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The Role of Sustainability in Enhancing Place Performance Through an Identity-Based Approach to Place Branding

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**THE ROLE OF SUSTAINABILITY IN ENHANCING PLACE
PERFORMANCE THROUGH AN IDENTITY-BASED APPROACH TO
PLACE BRANDING**

EVIDENCE FROM THE AUSTRALIAN AND GERMAN WINE INDUSTRY

By

HANNE KROGER

A thesis submitted to Plymouth University in partial fulfilment for the
degree of

DOCTOR OF PHILOSOPHY

Graduate School of Management

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AUTHOR'S DECLARATION

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Sub-Committee.

Work submitted for this research degree at the Plymouth University has not formed part of any other degree either at Plymouth University or at another establishment.

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Hanne Kroger

Abstract

Preventing the environmental impacts of economic growth is an important goal in today's marketplace. This concern for a sustainable future incentivises marketing based around sustainability. The food and beverage industry had its fair share of criticism as its production uses more natural resources than most industries. One industry that has been ahead of other food processors in adopting environmental practices is the wine industry. The close relationship between wine and places is undisputable and so strong that people frequently visit places of wine production in the form of wine tourism contributing significantly to regional economies. For wine to be associated with sustainability, regional stakeholders would be required to represent similar values. The branding of places is far more intricate than branding of products and needs the support of those stakeholders involved. Such support is often discussed as a shared place identity. Only limited previous research has addressed whether the communication of sustainability enhances business performance. No research to date has empirically tested whether a shared stakeholder identity influences the relationship between sustainability branding and business success.

To close this gap, a sequential mixed methods procedure was specified using quantitative questionnaires with 420 subjects and 20 qualitative interviews. A model with consequences of sustainability branding and a shared place identity was established using extant research. Mostly existing scales were adapted to fit this research context and tested with a structural modelling approach among Australian and German wineries.

It was found that practicing and communicating sustainability significantly influences performance on an individual winery and regional destination level. Furthermore, a shared place identity has been established as a critical success factor in the relationship between sustainability branding and place performance.

Both theoretical and practical implications can be drawn from this research. The results have provided empirical evidence on the direct relationship between sustainability and performance, in addition to the moderating role of a shared place identity. These findings extend the tourism literature which states that businesses practicing sustainably, enhance their own performance as well as the overall regional performance. It also extends stakeholder theory by establishing that a shared place identity strengthens this relationship even further, highlighting the need for regional management to initiate a shared sense of identification. Practically, regional managers who are eager to enhance economic performance should be actively involved in developing relationships between the individual wineries and the regional management in order to foster a shared place identity. Furthermore, it is of major importance to establish positive attitudes toward sustainability among winery owners. This can be done by building the confidence of winery owners by offering infrastructures for learning and support about sustainability.

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LIST OF ABBREVIATIONS

Abbreviations	Full term
A	Australia
ABS	Association of Business Schools
APC	Average Path Coefficient
ARS	Average R-squared
ATT	Sustainability attitudes
AVE	Average Variance Extracted
AVIF	Average Variance Inflation Factor
BENEF	Benefits
CBRA	Collective/Regional sustainability place branding
CEO	Chief Executive Officer
COO	Country-of-Origin
CPRF	Collective/Regional place performance
CPRF_Tou	Collective/Regional place performance Tourism
CPRF_Fin	Collective/Regional place performance Finance
CPRF_Mar	Collective/Regional place performance Marketing
CPRF_Inn	Collective/Regional place performance Innovation
EC	European Commission
ESRC	Economic and Social Research Council
ESI	Environmental Sustainability Index
EU	European Union
F	Formative
FRE	Framework for Research Ethics
G	Germany
H	Hypothesis
ha	Hectar
ID	Place Identity
ID_CON	Place Identity congruency
ID_SIM	Place Identity similarity
INVO	Involvement
IPRF	Individual place performance
IPRF_Tou	Individual place performance Tourism
IPRF_Fin	Individual place performance Finance
IPRF_Mar	Individual place performance Marketing
IPRF_Inn	Individual place performance Innovation
ISO	International Standards Organization
NORM	Norms
NWR	New World Region
N/A	Not Available
H	Hypothesis
KG	Kilogram
N	Sample size
NS	Non-Significant
OWR	Old World Region
PLAT	Place attachment
PLS	Partial Least Squares
PLS-SEM	Partial Least Squares Structural Equation Modelling
PRA	Sustainability practices
PRA_Soc	Sustainability practices Social
PRA_Rec	Sustainability practices Recycling
PRA_Env	Sustainability practices Environment
PRA_Mng	Sustainability practices Management

QUAN	Quantitative
QUAL	Qualitative
R	Reflective
R1-20	Respondent
RQ	Research Question
SEM	Structural Equation Modelling
SME	Small and Medium Size Enterprise
SIT	Special Interest Tourism
SPSS	Statistical Package for the Social Sciences
Std. Dev	Standard Deviation
VAF	Variance Accounted For
VIF	Variance Inflation Factor

1. CHAPTER: INTRODUCTION

1.1. Contextual background to the research

Trends in society shape the way businesses need to adjust their offerings in order to meet the needs of their consumers. Concern for environmental and social impacts of economic growth started to be acknowledged in the 1970s, and these issues remain an important discussion in society today (Belz & Peattie, 2009). The Brundtland Report in 1987 highlighted systems of production and patterns of consumption that were environmentally and socially unsustainable, and brought the concept of sustainable development to mainstream public and policy attention (Keskin, Diehl, & Molenaar, 2013). Reports such as the Millennium Ecosystem Assessment further illustrated the need for change to guarantee the future well-being of human kind (Belz & Peattie, 2009).

The growing concern for a sustainable future provides impetus for product innovation (Keskin et al., 2013), corporate social responsibility programs and ethical marketing (McEwan & Bek, 2009). Due to the change in consumer behaviour towards integrating environmental considerations into lifestyle choices (Barber, 2010), marketers offer sustainable products mainly in the form of promoting green, organic, or ethical products. Businesses based on sustainability ideals are noted by Keskin et al. (2013) to be successful if there is an overlap between the benefits for customers and clearly defined sustainability business goals. Indeed, Pullman et al. (2010) suggest that the wine industry has been ahead of other food processors in adopting and communicating environmental practices.

Due to the competitive nature of the wine industry, sustainability is pursued as a means of searching for advantage by telling a story that involves sustainability and experimenting with sustainability initiatives (Flint & Golic, 2009). This promises to be a successful strategy since previous research about sustainability in the wine industry has looked at branding wine as

environmental friendly and found that 'green' wines provide a competitive advantage (Barber, 2010; Pugh & Fletcher, 2002). The close relationship between wine and place is undisputable and frequently adopted in wine marketing strategies (Thode & Maskulka, 1998). Therefore, for wine to be associated with sustainability, the place and thus the wine region would be required to represent similar values. The branding of places is far more intricate than the branding of products and communicating sustainability values requires the support of the local community (Aitken & Campelo, 2011; Kavaratzis, 2005; Skinner, 2005). Such support is often discussed as a shared place identity (Kavaratzis & Hatch, 2013). This research understands place identity in accordance with corporate identity theory and proposes that a successful place brand in the wine industry has to be based on shared place identities among players within the wine region such as individual wineries (Aitken & Campelo, 2011; Anholt, 2007; Govers & Go, 2009; Kavaratzis & Hatch, 2013). This understanding is comparable to corporations that need shared identities among corporate stakeholders to communicate a successful corporate brand. Balmer (2008) accentuates the importance of identity based research by claiming that it will grow in importance leading to an 'identity based view of corporate branding'. It is for this reason that the adoption of an identity-based approach to place branding is crucial to study how sustainability can be applied most successfully in the wine industry.

1.2. Defining the research problem

Place branding is an intricate undertaking and some scholars (Aitken & Campelo, 2011; Kavaratzis, 2005; Skinner, 2005) argue that places are too multifaceted to include in branding discussions since they have a lot of stakeholders and not enough management control. Often, places are not perceived as brands by the public (Skinner, 2005). There is much agreement amongst academics that place identity is the core brand essence in place brand management (Aitken & Campelo, 2011; Hankinson, 2004a; Hankinson, 2004b). Yet due to the multifaceted interrelation between culture, national identity and the numerous stakeholders involved,

places do not have single identities that can be branded (Skinner, 2008). This problem is of particular concern to the wine industry as the majority of wine businesses communicate the wine region in positioning strategies (Barber, 2010) and wine regions often form the attraction for wine tourists (Getz, 2000). Wine regions are formed by a number of individual businesses and therefore a range of different identities need to be managed. Kavaratzis & Hatch (2013) argue that place identity is a complex construct evolving as a process. Therefore, it should not be regarded as fixed but rather as something that should not be defined or forced upon people.

The question that arises from these extant studies pivots around the extent to which sustainability can be incorporated into this complex construct of place branding and place identity. Previous research shows that sustainability marketing increases brand performance through price premiums (Barber, 2010; Loureiro, 2003), increasing consumer loyalty and competitive advantage (Flint & Golobic, 2009). Professionals in the field of marketing agree that improved environmental performance results in better marketplace performance (Charter, Peattie, Ottman, & Polonsky, 2002). Wine region place brands are essential for the attraction of wine tourists as well as creating positive associations in the mind of the consumer which can be achieved through sustainability positioning. Skinner (2008) finds that places have different attractions and meanings to the diverse groups of stakeholders which results in different identities. Mayes (2008) agrees that the major issue with multiple stakeholders in the place branding process is seen in their differing ideas of local identity. Kavaratzis & Hatch (2013) argue that effective place branding should result from an identity based approach where locals express cultural features that already form part of their place identity. Therefore, some players in the wine region might support the regional place brand strategy of being sustainable and contribute by being sustainable themselves, whilst others might not identify with the regional brand based on sustainability.

Zamparini & Lurati (2012) in the Franciacorta wine cluster in Italy study the problem of collective versus singular identities in the branding process. They test how firms operating in regional clusters use the cluster's collective identity in their external communication and combine it with the communication of their individual identity. The findings highlight that the regional cluster firms express their identities using the same values as the regional umbrella brand uses to communicate the collective identity (Zamparini & Lurati, 2012). Yet, the firms illustrate only some of the collective values while neglecting others. The findings are grouped into firms of different sizes. Firms in the first group are similar to the collective group and use individual symbols to depict their own identity but still are in line with the collective values. The second group is formed of smaller cluster firms and uses mainly collective symbols and names. Zamparini & Lurati (2012) argue this is due to a lack of resources to invest in communication strategies. For branding places as sustainable this would suggest that especially smaller wineries may rely heavily on the branding of the collective regional brand. Larger wineries in contrast might prefer to use their own branding material which might cause a fragmentation of the place brand rather than illustrating a unified picture of sustainability.

Despite the complex nature of place identity and its intricacy for the wine industry, researchers agree that if a brand is not based on a shared place identity the branding effort will result in brands alien to the place, especially to its internal stakeholders which potentially leads to a brand that may be unattractive to the consumer (Houghton & Stevens, 2010; Therkelsen et al., 2010). The extant literature does not agree on a single place identity theory yet. The importance of an identity approach in the branding literature has been acknowledged (Balmer, 2008) and numerous scholars explored the relationship between place branding and a shared place identity (Aitken & Campelo, 2011; Govers & Go, 2009; Kalandides, 2012; Kavaratzis & Hatch, 2013; Mayes, 2008; Zamparini & Lurati, 2012). Whereas the general consent is that aligned place identity supported by different stakeholders in the place branding process leads to a more successful brand, there are only few studies that provide empirical evidence of this

(e.g. Mak, 2011). Certainly no empirical studies have researched the use of sustainability in place branding strategies in relation to regional and individual identities in the wine industry.

Thus, this research aims to fill this gap by hypothesizing that in order for wineries and wine regions to build successful place brands based on sustainability, sustainability needs to be central to the individual stakeholders' identities otherwise the place brand will be alien to the place. Previous studies highlight that place brand equity can only be achieved through an integrated and inclusive approach to place branding (Aitken & Campelo, 2011) setting place identity as the major focus. Therefore, an identity-based approach to place branding theory will be applied and tested throughout this research. This will be achieved through a set of pre-determined aims and objectives.

1.3. Aims and objectives

The aims and objectives of this study are:

- 1) Aim: To investigate the role of sustainability in wine place branding strategies.

Objectives

- To determine the meaning of sustainability in the context of the wine industry.
 - To examine the benefits of sustainability to the wine industry and wine place branding strategies.
 - To identify the challenges encountered in the use of sustainability in wine place branding strategies.
 - To explore ways in which barriers and challenges (if any) in the use of sustainability in wine place branding strategies might be overcome.
- 2) Aim: To investigate the moderating role of place identity in the relationship between sustainability and place performance.

Objectives

- To determine the role of sustainability in wineries' place identity.
- To explore the use of sustainability in regional place brands.
- To analyse differences (if any) between regional place brands and the individual wineries' place identities.
- To test whether a fit between the regional place brand and the individual place identities moderates the relationship between sustainability and performance.

3) Aim: To analyse differences between old and new wine producing regions in the relationship between sustainability and place performance in particular the moderating role of place identity.

Objectives

- To identify differences (if any) in the meaning and nature of sustainability in new and old wine producing regions.
- To analyse the impact of such differences (if any) on wine branding strategies in new and old wine producing regions.
- To study how wine regions place identities relating to sustainability are different (if they are different) among old and new wine producing regions.

4. Aim: To enhance theoretical and practical knowledge and understanding of the moderating role of place identity in the relationship between sustainability and place performance.

Objectives

- To measure whether wine regions and wineries identification with sustainability influences the impact of place branding strategies.
- To test whether the regional place brand needs to be congruent with the individual place identities in order to result in a successful brand.

- To consult wine region and winery managers on the interaction between the regional place brand and the individual place identity.
- To enlarge the use of sustainability in branding strategies among wine regions and wineries by informing regional and individual managers about how sustainability can best be implemented in place branding strategies taking a shared place identity into consideration.

These aims and objectives will be researched with the following questions.

- 1) How is the concept of sustainability (ecological, social and economic sustainability) used in wine place branding strategies and what are benefits as well as challenges involved?
- 2) How does a shared place identity moderate the relationship between sustainability place branding and place performance?
- 3) How does the moderated relationship between sustainability and place performance differ (if it does) between old and new world producing wine regions?
- 4) How does the investigation of the moderating role of place identity in the relationship between sustainability and place performance enhance theoretical and practical knowledge?

1.4. Research approach

The study is set in the context of the Australian and German wine industry. Previous studies highlight that place brand success can only be achieved through an integrative and inclusive approach to place branding (Aitken & Campelo, 2011). The term place brand instead of destination brand is adopted throughout this research as wine consumers are not only limited to visitors. Instead these include consumers choosing wine for its connection with a particular place in this case a wine region or winery (Flint & Golic, 2006). Also, not every place in the wine industry that creates meaningful associations among consumers can be seen as a destination. Place branding adopts a more holistic approach and aims to apply the advantages of

destination branding, while neglecting its shortcomings (Kerr, 2006).

This research proposes that in order for wine regions to build successful place brands based on sustainability, sustainability needs to be central to the individual stakeholders' identities. Thus, wineries that choose place brands based on sustainability are suggested to perform better if the regional place brand supports the illustrated identity and the other way around. Wine regions that communicate a sustainability positioning strategy are expected to perform better if the individual wineries identify with this.

This research adopts a post-positivistic paradigm of inquiry, executing a mixed methods approach. Primarily a deductive approach is applied as it aims to test the role of sustainability in enhancing place performance through an identity-based approach to place branding. This identity-based approach to place branding is rooted in stakeholder theory which states that stakeholders need to be taken into consideration when enhancing the performance of a business (Freeman, 1984; Anholt, 2007). This theory is tested by establishing hypotheses which are then either confirmed or rejected based on data collected from the Australian and German wine industry. Therefore, through the deductive research approach two out of the four proposed research questions (RQ2 – RQ4) will be fully answered. Collected data will be analysed with partial least square structural equation modelling using WarpPLS 5.0. There is one research question (RQ1) that has to be approached inductively since the deductive approach does not allow to fully answer it. As Saunders et al. (2009) points out, it is often advantageous to combine both research approaches within the same piece of research. One main aim of this research is to understand the meaning of as well as challenges involved with the implementation of sustainability in the wine industry. There is a lack of theory in the literature on what sustainability means (Warner, 2007). Sustainable practices are often explained but the actual meaning behind the concept is not fully theorized (Lindsey, 2011; Warner, 2007). It is for this reason that an inductive research approach aims to clarify the

meaning of sustainability for the wine industry with semi-structured interviews. In addition, findings from the interviews will aid in interpreting the results collected quantitatively (Creswell, et al., 2003). These interviews will be analysed using thematic analysis (Braun & Clarke, 2006). Mixed method design was chosen in order to aid interpretation and achieve depth of the data findings that are not achievable with a single method design (Creswell & Plano, 2007).

This research addresses an identity-based approach to place branding theory. Such an approach makes the assumptions that place brands are only successful when they are built on a shared place identity (Kavaratzis & Hatch, 2013). Wine regions are formed of many individual players such as the individual wineries that unquestionably are the main attractions for wine tourists (Getz, 2000). This research aims to test whether the use of sustainability in the regional as well as the individual place branding strategies needs to be supported by the stakeholders involved in order to be successful. Stakeholders of wine regions will be limited to wineries as these form the core attraction for consumers and guests when participating in wine related travel (Getz, 2000). Hence, winery management are targeted with this research. Furthermore, the extent to which the individual identification of wineries affects the success of individual and regional place branding strategies in form of place performance is explored and measured.

1.5. Theoretical and practical contribution

This research contributes to the existing literature on place branding and place identity research. Previous conceptual research suggests a connection between the success of a place brand and the place identity (Anholt, 2007; Govers & Go, 2009; Kalandides, 2012; Kavaratzis & Hatch, 2013; Lindstedt, 2011). However, there is no single place identity theory that considers the role of place identity in place branding strategies. Scholars apply an identity-based approach to place branding (Zavattaro, 2013; Mak, 2011). Yet, studies are mainly based on a

single case (Mak, 2011) or are only conceptual in nature (Zavattaro, 2013). Kavaratzis & Hatch (2013) form the key contribution in the literature by modelling an identity-based approach to place branding. Their research is of a conceptual nature and does not provide empirical evidence. Advancing the theory of place branding by achieving a better understanding of the relationship between place identity and place brands is suggested (Kavaratzis & Hatch, 2013). Therefore, this research aims to rigorously test the intricate relationship between place identity and business practices.

The other stream of research this study will contribute to is regional versus individual identities in place branding and tourism literature. Existing literature looks into the use of branding strategies combining individual and regional identities in place branding (Zamparini & Lurati, 2012) as well as corporate branding (Balmer, 2008). However, there are limited studies available on how these different, sometimes opposing, identities need to be considered during the branding process (Kavaratzis & Hatch, 2013). This research intends to contribute theoretically to the place branding and tourism literature by conceptualizing how the individual stakeholder identity needs to fit with the regional place and destination brand in order to perform well.

Various scholars research the role of sustainability in place branding and tourism strategies (Alonso & Liu, 2012; Cordano, Marshall, & Silverman, 2009; Gabzdylova, Raffensperger, & Castka, 2009; Marshall, Cordano, & Silverman, 2005; Zouganeli, Trihas, Antonaki, & Kladou, 2012). This research aims to contribute to this body of literature by showing that the use of sustainability in place branding strategies results in a more successful brand. It is suggested that wine regions and wineries will perform better if a shared brand identification exists amongst them.

Practically, this research aims to contribute to policy-making as well as highlighting

management practice implications at the region as well as the individual winery level. Regional management in some cases destination management will be advised on the use of sustainability in branding strategies among wine regions. This is intended to be achieved by informing regional place management as well as the individual winery management about how sustainability can best be implemented in place branding strategies in order to result in highly performing places. Here, the findings will highlight whether there needs to be a fit between the regional place brand and the individual stakeholder identity. Guidance can be given to wine regions' management on how to initiate shared place brand identification when using insights as to whether the use of sustainability in place branding strategies leads to better performing places.

Furthermore, this research aims to address the lack of research across wine regions. The proposed study compares a number of cross-national wine regions. New world regions (NWR) in Australia will be compared to old world regions (OWR) in Germany in order to observe how sustainability is used in place branding strategies and how individual identities fit with the regional place brand. NWR such as Canada, Australia, New Zealand and Argentina are among the top 15 countries worldwide in the 2005 Environmental Sustainability Index (Etsy, Levy, Srebotnjak, Sherbinin, 2005). OWR such as Germany, France, Italy and Spain conversely are positioned between rank 31 (Germany) and rank 76 (Spain) (Etsy et al., 2005). The Environmental Sustainability Index (ESI) 'benchmarks the ability of nations to protect the environment over the next several decades ...and permits comparison across ...: environmental systems, environmental stresses, human vulnerability to environmental stresses, social capacity to respond to environmental challenges and global stewardship' (Etsy, et al., 2005, p.2). These comparisons highlight a tendency of NWR producing countries to show better results in their efforts and capabilities to protect their natural resources. These results raise the question of whether the pattern can also be observed for the concept of sustainability in wine regions.

In the following, these contributions will be summarized:

- (1) Extending the identity-based approach to place branding introduced by Kavaratzis and Hatch (2013) by providing empirical evidence.
- (2) Theoretically contributing to the discussion about regional and individual identities and how these need to be managed in the place branding process. Therefore, conceptualizing how the individual stakeholder identity needs to fit with the regional place brand in order to result in successful place brands.
- (3) Identifying the moderating effect of a shared place identity on the relationship between sustainability place branding and place performance.
- (4) Contributing to the sustainability literature by empirically showing that the use of sustainability in place branding strategies results in a more successful place brand by providing evidence from the wine industry.
- (5) Identifying the meaning of sustainability in the wine industry to extend the theoretical discussion about sustainability and its denotations.
- (6) Identifying barriers and challenges in the use of sustainability in place branding strategies in order to draw conclusion in how far these can be overcome in order to result in better place performance.
- (7) Analysing the difference between new and old world wine countries to conclude whether age has a significant implication for the effect of sustainability place branding on place performance.

1.6. Thesis structure

This section provides the content of this thesis which is divided into ten separate chapters.

Chapter 1 introduces the reader to the subject of the thesis and the contextual background of the research is outlined. The research problem is defined and aims and objectives are given.

The adopted research approach is highlighted and theoretical as well as practical contribution

discussed. **Chapter 2** introduces the theoretical foundation of place branding by outlining an identity-based approach to place branding theory. Specific attention is given to place identity in the wine industry. **Chapter 3** places emphasis on sustainability in the wine industry and its role in place branding. Relevant literature concerning the current meaning of sustainability in the wine industry as well as its application in place branding strategies is discussed.

Sustainability is discussed as a factor influencing place performance. Particularly, differences between new and old world wine regions in their identification with sustainability place brands are offered. This chapter ends with the presentation of an innovative conceptual model based on the extant literature. **Chapter 4** illustrates the research methodology applied in this thesis. The research philosophy is proposed resulting in the postulation of a suitable research design. This chapter ends with the discussion of potential ethical issues. **Chapter 5** details quantitative research methods. The questionnaire development and necessary scale selection are outlined as well as the individual variables discussed. Specific attention is given to the description of the quantitative data collection procedure. **Chapter 6** deals with the qualitative research methods and proposes methods for the data collection as well as data analysis. **Chapter 7** includes the quantitative analysis that starts with the descriptive statistics. Common method bias is tested and the Partial Least Squares Structural Equation Model analysis is executed. This includes assessing the results of the first-order and the formative measurement model. A shared place identity as a moderating variable affecting the relationship between sustainability and place performance is measured. **Chapter 8** demonstrates the data from the qualitative interviews. Following the participants' characteristics as well as the interview coding structure, different sustainability meanings and practices are illustrated. The role of sustainability in place branding strategies in the wine industry is explored and justified by exemplifying quotes of the respondents. **Chapter 9** presents the discussion of the thesis with a special focus on how the research aims and objectives are met. **Chapter 10** draws main conclusions of the thesis and discusses how the results contribute to theoretical knowledge. Also, main implications for

policy makers and management are illustrated. Finally, details of this study's limitations and potential routes for future are explored.

1.7. Summary

This chapter outlined the introduction to the thesis. The reader was first introduced to the contextual background and the research problem was defined by addressing the gaps in extant literature. A number of objectives have been drafted that underline five main aims. The research approach explained how the aims and objectives are planned to be achieved. To finish, the content of each of the ten chapters was briefly outlined. The following two chapters are presenting the review of the existing literature relevant to this study.

2. CHAPTER: PLACE BRANDING

Compared to other agricultural products, wine is most frequently associated with 'place' (Thode & Maskulka, 1998). Place of origin is an important quality indicator for the wine product and commonly used in branding strategies (Bruwer & Johnson, 2010). Visitation to wine regions and wine tourism is an important sales outlet for numerous wineries (Getz & Brown, 2006b). Some wineries as well as wine regions are more successful in exploiting such visitation than others (Bruwer & Lesschaeve, 2012). The visibility of strong place brands is identified in the literature as an indicator why some wine regions are more successful in attracting visitors than others (Bruwer & Lesschaeve, 2012; Gomez & Molina, 2012; Ryan & Mizerski, 2010; Scherrer, Alonso, & Sheridan, 2009; Scorrano, 2011). This chapter is structured as follows: firstly, the theory of place branding and the role of place identity therein is going to be explored. This is followed by a discussion about place attachment and its role in the place branding literature. Before a stakeholder approach to place branding is discussed, extant criticism about place identity in the place branding process is depicted. Country of origin branding will be reviewed and followed by critically analysing place-based branding in the wine industry.

2.1. Theoretical foundation of place branding

Globalization has resulted in a rise of competition among countries, cities and regions for world's consumers, tourists, investors, students, entrepreneurs and events (Anholt, 2007). In order to compete in such a crowded market-place, places need to find a way of being recognized by their target group. Place branding as a strategic response to raising competition has gained momentum in academic discussion in recent years (Aitken & Campelo, 2011; Bruwer & Johnson, 2010; Govers & Go, 2009; Kalandides, 2012).

Place branding can be categorized among disciplines such as marketing, place management and urban development (Ryan & Mizerski, 2010, p.49). Aitken & Campelo (2011) argue that for

places such as towns, cities, regions and countries, the use of branding principles such as authenticity, essence, equity, ownership, governance and communication is of crucial importance. Place branding aims to manage associations in consumer's mind and to create brand equity. Brand equity reflects the power of a brand in the market-place and is determined by the consumer (Flint & Golobic, 2009). Consumers prefer one brand over the other depending on which one they perceive to be of better value. Due to the amount of competitive offerings in the market-place, consumers' perceptions of value change over time (Flint, 2006). Since brand equity depends on the consumer's perception of value, it changes if the perceived value and association change which makes brand equity a very dynamic field.

It is important to clarify different stances taken in the literature when discussing place branding. At first, the term 'place' needs to be deconstructed. A place is not based on a location only but rather on the experiences acquired in a certain setting according to Relph (1976). Additionally, the definition of places as physical places needs to be considered and place is often described in the literature as a space, a setting, landscape and environment (Ryan & Mizerski, 2010). The deconstruction of the term 'place' has shown the focus of experiences in a certain setting on the one hand and the consideration of location on the other when considering places in the place branding process. Secondly, the positioning of place branding in relation to other branding theories needs to be considered. It is questioned whether places in the branding process should be treated as products and services that can be branded or whether places should be seen as organizations which would require the application of corporate branding theory (Alsem & Kosteljik, 2008). The literature on place branding is not congruent on how to resolve this matter. However, the majority of scholars see a better fit between place brands and corporate brands (Alsem & Kosteljik, 2008; Kavaratzis & Hatch, 2013; Lindstedt, 2011). Kerr (2006) agrees that place brands should be approached as more aligned to the corporate brand than a product brand. This approach is justified in that corporate brands have similar attributes to places that need to be taken into consideration

during the management process (Hatch & Schultz, 2003). First of all, place brands just like corporate brands are influenced by the prevailing culture and shared vision held by the stakeholders. Secondly, corporate brands as well as place brands contribute to the image held by all its stakeholders, therefore not only contributing to customer-based images but also to images formed by all its stakeholders. Kerr (2006) further argues for place brands being closer to corporate brands than to product brands since the location of places usually have different sometimes unrelated industries, products and different cultures just like corporations.

Several definitions have been presented to conceptualize place branding. 'A network of associations in the consumer's mind based on the visual, verbal, and behavioural expression of a place which is embodied through the aims, communication, values, and the general culture of the place's stakeholders and the overall place design' (Zenker & Braun, 2010, p.5) encompasses the elements of place branding. It highlights the consumers' as well as stakeholders' role in the process of branding a place. Kavaratzis (2005) acknowledges five different strands of research on place branding in the current literature. These range from place of origin branding, destination and nation branding, culture branding to place and city branding. Others agree that place branding is discussed in terms of tourism destination (Gnoth, 2002), brand architecture (Dooley, 2005), attracting foreign investment (Kotler & Gertner, 2002) and leveraging place brand value to export products (Gnoth, 2002). The wine industry offers place brands in terms of wine regions and wineries as destinations for wine interested tourists (Gnoth, 2002; Getz & Brown, 2006b) as well as place of origin branding (Kavaratzis, 2005). The term place brand instead of destination brand seems more fitting as wine consumers are not limited to visitors only but also include consumers choosing wine for its connection with a particular place in this case a wine region or winery (Flint & Golic, 2006). A destination brand is discussed as only being part of the complete location brand architecture (Kerr, 2006). Furthermore, not all places in the wine industry that might create a meaningful association among consumers can be necessarily seen as destinations. Place branding adopts a

more holistic approach and aims to apply the advantages of destination branding, while neglecting its shortcomings (Kerr, 2006).

Reviewing literature on destination branding, a number of models are offered that conceptualize successful destination branding. The destination brand benefit pyramid for example highlights five levels that aim to analyse the extent to which the destination's brand personality interacts with the target market (Morgan & Pritchard, 2002a). The first level concerns the measurable characteristics of a destination. Whilst the second level looks at the benefits resulting from destination features, the third level concerns the psychological rewards when visiting a destination. The fourth levels discusses the values of a destination for a repeat visitor and the final level questions the essential character of the destination brand. Other models include the 'Destination celebrity matrix' and the 'Destination brand positioning map' (Morgan & Pritchard, 2002b). These models aim to guide in building strong destination brands. However, the intricacy of places with its many stakeholders is neglected. In contrast, Govers & Go (2009) formulate a place branding model that combines the host as well as the guest perspective. It aims to identify possible 'gaps' that can occur during the delivery process based on the 5-gap service quality analysis model developed by Parasuraman et al. (1985). They summarize place brands as the representation of positive internal (brand delivery) and external (visitors) images that lead to favourable brand associations (Govers & Go, 2009). The overall aim of place branding is described as linking place identity and perceived image by creating memorable place experiences. Other literature on place branding is congruent in emphasising place identity as most important when building and maintaining a sustainable competitive place brand (Aitken & Campelo, 2011; Anholt, 2007; Govers & Go, 2009; Kavaratzis & Hatch, 2013). Due to the pivotal role of place identity in the place branding process the following section will discuss place identity in detail followed by an identity-based approach to place branding theory.

2.2. Place identity

The literature on place branding frequently refers to the term of place identity (Aitken & Campelo, 2011; Anholt, 2007; Govers & Go, 2009; Kavaratzis & Hatch, 2013). Various deviations of the term place identity are applied in different ways. Differences in terms are acknowledged as spatial identity (Kalandides, 2011), local identity (Lindstedt, 2011) or place identity (Kalandides, 2012; Kavaratzis & Hatch, 2013). Some authors criticise the interchangeable use of place identity and place image (Kalandides, 2011; Skinner, 2008). Early scholars have linked the concept of place identity to the psychology of self-identity (Proshansky, Fabian & Kaminoff, 1983). Here, the importance of places surrounding oneself in the development of self-identity is emphasised. This is exemplified by children gaining a sense of 'who they are' by the relationship with others as well as the physical things and settings that surround them (Proshansky et al., 1983).

The connection between self-identity and people's identification with places is described in accordance with an individual's experience of 'belonging' according to Relph (1976). Feelings in relation to identity are divided in terms of insideness and outsideness, whereby insideness pertains a strong sense of place identity and outsideness a weak sense. There are several attempts in the literature to theorize place identity in the context of place branding.

Kalandides (2011) summarize six uses of the term place identity in the literature:

- (1) Place identity as part of the individual (human) identity;
- (2) Place identity as formative of group identity;
- (3) Mental representations of place by an individual;
- (4) Group perceptions of place;
- (5) Identification of a group with a territory; and
- (6) Place identity as a sense of place, 'character', 'personality' and distinctiveness.

The worldwide wine industry is characterized wine regions being formed of numerous individual wineries. For this reason, place identity as group perceptions of a place, in this case the individual wineries' perception of the wine region and the identification of a group with a territory is most fitting. This is conforming to the sense of belonging identified by Relph (1976) as wineries who feel a strong sense of belonging should feel a strong sense of identity towards their wine region. Mayes (2008) assesses place identity as being established through the intrinsic features and history of a place.

Relating place identity to corporate identity, Burmann et al. (2009) establish the notion of an identity-based brand equity model. Just as the identity-based equity model place identity can be understood as the identification of the local community and stakeholders with the regional place brand. Burmann et al. (2009) explain brand identification as a sense of group belonging through an individual's acceptance of social influences. Such a group belonging can have various reasons and as previously highlighted intrinsic features can be one reason for a shared place identity.

2.3. An identity-based approach to place branding theory

Various scholars highlight place branding and place identity as integrated approaches (Kalandides, 2012; Kavaratzis & Hatch, 2013; Lindstedt, 2011). The literature on place identity and its role in place branding is far from agreeing on how identity should be taken into consideration in the place branding process. Numerous approaches have been made to theorize how place identity should be incorporated into the place branding process. Kavaratzis & Hatch (2013) emphasise the need for an improved understanding of identity to enhance the theory of place branding. It is reasoned that place identity should be regarded as a complex process of identity construction resulting from dialogue between stakeholders. It is cautioned that place identity is not the outcome of such a process but rather the process itself. Place identity is nothing that is ever finished or achieved (Kavaratzis & Hatch, 2013). Place

branding needs to take this dynamic into account in the interwoven process between branding and identity. Kavaratzis & Hatch (2013) base their integrative identity-based branding approach on the dynamics of organizational identity treating places as organizations. A model has been introduced that reflects how place branding and identity work together based on three features, namely place culture, place identity and place image. Kavaratzis & Hatch (2013) suggest that effective place branding needs to be a tool for locals to express cultural features that are already part of their place identity.

When reviewing literature about shared place identity and its effect on place brand success, a number of varying findings are presented. Bhattacharya & Sen (2003) conceptualize the relationship between consumer-company identification and its influence on company loyalty. It is suggested that the higher the consumer-company identification, the higher consumer loyalty will be. Relating consumer-company identification to a place branding setting, this would mean that the higher the identification of the local community and stakeholders with the regional place brand, the more successful the place brand. Currently, the research by Bhattacharya & Sen (2003) lacks empirical support but requests empirical testing.

Another stream of research reviewing the effect of a shared identification on brand success is the destination branding literature. Blain (2005) review the use of destination logos and how those are aimed to create brand image and identity. It is stressed that hospitality firms in the destination should be involved in the branding process and the logo design since in destination branding the image and identity communicated should resemble the overall idea of experiencing the destination (Blain, 2005). Results of 99 respondents show that that most important reason for destination logos were “to support our destination image,” “provide a label that describes us,” and to “differentiate us from other destinations” (Blain, 2005). It can be argued that the identification with such destination logos can be seen as a shared place identity among stakeholders with the overall presented brand of the wine regions.

A continuous interaction between culture, identity and image can be summarized as pivotal to the creation of a shared place identity which ultimately results in strong place brands. Extant literature stresses that place branding professionals need to incorporate these linkages between stakeholder culture and place identity. Having established the importance of an identity-based approach to place branding, it becomes crucial to establish antecedents of a shared place identity. One of such a linkage can be seen as place attachment (Lindstedt, 2011) and will be discussed in further detail.

2.4. Place attachment

Lindstedt (2011) considers the connection between identity, place and brand construction in relation to the local population's identification with the place in the place branding process. It is argued that for a place brand to be sustainable, the local population is viewed as the internal target audience of brand construction. Brand construction is understood as 'the means both for achieving competitive advantage in order to increase inward investment and tourism and also for achieving community development, reinforcing local identity and identification of the citizens with their city and activating all social forces to avoid social exclusion and unrest' (Kavaratzis, 2004, p.70). The previous definition accentuates the importance of the local community needing to be targeted during the place branding process. The formation of place attachment by the local community is seen as enhancing brand equity. The concept of place attachment describes the affective bond between individuals and their meaningful environments (Lindstedt, 2011). Such an affective bond is not dissimilar to what Relph (1976) described as a sense of belonging and essential in establishing place identity.

The formation of place attachment is divided into four dimensions: manageability, continuity, goal support and distinctiveness (Lindstedt, 2011). Manageability includes the social and physical characteristics of a place and if a place is understood as unmanageable, the formation of place attachment is unlikely to occur (Twigger-Ross & Uzzell, 1996). The second dimension

refers to a continuity of experiences, actions and emotional meanings leading to place attachment (Lindstedt, 2011). Lindstedt (2011) refers to Scannell & Gifford (2010) when explaining goal support as a dimension of place attachment. Here, a strong sense of place attachment is anticipated if a person is capable of reaching the goals perceived as valuable. This final dimension of distinctiveness is rooted in the idea that places provide a means for people to distinguish themselves from others through belonging to a certain geographical area (Lindstedt, 2011). These dimensions aim to explain how place attachment among local communities can be achieved and how perceiving inhabitants in close contact with the place leads to the success of persistent place brand constructions. Lindstedt (2011) concludes by explaining how those four dimensions are essential for a socially constructed place brand. By associating with such a place brand a sense of self-esteem and pride should be initiated in the local population. Other authors commonly perceive place attachment as a multiple variable construct (e.g. Ramkissoon et al., 2013). Ramkissoon et al. (2013) criticize the fact that the operationalization of the place attachment construct differs greatly across disciplines and divide the place attachment construct into place dependence, place identity, place affect and place social bonding (Ramkissoon et al., 2013). Similar to Lindstedt's (2011) fourth dimension of distinctiveness, Ramkissoon et al. (2013) stress place identity as an important part of place attachment. Lindstedt (2011) discusses distinctiveness as people distinguishing themselves from others through their identification with a place. Ramkissoon et al. (2013) drew similar comparisons by highlighting how places offer people the opportunity to develop a sense of identity by being unique and/or distinct from other places. In their empirical study a second-order confirmatory factor analysis is run that shows place attachment as a principal concept consisting of place identity among others. Others claim that place identity arises through gathering experiencing in a certain place (Budruk, Thomas, & Tyrrell, 2009) which could be seen as place attachment needing to antecede place identity rather than vice versa. It can be argued that in order for people to develop a sense of identity with a place they need to form an affective bond with their meaningful environment first (Lindstedt, 2011). Based on the

plethora of terms used to describe the relationship between people and spatial settings (Ramkissoon et al., 2013), the role of place attachment and place identity needs clarification. Taking the multi-dimensionality of place attachment into account as well as suggested shortcomings in the literature to properly understand what represents place attachment, further investigation is necessary to understand the relationship between place attachment and place identity.

Understanding the relationship is essential since the most important factors for successful place branding have been identified as linkages between culture, place identity and place image. The following section thus draws on critical voices about an identity approach in the branding of places.

2.5. Criticism about place identity in the place branding process

Several authors critique the application of place identity in the place branding process. For example Kavaratzis & Hatch (2013) criticise the static view of identity and that an identity is seen as the outcome of a decision making process and that it can be altered to fit place branding strategies. Kalandides (2011) agrees that an identity cannot be changed to make it fit place branding communication because it is a process rather than a result. Therefore, instead of seeing the identity of a place to portray a certain picture in brand construction, its complexity should be acknowledged and used to achieve competitive advantage. This can be managed by strengthening local identity and identification between local people and their place to prevent social segregation and unrest (Kavaratzis, 2004).

A further critique point deals with the multiplicity of place identities. The issue of singular versus multiple identities of places is mentioned (Skinner, 2008). This contributes to the discussion around whether places should be seen as products or corporations in the branding process. Hankinson (2004b) outlines that unlike for products, the branding of places does not start at zero. Instead, the place's identity usually cannot be controlled by marketers as it

depends on the various stakeholders involved. Conforming to Hankinson (2004b), Trueman, Cornelius & Killingbeck-Widdup (2007) draw attention to the fact how local communities, heritage and infrastructure all pertain to place identity.

Another stream of literature considers places as having a single identity with multiple facets (Papadopoulos, 2004; Hankinson, 2004) which lends itself to the concept of corporate branding. Numerous scholars base their line of thinking about place identity on the corporate branding literature (Kavaratzis & Hatch, 2013; Skinner, 2008). This is done due to the multiplicity of stakeholders involved during the place branding process which is conforming to branding a corporation rather than a product or service. The literature on stakeholder involvement in the place branding process as well as the herefrom resulting identity diversity is far from saturated. Skinner (2008) concludes that based on the intricate relationship between culture, national identity and numerous stakeholders involved when managing the place brand, there is not just one identity that can be branded as can be done with services or products. Kavaratzis & Hatch (2013, p.75) summarize the current state of the literature on place branding and identity by stating that ‘there seems to be an agreement that both the place brand and place identity are formed through a complex system of interactions between the individual and the collective, between the physical and the non-physical, between the functional and the emotional, between the internal and the external, and between the organized and the random’. The previous discussion poses the question of stakeholder involvement in the place branding process. Additionally, the abundance of identities resulting from stakeholder involvement needs to be analysed. Hence, the following section considers stakeholder involvement.

2.6. Co-creation of the place brand – a stakeholder approach

Collective identities have been researched by scholars of various perspectives and refer to identities of groups or firms (Zamparini, 2012). These collective identities need to be managed

when considering the branding of places. Skinner (2008) reasons how places may have different attractions and meanings to the diverse target markets and groups of stakeholders. Brown (2006) agrees that there is a need to investigate branding from a multi-stakeholder perspective. Stakeholders are seen to collectively produce the place brand. Place branding is understood as a 'dialogue, debate and contestation between stakeholders because brands are built out of the 'raw material' of identity and identity emerges in the conversation between stakeholders and what brings them together' (Kavaratzis & Hatch, 2013, p.82). Scholars agree about the importance of stakeholders involved in the place branding process and the need to better understand their engagement (Hanna & Rowley, 2011). Further attention in the literature is put forward to explain the role of stakeholders in co-creating the place brand (Kavaratzis & Hatch, 2013). The wine industry like the majority of agricultural industries is often in rural areas (Hall, 2005). Existing research shows that in particular rural communities need collaboration and partnerships for destinations and therefore place brands to be successful (Haven-Tang & Sedgley, 2014).

In order to conceptualize the influence of stakeholder in the place branding process stakeholder theory will be addressed briefly. Stakeholder theory was first established by Freeman (1984, p.46) in strategic management where stakeholders have been defined as 'any group or individual who can affect, or is affected by, the achievement of the organization's objectives'. It is argued that businesses should take stakeholder's interest into consideration when taking strategic decisions. However, stakeholder theory is advised not to be seen as a single theory but instead a set of theories for the management of stakeholders (Donaldson & Preston, 1995). Friedman & Miles (2006) divide those sets into three sub groups: the descriptive (which sets out how the organization operates in term of stakeholder management); the instrumental (which demonstrates how to attain organizational objectives through stakeholder management); and the normative (which defines how business should operate, especially in relation to moral principles).

The wine industry is best explained by stakeholders in the co-creation process of place branding since successful and sustainable place branding requires a participation of all stakeholders involved (Anholt, 2005). Other scholars agree that successful place branding is based on community decision making that supports the brand (Foley & Fahy, 2004; Kerr, 2006). How can stakeholder theory be applied to understand the phenomena? The instrumental approach to stakeholder theory usually researches cause and effect on how objectives can be achieved through stakeholder management (Mainardes, Alves & Raposo, 2011). Donaldson & Preston (1995) examine how the stakeholder model can be applied to accomplish performance objectives of an organization through the enactment of certain behaviours among stakeholders. A relatively recent phenomenon when regarding stakeholders in branding strategies is that of co-creation (Hatch & Schultz, 2010). When approaching places as corporations, stakeholder theory can be a valuable tool to explain how stakeholders are managed in order to co-create a successful place brand.

When reviewing empirical literature about co-creation, Hatch & Schultz (2010) outline interesting findings based on prior research conducted by Prahalad & Ramaswamy (2004) who established four building blocks through which co-creation occurs: dialogue, access, transparency and risk. Those building blocks have been applied in the branding context to derive a theory of brand co-creation. Based on a longitudinal case study of the LEGO Group, Hatch & Schultz (2010) find that company/stakeholder engagement and organizational self-disclosure are central concerns when it comes to brand co-creation.

An empirical study on city branding set in the Netherlands researches the role of stakeholder involvement in place branding. Klijn et al. (2012) hypothesize that the more stakeholders involved in the place branding process, the clearer the brand concept and the more successful the brand. A correlation between stakeholder involvement and place brand success has been

established. Yet, the research relies heavily on subjective data provided by professionals involved in the city branding. Despite this limitation, the study lends empirical support that involved stakeholders correlate to brand success.

When reviewing the definition of place identity as ‘the identification of the local community and stakeholders with the regional place brand’ (Burmman et al., 2009), it seems reasonable to assume that involving stakeholder in the brand creation process results in a strong identification between stakeholder and place brand. There is a lack of empirical literature about the effect of stakeholder involvement and place brand success which is why clarification is needed (Klijn et al., 2012).

Further criticism includes the categorization of stakeholders according to their generic economic function (e.g. consumers and investors) instead of looking at other interest groups that might have a stake in the company (Crane & Ruebottom, 2012). Crane & Ruebottom (2012) add the concept of social identity to stakeholder theory by stressing that for a firm to completely understand expectations and manage stakeholder relationships, their social identities as well as different values need to be considered. Numerous research acknowledges the necessity to consider stakeholders’ identity (Crane, Matten, & Moon, 2004; den Hond & de Bakker, 2007; Granovetter, 2005). Crane & Ruebottom (2012) underline the challenge of considering stakeholders’ economic roles and social identities simultaneously instead of independently. Social identity theory emphasises the category-based identity to which people feel attached (Stryker & Burke, 2000) and is explicitly intended to be a psychology of the group, rather than of the individual (Turner, 1987). This clarification is necessary to explain social identity in stakeholder groups and how this can affect the focal organization or in this case the place brand. Despite the fact that Crane & Ruebottom (2012) base their research on organizations, it is a useful consideration for place branding. As shown earlier, the involvement of stakeholders leads to a successful place brand. Stakeholder groups can be identified more

accurately when applying social identity to stakeholder theory. Aligning numerous scholars on identity in the place branding process, it can be concluded that the consideration of a place's identity leads to a more successful brand. The following section therefore exemplifies how place branding is initiated and place identity applied in the wine industry.

2.7. Country-of-Origin branding (COO)

Place of origin is an important quality indicator for various products (Bruwer & Buller, 2012). Different product categories have preferred countries of origins and make use of reputation in communication strategies. Wine has been one of the first agricultural product to have a close relationship with its geographic place of origin (Bernabéu, Brugarolas, Martínez-Carrasco, & Díaz, 2008). Thode & Maskulka (1998) go as far as explaining that it would be very challenging to find an agricultural product other than wine more often associated with a place. The country or region of origin is mostly stated on wine labels easily recognizable for the consumer. However, the creation of positive quality perception must be achieved in the mind of the consumer (Bruwer & Buller, 2012). Therefore, a positive image must arise when consumers think about purchasing a wine from a certain region. Hence, the wine industry focuses on building strong brands which the consumer can identify and trust (Bruwer & Johnson, 2010).

The consumer's quality perception is one of the main determinants for the purchase decision of wine (Sáenz-Navajas, Campo, Sutan, Ballester, & Valentin, 2013). However, assessing the quality of wine cannot be done prior to the actual consumption of the product (Bruwer & Buller, 2012). Hence, cues concerning the quality of the product are weighed up prior to or during the purchase decision through extrinsic signals. Such signals are identified as labels or packaging (Elliot & Barth, 2012; Sáenz-Navajas et al., 2013). One such extrinsic cue on packaging or labelling is identified by the literature as country-of-origin (COO) or region-of-origin (Bruwer & Johnson, 2010; Orth et al., 2012; Alonso & Northcote, 2009; Gomez & Molina,

2012). As the wine market is seen as complex for decision making, brand managers need to strive for product differentiation (Bruwer & Johnson, 2010). Region-of-origin or place-based marketing is one such strategy of differentiation (van Ittersum, Meulenbergh, & van Trijp, 2003). Orth, McGarry & Dodd (2005) highlight that place-based marketing affects how consumers respond to products. It is mentioned that origin marketing is especially important in the wine industry. Place branding forms the major part of origin based marketing and has the ultimate goal of awakening positive association with a certain area (Bruwer & Buller, 2012). Pursuant to this reasoning would be the perception of Champagne producing high quality sparkling wine. Another example would be wine preferably coming from Italy, a well-regarded wine country (Bruwer & Buller, 2012). Research even suggests that some countries of origin have such strong associations with perceived quality that consumers prefer lower quality wine from France to high quality wine from Australia (D'Alessandro & Pecotich, 2013). Such associations with the country/region of origin can be seen as creating brand equity (Kerr, 2006; Papadopoulos, 2002).

When an area strives for using place-based branding, hence offering products being perceived to be 'typical' of an area, there must be more than a geographical association. Ryan & Mizerski (2010) state that there must be historical and cultural meaning associated with the product. One reason why the region of Champagne is regarded such a successful regional brand is the fact that it has been produced and delivered a stable quality promise for the past decades. The question that arises is how such positive associations can be initiated in the mind of the consumers. What can be part of creating successful regional brands? The literature starts to see the importance of place branding in the wine industry and is reviewed in the next section.

2.8. Place branding in the wine industry

Country-of-origin (COO) and place-based marketing can be differentiated based on Thode & Maskulka (1998). They categorize 'place-based' strategies as a more specific extension of COO

strategies since COO strategies do not necessarily derive their uniqueness from a specific geographic location. Three benefits have been identified (Thode & Maskulka, 1998) as stemming from place-based branding for agricultural producers:

- 1) additional incentive to emphasise product development;
- 2) improved marketplace competitiveness; and
- 3) the creation of a sustainable competitive advantage.

It is summarized that a place-based strategy is useful in a competitive environment since products are differentiated on the basis of a unique attribute – geographic origin. The geographic source for fine wine does not solely contemplate the country-of-origin but additionally the geographic appellation within that country and the vineyard source of the wine (Thode & Maskulka, 1998).

Research to date focuses on different aspects of place branding in the wine industry. Some studies focus on local differences between old world producing countries such as the major European countries regarding destination branding (Alonso & Northcote, 2009; Bruwer & Buller, 2012). Alonso & Northcote (2009) for example examine wine place brands in Western Australia and compare those with old world producing countries in Europe. It is reasoned that European wine regions use historical elements in wine making as part of their wine branding activity. Due to the lack of historical wine making this is not possible in new world producing countries such as the Americas, Australia, New Zealand and South Africa. Alonso & Northcote (2009) find that other elements are used as substitutes for the lack of historical elements. Such substitutes are identified as an area's farming background (such as timber) and connecting this with the wine product. This is seen as exploiting the area's characteristic to create an image and identity for the wine regions.

The majority of research about place branding does not compare regions but instead focuses

on one specific country or region (Gomez & Molina, 2012; Ryan & Mizerski 2010; Bruwer & Buller, 2012). Gomez & Molina (2012) study the influence of the Denomination of Origin (DO) brand image on wine tourism destination brand equity in Spain. They find that the DO brand image influences wine tourism destination's brand equity. The role of public organizations to project a favourable DO image is stressed in order to attract a great number of visitors to wine tourism destinations. Such a favourable DO image can be achieved through infrastructure and socio-economic as well as social conditions. Hence, public institutions should focus on quality accommodation and gastronomy, cleanliness and safety as well as the reduction of environmental pollution and the creation of pleasant surroundings (Gomez & Molina, 2012).

The time factor is regarded important in relation to place brand building in the wine industry as it takes time to create an image about a region or place in the consumers mind and in order to sustain such an image, the right management is needed. Ryan & Mizerski (2010) suggest treating places like corporate brands with its own CEO and strategic management in order to reach long-term sustainability. They research how 'New Norcia', a rural town in Western Australia forms a brand based on 'place'. They introduce corporate location branding in form of nominating a CEO to provide strategic leadership (Ryan & Mizerski, 2010). They emphasise the idea of a location brand needing synergy among key elements to ensure feasible operation which is done by applying a strategic approach. A further angle of corporate location branding is seen in the place brand being linked to a future vision of a location. It is concluded that the brand 'New Norcia' ensures its long-term sustainability by applying the concepts of a typical corporate location brand (Ryan & Mizerski, 2010).

Alonso & Northcote (2009) question the importance of the historical background of a wine area when it comes to origin branding and try to verify in how far countries (especially from new world producers) overcome their lack of established traditions that are used for regional branding in old world regions. It is concluded that producers are taking the heritage branding

of old world wines and setting it in a uniquely Australian context by stressing the role of immigrants (Alonso & Northcote, 2009).

There is confusion between destination brand and image due to a lack of clear definition of the destination brand concept (Tasci & Kozak, 2006). It is further stated that wine region imagery has changed from highlighting wine production and related activities to more aesthetic and experiential factors (Williams, 2001). Now, entertainment as part of experiencing wine regions is emphasised in the place branding process. It is indicated by Getz & Brown (2006b) in order to completely and accurately measure wine region destination image, the characteristics and motives of wine tourists need to be better understood. If those are not understood correctly a destination image might be prevailing that is not in consonance with what the destination would like to communicate. This is especially the case for destinations that are not primarily aiming to attract wine tourism (Scherrer et al., 2009). The lack of clear definition of the destination brand concept can be observed in the various terminology applied. The literature on place branding in the wine industry borrows concepts and terms from the general marketing literature on place branding. Corporate location branding as in the case of New Norcia (Ryan & Mizerski, 2010) and place brand equity (Gomez & Molina, 2012) are two examples of the application of general marketing terms to the wine industry. Bruwer & Buller (2012) apply place-based marketing theory and brand imagery when discussing place branding in wine destinations. Turning a destination or place into a brand is the general consensus on how to create place brands for wine marketing purposes. Ryan & Mizerski (2010) explain place branding as a rather modern concept and try to define the concept by adding 'place' to the commonly defined term 'brand' as 'name, term, sign, symbol or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors' (Kotler, 1994, p.444). The precedent definition reflects the importance of differentiation and image creation when building a brand around a place.

2.9. Summary

The previous section looks at place branding generally and specifically in the wine industry. Several findings can be summarized. First of all, the term 'place' needs to be clarified. This research adopts a combination of 'place' as defined by Relph (1976) encompassing a combination of human and natural order as well as the definition of 'places' as defined by Ryan & Mizerski (2010) as 'region, space, setting, wilderness, landscape and environment'.

After critically reviewing the literature on stakeholder involvement and place identity in the place branding process it can be concluded that place identity in relation to place branding forms a valid theoretical perspective that can be summarized by stating 'if a brand is not based on identity then the branding effort can only lead to a brand alien to the place' (Govers & Go, 2009, p. 23). However, the literature is not yet ready to agree on a single place identity theory. The issue of multiplicity of identities and its effect on branding success has not yet been empirically tested. There is not much empirical evidence in the literature that place identity and stakeholder involvement are indeed necessary to consider in the place branding process. Nevertheless, aligning numerous scholars on identity in the place branding process it can be concluded that the consideration of a place's identity leads to a more successful brand. Therefore, an identity-based approach to place branding theory will be applied throughout this research taking a stakeholder approach.

Wine has been identified as one of the first agricultural product that has a close relationship with its geographic place of origin (Bernabéu et al., 2008) since it is seen as a quality indicator. This is due to the fact that wine quality is hard to be assessed prior to consumption and therefore needs quality indicators. Place-based branding is used to stimulate favourable associations in the mind of the consumer during the wine purchase decision making. In addition, place branding aims to attract visitation to wine regions and numerous findings advise on how place branding achieves that goal. Managing wine regions as corporate brands

in order to make strategic decision is seen as one way of sustaining a successful place brand. Furthermore, historical background as well as other established traditions should be communicated in the place branding process to attract visitation.

The literature on place branding is not extensive at this point in time and numerous questions remain. One such open question concerns the attributes that possibly create favourable associations in the mind of the consumer. Responding to trends in society can be a way of achieving favourable association. One such trend is the concern in society for environmental and social impacts of economic growth (Belz & Peattie, 2009). The food and beverage industry had its fair share of criticism as its production uses more natural resources than most industries (Maras, 2015) including the wine industry (Pullman et al. 2010). Also, environmental as well as social impacts of tourism have been clearly visible for various tourism destinations (Wheeler, 1995). Cooper, et al. (2005) state that the 21st century will be characterized by increasing concern regarding the impact of tourism. There will be more concern for the protection of the environment and business policies will have to be implemented to ensure resources being sustained. Branding a place as sustainable creates a unique identity to be differentiated from the competition. The following section therefore reviews the literature on sustainability in wine (tourism) industry and its branding strategies.

3. CHAPTER: SUSTAINABILITY IN THE WINE INDUSTRY AND ITS ROLE IN PLACE BRANDING

3.1. Sustainability in the wine industry

Concern for environmental and social impacts of economic growth as well as the impact of climate change are topics in the public discussion (Belz & Peattie, 2009). Scholars agree that consumers have become progressively concerned about the impact of conventional agricultural practices on human health and the environment and require safer, better quality and healthier foods (Barber, 2010; Forbes, Cohen, Cullen, Wratten, & Fountain, 2009; Remaud, Mueller, & Chvyl, 2008). In addition, corporate interest has risen in striving towards sustainability especially in relation to reducing energy usage and carbon emissions (Cholette & Venkat, 2009; Sampedro, Sánchez, López, & González, 2010). Maybe less so than conventional 'dirty' industries, the wine industry has its share of criticism for impacts on the environment (Baughman et al., 2000). These range from the use of pesticides and herbicides, fertilizers, using and wasting scarce water resources, producing waste through packaging as well as conflicting land-use options (Baughman et al., 2000).

Further critique concerning the wine industry deals with the impact of the 'carbon footprint' due to the heavyweight glass packaging as well as transportation costs (Barber, 2010; Colman & Paster, 2009). Therefore, numerous wine firms are committed to take environmental protection into consideration. This is done either due to social commitment or in avoidance to paying fines for not complying to environmental standards (Sampedro et al., 2010). The literature suggests that wineries have been ahead of other food processors in adopting environmental practices (Pullman et al., 2010). Numerous wine producers worldwide start to implement environmental strategies ranging from abdication of chemical fertilizers in the vineyards, restoration of natural habitats as well as re-using water (see for example "Cono Sur", 2013 in Chile) . These varying practices highlight the different facets of what the term

sustainability can entail. The following section therefore reviews the literature concerning the meaning of sustainability in the wine industry.

3.1.1. The meaning of sustainability

Historically, sustainability has been applied mostly in a technical sense to refer to the maintenance or continuation of some process or system over time (Kajikawa et al., 2007). Hay et al. (2014, p. 232) define sustainability in its most basic form according to different scholars as 'the ability to sustain, maintain or continue something over time'. Hay et al. (2014) suggest that despite the fact of growing body of research on sustainability, our society is not much closer to actually being sustainable. A lack of a clear and unified understanding of sustainability is perceived to be one of the causes of this failure (Lindsey, 2011). Hannon and Callaghan (2011) agree that there is a vast amount of information concerning sustainability out there but especially small business owners might be challenged by a high degree of uncertainty when planning to move towards sustainability. It is reiterated that there seems to be a general agreement that a sustainable society is in the best interest of everyone (Lindsey, 2011).

Based on an extensive literature review executed by Hay et al. (2014) three concepts have emerged when aiming to explain the nature of sustainability across different sectors: (1) systems, (2) activities and (3) knowledge. The systems are seen as providing a context for sustainable actions by not focusing on sustainability in isolation but rather seeing sustainability of entities as interconnected parts of a wider system (Bodini, 2012). Activities include the wish to sustain different things. These things range from resources (Dyllick & Hockerts, 2002) to social standards (Heal, 2012) and the life of organisms and non-organic entities (Heal, 2012). Hay et al. (2014, p. 234) stress such activities as the core of a sustainable development as activities need to be sustained in order to produce an entity in the first place and 'without activities there would be no life and therefore no society to sustain'. Knowledge is the third

concept and is based on the idea that one needs knowledge about processes that need to be managed in order to be able to strive towards sustainability (Hay et al., 2014).

3.1.1.1. Agricultural sustainability practices

The previous discussion about sustainability focused on societal considerations of sustainability and is applicable to a range of industries and players. Of particular interest is what sustainability means in the wine industry. With wine being an agricultural product the general agricultural literature about sustainability has been reviewed. A reduction of environmental impacts of production systems is often the main focus of sustainability research in agriculture (Conway, 1986; Hansen, 1996). The main motivators of sustainability being impacts of agriculture on the land and threats to agriculture which both lead to the adherence of sustainability practices (Hansen, 1996). Yet, a general definition of agricultural sustainability is discussed as focusing on 'both genotype improvements through the full range of modern biological approaches and improved understanding of the benefits of ecological and agronomic management, manipulation and redesign' (Pretty, 2008, p. 447). This implies that there are a number of approaches in the agricultural industry that need to be taken into consideration when aiming for sustainability. The importance of resilience is pointed out and it is argued that environmentally friendly production methods may cause problems for long-term economic and social sustainability of a farm (Darnhofer et al., 2010). In addition to the environmental aspect, the social and economic consideration of sustainable development is added. It is further debated that the sustainability of a farm can only be achieved through adaptability and change by retaining diversity (Darnhofer et al., 2010). Education and learning is also highlighted as a targeted outcome as previously established by Hay et al. (2014) who claimed that knowledge about sustainability is essential when striving towards it.

Many different expressions are used for discussing sustainability in the agricultural context and include (among others) biodynamic, community based, ecoagriculture, ecological,

environmentally sensitive, extensive, farm fresh, free range, low input, organic, permaculture, sustainable and wise use (Pretty, 2008). It remains questionable whether businesses that attain to these standards are actually sustainable as some scholars question the economics of organic farming to name but one example (Lampkin & Padel, 1994). Pretty (2008) summarizes the key principles of sustainable farming as:

- (i) integrate biological and ecological processes such as nutrient cycling, nitrogen fixation, soil regeneration, allelopathy, competition, predation and parasitism into food production processes,
- (ii) minimize the use of those non-renewable inputs that cause harm to the environment or to the health of farmers and consumers,
- (iii) make productive use of the knowledge and skills of farmers, thus improving their self-reliance and substituting human capital for costly external inputs, and
- (iv) make productive use of people's collective capacities to work together to solve common agricultural and natural resource problems, such as for pest, watershed, irrigation, forest and credit management.

Other practices of sustainable agriculture are seen as protecting soil fertility, prevent resource depletion, conserve land for wildlife/ecological services, protect integrity of aquatic ecosystems, stop global warming, protect human health; prevent damage to vegetation, conserve sensitive (semi-) natural ecosystems, protect human health & ecological functions, conserve biodiversity and species communities and food security/availability of control mechanism (Walter & Stützel, 2009, p. 1282). The previous examples are by no means an extensive list of sustainability practices but show an extract of what sustainability entails in the agricultural industry.

3.1.1.2. Sustainability practices in the wine industry

The literature on sustainability is not as extensive as the one on general agriculture but is still able to shed some light on the meaning of sustainability in the wine industry. Szolnoki (2013) establishes sustainability meanings across wine nations and finds that the majority associates the term sustainability with the environmental dimension. It is further cautioned that there is opacity regarding production management systems with people confusing terms such as organic, biodynamic and sustainable (Szolnoki, 2013). Thus, in order to understand the meaning of sustainability in the wine industry, it is essential to differentiate it from other forms of wine growing such as biological, organic and biodynamic wine growing. Organic wine growing includes the protection of the environment and the wine from as many external ingredients as possible (Gemmrich & Arnold, 2007). Biodynamic wine on the other hand relates to the thinking of Rudolf Steiner (1861-1925) whereby followers produce wine in accordance with nature and the lunar phases. In addition to organic and biodynamic wine, there are natural wines, preservative wines and vegan wines. All of these styles of wines limit external ingredients. Gemmrich & Arnold (2007) stress that two major aspects of sustainability are missing in those forms of wine growing. These are discussed as the men actually working with the wine and the profitability of the wine growing which are an essential part of sustainability and together with the protection of the environment form the triple bottom line of sustainability (Gemmrich & Arnold, 2007).

Overall, sustainable wine growing is defined to 'sustain the ecological digestibility as well as the healthiness of living and following generations in an overall profitable and economical way' (Gemmrich & Arnold, 2007, p. 2). According to The Sustainable Agriculture Research and Education Program at the University of California, sustainable viticulture integrates three main goals: environmental health, economic profitability and social and economic equity. In order to understand why sustainable wine growing is of such importance to the wine industry, its dangers to nature as well as people involved have to be discussed and will be listed.

- (i) Production of wine leads to a number of by-products such as waste and waste water and needs to be disposed of responsibly.
 - a. A single bottle of wine produces 0.5 kg waste and emits 16g of SO₂ (Rosenthal, 2006)
 - b. On average wineries in Australia use 2 litres of fresh water for each 0.75 litre bottle of wine (Frost et al., 2007)
- (ii) Labour intensive and health endangering jobs are prevalent in the wine industry

The implementation of measures that would prevent those dangers of the wine industry and ensure a step towards sustainability is unquestionable a valuable thing to do. A number of different authors have empirically researched sustainability practices in the wine industry (see for example Cordano et al., 2010; Gabzdylova et al., 2009; Pullman et al., 2010). Pullman et al. (2010) compares sustainability practices in the wine industry to practices in food supply chains and how those effect firm performance. Sustainability practices in the wine industry are divided into environmental practices and social practices. The environmental practices are further grouped into land, conservation and recycling practices. Purchasing and employee practices form the social practices. Interestingly, compared to other food supply chains, the wine industry has been measured to have higher land environmental practices. Such practices include wildlife habitat protection, protection of water resources and soil protection (Pullman et al., 2010).

Gemmrich & Arnold (2007) note that sustainable practices seem to be positive for communication, advertising or public relations by highlighting an additional benefit and competitive advantage in a competitive industry. Therefore, marketing literature is reviewed to explore how the wine industry uses sustainable claims in order to gain competitive advantage.

3.1.2. Sustainability place branding in the wine industry

The growing concern for a sustainable future results in branding efforts that emphasise sustainability (McEwan & Bek, 2009). Consumers change their behaviour towards integrating environmental considerations into lifestyle choices (Barber, 2010). Marketers adjust to this change in consumer behaviour by offering sustainable products in form of promoting green, organic and ethical products (Barber, 2010). Research shows that sustainability marketing increases brand performance through price premiums (Barber, 2010; Loureiro, 2003), increasing consumer loyalty and competitive advantage (Flint & Golobic, 2009). Professionals in the field of marketing agree that better environmental performance leads to better marketplace performance (Charter, Peattie, Ottman, & Polonsky, 2002).

The international wine market is perceived to be highly competitive and formed by multiple players, labels and products (Pugh & Fletcher, 2002) which is why companies need to find ways to differentiate their products from those of the competition. One way of doing so is seen as marketing wine as sustainable or environmentally friendly (Barber, 2010; Flint & Golobic, 2009). Pugh & Fletcher (2002) summarize that Australia's success is not due to its ability to produce quality wines at reasonable prices but instead the skill of Australian wine companies to build brands that compete internationally. Brand equity is generated in Australia through leveraging the country of origin image by transferring positive opinions such as quality fruits and relaxed lifestyles to its wine and food (Pugh & Fletcher, 2002). Authors clearly highlight the importance of building brands in the wine market since those are the bond with the customer and need to appeal to the wine consumer's own sense of individuality and unique style (Cederberg et al., 2009; Pugh & Fletcher, 2002). This understanding of the consumer segment in the wine industry is recognized by a number of scholars (Barber, Taylor, & Strick, 2010b; Barber, 2010; Flint & Golobic, 2009; Pugh & Fletcher, 2002). Barber (2010) summarizes that consumers' perception of wine as a product is crucial in the consumer decision making process and therefore in the brand's success. This perception of wine in return should appeal to the right

market segment.

Pugh & Fletcher (2002) find that 'green' wine is targeted at consumers who are looking for products that are conforming to their values of good living, being healthy and their desire to act in an environmentally friendly way. Such segments are identified as being between 40 and 60 years old with skewing towards women since those have been the original activists in the sixties and seventies and pro-environmentalists (Pugh & Fletcher, 2002). Barber et al. (2010b) support those findings for environmental concerned wine consumers being more female than male and from the Generation X (born 1965-1984) or Baby Boomers (born 1946-1964). The study is conducted in the United States and highlights the problem of regional differences when pursuing selective marketing. Their results show different findings for Southern, Midwestern and North eastern consumers in the US. Keeping in mind that those are relatively close in their cultural background, norms and attitudes raises the question about international differences. This regionalism of consumer segments demonstrates the intricacy of selective marketing efforts and leads to the question how 'green' and environmentally friendly brands can be built.

3.1.3. Individual sustainability place branding

Sustainability place branding in the wine industry can be divided into sustainability branding for the individual winery including wine brands as well as for the wine region. Since the majority of wine brands are somehow related to their place of origin (Thode & Masulka, 1998) the division of place branding on the individual and regional level is often opaque.

Limited research is available about how wine brands based on sustainability are built successfully. A case study by Pugh & Fletcher (2002) set in Australia looks into the brand building of Banrock Station wine, a sub-brand of BRL Hardy Ltd which is one of the top 10 largest wine groups in the world. The brand Banrock Station faces the challenge of

differentiating itself from the competition by targeting the niche market of environmentally friendly consumers. The 'green' marketing strategy is pursued by supporting conservation activities in order to cater towards the values and beliefs of wine buyers. They hoped the conservation and restoration of the Banrock station wetlands in Southern Australia might be an undertaking valued as important by the consumers. The strategy continuously includes donating a certain amount per sold bottle to conservation projects such as Wetland Care Australia and Landcare Australia (Pugh & Fletcher, 2002). In addition to the donations, Banrock Station uses communication tools in their branding, identifying the brand with supporting the environment such as advertising slogans 'good earth, fine wine' and in-store promotional material such as bottle flyer communicating their environmental commitment. Furthermore, the brand clearly states their point of difference in news stories, packaging, and point of purchase promotions, wine shows and on the website (Pugh & Fletcher, 2002). BRL Hardy expanded their successful niche marketing strategies to market with growth potential such as USA and the UK. Strategic alliances with local conservation groups are formed in those new key markets to appeal to the local target market. The case study on BRL Hardy shows that environmentally conscious customers offers substantial potential for future marketing (Pugh & Fletcher, 2002). This case study resembles green advertising literature in that it aims to portray an image based on environmental friendly business behaviour. Chen (2010) reviews the relationship between green brand image and green brand equity. Here, green image relates to factors such as the brand being trustworthy about environmental promises and well established about environmental concern. The case study of Banrock Station shows that they are trustworthy about their green promises through collaborating with reputable organizations such as Wetland Care Australia. Banrock Station also follows green advertising literature by trying to establish their brand about environmental concern. This is done by communicating their commitment through various channels. This shows that the general green advertising literature and sustainability branding on the individual winery level are comparable.

Flint & Golobic (2009) agree that a sustainability competency provides a point of differentiation in the firm's market. However, they extend the brand building around sustainability and environmentalism by including different sub-categories of concepts. Such concepts have been identified as leveraging the brand, telling a story, experimenting with sustainability and managing supply chain relationships (Flint & Golobic, 2009). Creating a point of difference can be achieved through telling local stories (Flint & Golobic, 2009; Ryan & Mizerski, 2010). This is done at the door level and is especially useful for smaller wine firms trying to create a point of difference in the mind of the consumer. As opposed to previous research, Flint & Golobic (2009) claim that sustainability initiatives in New Zealand are mandatory which is why the point of differentiation loses its strengths since all wineries are obliged to follow certain guidelines. Therefore, it might be helpful on the international level but the regional differentiation does not benefit from those initiatives. It is reasoned that in order to pursue differentiation strategies, wineries adopt additional environmentally related initiatives such as carbon zero (Flint & Golobic, 2009). Rocchi & Stefani (2005) agree that 'carbon criticism' is extremely high in the wine industry due to the heavyweight packaging and the here from resulting logistical strains.

An interesting finding by Colman & Paster (2009) shows how hard it is for consumer to 'do the right thing' when choosing a wine based on its carbon footprint. Due to the extreme efficiency of sea freight's emission, an Australian bottle of wine shipped through the Panama canal to port in New Jersey and then driven to Chicago by truck has a lower emission (2.1kg) than a bottle of the same weight being transported on a truck from California to Chicago (Colman & Paster, 2009). The importance of improving the sustainability practices of supply chains is pointed out since research concludes that supply chain management can lead to competencies harder to copy by the competition (Markley & Davis, 2007; Pullman et al., 2010). The focus on supply chain management reflects the importance of cooperation among players when aiming

to build a sustainability brand.

Warner (2007) researches the importance of partnerships in creating a brand for Napa Valley in California and finds that players in the wine industry learned the importance of cooperative action in branding their place. It was established that more individual rewards were achieved, the more a collective ability to enhance the reputation of Napa wines was apparent. Other scholars agree that new product development needs to be communicated throughout the supply chain (Pullman et al., 2010). This general agreement among researchers of working together to establish a strong brand is pursuant to the stakeholder approach of co-creating the place brand.

As discussed, there are different reasons for implementing sustainability into wine branding strategies. One stance taken in the literature is that management attitudes and norms are particularly important when adopting new practices (Cordano et al., 2010). Current literature on attitudes and norms influencing new process adoption will therefore be reviewed in the following section.

3.1.4. Management attitudes and norms towards sustainability

It is suggested that particularly in small and medium enterprises decisions are made based on the manager's attitudes and norms (Rothenberg & Becker, 2004). Since the wine industry is largely formed by small family enterprises decision making is likely to be influenced to a great extent by attitudes and norms held by management. Varying results in the literature concerning norms and values as drivers for sustainability implementation exist. Gabzdylowa et al. (2009) compare individual and institutional drivers and find that individual drivers such as environmental values and the personal satisfaction with the profession have the strongest influence on sustainable practices among New Zealand wineries. Institutional drivers such as compliance with current and future regulations is less important than the values and norms

held by the winery management. Marshall et al. (2005) review managerial attitudes and norms as drivers of proactive environmental behaviour in the US wine industry through focus groups. Their results clearly show that attitudes and subjective norms labelled as individual drivers and based on the Theory of Reasoned Action (Ajzen & Fishbein, 1980) seem much more relevant than institutional drivers such as community pressure or consumer demand. Another study set in the wine industry researches drivers for pro-environmental behaviour and finds differing results (Marshall et al., 2010). Marshall et al. (2010) differentiate between attitudes held by the management and subjective norms felt by people in the company. Interestingly, findings show that whilst individual management attitudes do not influence sustainability practices, norms held by the employees portray a strong positive correlation. It needs to be cautioned though that attitudes of the management only relates to perceived benefits of sustainability practices. Having said that, managers might still have a positive attitude towards the ethics of sustainability but might not believe it to be worthwhile (Marshall et al., 2010). Cordano et al. (2010) draw the link between managerial attitudes and norms and performance of small and medium enterprises. This is explained by the fact that organizational structures in the wine industry are often quite simple with the owner/manager being head of a few employees. It is suggested that therefore managers attitudes are likely to strongly influence decision making (Cordano et al., 2010). Cordano et al. (2010) test through correlation and multiple regression analysis whether positive attitudes and norms influence the implementation of environmental management programs. Findings show that whereby subjective norms strongly correlate to the implementation of such programs, positive attitudes only display a marginal correlation. It is important to note that the variable of positive attitudes is divided into expected general benefits of environmental management programs and positive attitudes towards organic viticulture (Cordano et al., 2010). Only the general positive attitudes result in a positive correlation. These differing results require further investigation into the effect of norms and attitudes held by winery management as drivers for sustainability implementation.

Having discussed some of the drivers for the supply side it is equally important to determine whether the communication of sustainability influences potential consumers. Thus, drivers for sustainable behaviour are reviewed.

3.1.5. Drivers for sustainability consumption

The literature identifies different drivers that influence the choice for sustainable product consumption. The prevailing literature on organic choices is based on food consumption. The majority of the literature looks at attitudes and beliefs when it comes to choosing organic or 'green' food products. A Scandinavian study found that self-reported purchase of organic food products mainly due to health reasons (Magnusson, Arvola, Hursti, Åberg, & Sjöden, 2003).

Another study compares German and UK attitudes towards organic food choices and is comparable to previous findings of choosing organic products for health reasons (Baker, Thompson, and, & Huntley, 2004). However, differences were found in that Germans regarded the benefit to nature when choosing organic products, British counterparts did not see benefits for nature as a driver of organic food choice. The previous study reflects the importance of cultural differences when researching attitudes towards organic food choices. A study on drivers of organic food choices found that whereas the consumer believes in the 'betterment' of organic food products, the limited choice available and inconvenience of buying organic products undermines the positive attitude towards organic food products being transformed into an action of actually purchasing those goods (Lockie, Lyons, Lawrence, & Mummery, 2002).

The main benefit sought when purchasing organic products is health related. The question is whether the same findings emerge for wine choices. According to the 'French Paradox' moderate wine consumption is regarded as providing health benefits such as preventing cardiovascular diseases (Bruwer & Buller, 2012). Yet, wine is an alcoholic beverage which includes dangers such as alcohol addiction. The literature on consumer behavior for organic or

green wine is limited. Only a handful of scholars examine consumer attitudes towards organic or environmentally friendly wine. There is consensus in the literature that the market for sustainable products has grown in the past decade and consumers ask for better quality and healthier foods (Brugarolas, Martinez-Carrasco, Bernabeu, & Martinez-Poveda, 2009; Forbes et al., 2009; Remaud et al., 2008). Forbes et al. (2009) base their research on the premises that many companies pursue environmental practices in order to differentiate their products and to gain a competitive advantage in a competitive market. Therefore, the focus of the study is the determination of whether environmentally sustainable practices actually provide a point of difference (Forbes, 2009). Results in the New Zealand wine market clearly show that consumers indeed prefer wine that has been produced using environmentally sustainable methods of production and are labelled as such (Forbes, 2009).

Furthermore, the vast majority agrees on the willingness to pay more for such wines which shows that environmentally sustainable practices adopted by New Zealand winemakers lead to a competitive advantage. However, the study is set in New Zealand and was based on a survey of merely 109 respondents which lead to questioning the generalizability of the results, especially since other studies (Gabzdylova et al., 2009) state that New Zealand winemakers are not able to ask premium prices for their environmentally friendly produced wines. Another study by Remaud et al. (2008) inquires the willingness to pay of Australian wine consumers for organic wine. The results of the study conclude that there is a market for organic wines in Australia, yet only a small one. Just over 10% (n=756) of the respondents claim to be environmentally conscious and do value organic wine. However, the willingness to pay premium prices for organic wine in the Australian study is found to be only \$0.25 more than the conventional price. It needs to be researched whether that would be enough to retain costs made through sustainable production methods.

Remaud et al. (2008) highlight an interesting finding of Australia's role in the general organic

market being of great importance. This is due to the fact that Australia has the largest land area under organic food production worldwide, however, that does not account for wine. This reflects a major difference between organic wines as opposed to organic food. Brugarolas et al. (2009) analyse whether establishing local organic wine markets in Spain would be profitable. The willingness of consumers to pay for organic wine is examined. The vast majority of about 70% - 80% (n=800) would be willing to pay more for organic wines in Spain as opposed to the Australian study (Remaud et al. 2008). The increase in price for organic wine is due to raised production costs since labour costs need to be increased and is estimated to be around 22% higher than for the traditional products (Brugarolas et al., 2009). When looking at drivers for organic choices three factors are identified; concern about food, concern for the environment and health reasons. As opposed to the Australian study (Remaud et al., 2008) the willingness to pay among Spanish consumers would compensate the additional costs involved when producing organic wine (Brugarolas et al., 2009). Forbes et al. (2009) claim that the demand for environmentally responsible products is higher among European and North American consumers than among New Zealand consumers. This claim might be verified by the noteworthy difference in wineries being certified organic ranging from 1,639 in France (in 2006) to 44 wineries in Australia (2008) (Remaud et al., 2008). This lack of consumer willingness to pay for organic wine in Australia and New Zealand as opposed to the generally positive attitude among European consumers raises the question of in how far sustainability actually influences business performance and will be reviewed in the following section.

3.1.6. Sustainability and performance

Winemakers are under the impression that environmental friendly actions might be counterproductive for wine quality and earnings (Gemmrich & Arnold, 2007). This statement shows a negative angle of the production and the marketing of sustainable wine on consumer choice and therefore on business performance. Drawing from general business literature there are varying findings of whether sustainability practices lead to better performing firms. There

are a number of studies that found a negative relationship (Chen & Metcalf, 1980; Jaggi & Freedman, 1992; Wagner et al., 2002). Lo (2010) argues that a negative relationship can best be explained by firms' who are investing in sustainability efforts might be at a cost to profitability. Wagner et al. (2002) explain that the relationship between environmental sound business practices and business performance is improving based on a number of reasons. First of all, it is a potential source for competitive advantage by making processes more efficient, improving productivity, lowering costs of compliance and opening new market opportunities (Porter, 1991; Porter & van der Linde, 1995; Schmidheiny, 1992).

A number of empirical studies resulted in positive relationships between a firm's environmental performance and financial benefits (Blacconiere & Patten, 1994; Forbes et al., 2009; Klassen & McLaughlin, 1996; Dowell et al., 2000; King & Lenox, 2002; Nowak and Washburn, 2002; Schnietz & Epstein, 2005; Lo & Sheu, 2007). It is agreed by professionals in the field of marketing that better environmental performance results in better marketplace performance' (Charter, Peattie, Ottman, & Polonsky, 2002). Judge & Douglas (1998) assessed whether integrating environmental management concerns into the strategic planning process positively relates to financial performance. They suggest that based on their findings, concern for environmental issues actually yields competitive advantage in the marketplace. Klassen & McLaughlin (1996) also support the notion of environmental management positively influencing profitability, despite the fact that many had suggested that profitability is actually diminished by higher production costs of environmental production methods. Firms who have received environmental performance awards were observed and compared to those firms' with fewer awards and a significant positive return was observed for those companies who had strong environmental management (Klassen & McLaughlin, 1996).

These two opposing findings can be explained by two views, the 'traditionalist' and the 'revisionist' as outlined by Wagner et al. (2002). The traditionalist believes that environmental

improvements have decreasing net benefits. The revisionist on the other hand follows an inversely U-shaped curve with an optimum level of environmental performance as displayed in the following figure based on Wagner et al. (2002, p.134).

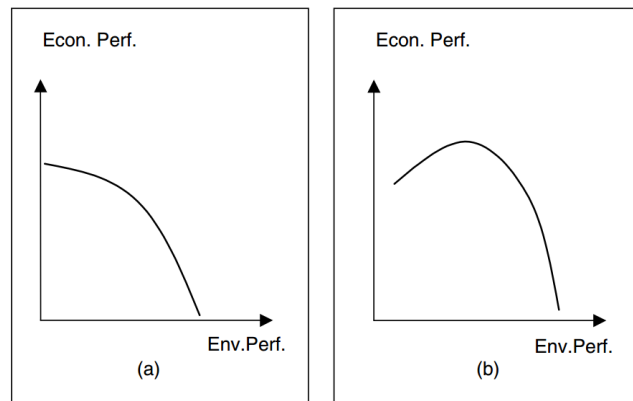


Figure 3.1. 'Traditionalist (a) and 'revisionist (b) views

The idea behind the 'revisionist' view is that long-term competitive advantage can be achieved despite the fact that whilst imposing costs, properly implemented environmental standards increase innovations which save money in the long run (Wagner et al., 2002). This general review of the literature about the relationship between sustainability mainly in form of environmental performance on the economic performance leads to the question of whether the same effect can be observed in the wine industry.

Previous research shows that the communication of sustainability efforts increases brand performance through price premiums (Barber, 2010a; Loureiro, 2003). Barber (2010a) explains how initially spending more on green packaging can be overcome by customers being willing to spend more. Loureiro (2003) on the other hand questions quality perceptions for environmentally friendly wine and concludes in order to receive a premium price for environmental friendly wine those wines need to be perceived as high quality first and foremost. Research in the wine industry shows how sustainability can lead to competitive advantage through 'telling a story that involves sustainability, managing supply chain

relationships around sustainability and experimenting with sustainability initiatives' (Flint & Golobic, 2009, p. 841). Interestingly, this 'telling of a story' seemed to be one of the main success factors for New Zealand wineries who explain that these stories seemed critical for establishing an emotional bond between customer and wineries and transformed customers into strong advocates and loyal buyers of the brand (Flint & Golobic, 2009). One of the issues discussed in relation to sustainability and performance is the measurement of success. Performance is described as complex concept that requires a number of variables to be measured correctly (Lo, 2010). The following sections are thus reviewing literature on individual and regional place performance.

3.1.7. Individual and regional place performance in the wine industry

A number of scholars have debated that a multifactor performance measurement model should be applied in research (Bagozzi & Phillips, 1982; Chakravarthy, 1986). Stock market information is often applied for objective company performance measures (Lo, 2010). Yet, the wine industry consists mainly of small and medium businesses often run as family businesses. Therefore, objective published performance figures related to revenues and profits are hard to obtain. Particularly the place branding literature calls for comprehensive performance measures (Zenker & Martin, 2011).

A number of different performance measures can be found when reviewing the tourism literature. Dwyer & Kim (2003) establish a number of selected indicators of destination competitiveness. These include natural resources as well as tourism supporting factors such as developed tourism infrastructure. Destination management success is another success factor for destinations taking reputation and effectiveness of destination positioning into account. Finally, market performance indicators are introduced by Dwyer & Kim (2003) as essential when measuring destinations' success. Such market performance measures are stressed as visitor expenditure and number of visitors.

In addition to market performance indicators, the success of the destination brand is highlighted as indication for a well performing place or destination (Blain, 2005). Blain (2005) contribute to the understanding of destination branding and found a number of themes for successful destination branding. These include image creation, recognition and differentiation among others. Thus, the better a destination brand is in creating a fitting image, conveys recognition and differentiates itself to other destinations, the more successful the brand will be.

Innovativeness is another variable discussed in the literature as crucially important for place performance measurement. It is highlighted how a firm can enhance its competitiveness through innovation (Ritchie & Crouch, 2000). Innovation plays a vital role in the tourism industry by technology adoption. Thus businesses that are keen to develop information and communication technology will be able to outperform those who do not (Dwyer & Kim, 2003). This is in line with Deshpande, Farley, & Webster (1993) who review the relationship between performance and innovativeness and find a positive correlation between organizational innovativeness and performance.

Economic prosperity is another success factor of destinations highlighted by Dwyer & Kim (2003). Rao & Holt (2005) research the relationship between green supply chain and economic performance based on factors such as new market opportunities, profit margin, sales and market share.

In order to overcome the problem of mainly dealing with SME's in the (wine) tourism industry, a comparative approach is suggested in the literature on measuring performance. For example Deshpande et al. (1993) measure performance by asking respondents to compare their performance relative to their largest competitor. Dess & Robinson (1984) also suggest that if

objective measurements are unobtainable, seeking performance information relative to similar companies in the industry is likely to produce findings that are consistent with factual measures.

The previous discussions about the effect of sustainability on place performance and the measurement of place performance acknowledges some ambiguities and difficulties in the extant literature. The following section acknowledges that there is not one certain way that guarantees success by exploring issues and barriers to sustainable branding.

3.1.8. Issues and barriers to branding sustainability in the wine industry

Despite the advantages related to sustainability and performance in the wine industry, issues are remaining that pose challenges to all parties involved. Pugh & Fletcher (2002) caution that positioning change towards sustainability requires pursuing a strategy in depths rather than superficially in order to prevent 'greenwashing'. Greenwashing entails making claims about sustainability that cannot be verified and are put forward for the mere purpose of marketing (Barber et al., 2010b). It is demonstrated that especially for strategic changes in overseas market, local strategic alliances and continuous delivery are necessary for a believable brand (Pugh & Fletcher, 2002). Pullman et al. (2010) research wineries' sustainability practices in food supply chains in the USA. They find that wineries do not feel ready yet to market sustainability heavily due to the ambiguity of what constitutes sustainable practices. Winemakers fear 'greenwashing' if moving too quickly and without the required knowledge (Pullman et al., 2010).

Another issue deals with finding the right target segment. Regional differences in preferences make the choice for a target segment difficult and yet serving the right consumer is the key when changing marketing strategies (Barber et al., 2010b). The author suggests that consumer should be segmented according to their concern for the environment. Yet, segmenting

consumers based on general concern for the environment is not a clear segment that can easily be targeted as there are discrepancies between consumers demographics and taste as well (Barber et al., 2010b).

From the company's point of view, additional costs form another challenge. Procedures to implement organic grapevines are costly and require large investments for equipment and installations (Bernabéu, Brugarolas, Martínez-Carrasco, & Díaz, 2008). In addition to production costs, costs for certification need to be considered. This is why mainly large wineries with resources have the possibility to officially be certified as an organic producer. Some small wineries cannot be certified as being organic even though they might use no pesticides and herbicides (Cederberg et al., 2009). Further barriers to implementing sustainability in business strategies can be seen in the challenge to choose the right certification. This is due to the fact that choices are notable, differing internationally as well as at a regional level (Cederberg et al., 2009; Pullman et al., 2010). More issues with the certification processes can be seen when new world wineries aim to access the European market. Cederberg et al. (2009) examines the opportunities for organic Chilean wineries and stresses that wineries that can afford international certification bodies have a big advantage. Despite the fact that the Chilean Ministry of Agriculture created a certification system for organic products, the European export market remains inaccessible for those wineries that rely on this national certificate (Cederberg et al., 2009). This is because the European Union has not yet approved the national Chilean system. This has significant effects on the organic wineries in Chile since they need access to overseas markets due to the fact that the home market for organic wine is limited (Cederberg et al., 2009). Organic wine production in New Zealand has only been recognised by the European Commission (EC) as comparable to their own in 2015 (Hamlet, 2015). Benefits such as higher export margins and more time efficiency are the result for the New Zealand exporters and encourage the communication of organic certification. Wine producers would omit organic certification before the acceptance by the EC in order to forgo lesser margins and greater time efforts (Hamlet, 2015).

3.1.9. Summary

A review of the literature suggests that wineries have been ahead of other food producers in adopting environmental practices (Pullman et al., 2010). There is a lot of information concerning sustainability available but especially small business owners might be challenged by a high degree of uncertainty when planning to move towards sustainability (Hannon and Callaghan, 2011). This is partially due to the various meanings of sustainability that are not unanimous. Consumer search for sustainable products and applying sustainability efforts in wine marketing is partially researched to have a positive effect on firm performance. This notion can be supported by the general business literature but the wine industry lacks reliable, empirical studies that show whether following a sustainability strategy actually influences performance.

One possible barrier to profiting from sustainability marketing strategies in the wine industry is the problem of 'greenwashing' which means the communication of sustainability without the support of actual sustainable behaviour. Finally, additional costs are seen as problematic especially among small businesses. It can be summarized that if executed in depth, an innovative marketing approach, such as sustainability branding, is a useful way of positioning wine in new and existing markets. However, barriers and challenges such as expenses and a lack of consumer knowledge need to be overcome before successfully making use of sustainability in marketing. The current research is executed in place branding for wineries and wine regions and the role of sustainability in such. Therefore, it is of interest how sustainability is applied and executed in the place branding literature. Since the literature on place branding is far from being extensive, the tourism literature will also be reviewed in order to draw a complete picture of sustainability and place branding which can be regarded as a form of destination branding (Kerr, 2006). This will then be applied to place branding in the wine industry.

3.2. Regional sustainability place branding

Environmental as well as social impacts of tourism on the host community are clearly visible for various tourism destinations (Wheeler, 1995). Cooper et al. (2005) state increasing concern regarding the impact of tourism. According to a survey conducted by TripAdvisor in 2012, the 'green' travel trend is growing as 71% of the respondents said they are planning on making more eco-friendly choices compared to 65% the previous year (TripAdvisor, 2012). Kozak & Nield (2004) state that it is commonly accepted that destinations will compete based on the degree to which they are concerned about sustainability of their natural, economic and cultural resources.

Font, Tribe, Road, & Wycombe (2001) find that there are limited direct benefits for tourism destinations that act environmentally responsibly. An example of a direct benefit would be the receipt of revenues from recycling. Instead, indirect benefits such as being able to increase pricing is mentioned as environmentally conscious visitors are willing to spend more (Font et al., 2001). This highlights the need to position a tourism destination as an environmental one, which is where destination branding plays a crucial role. Thus, the following section will review the literature on sustainability in destination branding strategies. In order to clarify the importance of destination and place branding strategies in the wine tourism industry, the wine tourism literature has been studied with a particular focus on sustainability. This chapter starts by reviewing general wine tourism literature. This is followed by a discussion of the benefits of sustainability in destination and place branding strategies. Issues and barriers of sustainability in these strategies will be outlined and suggestions provided how they can be overcome.

3.2.1. Wine tourism

The division of wine tourism research from other fields of tourism research started to develop in the mid-1990s. Scholars link wine tourism to different categories of tourism. Marzo-Navarro & Pedraja-Iglesias (2012) see wine tourism as a form of Special Interest Tourism (SIT) and

reason its existence due to a change in travel behaviour away from 'sand and beach' holidays, to alternative forms of tourism. Another categorization is wine tourism as part of rural food tourism (Hall, 2005).

There are numerous different definitions for wine tourism in the literature. One definition is commonly used and accepted by wine tourism scholars as 'visitation to vineyards, wineries, wine festivals and wine shows for which grape wine tasting and/or experiencing the attribute of a grape wine region are the prime motivating factors for visitors' (Hall et al., 2000, p.298). Getz & Brown (2006b) recognize that there are three perspectives to be considered when defining wine tourism. These different perspectives come from three interest groups: wine producers, tourism agencies (representing the destination) and consumers, who together form the complete wine tourism product (Getz, 2000). According to the previous definition, wine regions, wineries and vineyards can be regarded as places and destinations in the branding discussion.

There are benefits as well as issues related to wine tourism. Hall et al. (2000a) mention advantages for vineyards and wineries such as additional sales outlets, educational opportunities and increased margins. Carlsen (2004) looks at the whole wine region when identifying benefits of wine tourism and states its benefits go beyond the cellar door to all areas of the regional economy. Hence, wine tourism can lead to earnings not just for businesses directly involved with wine but also for additional stakeholders such as restaurants, accommodation and other tourist attractions. Other research supports the view that wine tourism benefits the whole region (Carmichael, 2005; Niininen, Szivas, & Riley, 2004). O'Neill & Charters (2000) establish wine tourism as a profitable industry. Benefits such as foreign exchange earnings, creation of employment and the generation of secondary economic activity in wine tourism regions are further mentioned. The creation of such benefits is important since wine tourism is one of the few industries located in rural areas and can therefore assist and

contribute to regional development (O'Neill & Charters, 2000).

In contrast to the benefits, there are also shortcomings related to wine tourism. Macionic (1999) claims that wineries might benefit less from wine tourism than tour operators might. The possibility is highlighted that tourists might be merely interested in consuming alcohol instead of seeing wine tasting as a means for possible purchase and education reasons. Other issues concern the costs for wineries involved when offering wine tourism. Those costs include initial expenditure such as reconstructions of facilities as well as continuous spending for paid staff in tasting rooms (Hall et al., 2000a). Additionally, management time may increase if tourists have to be served. Therefore, capital and revenue spending is required for wineries to restructure for tourism demands. Besides, wineries have no guarantee for sufficient return on investment since there is no definite increase in sales (Hall et al., 2000a). Other issues concerning wine tourism, are the rapid expansion of vineyards and the herefrom conflicting land-use options (Skinner, 2000; Carlsen, 2004). Another threat through the rapid development of wine regions leads to the endangerment of animal species and their natural habitat loss (Alley, 2010). These conflicts of wine tourism raise the question of how and whether the application of sustainability in the attraction of wine tourists affects the wine tourism product. The following section therefore reviews benefits of applying sustainability in the wine and general destination branding.

3.2.2. Benefits of sustainability place branding

The theory section on place branding emphasises the use of place branding rather than destination branding. However, due to the intricacy of applying sustainability to the branding process and a more encompassing body of literature on destination branding, this section draws on literature from both place and destination branding.

Branding a destination has been defined as 'the process used to develop a unique identity and

personality that is different from all competitive destinations' (Morrison & Anderson, 2002, p.17). Morgan & Pritchard (2002) agree that there is a need for destinations to create a unique identity to be different from the competition. They further propose that most destination still remain loyal to common display of blue skies and white beaches which does not provide any form of differentiation. There are claims in the literature that future customers are less concerned with the price of a destination but rather can be convinced through perceived values which makes destination branding such an important tool (Morgan & Pritchard, 2002).

Branding a destination as environmentally friendly is one differentiation strategy. The tourism market place shows various approaches to environmental friendly branding such as the communication of sustainability claims, eco-labels and eco-tourism certificates. Building a destination brand around eco-friendliness aims to create a unique identity trying to persuade the visitor of the destinations uniqueness that aims to touch the visitor's 'heart and mind' (Morgan & Pritchard, 2002). Whereas ecological impacts of wine tourism are connected to farming, harvesting and wine production on the one hand, activities and travel pattern of wine tourists also have their share of negative impacts on the environment (Barber, Taylor, & Deale, 2010). In order to attract wine tourists, wine companies address specific issues related to wine production and build competitive brands around the prevention of those issues. Furthermore, bio-dynamic or sustainable farming practices are articulated in the attempt to attract wine tourists (Barber et al., 2010a).

There are different ways in which destinations pursue the communication of differentiation tactics based on sustainability. One such way is the promotion of environmental credentials such as eco-labels (Font et al., 2001). Compared to manufacturing or timber production industries where certification is a common way of differentiation, tourism industry awards are not as well developed yet (Font et al., 2001). Nevertheless, there are more than 100 eco labels for tourism, hospitality and eco-tourism (Font, 2002) which reflects the growing use of eco-

labels in the tourism industry as a mean of differentiation. There are no academic sources that verify the existence of eco-labels in wine tourism; however eco-labels have been researched in the general wine marketing literature. Loureiro (2003) looked at environmentally friendly labels as a way to build a reputation of high quality wines. Due to the fact that eco-labels are applied in the process of destination branding throughout tourism destinations and in the general wine marketing literature, the following section analyses the benefits of eco-labels when aiming for a competitive advantage and critically assesses whether those benefits apply to the wine tourism setting. For the purpose of simplicity the word sustainability, green, soft and eco-tourism are used interchangeably to refer to environmentally friendly tourism even though the researcher is aware that they have a different focus and meanings (Font et al., 2001).

3.2.2.1. Benefits of eco-labels for (wine) tourism destinations

There are more than 100 eco-labels for tourism, hospitality and eco-tourism (Font, 2002) and their application in the tourism industry dates back to the early 1990s (Kozak & Nield, 2004). The general aims are argued to be the constant improvement of the environmental quality of tourist destination by minimising negative impacts of tourism development (Kozak & Nield, 2004). This aim is perfectly applicable to wine tourism as well since wine tourism poses threats and challenges to the environment due to wine production methods as well as visitor related issues (Barber et al., 2010a). This section focuses on the benefits for the supply side of destination branding based on environmental support. This support of the environment can be shown in form of eco-labels, by stating sustainability claims in destination branding and by generally branding wine regions as eco-tourism destinations.

The supply side of wine tourism comprises of wineries, accommodation, restaurants and official tourism offices in wine regions to name but a few stakeholders. There are different views about how branding a destination as environmentally friendly can benefit the supply

side. Some scholars say that 'green' branding is a way for justifying the demand of higher prices (Buckley, 2002; Font et al., 2001) which would benefit the supply side by reaching higher profits with the same amount of visitors. The literature on wine marketing acknowledges that the implementation of environmentally friendly production methods, such as the abdication of chemical pesticides are costly due to enhanced manual labour (Brugarolas et al., 2009). In this situation, the demand of higher prices is justified and will not necessarily lead to higher profits. How can destinations benefit, if not by making more profit from the same amount of visitors? Font et al. (2001) mention an enhanced image as a benefit for destinations that are positioned as environmentally friendly. Such image enhancement can lead to competitive advantage which in return leads to augmented consumer choice (Kozak & Nield, 2004). Other financial benefits would include improved access to public funds and cost savings in the long run (Buckley, 2002; Font et al., 2001). Whereas it might be cost intensive to change a winery from regular production methods to environmentally friendly production methods, it might pay off in the long run. An example would be the purification of water being used during the production process, which diminishes the dependence on external water sources (Font et al., 2001). Those cost savings could be spent on service improvements or marketing activities. The other benefit concerning access to public funding is due to an improvement of relations with the public sector (Buckley, 2002; Font et al., 2001).

Another perceived benefit for the supply side when committing to environmental friendly practices is the possibility of benchmarking (Kozak & Nield, 2004). If a destination is yet unsure, what kind of sustainability improvement to apply in order to strive towards sustainable destination branding, eco-labels and awards can be used as a way of defining benchmarks. Gaining insights into other destinations performance provides a good learning opportunity to make a destination more competitive (Kozak & Nield, 2004). Furthermore, destinations can benefit from entering a network with other destinations that use sustainability attributes in their branding strategy (Buckley, 2002). This can be in form of official networks if the

destination chooses for eco-labels that are provided by official organizations. Such an official network helps in case of problems occurring through the implementation of environmental standards. Even if no official standardization organizations are used, the environmental friendly branding allows access to other networks such as promotion agencies for inclusion in marketing campaigns (Buckley, 2002). Networks can be built with other destinations using environmental improvement, which is highly common in the wine industry and lead to benefits such as cost minimisation through shared marketing efforts and/or production methods (Kozak & Nield, 2004).

An improved relationship with the local community is reasoned to be another benefit of adopting environmentally friendly methods in the destination branding process (Buckley & Clough, 1997). Once the local community will be aware of the improved environmental methods applied by wineries and/or stakeholder in the wine region, it feels valued and satisfied (Buckley & Clough, 1997). This might be especially true for wine tourism since wine tourism can be regarded as rural tourism, usually being located in rural landscapes where the impact of tourism on the local community is especially high (Hall, 2005). Therefore, satisfying the local community by highlighting the acceptance of the nature and minimal effect on it is seen as another benefit.

Summarizing, there are numerous benefits of applying 'green' destination branding. These range from financial benefits of cost minimisation to network availability and the satisfaction of the local community. Despite the fact that these benefits stem from the general tourism literature, an application to the wine tourism industry is possible. In addition to benefits for sustainability applied in destination branding, there are also issues and barriers involved which will be discussed in the following section.

3.2.3. Issues and barriers of sustainability place branding

In spite of the benefits identified, there are a range of challenges and barriers involved when branding a destination as sustainable. Buckley (2002) explains that eco-labels and environmental accreditation as being debatable topics in tourism. The common critique concerning the use of sustainability in destination branding strategies is that there are no methods that enforce sustainable management and regulate green messages. This fact poses different challenges for the supply side of the wine tourism product.

3.2.3.1. Issues and barriers of sustainability branding for wine tourism destinations

A challenge concerning the supply side of tourism is identified as the costs involved when applying for ecological certification. Those costs are not just of monetary nature but include time (Synergy, 2000). These costs need to be weighed against the benefits associated with the development of becoming a sustainable destination. The main benefit and desired outcome for the supply side is the development of a competitive advantage which aims to attract tourists (Kozak & Nield, 2004). Kozak & Nield (2004) establish that visitor choice is influenced by many more attributes than the environment. Those attributes have been identified as location, price and specific customer requirements. All of these attributes form part of the destination choice process which creates doubt whether costly environmental strategies pay off.

Studies on factors influencing the consumer choice regarding wine tourism destination reveal findings such as 'attractive scenery', 'knowledgeable winery staff' and 'wine festivals' (Getz & Brown, 2006b). Hence, the issue about understanding tourist destination choice and evaluating the importance of environmental issues is applicable for wine tourism destinations as well. Another issue concerning the destination choice process can be seen in the question regarding which target market to position the branding strategy in. As Buckley (2002) notes, environmental concerns and priorities may vary to a great extent between countries and

socioeconomic groups. This outcome can be confirmed for the wine industry since the literature on 'green' wine marketing reflected the variability in consumer preferences among regions let alone countries (Barber et al., 2010b).

Another challenge involved in the process of stressing environmentally friendly attributes is formed by the opacity of terminology. The orientation towards environmentally friendly processes has poorly defined terms such as green, nature or sustainable eco-tourism, all seemingly promoting the same thing (Buckley, 2002). The author further states the problem of terms being used so widely and loosely that it nearly becomes meaningless to consumers. An example about defining eco-tourism in Australia highlights just how little consensus there is in relation to the term. Two definitions provided by Buckley (2002, p.187) are compared. One definition coming from the Commonwealth Department of Tourism (1994) that includes 'education and conservation, as well as nature-based product and sustainable management' in the term eco-tourism. The Department of Tourism, Small Business and Industry (1997) on the other hand refers to eco-tourism as 'sustainably managed tourism in a natural setting' (Buckley, 2002, p.187). These definitions pose challenges to offer an appropriate message in branding strategies. Additionally, it raises the question in how far the consumer differentiates between the terms and whether the promotion of any of these terms influences the consumer choice process. The issue of terminology is outlined in the previous section as playing a vital role in environmental oriented wine marketing (Szolnoki, 2013). Here, terms such as organic wine, wine produced from organic grapes, sustainable wine and bio-dynamic wine all have different meanings.

The ambiguity in terminology leads to the next challenge which includes the remarkable choice of labels and awards in the market place. Font et al. (2001) identifies more than seventy different eco-labels which make it nearly impossible for destinations to choose the right one. Plus, relevant information as to the scope, coverage and information of different awards and

labels are missing (Kozak & Nield, 2004). The following section reviews how those challenges can be overcome.

3.2.4. Overcoming challenges in using sustainability in place branding

The literature classifies various improvement points for the use of environmental management in destination branding strategies. Most scholars agree on the need for improved legislation (Bell, 2008; Buckley, 2002; Font et al., 2001; Font, 2002) as a response to the various amounts of environmental claims made by destinations. An example for the improvement of legislation is provided by Font et al. (2001, p.19) who explain that the Department of Transport, Environment and the Regions in the UK takes action by standardizing and benchmarking claims. The tourism industry is fragmented and formed by numerous small players in different countries with diverse development priorities and administrative frameworks (Font et al., 2001) which is also the case for the wine tourism industry. Hence, the aim to attempt tourism-wide standards will result in inconsistencies (Ding & Pigram, 1995). In order to face this challenge Font et al. (2001) suggests the environmental management approach applying accepted standards such as ISO 14001 (International Standard Organization). ISO 14001 is guaranteeing environmental policies and is awarded to wineries worldwide (see for example "Cono Sur", 2013 in Chile). Such standardized labels are claimed to be the only method to cover the complete tourism industry irrespective of locational differences' (Font et al., 2001). However, such accepted standards as ISO 14001 are cost intensive and usually only feasible to apply for larger companies which makes them less applicable to many players in the tourism industry.

Font (2002) assesses takeovers, mergers and alliances as a way of gaining economies of scale necessary to communicate the sustainable message to the international tourist market.

Alliances can be seen as networks which have been identified in the wine literature as key drivers for success when improving environmental management (Bruwer, 2003). It is further

addressed that such generic international labels and certification are likely to use generic and vague standards in order to be applicable to the whole tourism industry (Font, 2002). Instead of general standardization labels, Buckley (2002) argues that an environmental scheme essentially needs different detailed criteria for various types and scales of tourism accommodation, transport, tours and activities. Hence, a labelling scheme away from generalization is suggested that requires two levels of labelling; one label that is easy to obtain for businesses that perform above average sustainability management and one label for outstanding performers who fulfil a number of rigorous environmental criteria (Buckley, 2002). Such suggestion might work in the wine tourism industry as well giving visitors the choice to what extent they expect environmental excellence.

No matter the detail of the labelling scheme, the criteria by which those labels are given needs to be transparent and information available and accessible to the public (Buckley, 2002). Additionally, the label needs to be meaningful and reliable to satisfy the customer (Buckley, 2002). This success factor for labelling schemes is essential and taps into the ambiguity of environmental claims used. As stated in the wine marketing literature, consumers are not always aware about the differences between organic, sustainable or bio-dynamic wine and the branding of such needs to take the knowledge of the consumer into account in order to supply meaningful choice criteria (Remaud, 2008). Therefore, the clearer and more accessible the claims made by the destination the better they work in attracting tourists. Final suggestions in legislation to overcome barriers to using sustainability in branding destination strategies are clear audit criteria and penalties for non-compliance (Buckley, 2002). Ding & Pigram (1995) agree on the important contribution of environmental auditing and monitoring in how far a tourist organization satisfies environmental standards. Auditing also entails the necessity of labelling schemes only being used when they have been earned and withdrawn if no longer available (Buckley, 2002). This would give the tourist protection from 'greenwashing' and motivate the supply side to fulfil the criteria they claim to possess.

Another suggestion for the success of integrating environmentally friendly strategies is the distinctiveness of claims differentiating between holders and non-holders (Buckley, 2002). This ensures that there is ground for differentiation that consumers will be willing to pay for. A further argument for the successful implementation of environmentally sound management is benchmarking with regions that have been successful (Font, 2002). Kozak & Nield (2004) agree about the merits of benchmarking in order to brand a destination successful and improve an organization's performance. This is achieved by accentuating the importance of comparing information about successful methods in other industries. Global recognition and customized local implementation are stated to be success factors for any environmental brand strategy (Buckley, 2002). Arguing in the context of wine tourism, this difference between national and regional level is important to consider. Being easily recognizable on an international level is essential for the success of wine tourism strategies since international travel is highly evident in the wine tourism sector (Getz & Brown, 2006b). Customized local implementation on the other hand is crucial in order to cater towards the specific needs of tourist segments. This leads to the final point in improvement suggestions.

Ecological branding is regarded as a mechanism for consumer choice which requires knowledge as to what the consumer wants. Bell (2008) compares online sustainability claims of hostel accommodation with the actual implementation of sustainability practices in New Zealand. The segment of Fully Independent Traveller (FITS) is identified as being targeted. The reasoning for the segmentation is stated as attracting visitors that are most likely to appreciate the offered tourist products (Bell, 2008). This provides the best chance of gaining satisfied a visitor who will result in positive word-of-mouth. Such segmentation of the tourism market is undertaken extensively in the wine marketing as well as wine tourism literature.

3.2.5. Summary

There are suggestions to be found in the current literature on how to make environmentally friendly branding a success for tourism destinations (Bell, 2008; Buckley, 2002; Font et al., 2001; Font, 2002). The existing literature focuses mainly on eco schemes such as eco-labelling and concludes the success factors for any eco-label should include clear, measurable parameters and thresholds that need to be fulfilled to qualify for the label (Buckley, 2002). Other branding methods such as the claims to be sustainable oriented without any belonging to a legislative body are missing in the literature. Additionally, only limited empirical application is found that confirms barriers and success factor for environmentally friendly branding strategies. Finally, no extant research dedicated to special form tourism could be identified.

One barrier that has been detected throughout the literature review on the use of sustainability for the wine industry and the wine tourism industry is the problem of 'greenwashing' which essentially means that sustainability claims are made without being supported by actual activities. Part of such 'greenwashing' activities might be made involuntarily as wine tourism destinations are formed of many different players. Some of these players might indeed adhere to sustainability guidelines while others might not. The consumer and wine tourists might be informed through destination branding of a wine region claiming to follow sustainability standards and expect such claims to be followed by all wineries who can be visited in that particular region. There are cases where a number of wineries might be located in a region that strives towards sustainability but that individually do not identify with the overall regional sustainability claims. In order to understand the importance of individual players identifying with regional destination branding, the following section will review the role of place identity in sustainability wine destination branding.

3.3. Place identity and sustainability in wine place branding strategies

Branding places as sustainable is identified as a successful way to create a differential advantage (Kozak & Nield, 2004; Buckley, 2002; Font et al., 2001). Place identity has been highlighted in the theory section on place branding (section 2.2., p. 31) as one of the main building blocks in the place branding process (Balmer, 2008; Govers & Go, 2009; Kalandides, 2011, 2012; Kavaratzis & Hatch, 2013; Lindstedt, 2011). Managing place identity involves its own set of challenges ranging from dealing with a multiplicity of identities in places to seeing place identity as an outcome rather than a dynamic process that is constantly changing and evolving (Kalandides, 2011, 2012). Despite the intricacy of place identity, scholars agree on the necessity to build place brands based on the hegemonic identity of places in order to build an authentic and successful brand (Balmer, 2008; Govers & Go, 2009; Kalandides, 2011, 2012; Kavaratzis & Hatch, 2013; Lindstedt, 2011). Therefore, it can be assumed that when sustainability claims are used in place branding strategy, they need to be in keeping with the place identity in order for the sustainable place brand to be successful.

Guardia & Pol (2002) establish that sustainability can only be achieved within communities that possess social cohesion and shared similar characteristics and ultimately recognize itself as sustainable. The previous statement reflects the importance of the community to share an identity when stressing the concept of sustainability. Other scholars agree with the relationship between shared place identities and environmentally friendly behaviour. Empirical research by Uzzell, Pol, & Badenas (2002) hypothesized that the greater the sense of place-related social identity, the greater the probability of sustainable behaviour. Here, place identity is illustrated as being created through group identification, with social cohesion and residential satisfaction as subsidiary processes. The study compares two locations in the UK. Findings suggest that one of those locations has a strong positive relationship between place-related social identity and environmental sustainability (Uzzell et al., 2002). The second location on the other hand did not show the same statistical relevance. The author therefore

caution that sustainability cannot be understood in isolation from either its social or its environmental- or place-related context (Uzzell et al., 2002).

The previous study explored the relationship between place identity and attitudes and behaviour towards environmental sustainability. Despite the fact that the previous study does not look at communicating sustainability it can be applied accordingly. It does highlight the necessity that environmental attitudes are formed through collective, social relations and relationships with places. Hence, the parties forming the place brand should identify themselves with being sustainable. A follow up study to the previous one critically analysed the previous constructs through structural equation modeling and verified that there seems to be a clear relationship between identity and sustainability (Guardia & Pol, 2002).

Porter (1995) researched identity and sustainability in a discursive approach. The relationship between identity and sustainability is explored in that it is claimed that actors make environmental decisions in order to establish a positive identity. This reasoning is based on the claim that one person or organization is perceived against another (Porter, 1995). This means that organizations see themselves in relation to and identifying themselves against other organizations. If competitors focus on sustainability branding, Porter (1995) argues that organizations copy this behaviour which can lead to the problem of 'greenwashing'. If companies strive to exemplify a positive identity in regard to the competition without actually owning sustainable attributes.

Another stream of research that needs to be taken into consideration when looking at the relationship between sustainability and identity in wine destination branding strategies is the configuration of the wine industry. The wine industry is characterized by small numbers of large players on the one hand and large numbers of small businesses on the other hand (Cordano et al., 2010). The question that becomes apparent is how does the identity of the

single vineyard interact with the overall identity communicated by the wine region? In the case of sustainability the question is raised whether all members of the wine region need to identify with being sustainable for the regional brand to be successful. Alternatively, does the wine regional brand need to stress sustainability for the individual winery brand to benefit from sustainability branding? Zamparini & Lurati (2012) study how firms operating in regional clusters use the cluster's collective identity in their external communication and combine it with the communication of their individual identity. The study is set in the Franciacorta wine cluster in Italy. Findings suggest that the regional cluster firms express their identities using the same values as the collective brand uses to communicate the collective identity (Zamparini & Lurati, 2012). Yet, the firms highlight only some of the collective values while neglecting others. Larger firms are similar to the collective group and uses individual symbols to illustrate their own identity but still are conforming to the collective values (Zamparini & Lurati, 2012). Smaller cluster firms use mainly collective symbols and names. Zamparini & Lurati (2012) argue, this is due to a lack of resources to invest in communication strategies. For branding wine regions as sustainable this would suggest that smaller vineyards will especially rely heavily on the branding of the collective brand. Larger wineries on the other hand might prefer to use own branding material which might cause a fragmentation of the place brand rather than portraying a unified picture of sustainability.

Cai (2002) participates in the discussion of identity formation in cooperative branding by looking at cooperative branding for rural destinations. It is suggested that 'cooperative branding across multiple rural communities builds stronger destination identity than an individual community' (Cai, 2002, p.736). Findings suggest that both the region and its member communities benefit from cooperative branding in projecting a consistent cognitive image based on shared destination attributes (Cai, 2002). Haven-Tang & Sedgley (2014) also exemplify the value of cooperation and networks in rural destination branding and emphasise how local identities can be integrated into tourism products by linking food, culture and

landscape.

In summary, branding a destination as sustainable imposes the inclusion of place identity which is formed by the various stakeholders involved. These issues have been acknowledged in the current literature as communities having to share identities for successful branding strategies. A number of empirical findings show that a shared place identity is indeed necessary to result in a sustainable place brand (Guardia & Pol, 2002; Uzzell et al., 2002). Due to the widely acknowledged importance of shared place identity in the place branding process and the limited empirical support, more research is required about the use of sustainability in wine regions' place brands. Especially in how far they need to be in line with the place identity in order for the sustainable place brand to be successful. There seems to be a division in the literature about new world wine regions highlighting sustainability in place branding to a greater extent than old world wine regions (Alonso & Northcote, 2009). It is reasoned that European wine regions use historical elements in wine making as part of their wine branding strategy (Alonso & Northcote, 2009; Bruwer & Buller, 2012). Due to the lack of historical wine making this is not possible in new world producing countries such as the Americas, Australia, New Zealand and South Africa. In order to overcome this lack, other elements are emphasised in their branding strategy, sustainability being one of those (Alonso & Northcote, 2009). In order to identify regional differences, the following section looks into branding of sustainable wine and focuses on differences among new world and old world producing countries.

3.4. Sustainability in old and new wine producing regions

A change in wine production location and consumption behaviour has been noticed in recent years (Hall, et al., 2000a). The locality of wine production has shifted in the past thirty years from being mostly situated in Europe (France, Italy, Spain, Portugal and Germany, seen as old world wine producing countries) towards new world producing countries such as Australia, New Zealand, the United States (Cassi, Morrison, & Ter Wal, 2012) and developing countries

such as South Africa, Chile and Argentina (Cusmano, Morrison, & Rabellotti, 2010). Hall et al. (2000) group new world wine regions as Australia, Canada, Eastern Europe, New Zealand, South Africa, South America and the United States. Concerning the volume of wine production the European share has dropped from about 95% in the late 1980s to 69% in 2008 whereas the new world share increased in the same time frame from only 5% to 31% in 2008 (Cusmano et al., 2010). Qualitative shifts in production techniques, capital investment as well as growing demand are seen as some reasons new world countries increased their market share (Cassi et al., 2012; Cusmano et al., 2010; Overton & Murray, 2011). These changing figures in wine production raise the question of how wine tourism initially developed and how it is affected by the shift in production from 'old' regions to 'new' regions.

The literature on regional differences in wine tourism development indicates that new world producing regions illustrate the concept of wine tourism earlier than old world producing regions. Hall & Mitchell (2000) concluded a decade ago that new world wine regions such as Australia, Canada, New Zealand and the United States have developed strong links between wine and tourism. Scholars who research wine tourism in old world regions found for example Spain not taking advantage of wine tourism and that wine tourism is still in a very early stage of development (Marzo-Navarro & Pedraja-Iglesias, 2012). Hence, the following section explores wine tourism development historically in old world and new world producing countries.

3.4.1. Wine tourism in old world producing wine regions

Wine tourism in Europe has developed in the form of official wine routes and wine roads almost a century ago with wine routes in Germany having been part of tourism products since the 1920s (Hall & Mitchell, 2000) and have been used to educate tourists about wine. By 1979 all of the eleven wine regions in Germany had their own '*Weinstrassen*'. However, the purposeful development and marketing of wine tourism has only developed in recent years

(Cambourne, Hall, Johnson, Gary, Macionis, Mitchell, & Sharples, 2000). One such way of purposeful marketing wine tourism in Germany has been the provision of brochures for the different wine German regions by the German Wine Institute. Those brochures concerned information about languages spoken at the winery, facilities available and accessibility to wineries (Cambourne et al., 2000). Those brochures have been published in English and German which reflects the intention and preparation for international visitors. Another marketing attempt was the campaign Culinary Germany by the German National Tourist Board (Cambourne et al., 2000). The development of wine tourism in Germany has therefore been governmentally induced with the early recognition of its importance to the wine industry.

Wine tourism started in France in the 1980s as direct door sales in order to overcome declining rural economic conditions (Cambourne et al., 2000). Numerous wine regions in France established wine routes that connect attractions, regions and wine producers in order to gain economically through tourism. Informal wine networks and Clubs (for example Association of Young Wine professionals of Beaune) as well as individual producers invested in the development of wine tourism infrastructure (Cambourne et al., 2000). Nevertheless, a lack of cooperation between wine professionals and the tourism industry restrained wine tourism from fully developing in France. Hall & Mitchell (2000) claim that at the beginning of the new century the majority of French vineyards were not open to the public. For example in Burgundy only 12% of total wine sales come from tourists. This fact reflects the relative underdevelopment of wine tourism in France even though the country has a worldwide reputation for wine. Packaged tours are offered to tourists visiting France where visiting wine areas is just one of the components of the tour offered. Therefore, tourists who are interested in the heritage and culture of France are attracted with wine just playing a minor role (Frochot, 2000). The previous overview shows a privately planned development of wine tourism in France with a lack of cooperation between tourism officials and wine producers. France seems to be competing with its own tourist attractions, not yet being able to attract wine tourists to

its full potential.

Italian wine producers did not see the potential benefits of combining wine and travel until the beginning of the 1990s. In 1993 the organization Movimento del Turismo del Vino (Italian wine tourism association) was established with the aim to raise visitor numbers to wine producing areas through marketing (Cambourne et al., 2000). The organization has been a non-profit organization being formed by wine producers, restaurants, travel agents and media. Hence, privately involved parties took the initiative to actively collaborate in order to promote the wine tourism product through wine routes, festivals and open cellar door events. Additionally, wine routes have been aimed to promote rural wine areas. Their development has been supported by policies through National law in 1999. With this, geographical areas were defined and it was aimed to exploit the winegrowing areas and wineries with its cultural and natural resources, and to enable tourists to benefit from these (Asero & Patti, 2009). Nevertheless, the main barrier towards wine tourism development has been the lack of supply (Cambourne et al., 2000) with wine producers not willing to open their cellar doors; until in 1997 only about 3 % of Italian wine producers reportedly participating in wine tourism.

In conclusion, the connection between wine and travel has been recognized in Europe in the beginning of the 20th century through wine routes. However, the active promotion and initiating of wine tourism only dates back to the late 1980s. Wine tourism has been developed through public regulations and laws as well as through private initiatives and associations. However, one drawback for wine tourism development in Europe has been recognized as limited participation of the supply side. With wine producers being slow to see the benefit of opening their cellar doors to the public.

3.4.2. Wine tourism in new world producing wine regions

This slow development in the old wine world is in high contrast to the development of wine tourism in new world producing countries where 60% of wineries in New Zealand and even

90% of wineries in Australia opened their door to wine tourists in 1995 (Cambourne & Macionis, 2000). Literature on wine tourism development in Australia states that small wineries were especially interested in the development of wine tourism. This claim is supported by almost 50% of sales in the Canberra District being cellar door sales (Cambourne & Macionis, 2000). Particularly small wineries depend on wine tourism economically and there are many small players in the Australian wine industry (Cambourne & Macionis, 2000). Those wineries have been developed in Australia during the 'boutique boom' in the 1970s and 1980s. The 'boutique boom' describes the development of small family sized wineries in Australia. Here wine tourism is seen to 'achieve better sales mix at a higher yield, while at the same time providing opportunities to brand their product and winery successfully' (Cambourne & Macionis, 2000, p.82). Australia approached wine tourism exceptionally through the development of formal wine tourism bodies in several Australian states (Cambourne & Macionis, 2000). Furthermore, official wine tourism strategies have been developed in the mid-1990s including vision and mission of the wine tourism development (Carlsen & Dowling, 1998). This strategy has been reviewed and renewed in 2009 (Carlsen & Dowling, 1998; Winemakers' Federation of Australia, 2009). Hence, Australia acknowledged early the need for a strategic way of developing wine tourism.

The structure of the wine industry in a country has important consequences for the development of wine tourism (Hall et al., 2000b). Wineries pursuing a growth strategy, especially in smaller countries such as New Zealand, aim at the export market instead of developing wine tourism. New Zealand did not have any national or regional wine tourism association in 1999 but was aiming to learn from its neighbour Australia (Hall et al., 2000b). However, a lack of participation between the wine and tourism industry prevented the full development of wine tourism in New Zealand. Reasoning for this is the lack of funds for restructuring wineries for tourists' needs as well as paucity of market research on the potential

of wine tourists in New Zealand (Hall et al., 2000b).

Canada is an example of a new world destination that claims to have developed wine tourism mainly through entrepreneurial activities of wineries and voluntary non-profit organizations (Martin & Williams, 2003). Examples in Canada of such associations are BC Wine Institute and the Okanagan Wine Festival Society (Martin & Williams, 2003). Historically, a Canadian entrepreneur initiated collaboration between the Fingerlake wine region in New York, US and the Ontario wine region in Canada (Martin & Williams, 2003). A wine route based on the European route system has been developed in early 1990s and was labelled the Northeast Wine Route. As visitation increased to this wine route over the years, many tourist facilities such as restaurants, spas and accommodation emerged (Martin & Williams, 2003).

These brief examples of the development of wine tourism in old as well as new world wine producing regions shows how different wine tourism is perceived to be benefitting wine producers. On the one hand wine tourism has been initiated with a top down approach, being guided by laws and regulations through public bodies. On the other hand, entrepreneurial spirit and voluntary collaboration lead to the development of wine tourism. New world producing countries seem to see the advantage of direct cellar door sales and an extensive network for the promotion of marketing wine tourism. Australia, for example was the first country to adopt a long term strategy that guides the development of wine tourism for the last twenty years (Winemakers' Federation of Australia, 2009).

The lack of participation of wineries in wine tourism has been established in old world as well as new world producing countries. Most wine regions face the issue of wineries not seeing the potential of wine tourism due to a lack of research and hence knowledge about the potential of wine tourism in their region. Hall & Mitchell (2000) summarize the difference in wine tourism research best by explaining that knowledge on winery customers or on wine tourist-

motivations in European countries is limited compared to research undertaken in Australia, New Zealand and the United States. The following section focuses on the application of sustainability in old as well as new world wine regions.

3.4.3. Sustainability place branding in new and old world wine regions

This section compares findings concerning the difference between sustainability in place branding strategies in new world and old world producing countries. It focuses not solely on branding destination strategies, since the literature is rather slim on this topic but instead on regulatory differences, as well as labelling schemes. Those highlight indications on how widely established the protection of the nature in the wine industry is in the different countries and whether tendencies can be observed grouping old world and new world producing countries according to the use of sustainability claims in branding strategies.

The history of the wine industry in new and old world producing countries plays an important role when researching sustainability in place branding strategies. In the wine industry, the most common way of geographic branding is the notion of appellation or regions of production (Barham, 2003). This counts more for the marketing of wine than wine tourism. However, as discussed earlier the marketing of the wine product and wine tourism work congruently in attracting consumers (Thode & Maskulka, 1998). The concept of appellation is originally developed in France and is used throughout the European wine community (Barham, 2003). Regions such as Burgundy, Bordeaux and Champagne have legal regulations on the use of Appellation Origin (Sinha & Akoorie, 2010).

Additionally, the concept of 'terroir' is used in the branding of wine regions in old producing countries and entails the different parts that make the wine authentic and unique such as local climate, the soil and the production process (Sinha & Akoorie, 2010). 'Terroir' refers to 'an area or terrain usually rather small, whose soil and microclimate impart distinctive qualities to food

products ... it can be said that a certain wine has the taste of its particular terroir' (Barham, 2003, p.131). The European wine industry widely emphasises the 'terroir' as indicator for quality of the wine product. It is believed that implementing sustainability practices is linked to wine quality through improving the soil and grape quality of the 'terroir' (Barham, 2003). New world producing wine regions on the other hand do not have the luxury of building wine brands on centuries of tradition (Pugh & Fletcher, 2002). Instead they had to consider their own way of branding wine. Warner (2007) argues that the wine industry in California starts to use the terms of appellation and 'terroir' but criticises that they do not carry the same 'viticultural, historical, cultural or enological meaning' as European wine regions. Instead of copying old world producing countries a number of new world wine regions implement the use of 'varietal wine marketing' (Sinha & Akoorie, 2010).

Countries such as the US, Australia and New Zealand differentiate their wines by using solely varietal wine marketing. This approach weakens the relationship between differentiating the wine and promotional activities for the place (Sinha & Akoorie, 2010). Europe emphasises the regional attributes of wine and where the wine is made. Therefore, old world producing wine regions brand the region simultaneously to the wine brand and hence attract visitation. New world producing countries on the other hand brand their wines according to varieties. Varietals can be grown in various areas worldwide so do not pose a unique attribute to one region. Hence, new world producing wine regions need to go the extra step of branding the location in addition to building a brand for the wine from the region. Pugh & Fletcher (2002) agree that it has been brands that have made Australian wine successful – not the name of the wine producer.

These differences in branding in new and old wine regions do not emphasise the use of environmental friendly claims but add an understanding of how the branding process differs regionally due to historical factors. Another difference between new and old world producing

countries has been acknowledged in governmental legislation. Cederberg et al. (2009) describe the European Union as being the first market with government legislation on organic production. The EU Regulation EEC 2092/91 displays the legislation for agricultural products obtained organically and has been implemented in 1991 ("Europa - Summaries of EU Legislation", 2013). It is argued that this regulation maintains to be the most important organic standard for organic producers and traders worldwide (Cederberg et al., 2009). Other EU legislative initiatives to manage environmental standards can be found in Sampedro et al. (2010) who explore the environment as a critical success factor in the wine industry. It is reasoned that the European community implemented the framework whilst taking human actions on the environment into account. Thus, promoting the development of a society and an economy considering a sustainable development (Sampedro et al., 2010). The legislative framework is divided into environmental management, sustainable development, integration of environmental policy, tackling climate change, and many more influences. For the wine industry legislation such as soil protection, the use of chemical products and water protection and management is of crucial importance (Wheeler, Zuo, & Bjornlung, 2013).

Such protective initiatives in Europe are mostly compulsory. Due to the fact that they need to be complied with, companies should use those in the promotion strategy to attract the more environmentally conscious consumer. Legislation in new world producing countries concerning environmental stewardship has been mainly voluntary (Cordano et al., 2009; Gabzdylova et al., 2009; Marshall et al., 2005). Voluntary initiatives such as Sustainable Wine New Zealand and California Sustainable Winegrowing Alliances are successful communities promoting sustainability in the wine industry. New Zealand has been identified as one of the first countries to consider the interdependence between economic and environmental systems and to establish voluntary sustainability initiatives (Patterson, 2006). Official management systems such as ISO 14001 are applied in the New Zealand wine industry as well (Flint & Golobic, 2009). However, Flint & Golobic (2009) criticise that certification such as ISO 14001 might have helped

New Zealand as a country to being perceived as environmentally friendly but individual businesses and brands do not have the same level of differentiation. Sinha & Akoorie (2010) agree that New Zealand wineries use strategic environmental initiatives to develop ecological sustainable wineries and markets to gain competitive advantage.

Both regions have been identified in the literature as using environmental initiatives as a mean to gain competitive advantage. Still, there is limited empirical evidence concerning a greater success story in either one of the producing wine regions. The 2005 Environmental Sustainability Index shows new world regions such as Canada, Australia, New Zealand and Argentina among the Top 15 countries and old wine producing countries such as Germany, France, Italy and Spain on the other hand positioned between rank 31 (Germany) and rank 76 (Spain) (Etsy et al., 2005, p.2). These comparisons highlight a tendency of new world producing countries to show better results in their efforts and capabilities to protect their natural resources. These results pose the question whether the pattern can also be observed for the concept of sustainability in wine regions. Due to different findings among old and new world producing regions and the lack of current literature, research is needed that explores whether the use of sustainability in wine place branding strategies differs between old and new world producing wine regions and if it does how so.

3.4.4. Summary

The previous section reviews the literature on the use of environmental messages in the place branding process. Due to the fact that the literature on wine tourism is limited, the general tourism literature was reviewed and where possible applied to the wine tourism industry. Numerous benefits of applying sustainability in the destination branding process are detected. These benefits range from financial benefits of cost minimisation to network availability and the satisfaction of the local community.

The use of sustainability in destination branding strategies has numerous barriers and challenges. The supply side is faced with challenges such as the numerous choices of labelling mechanism that lack governmental regulations and support. There are suggestions to be found in the current literature on how to make environmentally friendly branding a success for tourism destinations. The existing literature focuses mainly on eco schemes such as eco-labelling and concludes the success factors for any eco-label should include the measurement and consideration of environmental parameters as well as stating thresholds for the qualification of those (Buckley, 2002).

Finally, differences among new and old world wine regions have been observed. The historical wine development and the herefrom resulting difference among wine marketing are partially responsible for place of origin marketing versus varietal marketing. Whereas, European wine countries seem to have enforced environmental protection, new world producing countries are perceived to be more successful in the worldwide Environmental Sustainability Index.

3.5. Conclusion

The literature has been reviewed according to the relevant theoretical and empirical backgrounds aiming to contextualize the topic of this study which is the role of sustainability and identity in place branding strategies in the wine industry. The second chapter describes place branding and its relationship with the wine industry. The wine industry has been discussed as applying place branding as county-of-origin as well as destination branding (Bruwer & Buller, 2012). Wine has been identified as one of the first agricultural product that has a close relationship with its geographic place of origin (Bernabéu et al., 2008) since it is seen as a quality indicator. This is due to the fact that wine quality is hard to be assessed prior to consumption and therefore needs quality indicators (Bruwer & Buller, 2012).

Place-based branding is used to stimulate favourable associations in the mind of the consumer

during the wine purchase decision making (Bruwer & Johnson, 2010). Scholars agree that place brands need to be based on values and identities of the local brand communities in order to be successful (Aitken & Campelo, 2011; Anholt, 2007; Govers & Go, 2009; Kavaratzis & Hatch, 2013). Therefore, an identity-based approach to place branding will underpin this study (Kavaratzis & Hatch, 2013).

The importance of stakeholders in co-creating the place brand is highlighted (Lindstedt, 2011). Current literature on place-based branding in the wine industry stresses the limited research available and demands additional research in this area (Bruwer & Johnson, 2010; Bruwer & Lesschaeve, 2012; Flint & Golobic, 2009; Gabzdylova et al., 2009).

The third chapter deals with sustainability in the wine industry and the review of the literature suggests that wineries have been ahead of other food processors in adopting environmental practices (Pullman et al., 2010). Yet, especially small business owners seem challenged by a high degree of uncertainty when planning to move towards sustainability (Hannon and Callaghan, 2011). This is partially due to the various meanings of sustainability (Szolnoki, 2013). Consumer search for sustainable products and sustainability efforts in wine marketing is partially researched to have a positive effect on firm performance (Barber, 2010; Loureiro, 2003). This notion can be supported by the general business literature (Blacconiere & Patten, 1994; Forbes et al., 2009; Klassen & McLaughlin, 1996; Dowell et al., 2000; King & Lenox, 2002; Nowak and Washburn, 2002; Schnietz & Epstein, 2005; Lo & Sheu, 2007) but the wine industry lacks reliable, empirical studies that show whether following a sustainability strategy actually influences performance (Barber, 2010; Loureiro, 2003).

One possible barrier to profiting from sustainability marketing strategies in the wine industry is the problem of 'greenwashing' which means the stressing of sustainability without being supported by actual sustainable behavior (Barber et al., 2010b). Finally, additional costs are

seen as problematic especially among small businesses (Bernabéu, Brugarolas, Martínez-Carrasco, & Díaz, 2008). It can be summarized that if executed in depth, innovative marketing approaches such as sustainability marketing are a useful way charging price premiums and gaining competitive advantage (Barber, 2010; Pugh & Fletcher, 2002). However, barriers and challenges such as expenses and a lack of consumer knowledge need to be overcome before successfully making use of sustainability in marketing.

The second part of the third chapter reviews sustainability in place branding strategies. There are suggestions to be found in the current literature on how to make environmentally friendly branding a success for tourism destinations (Bell, 2008; Buckley, 2002; Font et al., 2001; Font, 2002). The existing literature focuses mainly on eco schemes such as eco-labelling (Buckley, 2002). Only limited empirical evidence is found that confirms barriers and success factor for environmentally friendly branding strategies. Finally, no research dedicated to special form tourism could be detected in previous research.

In order to understand the importance of individual players identifying with regional destination branding, the role of place identity in sustainability place branding strategies has been reviewed in the third part of chapter 3. Branding places as sustainable is identified as a successful way to create a differential advantage (Kozak & Nield, 2004; Buckley, 2002; Font et al., 2001). Despite the intricacy of place identity, scholars agree on the necessity to establish place brands based on the hegemonic identity of places in order to communicate an authentic and successful brand (Balmer, 2008; Govers & Go, 2009; Kalandides, 2011, 2012; Kavaratzis & Hatch, 2013; Lindstedt, 2011). Therefore, it can be assumed that when sustainability claims are used in place branding strategy, they need to be pursuant to the place identity in order for the sustainable place brand to be successful.

Due to the fact that the literature on wine tourism is limited, the general tourism literature

was reviewed and where possible applied to the wine tourism industry. Numerous benefits of applying sustainability in the destination branding process have been detected. These benefits range from financial benefits of cost minimisation through shared marketing efforts and network availability (Kozak & Nield, 2004) to the satisfaction of the local community (Buckley & Clough, 1997). The use of sustainability in destination branding strategies has numerous barriers and challenges. The supply side cannot be sure prior to investments whether the consumers' choice will actually value their new orientation which can lead to significant losses (Synergy, 2000).

Finally, differences among new and old world wine regions have been observed. The historical wine development and the herefrom resulting difference among wine marketing are partially responsible for place of origin marketing versus varietal marketing (Sinha & Akoorie, 2010). Whereas, European wine countries seem to have enforced environmental protection (Sampedro et al., 2010), new world producing countries are perceived to be more successful in the worldwide Environmental Sustainability Index (Etsy et al., 2005). The previous review of the literature results in a number of research questions that have been stated in the introduction. The following section will introduce the theoretical model guiding this study.

3.6. Theoretical framework

Based on the identity approach to place branding and stakeholder theory, a place brand can only be successful and therefore result in positive place performance if the individual stakeholder identifies with the communicated brand (Aitken & Campelo, 2011; Anholt, 2007; Govers & Go, 2009; Kavaratzis & Hatch, 2013). Reviewing the literature has highlighted a number of variables when discussing the role of sustainability in enhancing place performance through an identity-based approach to place branding. These variables have been discussed as a shared place identity between the individual wineries and wine regions on the one hand and sustainability place branding on the other hand.

The communication of sustainability among wineries as well as wine regions is expected to have a positive effect on place performance in line with existing literature from the general business literature as well as the place branding and tourism literature (Blacconiere & Patten, 1994; Forbes et al., 2009; Klassen & McLaughlin, 1996; Dowell et al., 2000; King & Lenox, 2002; Nowak and Washburn, 2002; Schnietz & Epstein, 2005; Lo & Sheu, 2007; Charter et al., 2002).

The literature discussed place attachment as an affective bond between individuals and their meaningful environments (Lindstedt, 2011) being similar to what Relph (1976) described as a sense of belonging. The literature describes place attachment as essential in establishing place identity which is why it is theorized as an antecedent to a shared place identity (Ramkissoon, Smith, & Weiler, 2013). Also, co-creation and involvement of the individual stakeholder in the place branding process has been discussed as crucial in the establishment of a shared place identity (Hanna & Rowley, 2011; Kavaratzis & Hatch, 2013). It is for this reason that involvement is expected to be an antecedent of place identity (Klijn, Eshuis, & Braun, 2012; Hatch & Schultz, 2010). Finally, based on extant literature positive sustainability attitudes are expected to be antecedents of sustainability practices as well as the use of sustainability in place branding strategies (Cordano et al., 2010).

The literature also posed a number of barriers and challenges in the use of sustainability in place branding strategies. Place brands based on sustainability aim to improve place performance according to the idea of the 'revisionist'. This view argues that long-term competitive advantage can be achieved despite the fact that whilst imposing costs, properly implemented environmental standards increase innovations which save money in the long run (Wagner et al., 2002).

Furthermore, a shared place identity between the individual wineries and wine regions is believed to positively influence place performance based on the notion that effective place

branding needs to be a tool for locals to express cultural features that are already part of their place identity (Kavaratzis & Hatch, 2013). In addition, Lindstedt (2011) considers the connection between identity, place and brand construction in relation to the local population's identification with the place in the place branding process. It is argued that for a place brand to be sustainable the local population is viewed as the internal target audience of brand construction. Finally, a moderating role is derived from the literature that stresses place identity as enhancing the relationship between sustainability place branding and place performance. Guardia & Pol (2002) conclude that a community needs to identify and recognise itself with shared characteristics in order to enable the concept of sustainability. Based on the previous relationships, the following theoretical framework is proposed:

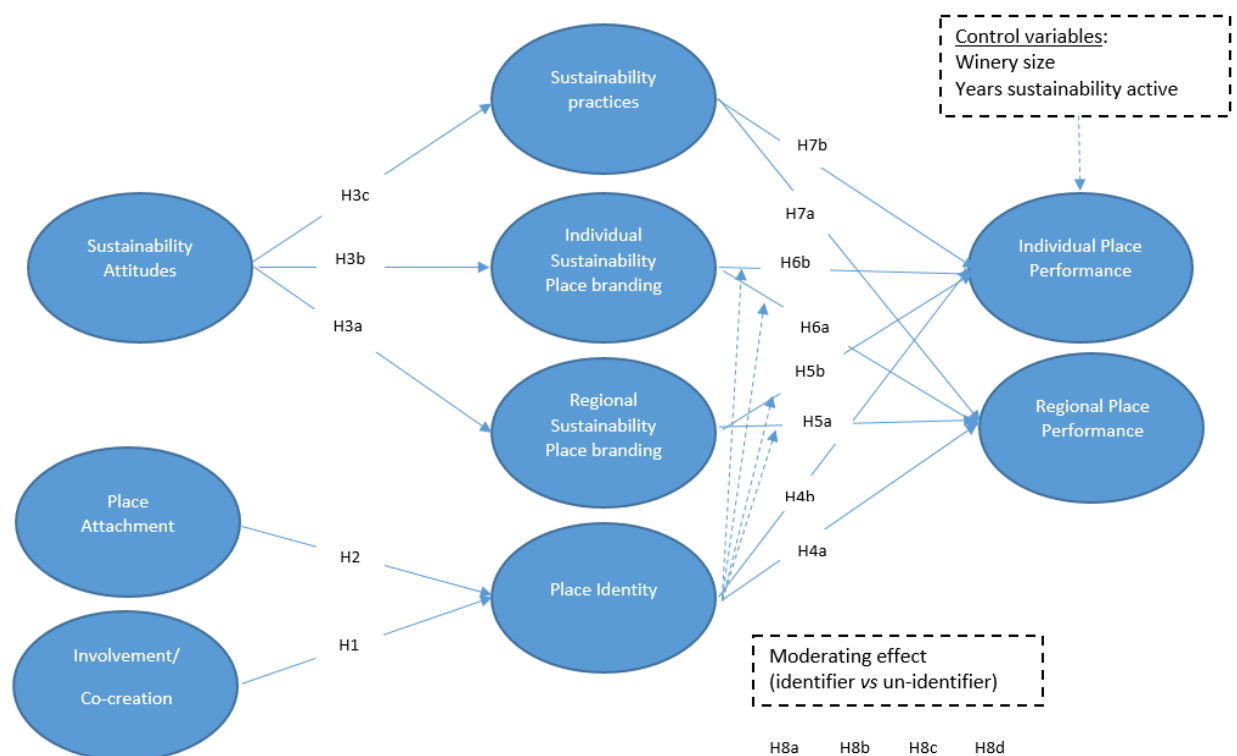


Figure 3.1-1: Theoretical framework for the role of sustainability and place identity in enhancing place performance.

Based on the previous model, there are a number of relationships that this research aims to establish. First of all, feeling a strong place attachment is expected to positively influence place identity. In other words, stakeholders that feel attached to a place, identify stronger with the brand. Furthermore, stakeholders who feel involved in the branding process, as co-creators so

to speak, also have a stronger identification with the communicated place brand (Anholt, 2005; Foley & Fahy, 2004; Kerr, 2006). Another approach is the dynamic view of place branding that perceives place identity as a continuous dialogue between stakeholders (Kavaratzis & Hatch, 2013). Such dialogue established an identification with the place brand in form of a shared place identity which is argued to positively influence place performance based on achieving a competitive advantage as highlighted by Kavaratzis (2004). Place performance is measured for the individual wineries as well as the wine regions.

A further relationship outlined in the theoretical framework is the influence of sustainability on place performance. First of all sustainability practices are suggested to positively influence the place performance of the wineries as well as the wine regions based on the view that implementing innovative sustainability practices results in costs savings in the long run (Wagner et al., 2002). Applying the sustainability practices to position wineries as well as wine regions as environmentally friendly is expected to influence place performance. This is based on the notion that communicating sustainability practices is essential for the consumer to make an informed choice based on the sustainability criteria (Barber, 2010; Loureiro, 2003).

3.6.1. Research questions and hypotheses

Firstly, this research strives to clarify the concept of sustainability in the Australian and German wine industry. The literature revealed a vast amount of different meanings across industries and countries when it comes to sustainability and this makes cross national comparisons very complex. Furthermore, the literature shows different sometimes conflicting effects of communicating sustainability efforts on performance. Also, it is essential to clarify potential antecedents of the implementation of sustainability. The literature highlights a number of barriers and challenges regarding the use of sustainability in place branding strategies. Ambiguity of the term sustainability and 'greenwashing' activities are just two

examples of challenges in sustainability in place branding strategies. It is for these reasons that the first research question is:

How is the concept of sustainability (ecological, social and economic sustainability) used (in place branding strategies) in the wine industry and what are benefits as well as challenges involved?

Secondly, the wine industry is characterized by a large amount of small players. Individual wineries, vineyards and complete wine regions often emphasise different characteristics in their communication whilst communicating the same place in their branding. In fact, the literature highlights how some wine regions accentuate something in their place branding which might not be supported by a single winery in that particular wine region. Therefore, the question arises in how far a shared identity is necessary for place brands to enhance performance and furthermore, how such a shared identity can be achieved. This leads to the second research question:

How does a shared place identity moderate the relationship between sustainability place branding and place performance?

Thirdly, the wine industry is divided into the old wine world which entails mainly European wine regions that traditionally produce wine for thousands of years and the new wine world including countries such as the Americas, Australia, New Zealand and South Africa. Some sources reveal Europe to be very strong when it comes to communicating sustainability whereas other sources claim countries such as Australia and New Zealand to be pioneering when it comes to sustainability. In order to clarify in how far sustainability plays an important role when it comes to place branding strategies and how these effect place performance, the following research question is posed:

How does the moderated relationship between sustainability and place performance differ (if it does) between old and new world producing wine regions?

Finally, this research contributes to existing literature on the topic of the role of sustainability and place identity in enhancing place performance. Furthermore, improving practice in the wine industry regarding the implementation and communication of sustainability is equally important. For this reason, the final research question is:

How does the investigation of the moderating role of place identity in the relationship between sustainability and place performance enhance theoretical and practical knowledge?

The following hypotheses are based on existing literature and aim to answer the proposed research questions:

Hypotheses	Research question
H1: Involvement positively influences place identity.	2
H2: Place attachment positively influences place identity.	2
H3a: Sustainability attitudes positively influence regional sustainability place branding.	1
H3b: Sustainability attitudes positively influence individual sustainability place branding.	1
H3c: Sustainability attitudes positively influence sustainability practices.	1
H4a: Place identity positively influences regional place performance.	2
H4b: Place identity positively influences individual place performance.	2
H5a: Regional sustainability place branding positively influences regional place performance.	1
H5b: Regional sustainability place branding positively influences individual place performance.	1
H6a: Individual sustainability place branding positively influences regional place performance.	1
H6b: Individual sustainability place branding positively influences individual place performance.	1
H7a: Sustainability practice positively influences regional place performance.	1
H7b: Sustainability practice positively influences individual place performance.	1
H8a: The effect of regional sustainability place branding on regional place performance is moderated by a shared place identity, this effect being significantly greater among identifiers than un-identifiers.	2
H8b: The effect of regional sustainability place branding on individual place performance is moderated by a shared place identity, this effect being significantly greater among identifiers than un-identifiers.	2
H8c: The effect of individual sustainability place branding on regional place performance is moderated by a shared place identity, this effect being significantly greater among identifiers than un-identifiers.	2

H8d: The effect of individual sustainability place branding on individual place performance is moderated by a shared place identity, this effect being significantly greater among identifiers than un-identifiers	2
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Table 3.1-1: Hypotheses overview

Summary

The theoretical framework of this research project is based on the literature review and demonstrates the expected relationships between sustainability place branding, a shared place identity and place performance based on an identity-based approach to place branding and a stakeholder approach. Finally, the research questions are outlined and hypotheses provided that aim to answer part of the research questions. In the following the methodology of this research project will be presented.

4. CHAPTER: RESEARCH METHODOLOGY

Based on the previous literature, this chapter describes research methodology and methods.

Due to the fact that the literature on the use of sustainability on place branding is far from being extensive, two research methods are proposed. These shed light on the intricate relationship between the role of sustainability in enhancing place performance through an identity-based approach to place branding (Balmer, 2008; Govers & Go, 2009; Kalandides, 2011, 2012; Kavaratzis & Hatch, 2013; Lindstedt, 2011). This chapter is structured as follows. First, the philosophical underpinnings of this study are explained, both qualitative as well as quantitative methods outlined, specifically focussing on sampling, data collection and analysis. Justification for both methods are provided and ethics discussed.

4.1. Philosophical approach

Philosophical ideas have an impact on today's research despite the fact that they are often not clearly communicated (Slife & Williams, 1995; Creswell, 2009). Philosophical assumptions need to be identified which guide the strategy of inquiry that is linked to these assumptions and finally determines the specific methods and procedures of research that translate the approach into practice (Creswell, 2009). The following section reviews the different research philosophies and emphasises the relevant assumptions that are underpinning this research project.

4.1.1. Research philosophy

Research philosophy is formed by the ontological and epistemological viewpoint of the researcher. The philosophy of methodology aims to answer two questions (Hughes & Sharrock, 1990, p.5)

- a) How is it possible, if it is, for us to gain knowledge of the world?
- b) What kinds of things really exist in the world?

Whereas the former question relates to the philosophy of epistemology, the later question deals with ontology. The researcher needs to clarify how truth and knowledge are perceived and the degree of how much can be known about reality.

Empiricism is rooted in the belief that the researcher can only know what the world is telling them and only 'through objective or neutral observation true knowledge may be realised and understood' (Howell, 2013, p. 34). Philosophers supporting empiricism are Francis Bacon, Thomas Hobbes, John Locke and David Hulme. Almost a century later, positivism with Auguste Comte (1798-1857) as a main support replaced empiricism (Howell, 2013). Auguste Comte thought it possible that social sciences should be based on the same principles as the natural sciences (Howell, 2013) and therefore based on observation alone. Feelings and emotions on the other hand are unimportant and might even mislead the study (Guba & Lincoln, 2005). Another important component of the positivist approach to research is that the research is undertaken, as far as possible, in a value-free way (Saunders et al., 2009). Positivists believe in empirical, factual truth and truths based on the meaning of words. However, only the empirical truth was perceived as good (Kincaid, 1996). Concerning theory development, positivists believed theories to be based on 'the given' and then confirmed. 'The given' assumes that the researcher is confronted with information that is undeniable (Kincaid, 1996). Furthermore, positivists are enquiring research topics in order to predict and control those with the aim to explain and generalize findings (Guba & Lincoln, 2005).

Phenomenology is the other end of the philosophical spectrum. The philosophical paradigm of critical theory, constructivism and participation can be grouped as phenomenology and believe that theory and praxis are closely related (Howell, 2013). The development of the phenomenological paradigm is an outcome of the critique on positivism. This critique entails that history as well as society are human creations (Hughes & Sharrock, 1990). This underlines the realization that the researcher cannot be viewed as independent from the research

process and instead might influence the investigation (Howell, 2013). This development from positivism to phenomenology identifies the researcher as part of the investigation. It is acknowledged that the researcher as well as the investigated party actually influences the outcome of the observation and that contexts, experiences and perspectives of people and institutions have to be taken into consideration (Howell, 2013).

4.1.2. Paradigm of Inquiry

One attribute of the philosophical assumptions are the concepts of research paradigms which can be defined as: 'a way of examining social phenomena from which particular understandings of these phenomena can be gained and explanations attempted' (Saunders et al., 2009, p. 119). Paradigms of inquiry linked to questions regarding the ontology, epistemology and methodology of the research (Howell, 2013). Ontology aims to determine if there are truths which can be secured against all possible doubt or whether in the end one can never be certain of anything (Hughes & Sharrock, 1990). The researcher needs to clarify how truth and knowledge are perceived and the degree of how much can be known about reality. The epistemological approach clarifies how the researcher sees his/her relationship with what can be discovered (Guba & Lincoln, 2005) and what constitutes acceptable knowledge (Saunders et al., 2009). Methodology in the research process is seen as the way the researcher attempts to find out what one believes can be discovered (Howell, 2013) and a way of thinking about and studying social phenomena (Corbin & Strauss, 2008).

There are five main paradigms of inquiry identified in the social sciences. These are positivism, post-positivism as well as critical theory, constructivist and participatory. These differ in their thinking of how theory can be created. There are differences in how paradigms of inquiries use theories of reflecting reality, truth and knowledge. Positivists believe in empirical, factual truth and truths based on the meaning of words. However, only the empirical truth is perceived as good (Kincaid, 1996). Concerning theory development, positivists believed theories to be

based on 'the given' and then confirmed (Kincaid, 1996). Positivists believed that it is possible to build social science based on the same principles as natural sciences (Howell, 2013).

In the social sciences however, positivism is a rather outdated paradigm of inquiry and has been replaced by post-positivism. Post-positivists believe a theory is stronger the more it forbids and when it can be refutable by an event (Popper, 1963). Popper (1963) further argues that testability of a theory is its falsifiability. Progress is aimed for through falsification by finding new arguments and that might question the most accepted or recent theoretical explanation (Howell, 2013). The term post-positivism encompasses the thinking after positivism by criticising the traditional view of absolute truth of knowledge (Phillips & Burbules, 2000) and establishing that when researching behaviour and actions of humans, no one can be "positive" about the knowledge created (Creswell, 2009). Post-positivism aims to examine real world problems and moves positivism from a narrow perspective into more encompassing way (Henderson, 2011). Post-positivists see the need to identify and assess the causes that influence outcomes (Creswell, 2009). There is a shift from only one reality to multiple interpretations of reality (Howell, 2013) and a perception that theories are acceptable for a certain point of time but do not hold for an eternity and can be interchangeable (Popper, 1963). This follows the ontological perspective of the critical realist (Howell, 2013). The critical realist is a development from the naïve realist who believed that reality can be totally understood (Howell, 2013). Popper (1963) challenged positivism by claiming that progress is limited if theory and laws cannot be changed. Positivism as well as post-positivisms recognizes theory as finding relationships between abstract ideas and empirical observations, hence an empiricist view of theory development. It needs to be acknowledged that positivism and post-positivism is perceived as a continuum rather than being clearly demarcated in history (Howell, 2013).

Critical theory, constructivism and participatory paradigms see reality as something that is not

fixed. The critical theory paradigm for example supports the notion that reality is shaped over time by cultural, political and economic influences (Guba & Lincoln, 2005). The constructivist paradigm agrees on reality being tensile in that reality is specific to situations and locally constructed (Guba & Lincoln, 2005). The participatory paradigm defines reality most narrowly by highlighting how it is subjective to the individual participant (Guba & Lincoln, 2005).

Whereas, the post- and positivistic paradigm aims for objectivity, critical theory, constructivism and participatory paradigms accept that findings in the research process are subjective and co-created by the researcher and the participant. Research corresponding to the later paradigms is based on participants' views and interpretations of the investigated situation (Creswell, 2009).

This research aims to establish a relationship between sustainability place branding and place performance. In fact, antecedents and effects of sustainability place branding as well as place identity are based on existing literature and their interrelationship aimed to be confirmed. Guba & Lincoln (2005) indicate that knowledge is accumulated through generalizations and cause and effect linkages with the post-positivistic paradigm of inquiry. Furthermore, this research aims to compare findings from two different locations and aims to establish generalizable findings that aid the wine industry to benefit from sustainability efforts. Post-positivists aim to identify and assess the causes that influence outcomes (Creswell, 2009). In order to verify which effects the use of sustainability in place branding has on business performance, possible causes have been researched in the existing literature. Therefore, the researcher aims for knowledge accumulation through assessing the causes that influence the outcome of performance. In the long run, more sustainable business practices are essential for the well-being of our planet which is why being able to generalize findings from this research project is essential. To ensure comparable findings, these must be acquired empirically and leading to factual truths which is only possible with the post-positivistic paradigm of inquiry. Taking the ontological perspective into account, the researcher sees herself as a critical realist.

Therefore, it is believed that the reality can be understood only partially. Thus, despite the fact that the causes for performance will be researched, it is acknowledged that circumstances such as the influence of the researcher's background or knowledge will have an impact on how reality can be understood.

4.2. Research approach

Deduction vs. induction

Research involves the application of theory and the research approach clarifies in how far the researcher is clear about the theory at the start of the research or develops theory at the end of the research (Saunders et al., 2009). The deductive approach has the objective of testing or verifying a theory instead of developing it (Creswell, 2009). The inductive approach on the other hand, would collect data and establish a theory as a result of analysing that data (Saunders et al., 2009). Despite the fact that the literature cautions about labelling research approaches according to the philosophical stance taken, often deduction is perceived in keeping with positivism and induction with phenomenology (Saunders et al., 2009).

By following the deductive approach, the researcher strives to advance an existing theory by collecting data to test the theory with the aim to verify or falsify it (Creswell, 2009). Deductive hypothesis testing is the main research approach in the natural sciences where laws form the the foundation of explanation and predict the occurrence of phenomena thus permitting them to be controlled (Collis & Hussey, 2003). Robson (2002) specifies five progressive stages involved in deductive research:

- 1) deducing a hypothesis from the theory;
- 2) expressing the hypothesis in operational terms (that is, indicating exactly how the concepts or variables are to be measured), which propose a relationship between two specific concepts or variables;
- 3) testing this operational hypothesis

- 4) examining the specific outcome of the inquiry (it will either tend to confirm the theory or indicate the need for its modification);
- 5) if necessary, modifying the theory in the light of the findings

Induction is the second research approach and in terms of theory building it is an inductive process of being generated from the data, developed into broad themes, to a generalized model and theory (Creswell, 2009). Researchers following the phenomenological paradigm therefore often apply inductive procedures and are critical of deduction since it can establish cause-effect linkages between variables without understanding how humans interpret their social world (Saunders, Lewis & Thornhill, 2007). Induction can be defined as 'a type of reasoning that begins with study of range of individual cases and extrapolates from them to form conceptual category' (Bryant & Charmaz, 2007, p.15). The research process starts by collecting detailed information from participants that are then categorized. Such categories or themes are developed into theories and generalizations that in turn are then put in comparison to personal experiences or existing literature on the topic (Creswell, 2009). Hence, the inductive research approach requires dialogues between the researcher and the subject of investigation and usually includes some form of participative research (Howell, 2013). There are no clear end points for inductive studies as developing themes into categories and patterns can be undertaken continuously (Creswell, 2009).

In summary, both research approaches are often compared in that the inductive approach researchers why something is happening as opposed to the deductive approach that aims to explain what is happening (Saunders et al., 2009).

This research primarily applies a deductive approach as it aims to test the role of sustainability in enhancing place performance through an identity-based approach to place branding. This identity-based approach to place branding is rooted in stakeholder theory which states that stakeholders need to be taken into consideration when enhancing performance of a business

(Freeman, 1984; Anholt, 2005). This theory is tested by establishing hypotheses which are then either confirmed or rejected based on data collected in the industry. The final outcome will be the confirmation or maybe modifying of the theory. Therefore, through the deductive research approach two (RQ2-4) out of the five proposed research questions will be fully answered.

However, there is one research questions (RQ 1) that has to be approached inductively since the deductive approach does not allow for satisfying results. As Saunders et al. (2009) point out it is often advantageous to combine both research approaches within the same piece of research. One main aim of this research is to understand the meaning of sustainability for the wine industry. There is a lack of theory in the literature on what sustainability means (Warner, 2007). Sustainable practices are often explained but the actual meaning behind the concept is not theorized satisfactory (Lindsey, 2011; Warner, 2007). It is for this reason that an inductive research approach aims to clarify the meaning of sustainability for the wine industry. In order to do so a dialogue between the researcher and participants is essential to collect detailed information from wine industry experts (Creswell, 2009). These will then be categorized and potentially developed into theories (Saunders et al., 2009). Also, understanding challenges and barriers when applying sustainability in the wine industry is very sparsely researched in the existing literature and requires an inductive research approach in order to possibly establish own theories based on this research. In order to explain how the researcher goes about accumulating new knowledge the research methodology will be discussed in detail.

4.3. Research methodology

Methodology in the research process is the way of studying social occurrences (Corbin & Strauss, 2008). To be more precise methodology aims to establish how the researcher goes about what she believes can be discovered (Howell, 2013). There are numerous methodological approaches ranging from scientific experiments in constructed settings to participative action research in natural surroundings.

The methodology applied and fitting to the research project depends on the researcher's ontological and epistemological stance adopted (Creswell, 2009). Also, different viewpoints of how theory is created and how the researcher as well as the participants influence outcome, ask for different methodologies. Research based on a positivistic world view mostly applies deductive methodology in form of scientific experiments (Guba & Lincoln, 2005). Just as positivism, post-positivism uses hypothesis testing as a methodological approach but it is important to state that for post-positivists some form of qualitative measurement can be involved (Creswell, 2009; Saunders et al., 2009, Guba & Lincoln, 2005). Such hypotheses testing can be achieved through modified scientific experiments.

Examples of phenomenological methodologies are action research, ethnography, grounded theory and hermeneutics (Guba & Lincoln, 2005). Action research focuses on research with people instead of being about them (Howell, 2013). This includes the involvement of the group under investigation during the research process. The research setting is usually natural and familiar to the investigated group such as in organisations. Action research as a methodology is often applied in situations where practitioners want to improve understanding of their practice (Howell, 2013).

Ethnography is another methodological approach for social science researcher and the difference between action research and ethnography lies in the role of the researcher. Whereas the researcher is participating during the study, certain distance between the researcher and the group under investigation is still required and the researcher can be identified as such (Creswell, 2009). Ethnography on the other hand requires the researcher to be part of the natural surroundings of the researched entity (Howell, 2013). The aim of ethnographic studies is to understand the culture of a group or society and requires research undertaken over long periods of time. There are three types of ethnography that range in their

philosophical assumptions: Positivist ethnography, critical ethnography and constructivist ethnography.

Grounded theory entails a systematic and inductive approach with the purpose of constructing a new theory (Bryant & Charmaz, 2007). Grounded theory puts great emphasis on comprising a comparative part. Data that has previously been collected and previous research findings are considered to be of high importance when creating new theories (Bryant & Charmaz, 2007). Hermeneutics is a different phenomenological methodology and is concerned with understanding rather than finding causal explanations and uses interpretations of words and sentences in research (Howell, 2013). The main characteristics of hermeneutics are its dialogue with the text (Howell, 2013).

By following the post-positivistic philosophical assumptions, this research mainly applies the testing of hypotheses through the survey methodology. This methodology was chosen in order to keep exterior influences such as subjectivity of the researcher and possible impacts of the participants to a minimum (Bryman, 2005, Kothari, 2004). In addition to the survey methodology, this research includes qualitative methods of semi-structured interviews in order to establish the meaning of sustainability as well as challenges and barriers in the use of sustainability in the wine industry.

4.3.1. Quantitative and qualitative research methodology

Qualitative research means different things in different contexts but an initial definition is offered by Denzin and Lincoln (2005, p.3): 'Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversation, photographs, recordings and memos to the self'. Interpretation forms an important property of qualitative research

and therefore puts the researcher in a central role, who studies things in their natural setting attempting to interpret the meaning they bring to them (Denzin and Lincoln, 2005). The most notable difference between the two modes of research is the priority given to those being studied and the emphasis on the interpretation according to the researcher's own understanding (Bryman, 2005). In order to qualitative data to be useful, meanings need to be understood through analysing the data (Saunders et al., 2009).

Despite this interpretive approach to research, the researcher remains in the post-positivistic paradigm of inquiry believing that objectivity should still be pursued. Yet the total separation between the researcher and the subject under investigation has to be abandoned (Howell, 2013). Qualitative data can be summarized as all non-numerical data, not being quantified that ranges between open-ended questions in an online questionnaire to in-depths interviews (Saunders et al., 2009). The main differences between quantitative and qualitative data are summarized in the following table based on Saunders et al. (2009):

<u>Quantitative data</u>	<u>Qualitative data</u>
<ul style="list-style-type: none"> • Based on meanings derived from numbers • Collection results in numerical and standardised data • Analysis conducted through the use of diagrams and statistics 	<ul style="list-style-type: none"> • Based on meanings expressed through words • Collection results in non-standardised data requiring classification into categories • Analysis conducted through the use of conceptualisation

Table 4-1: Distinctions between quantitative and qualitative data

When reviewing the table presented above, it becomes apparent that some of the research questions being answered through this research cannot rely on one of the methods alone. As

Creswell (2009) notes, research questions should guide the selection of the appropriate research method. Understanding the meaning of sustainability in the wine industry and establishing challenges and barriers for implementing sustainability requires the collection of qualitative data in order to conceptualise meanings expressed through words. For the comparison between both countries and in order to measure an effect between the proposed variables, quantitative data is essential (Hughey et al., 2005). Furthermore, checking validity of findings by employing two types of data collection is highly possible (Bryman, 2005). It is for this reason that qualitative data is collected in addition to the quantitative data.

4.4. Research Design

There are three research designs mentioned in the literature: qualitative, quantitative and mixed methods research. These three designs differ in their research approach. Qualitative research aims to explore and understand social and human problems assigned by individuals or groups (Creswell, 2009). Qualitative designed research often follows an inductive approach and the researcher makes interpretations of the meaning of the data (Bryant & Charmaz, 2007).

Quantitative research on the other hand is aimed at testing theories by examining the relationships between variables (Creswell, 2009). Therefore, a deductive approach is most common for a quantitative research design and data can be analysed using statistical procedures and being able to generalize and replicate those findings is therefore one advantage (Creswell, 2009). The third research design is mixed methods research which combines both qualitative and quantitative forms in order to improve the overall strengths of the research (Creswell & Plano Clark, 2007).

This study follows the mixed methods research design rooted in the post-positivist paradigm of inquiry. A quantitative survey methodology aims to test the established theory and model developed based on those theories. Semi-structured interviews will follow in form of a

qualitative research design in order to follow up and possibly explain findings from the quantitative analysis. This is in accordance with the post-positivistic research paradigm as it allows for quantitative and qualitative methods to be applied (Guba & Lincoln, 2005). The reason for applying a mixed methods approach is rooted in the existing literature. The majority of economic and business researchers employ quantitative research methods (Kothari, 2005). Having reviewed empirical literature on sustainability and performance measures, many studies use a quantitative research design in form of surveys (Chen & Metcalf, 1980; Jaggi & Freedman, 1992; Wagner et al., 2002; Lo, 2010; Blacconiere & Patten, 1994; Klassen & McLaughlin, 1996; Dowell *et al.*, 2000; King & Lenox, 2002; Schnietz & Epstein, 2005; Lo & Sheu, 2007). However, sustainability research specifically set in the wine industry includes many qualitative studies based on case studies, interviews and focus groups (Barham, 2003; Warner, 2007; Marshall et al., 2005; Hughey et al., 2005; Poitras, 2006; Cederberg et al., 2009; Desta, 2008). Quantitative studies are equally common in research dealing with sustainability in the wine industry (Ballingall & Winchester, 2009; Brown 2006; Brugarolas et al., 2009; Cholette & Venkat 2009; Colman & Paester, 2009; Delmas & Grant, 2008; Forbes et al., 2009; Marchettini et al., 2003; Remaud et al., 2008). Yet, another stream of research lacks an empirical application and is conceptual only (Delmas & Grant, 2008; Markley & Davis, 2007; Sampedro, et al., 2010).

When comparing both research designs with empirical content as well as conceptual papers, it becomes apparent that a number of those studies suggest a combination of both designs for future studies as essential for thorough analysis of the topic (Hughey et al., 2005; Barham, 2003; Markley & Davis, 2007; Cholette & Venkat 2009). Some researchers question for example whether qualitative research is appropriate for a comparative evaluation (Hughey et al., 2005) which is aimed for with this study. Others directly suggest a combination of both qualitative and quantitative research (Markley & Davis, 2007). There are a number of reasons why one of the research designs alone does not seem to be sufficient. Generalization of results

is one reason why quantitative research is requested for future studies and qualitative research alone not enough (Forbes, 2009). Others also stress the need to understand quantitative findings in more depths by following up with interviews (Sinha & Akoorie, 2010). Only a limited number of existing researches are designed with mixed methods in the wine industry specifically looking into sustainability research (Pullman, 2010; Gabzdylova et al., 2009; Sinha & Akoorie, 2010).

This study follows the specific request for it by researchers in the field of sustainability in the wine industry (Cholette & Venkat, 2009). Finally, with a mixed method approach, the researcher aims to minimize bias since any method on its own could cancel the biases of other methods (Creswell, 2009).

4.4.1. Strategy of inquiry

In regards to the mixed method research design, there are three strategies of inquiry that have been identified: sequential, concurrent and transformative mixed methods (Creswell, 2009). Sequential mixed methods procedure includes the elaboration or expansions of findings. This is done by either beginning with qualitative methods and then adding quantitative methods for generalization or beginning with a quantitative method followed by a qualitative method including the detailed research of a few individuals (Creswell, 2009). Alternatively, the researcher may collect both types of data at the same time and integrating findings from both in the overall results which is called concurrent mixed methods. Transformative mixed methods are applied when the researcher applies a theoretical framework which contains both qualitative and quantitative data.

This research applies the sequential mixed methods approach with the qualitative findings aiming to explain and extend the quantitative findings (Creswell, 2009). The idea being, that the quantitative research is conducted first in order to test the relationships between the

variables of place identity and sustainability branding on place performance. Especially testing the moderating role of place identity on the relationship between sustainability place branding and performance is of high interest. Once these relationships are tested, follow-up interviews aim to deepen some the findings as well as clarifying remaining open questions (Creswell, 2009). The following figure pictures the planned research process according to the sequential explanatory design adapted from Creswell et al. (2003). This entails the quantitative data collection and analysis first, followed by the qualitative data collection and analysis resulting in the interpretation of the entire analysis.

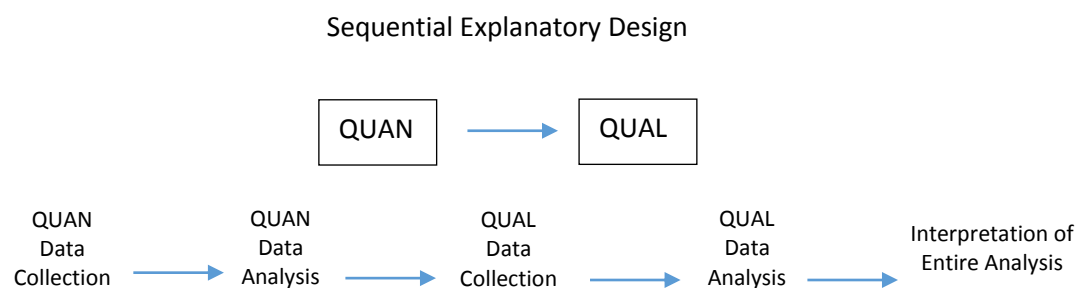


Figure 4-1: Sequential Explanatory Design

The sequential design is applied since a number of existing studies applying a mixed method approach in the literature on sustainability in the wine industry utilise this approach (Pullman, 2010; Gabzdylova et al., 2009; Sinha & Akoorie, 2010). Yet, those existing studies follow the sequential exploratory design which starts with qualitative data collection and is followed up by quantitative design. This research however puts more emphasise on the relationships between the variables in order to draw conclusions as to whether sustainability place branding actually influences place performance. In fact, the qualitative research aims to explain and add to these findings and therefore the sequential explanatory design is fitting for this research.

4.5. Research ethics

Ethics are defined as the 'norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others' (Cooper & Schindler, 2008, p. 34). Such behaviour

and relationships in the context of research mean the appropriateness of the researcher's behaviour relative to the rights of research participants (Saunders, et al. 2009). Most universities require attaining formal Research Ethics Committee approval (Saunders et al., 2009). On March 6th 2014, the proposed research design was approved by Dr James Benhin, the chair of Faculty Research Ethics Committee at the Faculty of Business, Plymouth University. In order to ensure high quality data, research has to be executed to high ethical standard. The Economic and Social Research Council (ESRC) publishes the Framework for Research Ethics (FRE) for researchers. This research aimed to follow the six key principles of ethical research that the ESCR recommends:

1. Research should be designed, reviewed and undertaken to ensure integrity, quality and transparency.
2. Research staff and participants must normally be informed fully about the purpose, methods and intended possible uses of the research, what their participation in the research entails and what risks, if any, are involved. Some variation is allowed in very specific research contexts for which detailed guidance is provided in Section 2.
3. The confidentiality of information supplied by research participants and the anonymity of respondents must be respected.
4. Research participants must take part voluntarily, free from any coercion.
5. Harm to research participants and researchers must be avoided in all instances.
6. The independence of research must be clear, and any conflicts of interest or partiality must be explicit.

The proposed research ensures integrity, quality and transparency by having been reviewed on a number of occasions to ensure the application of University relevant principles. Officially logged and reviewed supervisory meetings throughout the research process as well as external scrutiny after completed research stages are some of the measures implemented to overlook the quality of the current research. Plymouth University has clear, transparent and effective

procedures for ethics review, approval and governance as suggested by ESRC (2012). The dignity and autonomy of research participants was ensured through informing them about confidentiality and anonymity. Furthermore, enabling participants of the quantitative as well as the qualitative study that participation is completely voluntary and can be stopped at any time ensured that harm is avoided at any costs. No other organization or business, other than the university, was involved in the research project which ensures the independence of the research.

In addition to following the key principles of ethical research the ESRC recommends, Saunders et al. (2009) caution that the subsequent steps of the research process require different ethical considerations. When formulating and clarifying the research topics, the independence of the researcher was ensured through the abdication of any sponsor besides Plymouth University. When gaining access to participants and collecting the actual data, participants were informed according to ethical guidelines. When storing the data, it was password-protected and for use of the researcher only, until it will be securely destroyed. Finally, when reporting findings, individual identities such as names and organizations have been anonymised and not identifiable in any research output. These ethical considerations were communicated to the participants in the cover letter for the quantitative part of the study, in the consent form and orally to the participants of the qualitative part of the study.

5. CHAPTER: QUANTITATIVE RESEARCH METHODS

There are a number of data collection methods applicable to achieve different research results. Generally speaking it is possible to use any method of data collection for any methodological approach (Saunders et al., 2009). However, some methodological approaches are prone to certain methods of data collection. Positivist and post-positivistic studies predominantly undertake quantitative methodologies with methods of data collection such as surveys and structured interviews (Howell, 2013, p.193). This is due to the fact that quantitative research methods leave less room for interpretation by the researcher and describe rather than explore a phenomenon (Kothari, 2004).

The quantitative fieldwork is the first stage of data collection In line with the sequential explanatory research design as depicted in Figure 4.1. This section includes the rationale for using questionnaires, questionnaire development, collection and analysis of the quantitative data. Quantitative data is different to a qualitative data collection process in that it involves large amounts of numeric data hence the quantifiable characteristic of it (Saunders et al., 2009). According to Bryman (2005) a large amount of organisational research is showing the characteristics of quantitative research which resembles a 'scientific' approach to conducting research as it includes a commitment to a systematic approach to investigations. The main stages of quantitative research are summarized in Figure 5.1.

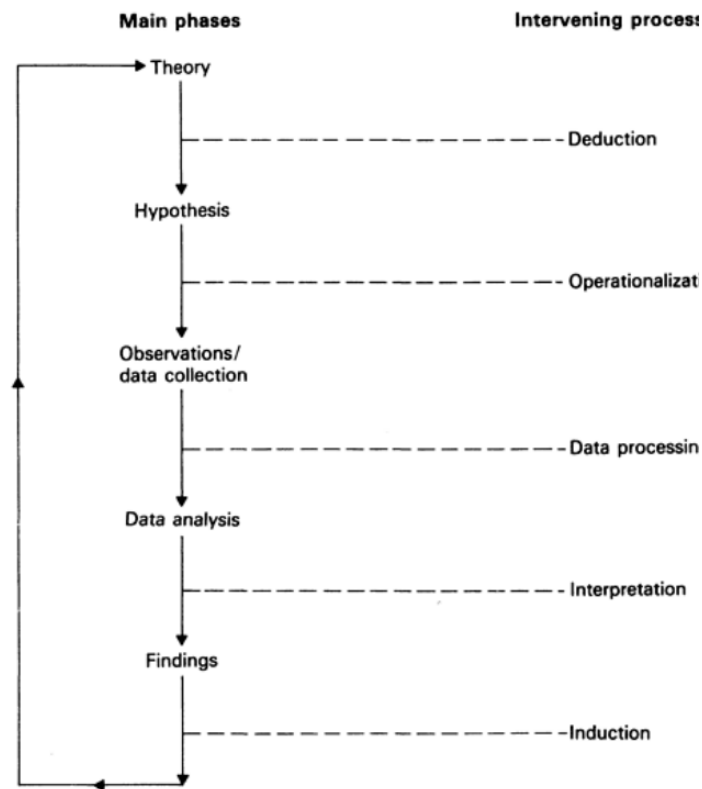


Figure 5-1: The logical structure of the quantitative research process (Bryman, 2005)

According to this model, this research starts with a theory of an identity-based approach to place branding that aims to explain why some places profit more from branding activities than other places (Govers & Go, 2009; Kalandides, 2011, 2012; Kavaratzis & Hatch, 2013; Lindstedt, 2011). This research proposes to measure the relationship between the use of sustainability in place branding strategies and the role that place identity plays. Questionnaires are commonly used for descriptive or explanatory research (Saunders et al. , 2009). This research is of descriptive nature, aiming to examine and describe the relationship between the independent variable of sustainability place branding and the dependent variable of place performance. The cause and effect between those variables is aimed to be clarified. A number of hypotheses have been deduced from the literature that tests the proposed causal relationships between variables. Questionnaires as well as experiments are suggested methods examining the relationships between and among variables and to test hypotheses (Creswell, 2009; Kothari, 2004). Therefore, questionnaires are adopted as the choice of data collection method that

enable quantification and generalisation of the findings (Bryman, 2005). Questionnaires have been identified as the fitting method in this context, as structured questionnaires enable the researcher to collect data that is comparable and standardised and therefore allows for testing differences in responses (Bryman, 2005).

5.1. Rationale for the use of questionnaires

The purpose of the questionnaire research is to generalize from the sample of wineries in Germany and Australia to the population of wineries in both countries. In order to be able to generalize findings of this study a large data set is required (Saunders, et al., 2009).

Questionnaires offer the benefit of timely and relatively inexpensive form of data collection (Howell, 2013). Therefore, large samples can be acquired since each respondent answers the same list of questions (Saunders et al., 2007). This resulting large sample size makes it possible to generalise findings. Alvesson & Skoldberg (2009) emphasise that generalisations can only be made by statistical studies that can establish that the probability of the findings have not emerged by chance. The study of place branding and especially the influence that place identity has on the success of place brand performance is a recent phenomenon in the literature and numerous propositions are conceptualized. Nevertheless, empirical evidence for how place brand performance is affected by the various stakeholders and their identities with the place is limited (Font et al., 2001). Especially in relation to the use of sustainability in the place branding strategies, very little empirical evidence is available. Hence, generalizability from empirical evidence is essential for this research which underpins the choice for quantitative research methods of questionnaires.

Further benefits of data collected through questionnaires are its reliability. Reliability describes the possibility whether the measure is stable over time which means that the research could be repeated (Creswell, 2009). Also it consists of stability, internal reliability and inter-observer consistency (Creswell, 2009). This consistency is a major advantage of quantitative methods of

data collections. The questionnaire development, the data collection strategy and analysis will be explained in the following section.

5.2. Questionnaire development

The development of a high quality questionnaire is essential in order to achieve high response rates (Bryman, 2005). Dillman (2007) suggests a number of methods that aim to increase the quality of questionnaires. These include that questions should be clearly presented, are easy to read by using appropriate sized font and be designed in a logical order. In order to avoid confusion, clear and precise instructions should be provided. Finally, the right type of questions should be chosen, depending on the data required. Those types of questions can be divided into open-ended, nominal, ordinal and interval (Chisnall, 2005). The final questionnaire is divided into three sections. The first section deals with information concerning the wine region, the second section deals with winery information and the final section asked questions concerning demographics of the respondents.

The first section focuses on key constructs such as sustainability place branding and performance measures at the regional level. The second section measures the previous and additional key constructs such as place identity at the winery level. The complete questionnaire applied mainly interval questions and a number of open questions. Yet, in order to measure the model constructs, mainly interval level rating questions based on five-point Likert scales ranging from 'strongly disagree' to 'strongly agree' were chosen. Likert-scales were chosen as they enable the researcher to apply statistical tools such as structural equation modelling (Collis & Hussey, 2009). Previous research in the field of sustainability and place branding, particularly in the wine industry has commonly applied such scales (Gabzdyllova et al., 2009; Sinha & Akoorie, 2010; Blain, 2005). Based on the existing literature, they have been deemed to be acceptable for this research. Despite the fact that some of the existing research (e.g. Sinha & Akoorie, 2010) applied higher point Likert scales, a limited number has been

chosen in order to limit variance in the responses (Pallant, 2011). It is argued that the use of more than five points provides only a marginal advantage in terms of reliability. The scales are based on and adopted from existing literature. The following section will explain how these scales were chosen and if necessary adapted to fit the context of this research.

5.3. Scale selection

This research applies the use of latent variables that are not directly observed (Hair, 2014). Such latent variables are more reliable when measured using a number of items that are related indicators (Borsboom, 2008). The application of a number of items when developing scales aims to measure the variance in latent constructs (DeVellis, 2003). High quality in the quantitative research arena is often based on reliability and validity measures. There are several measures that concern the reliability of the individual items with Cronbach's coefficient being among the common ones (Hair et al., 2014). In order for high quality to be apparent, a score of .70 or higher should have been achieved (Hair, et al., 2014). The validity of existing measures can be analysed by applying the convergent and discriminant validity tests (Fornell & Larcker, 1981). To measure convergent validity the average variance extracted need to be taken into consideration (Hair, 2014). The average variance extracted (AVE) is suggested to be higher than 0.50 (Hair et al., 2011b) which would mean that the latent construct can explain more than 50% of the indicator's variance. If the AVE is less than 0.50 on the other hand means that on average, more error remains in the items than the variance explained by the construct (Hair, 2014). There are two ways how discriminant variability should be measured and reported. Fornell & Larcker (1981) demonstrate that the square root of AVE in each latent variable can be used to establish discriminant variability. Therefore, the Fornell-Larcker criterion states that the AVE of each latent construct should be higher than the construct's highest squared correlation with any other latent construct (Hair et al., 2011b, p.145).

Appendix A shows a table of the scales that have been applied from previous academic studies

including reliability and validity measures of the existing scales in an attempt to ensure high quality for the applied scales in this research. Not all of the scales used in this questionnaire were completely transferred from previous studies. The majority of scales are based on the existing literature but adapted to the context of the wine industry.

5.4. Independent variables

Sustainability place branding

Sustainability place branding is divided into two measures: one for the sustainability branding of the wine regions and the sustainability branding efforts of the individual wineries. Existing measures for sustainability place branding were only partially available which is why a new scale was developed. This newly developed scale is based on green advertising literature (Banerjee, Gulas, & Iyer, 1995) and research published in the Journal of Business Ethics where Chen (2010) looks into how green company image is influenced by their green core competence. This research lends itself very well to the development of a multi item variable of sustainability place branding as it regards the company brand in relation to green claims which adopted for this research. Based on the same amount of items as the existing constructs, the variables consist of five items for the regional sustainability place branding and four items for individual sustainability place branding.

Variables	Item measurements	Author	Journal (ranking)
Sustainability branding	The measurement of the green brand image includes five items: (1) the brand is regarded as the best benchmark of environmental commitments; (2) the brand is professional about environmental reputation; (3) the brand is successful about environmental performance; (4) the brand is well established about environmental concern; and (5) the brand is trustworthy about environmental promises.	(Chen, 2010)	Journal of Business Ethics (3*)
Sustainability branding	Green advertising is defined as any ad that meets one or more of the following criteria: (1) Explicitly or implicitly addresses the relationship between a product/service and the biophysical environment. (2) Promotes a green lifestyle with or without highlighting a product/service. (3) Presents a corporate image of environmental responsibility.	(Banerjee, Gulas, & Iyer, 1995)	Journal of Advertising (3*)

Sustainability practices

Sustainability practices differ remarkably across industries and there are a number researchers that measure sustainability practices specific to the wine industry (Cordano et al., 2010; Gabzdylova et al., 2009; Pullman et al., 2010). Based on the fact that sustainability is such an ambiguous term encompassing a number of attributes (Warner, 2007), the variable of sustainability practices requires the formation of second-order constructs with four first-order constructs as previously applied in the sustainability literature based in the wine industry (Pullman et al., 2010). These first order constructs are divided into social, recycling, environmental and management sustainability practices. Despite the fact that there are a number of scales available, the scale developed by Pullman et al. (2010) is chosen as it demonstrates satisfying reliability as well as validity results. The divisions of the scales are based on the original scale developed by Pullman et al. (2010). In total four second-order constructs with 16 items in total have been created.

Variables	Item measurements	Author	Journal (ranking)
Sustainability practices	Wildlife habitat protection Protection of water resources (fish habitat, run-off, etc.) Soil protection Reduced herbicide usage Reduced pesticide usage Composite	(Pullman, Maloni, & Dillard, 2010)	Journal of Wine Research
Sustainability practices	Conservation of energy Conservation of water Composite	(Pullman et al., 2010)	Journal of Wine Research
Sustainability practices	Recycling, composting, reduced land filling of organic waste Reuse/recycling of other waste including packaging materials Composite	(Pullman et al., 2010)	Journal of Wine Research
Sustainability practices	Safe working conditions for employees Ensuring worker quality of life Ensuring worker skill development Ensuring worker job satisfaction Fair compensation (living wage) to all employees Employment status verification of all employees Composite	(Pullman et al., 2010)	Journal of Wine Research

Sustainability attitudes

The literature suggests that decisions made in firms are influenced by manager's attitudes and norms (Cordano et al., 2010). This holds particularly true for small and medium enterprises (SME)(Rothenberg & Becker, 2004) which suggests that the wine industry would be significantly influenced by norms and attitudes of managers. This is due to the fact that the

wine industry is largely made up by a large number of small and medium businesses and only a small number of large firms (Cordano et al., 2010). This research therefore suggests that positive sustainability attitudes and norms positively influence the adoption of sustainability practices as well as sustainability in place branding communication. The scale used for testing sustainability attitudes was taken from Cordano et al. (2010) who researched how SMEs go 'green'. The existing scales fulfil satisfying reliability and validity measures and have been applied in the wine industry context which justifies their use in this particular research.

Sustainability attitudes have been divided into benefits (four items) and norms (three items).

Variables	Item measurements	Author	Journal (ranking)
Attitudes – Benefits	(1) Our belief that environmental projects reduce costs. (2) Environmental initiatives lead to increased customer demand. (3) Environmental initiatives lead to enhanced reputation in the community. (4) Environmental initiatives lead to cost savings. (5) Environmental initiatives lead to improved wine quality. (6) Environmental initiatives lead to increased competitiveness in international markets.	(Cordano et al., 2010)	Journal of Business Ethics (3*)
Attitudes - Norms	(1) At our winery, people feel a personal obligation to do whatever they can to minimize environmental harm. (2) At our winery, people feel a personal obligation to reduce pollution. (3) At our winery, people feel a personal obligation to exceed the requirements of environmental regulations	(Cordano et al., 2010)	Journal of Business Ethics

Place identity

Place identity has many different definitions in the literature depending on which field of enquiry it is applied (Aitken & Campelo, 2011; Anholt, 2007; Govers & Go, 2009; Kavaratzis & Hatch, 2013). Differences in terms are acknowledged as spatial identity (Kalandides, 2011), local identity (Lindstedt, 2011) or place identity (Kalandides, 2012; Kavaratzis & Hatch, 2013). Burmann et al. (2009) establishes the notion of an identity-based brand equity model in an attempt to relate place identity to corporate identity. Place identity can be understood as the identification of the local community and stakeholders with the regional place brand portrayed by the local authorities according to the identity-based equity model (Burmann et al., 2009). Burmann et al. (2009, p.393) explains brand identification as 'an individual's acceptance of social influences which lead to a feeling of belonging to a group'. Such a group belonging can

have various reasons and as previously highlighted intrinsic features can be one reason for a shared place identity.

Various scholars highlight place branding and place identity as integrated approaches (Kalandides, 2012; Kavaratzis & Hatch, 2013; Lindstedt, 2011). The literature on place identity and its role in place branding is far from agreeing on how identity should be taken into consideration in the place branding process. Numerous approaches have been made to theorize how place identity should be incorporated into the place branding process. In this research, place identity is seen as the identification of the local stakeholders with the regional place brand portrayed by the wine region based on the identity-based brand equity model (Burmman et al., 2009). Place identity is formed of measures based on brand identification (Blain, 2005) and brand similarity (Bhattacharya & Sen, 2003). Brand identification is adopted from the destination branding literature that discusses the importance of places as relational brand networks. Relating those networks to branding, they are discussed to be represented by logos in order to differentiate products and enhance brand awareness (Blain, 2005). The identification with such place logos is adapted as an identification of the stakeholders in this research with the overall presented brand of the wine regions. Unfortunately, neither reliability nor validity has been reported as the identified items are outcome of the research rather than tested constructs.

The scale of brand similarity stems from the general business literature where Bhattacharya and Sen (2003) researched consumer company identification as a mean for companies to build strong, lasting relationships with their customers. In accordance to understanding place identity as leading to equity through brand identification this research adopts the suggested variable of identity similarity (Bhattacharya & Sen, 2003). The paper introducing consumer-company identification is of conceptual nature only and demands empirical testing. Taking into consideration that the items for place identity are based on conceptual papers only, requires a

quality judgement based on the quality of the journals that published the research. Finally, it was deemed necessary to apply a number of items that have been tested for reliability and validity in order to ensure high quality scales. It is for this reason that this research draws from an identity scale originally developed by Williams & Roggenbuck (1989) and published by Vaske & Kobrin (2001) and applying a number of items to the context of this study.

Place identity has been tested in form of two second order constructs of brand identification containing four items (Blain, 2005) and brand similarity consisting of four items (Bhattacharya & Sen, 2003). Therefore, place identity is defined as the identification with the identity of the brand (Burmman et al., 2009, p.393). The final scale is comprised of items such as 'Our sense of what our winery stands for matches the sense of the wine region brand' (brand similarity) and 'Our winery perceives the wine region brand as providing a label that describes us' (brand identification). Respondents rate each item on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'.

Variables	Item measurements	Author	Journal (ranking)
Place brand Identity (Congruence)	Supports our destination image. Provides a label that describes us. Differentiates us from other destinations. Creates a consistent image of what guests can expect to experience. For use on merchandise. Supports the overall vision and strategic plan of the organization. Unites all destination firms/organizations under one symbol. Ensures copyright protection.	(Blain, 2005)	Journal of Travel Research (4*)
Place brand Identity (Similarity)	Likert-type multi-item scale (e.g., "I recognize myself in Company X"; "My sense of who I am matches my sense of Company X")	(Bhattacharya & Sen, 2003)	Journal of Marketing (4*)
Place Identity	We also used four variables to measure place identity. The questions were drawn from an identity scale developed by Williams and Roggenbuck (1989). Respondents indicated their level of agreement with the following items: (a) I think often about coming here, (b) I am very attached to this place, (c) I identify strongly with this park, and (d) I feel like this place is a part of me. All four variables were coded on 5-point Likert-type scales ranging from strongly disagree (1) to strongly agree (5)	(Vaske & Kobrin, 2001)	Journal of Environmental Education

Place attachment

Lindstedt (2011) connects place, identity and brand construction in relation to the local population's identification with the place in the place branding process. It is argued that for a

place brand to be sustainable the local population is viewed as the internal target audience of brand construction. Therefore, it is highly important for the local community to be targeted during the place branding process (Kavaratzis, 2004). The formation of place attachment by the local community is seen as enhancing brand equity and the concept of place attachment describes the affective bond between individuals and their meaningful environments (Lindstedt, 2011). In keeping with this reasoning, place attachment is seen to be an antecedent of place identity since the formation of place attachment is divided into four dimensions: manageability, continuity, goal support and distinctiveness (Lindstedt, 2011, p.47). These dimensions aim to explain how perceiving inhabitants in close contact with the place leads to the success of persistent place brand constructions.

When searching the literature for fitting scales of place attachment, a wide array of existing scales could be found. Concentrating on the most recently published as well as communicating reliability and validity measures, this research borrowed items published by Ramkissoon, Smith, & Weiler (2013). Both Cronbach's Alpha as well as the AVE (Average Variance Extracted) has been reported as highly satisfactory. Place attachment contains five items and 'Our winery is feels a strong sense of belonging to his wine regions and its setting/facilities' is one example. Respondents rate each item on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'.

Variables	Item measurements	Author	Journal (ranking)
Place attachment	For what I like to do, I could not imagine anything better than the settings and facilities provided by this national park. For the activities I enjoy the most, the settings and facilities provided by this national park are the best. I enjoy visiting this national park and its environment more than any other parks	(Ramkissoon, Smith, & Weiler, 2013)	Tourism Management (4*)
Place attachment	I identify strongly with this park. I feel this national park is part of me. Visiting this national park says a lot about who I am.	(Ramkissoon et al., 2013)	Tourism Management (4*)
Place attachment	I am very attached to this park. I feel a strong sense of belonging to this national park and its settings/facilities. This national park means a lot to me.	(Ramkissoon et al., 2013)	Tourism Management (4*)

Co-creation and stakeholder involvement

Extensive prior research acknowledges the necessity to consider stakeholders' identity (Crane, Matten, & Moon, 2004; den Hond & de Bakker, 2007; Granovetter, 2005). Crane & Ruebottom (2012) mention the challenge of considering stakeholders' economic roles and social identities simultaneously instead of independently. Relating this to place branding Skinner (2008) reasons how places may have different attractions and meanings to the diverse target markets and groups of stakeholders. Brown (2006, p.12) agrees that there is a need to investigate branding 'from a multi-stakeholder perspective'. Stakeholders are seen to collectively produce the place brand (Kavaratzis & Hatch, 2013). Further attention in the literature is put forward to explain the role of stakeholders in co-creating the place brand (Kavaratzis & Hatch, 2013). The major issue with multiple stakeholders in the place branding process is seen in their differing ideas of local identity (Mayes, 2008). This relationship between stakeholders and the formation of place identity leads to the notion of involved stakeholder leading to higher place identity (Kavaratzis & Hatch, 2013).

The scale for measuring the extent of co-creation and stakeholder involvement in the branding process was adapted from scales developed by Klijn, Eshuis, & Braun (2012) and Hatch & Schultz (2010). Klijn et al. (2012) research the effectiveness of stakeholder involvement on the effectiveness of place branding. Hatch & Schultz (2010) base their research about a theory of brand co-creation on building blocks developed by Prahalad & Ramaswamy (2004) of dialogue, access, transparency and risk. This research employs a scale of seven items such as 'Our winery has been involved in creating the wine region brand' (stakeholder involvement) and 'Our winery perceives the work of the regional office to be very transparent' (co-creation). Some additional items have been adapted and added which felt necessary to operationalize the construct of co-creation and involvement in the wine industry context. This is acceptable as adapting and adding items to scales is common in the business research field (Bruner et al., 2005).

Variables	Item measurements	Author	Journal (ranking)
Stakeholder involvement	Stakeholder involvement was thus measured by two items on a 5-point scale: (1) private firms have had considerable influence on the content of city marketing; (2) citizens have had considerable influence on the content of city marketing.	(Klijn, Eshuis, & Braun, 2012)	Public Management Review (3*)
Stakeholder involvement	Co-creation between organizations and stakeholders via dialogue within network relationships.	(Hatch & Schultz, 2010)	Brand Management (2*)

5.5. Dependent variable

Performance

This research concerns the application of sustainability place branding and its effect on place performance. Performance is therefore the dependent variable of this research. Performance is a intricate phenomenon and it requires more than just one single measure to characterize it (Lo, 2010). A number of scholars have debated that a multifactoer performance measurement model should be applied in research (Bagozzi & Phillips, 1982; Chakravarthy, 1986). Based on the existing literature, this research applies two second-order constructs with four different first-order constructs. Performance is measured for the winery level as well as the wine region level. The measures that have been deemed important for this research are performance measures based on measures in form of visitor statistics (numbers and expenditures) (Dwyer & Kim, 2003), economic performance (Rao & Holt, 2005), brand relevant indicators (Blain, 2005) and innovation measures (Deshpande, Farley, & Webster, 1993). Those four performance measures have been chosen, since they represent ways in which wineries and wine regions could generate profit.

Generally, the literature agrees on firm's performance being measured by its ability to generate profit. It is for this reason that all four performance measures indicate some form of profit generating attribute. Visitor numbers are important for the capability to generate profit though open cellar doors (Carlsen, 2004). Economic performance measures reflect direct

profitability of the winery as well as the wine region. Brand relevant indicators deem to have an indirect effect of profitability but the wine related literature generally agrees on successful brands leading to high profitability (Beverland, 2004; Beverland, 2005). Finally, innovation success among firms show a direct link to profitability and are therefore a fitting measurement for firm performance in the wine industry (Flint, 2006).

The adopted scales only provide guidelines on how performance can be measured but do not contain empirical evidence since existing figures are compared according to the items suggested. Yet, conforming to previous reasoning, all scales are based on previous studies. The borrowed items have been adapted and in some case items added (Bruner et al., 2005).

It is generally accepted that firm's value are assessed by the stock market and therefore deliver objective measures (Lo, 2010). Yet, this is not possible in an industry that mainly consists of SME's, often run as family businesses who are not part of the stock market and often do not publish any company figures related to revenues and profits. In order to present reliable and valid findings, objectivity in performance measures were strived for. Respondents were asked to assess the performance of the winery (individual place performance) as well as their wine region (regional place performance) in comparison to wineries and wine regions of similar size over the past five years. Dess & Robinson (1984, p.271) found if objective measurements are unobtainable that this format of seeking performance information relative to similar companies in the industry is likely to produce findings that are consistent with factual measures. Respondents were therefore presented with performance measures in the form of visitor statistics, economic performance, brand relevant indicators and innovation measures and asked to compare those to similar companies in the industry.

Variables	Item measurements	Author	Journal (ranking)
Performance Marketing	<p>The collective wine region brand is successful in conveying a fitting image to visitors.</p> <p>The logo provided by the collective wine region brand achieves awareness among prospective and actual visitors.</p> <p>The collective wine region brand conveys a unique selling proposition.</p> <p>The collective wine region brand facilitates destination awareness that consistently provides an assurance of quality while reducing</p>	(Blain, 2005)	Journal of Travel Research (4*)

	perceived risk. The collective wine region brand evokes an emotional response from visitors. The collective wine brand conveys a promise of a quality.		
Performance Tourism	Number of foreign visitors ‘ Growth rate of foreign visitors ‘ Market share of destination – world, regional ‘ Shifts in market share ‘ Average length of stay ‘ Rate of revisit	(Dwyer & Kim, 2003)	Current Issues in Tourism (2*)
Performance Tourism	Expenditure of foreign visitors (FX receipts) ‘ Growth rate of expenditure of foreign visitors ‘ Share of destination in total tourism expenditure – world, regional ‘ Shifts in expenditure share ‘ Foreign exchange earnings from tourism as percentage of total exports	(Dwyer & Kim, 2003)	Current Issues in Tourism
Performance Tourism	‘ Investment in tourism industry from domestic sources ‘ Foreign direct investment in tourism industry ‘ Investment in tourism as percentage of total industry investment (and trend)	(Dwyer & Kim, 2003)	Current Issues in Tourism
Performance Finance	Relative to our businesses’ largest competitor, we are: Less profitable – about equally profitable – more profitable Larger – about the same size – smaller Have a larger market share – about the same market share – have a smaller market share Are growing more slowly – are growing about the same rate – are growing faster	(Deshpande, Farley, & Webster, 1993)	Journal of Marketing (4*)
Performance	Avg. quality of wine over prior 3 years Avg. quality of wine over prior 3 years Wine price Grape price (per ton of grapes) Age of winery Size of winery (storage capacity in thousands of gallons) Vineyard acreage Number of brands	(Benjamin & Podolny, 1999)	Administrative Science Quarterly (4*)
Performance Finance	To investigate the link between green supply chain management and economic performance a number of manifest variables constitute the construct measuring economic performance: (1) new market opportunities; (2) product price increase; (3) profit margin; (4) sales; and (5) market share.	(Rao & Holt, 2005)	International Journal of Operations & Production Management
Performance Innovation	In a new product and service introduction, how often is your company <ul style="list-style-type: none"> • First to market with new products and services • Later entrant in established but still growing markets • Entrant in mature, stable markets • Entrant in declining markets • At the cutting edge of technological innovation 	(Deshpande, Farley, & Webster, 1993)	Journal of Marketing (4*)

5.6. Control variables

Size of wineries is discussed as influencing the extent of sharing an identity between wineries and regions (Zamparini & Lurati, 2012). Also the need for wine tourism as an income stream is meant to depend on the winery size (Cambourne & Macionis, 2000). Experience with sustainability is stated to differ between old and new world wine regions (Buckley, 2002; Barber et al., 2010b). It is for this reason that winery size and sustainability experience are

used as control variables. Winery size is measured as vineyard size in hectares and sustainability experience is measured through the number of years the winery was involved with sustainability.

The complete questionnaire can be found in the Appendix B.

5.7. Geographical coverage

The targeted respondents of this study are stakeholders in wine regions in Australia and Germany. Both countries are major players in the wine (tourism) industry (Hall et al., 2000). Australia is selected as representing a new world producing country since it is a major player in the global wine industry and was among the first to recognize the potential of pairing wine and tourism (Macionic, 1999). Thus, lending itself very well to research in the wine industry with a focus on place branding. Other countries might exemplify similar sized wine industry but have less focus on wine tourism. Furthermore, a number of existing studies on sustainability are placed in Australia (Lockie, 2002; Patterson, 2006) and specifically in the wine industry (Alonso, 2009; Wayne, 2008; Remaud, 2008; O'Neill, 2000; Ryan, 2010). This proliferation of research in Australia shows an interesting and research active population that allows for result comparison.

Germany represents an old world producing country and is noted to be among the first wine producing countries that offered wine tourism as wine routes in Germany have been part of tourism products since the 1920s (Hall & Mitchell, 2000). However, the purposeful development and marketing of wine tourism has only developed in recent years (Cambourne, et al., 2000). Early research in Germany concerning wine and travel has been undertaken by The Institute of Geography in Bavaria in 1984 as reported by Hall et al. (2000a). More current research in Germany especially regarding sustainability is preliminary based on the organic food sector (see for example Baker et al., 2004). No research to date could be detected that researchers sustainability issues in the German wine industry. This is somewhat surprising as

Germany is the leading European market for organic food which entails 2.7 per cent of the total food turnover (Baker et al., 2004). In addition, German consumers are recognized as being remarkably aware of nutrition and environmental issues (Baker et al., 2004).

Pullman (2010) points out the need for comparative studies between producers in California, Chile, Argentina, New Zealand (representing the new wine world) and parts of Europe (representing the old wine world). It is claimed that in particular agricultural practice regulations and policies might influence the adoption of sustainability practices as well as their perceived outcomes (Pullman, 2010). By measuring the adoption of sustainability practices and their communication in place branding and the effect those have on place performance, this research aims to investigate differences among those two wine industry regions. Therefore, this research collected data from both Australia and Germany in order to compare findings in the new wine world and deliver empirical evidence for the old wine world.

5.8. Back-translation of the questionnaire

The original questionnaire was developed in English based on original scale development as well as on the targeted sample population being Australian. Due to the cross-cultural nature of the research, a German version was created. It is cautioned that translating a questionnaire into another language might cause problems (Saunders et al., 2009). Campbell et al. (1970) indicate that there are four techniques that improve the use of different languages during one research: (1) Back-translation (2) Bilingual technique (bilinguals take a test in both languages) (3) Committee approach (group of bilinguals translate to diminish errors) (4) Pre-test procedure (translation is field tested). This research used the back-translation technique in order to guarantee that the questionnaire is translated in a way that the questions have the same meanings in both languages.

Back-translation involves the engagement of two bilinguals, whereby one translates from the source to the target language and the second blindly translates back from the target to the source (Brislin, 1970). Two questionnaire versions of the same language are then available and checked for possible discrepancies. The researcher, who is a native German speaker and fluent in English, translated the questionnaire from English into German. Another German native speaker back translated the German version into English. The researcher then verified the original English survey with newly translated version and checked for any mistranslation or errors.

5.9. Quantitative sampling and survey population

In order to quantitatively or numerically describe trends, attitudes or opinions of a population, research applying a survey design studies a sample first. Results established from the sample lead to claims and generalizations to the population (Creswell, 2009). Sampling is acceptable and offers an alternative to census surveys if it is impracticable, or the researcher is constraint by budget or time (Saunders et al., 2009). For the purpose of representing the Australian as well as the German wine industry a simple random probability sampling method was strived for. All possible cases in a population from which the sample will be drawn comprise the sampling frames for a probability sample (Saunders et al., 2009).

The targeted questionnaire respondents for this study consist of winery owners from all wine regions in Australia and Germany. However, it needs to be cautioned that the reality is more likely to be a non-probability sample as the databases from where the wineries were selected might not be exhaustive and therefore the researcher cannot be one hundred per cent sure that the entire population of wineries in Germany as well as Australia have equal chances of being selected to participate in the study. Wineries in Australia were identified from a database established by the industry organisation Winetitles Pty Ltd (2014). All wineries published in the Australian part of this directory who indicated open cellar door facilities were

chosen as the target population in order to minimise sampling error as sampling errors are the result of 'attempting to survey only some, and not all, of the units in the survey population' (Dillman, 2007, p.9). The sample frame for this research is 1,711 Australian wineries. The target population for the German wine industry is based on the German web based industry organisation Winzer.de which counts 1,580 wineries. Using existing data bases can lead to problems such as databases being incomplete, information published might be inaccurate and information might be out of date (Edwards et al., 2007).

A suitable sample size needs to be established in order to make generalisations about a population based on the actual response rate. Cohen (1992) suggests sample size recommendations for the use in PLS-SEM which is a statistical analysis tool that is going to be applied in this research. The sample size depends on the relationships and variables tested in the proposed research. The researcher has to calculate the maximum number of relationships in the model pointing at one construct which in this research is four. Based on a 5 per cent significance level, this would mean a minimum sample size of 137 cases studied (Cohen, 1992). This would lead to researchers being sure of estimating the population's characteristic at 95 per cent certainty to within plus or minus 3 to 5 per cent of its true values (Saunders et al., 2009). Therefore, out of the complete population of 1,711 wineries in Australia and 1,580 wineries in Germany, at least 137 wineries per country needed to have responded.

The final list of wineries in Australia and Germany contained name, address and email address. Both lists were completed by manually adding the belonging wine region to the wineries. The data collection strategy was organised once the lists had been completed.

5.10. Quantitative data collection

5.10.1. Administering the questionnaires

Saunders et al. (2009) categorizes two types of survey data collection: self-administered

questionnaires distributed via internet or post and interviewer-administered questionnaires conducted on the phone or face-to-face. There are a number of advantages and disadvantages associated with both forms of questionnaire administering. Those range from sample sizes being larger with self-administered questionnaires to higher response rates with interviewer-administered questionnaires. Furthermore, the time for completion differed between the two types of questionnaires with self-administered questionnaires distributed through the internet being the fastest with a suggested time frame of 2-6 weeks (Saunders et al., 2009). Both forms of administering the questionnaire have been weighed against advantages and disadvantages. There are a number of reasons why a postal, self-administered questionnaire was chosen as the best possible way to collect the quantitative data. First of all, for generalisation, this research requests a large number of respondents (at least 137 cases per country) which is only achievable with the self-administered way of questionnaire distribution taken the available time into consideration (Dillman, 2007). Moreover, the geographical discrepancy between the two chosen countries made an interviewer-administered impossible due to time and financial constraints (Saunders et al., 2009). Despite the fact that an online administered questionnaire might have been more convenient and less costs intensive (Bryman, 2009) the researcher was worried about a low response rate compared to postal surveys (McDonald & Adam, 2003). In order to ensure a high response rate to be able to ultimately generalise the findings, the questionnaire was pre-tested and piloted.

5.10.2. Pre-testing and piloting the questionnaire

Pre-testing the questionnaire with the study population helps to identify the commonly shared vocabulary among the respondents and is suggested to be done in four stages (Dillman, 2007)

Stage 1: Review by Knowledgeable Colleagues and Analysts

Stage 2: Interviews to Evaluate Cognitive and Motivational Qualities

Stage 3: Small Pilot Study

Stage 4: Final check

For Stage 1, five researchers in the Business School at Plymouth University were asked to read the questionnaire and to make comments based on structure, content and wording. A number of these researchers reviewed the scales and categories and advised on modernizing some of the scales by adding new items. Stage 2 included the evaluation of wording, grammar and overall impression. The same five researchers who have been involved in the first stage also helped during this stage. In addition, one market research practitioners as well as two native speakers assessed whether all the questions are likely to be understood and grammatically correct. This was very helpful especially in changing some of the phrasing of individual questions as well as identifying unclear sections of the questionnaires. The third stage included a small pilot study.

This pilot study aimed to detect questions that generate a low item response rate and to find out whether some sections or questions are completely skipped. Existing empirical work in the wine industry dealing with sensitive issues such as sustainability have chosen to pilot study the questionnaires with face-to-face interviews with three winery managers/owners and winemakers in order to finalize the questionnaire (Pullman, 2010; Sinha & Akoorie, 2010). The revised questionnaire based on the first two stages was therefore piloted with three winery owners in each country and based on the recommendations of these winery managers, the questionnaire was revised and improved. The final stage of pretesting included the final check where people who have nothing to do with the development of the questionnaire complete it. Friends and family completed the final version of the questionnaire and nothing out of the ordinary was picked up. Pre-testing and piloting the questionnaire aims to result in a document that is ready to be distributed to the respondent (Dillman, 2007). In order to get responses from as many members of the survey population as possible, a well-designed questionnaire is only one important feature. Implementation procedures are deemed to have

an even greater influence on the response rate (Dillman, 2007) and will be discussed in the following section.

5.10.3. Questionnaire implementation

The communication process whilst collecting the responses has a much greater influence on the response rate than the questionnaire design (Dillman, 2007). In order to gain as many responses as possible, a number of steps have been followed throughout the questionnaire implementation. First, the appearance of the questionnaire as well the envelopes were designed in an appealing way as a professional appearance enhances response rate (Dillmann, 2007). The questionnaire package included the questionnaire, a cover letter explaining the purpose of the study as well as confidentiality assurance and a reply-paid self-addressed envelope in order to return the questionnaire. Confidentiality assurance and reply-paid envelopes are suggested for high response rates (Bryman, 2005; Saunders et al., 2009). Another way of reaching high response rates was the personalisation of the envelopes and questionnaires (Dillmann, 2007) including the winery and managers names. The cover letters have all been manually signed in another attempt to personalize the questionnaire as suggested by Dillmann (2007). Furthermore, the cover letter indicated a target date for the questionnaire to be returned after two weeks from receiving the questionnaire. After those two weeks a friendly reminder was sent with a thank you note to those who had already completed the questionnaire and a gentle reminder to fill out the questionnaire if not completed yet.

5.10.4. Sample size

Overall, the final questionnaire was sent to 1,711 Australian wineries. About 88 questionnaires were returned unopened due to a variety of reasons. Therefore, it can be assumed that about 1,623 were successfully delivered to wineries. In total, 220 usable questionnaires have been returned in a time period of two months (April 2014 – June 2014). The final questionnaire was

sent to 1,580 wineries in Germany that had accessible addresses. About 23 questionnaires were returned unopened which makes the delivered wineries of about 1,557. In a period of about two months (June 2014 – August 2014) about 210 questionnaires were returned from the German population which results in a response rate of about 14 per cent. The response rate for the Australian sample is about 14 per cent.

Questionnaires	Sent	Undelivered	Returned	Response rate (%)
Australia	1,711	88	220	13.56%
Germany	1,580	23	210	13.49%

Table 5-1: Response rate overview

Response rates of about 14 per cent seem relatively low but are deemed acceptable for a number of reasons. Small business owners are known for small response rates (Dennis Jr., 2003) and the majority of participants in this research were small business owners. Furthermore, the literature on partial least squares structural equation modelling acknowledges that robust results can be achieved with fairly small sample sizes (Henseler et al., 2009). Cohen (1992) suggests sample size recommendation for the use of PLS-SEM depending on the relationships and variables tested in the proposed research. By calculating the maximum number of arrows pointing at a construct, based on a 5 per cent significance level, this means an acceptable sample size of 137 cases studied (Cohen, 1992). This would mean that researchers are sure to estimate the population's characteristic at 95 per cent certainty to within plus or minus 3 to 5 per cent of its true values (Saunders et al., 2009). Therefore, the 220 returned questionnaires from Australia and 210 questionnaires from Germany can be regarded as satisfactory. Concluding the sample sizes achieved in this research project can be used to execute a robust PLS-SEM analysis.

5.10.5. Survey limitations

There are a number of constraints that the questionnaire was subject to. First of all, time as well as costs had to be taken into consideration. Conducting separate studies in two countries

requires financial means as well as time dedicated to the project. In order to work as efficiently as possible, planning has been implemented from the beginning of the project and financial means have been monitored and applied for in due course.

A second limitation concerns the targeted stakeholder in the German as well as the Australian wine industry. The respondents are chosen to be stakeholders in wine regions. The individual stakeholders of wine regions are limited to the wineries since those are hypothesised to have to identify with the overall regional place brand. Hence, winery owners and management are targeted in this research. A limitation can be seen in the fact that it might be possible that other stakeholders such as restaurants, accommodations and other tourist attractions influence the regional brand performance. However, measuring the identities of all individual stakeholders would exceed the scope of this study. Furthermore, the wineries are the main stakeholder forming the wine region and often combine winery, restaurant and accommodation under one roof (Hall et al., 2000a).

Finally, this research concerns the regional branding of wine regions and the individual wineries as sustainable. Wineries are the main carrier of sustainability. In accordance to previous studies in the field of wine tourism the supply side (winery owner and management) forms a valid measurement to test brand performance including brand equity (Gomez & Molina, 2012). Yet, this choice of respondents is not without criticism which is acknowledged by the researcher.

5.10.6. Quantitative analysis

This research aims to analyse the quantitative data with the use of non-linear regression-based partial least squares structural equation modelling (PLS-SEM) by applying the software WarpPLS 5.0 (Kock, 2013). Structural equation modelling (SEM) has almost become a standard in marketing research when analysing the cause-effect relationships between latent constructs

(Hair et al., 2011a). It is a multivariate technique that combines parts of factor analysis and regression which is why SEM allows to measure relationships between measured variables and latent variables as well as between latent variables only (Hair, 2014). Structural equation modelling can be divided into two approaches: covariance-based techniques and variance-based (Henseler et al., 2009). Partial least squares represent the variance-based technique of SEM and is applied to estimate models with complex, multivariate relationships between latent variables (Henseler et al., 2009). PLS had been applied across disciplines with a particular focus on international marketing research (Henseler et al., 2009). Its application seems successful as in excess of 20 studies (as of 2007) using PLS have been published in top-tier marketing journals (Eggert, 2007). Henseler et al. (2009) state a number of key characteristics of PLS based on the justification of 30 researchers that applied PLS:

- PLS delivers latent variable scores
- PLS path modelling avoids small sample size problems
- PLS path modelling can estimate very complex models with many latent and manifest variables.
- PLS path modelling has less stringent assumptions about the distribution of variables and error terms.
- PLS can handle both reflective and formation measurement models.

It has been summarized that PLS is mainly intended for causal predictive analysis in highly complex situations with low theoretical information (Jöreskog & Wold, 1982).

This research aims to identify factors including sustainability place branding that influence the performance of places across two sets of samples. This can be achieved through PLS as Albers (2009) has described PLS as a method for measuring success factors particularly in the field of marketing. In addition, research particularly looking at factors that influence performance measures have successfully applied PLS (Reinartz et al., 2009). Also due to the fact that the

majority of the variables in this research are not directly observed but latent variables, a measurement model for each construct needs to be stated (Hair, 2014); PLS is capable of delivering latent variable scores (Henseler, et al., 2009). Furthermore, two types of measurement specifications have been considered when developing constructs: reflective and formative. For every latent variable, the indicators have to be divided into being more likely to be causal (formative) or effect (reflective) indicators (MacCallum & Browne, 1993). The causality is from the construct (or latent variable) to its measures. The reflective measure dictates that all items are caused by the same construct and therefore lead to high correlation with each other. The constructs in this research are both reflective and formative and as Henseler et al. (2009) describe PLS can handle both type of variables.

The final justification lays in the fact the PLS can estimate very complex models which is necessary as the model construct of this research has multiple layered components (higher-order component) (Edwards, 2001; Hair, 2014; Jarvis et al., 2003; Wetzels & Odekerken-Schröder, 2009). Supporters of higher-order construct modelling claim that it leads to theoretical parsimony and reduces model complexity (Edwards, 2001; Hair, 2014; Wetzels & Odekerken-schröder, 2009). Hulland (1999) states that PLS-SEM models are normally analysed and interpreted in two sequences in order to guarantee reliable and valid measures of constructs before drawing conclusions about the relationships existing in the constructs:

- (1) Assessment of the reliability and validity of the measurement model
- (2) Assessment of the structural (formative) model

In summary, the data analysis will be completed for both countries respectively. In the end, results from Australia and Germany will be compared to evaluate similarities and differences. This research follows a sequential explanatory research design combining quantitative and qualitative data collection methods. This is based on suggestions in the literature for a mixed method approach (Hughey et al., 2005; Barham, 2003; Markley & Davis, 2007; Cholette &

Venkat 2009) and particularly in order to understand quantitative findings in more depth by following them up with interviews (Sinha & Akoorie, 2010). Therefore, the following section will explain the qualitative research method and justification for it in great detail.

6. CHAPTER: QUALITATIVE RESEARCH METHODS

Combining both quantitative and qualitative methods establishes both testability and context into the research and provides a wide range of coverage that is able to present a wider picture of the unit under study (Kaplan & Duchon, 1988). In order to provide such a wider picture of the area under investigation and to understand findings of the quantitative analysis, this research applies qualitative research subsequent to the quantitative data collection and analysis as outlined in the sequential explanatory research design.

6.1. Qualitative mode of data collection

Participant observation, interviews and focus groups are different methods of qualitative data collection (Mack, Woodsong, Macqueen, Guest & Namey, 2005). Interviews in particular can take on many shapes and forms ranging from unstructured to semi-structured and structured interviews (DiCicco-Bloom & Crabtree, 2006). It is cautioned that no interview can be completely unstructured; yet in the widest sense, unstructured interviews resemble a guided conversation. Unstructured interviews and participant observation are often combined (DiCicco-Bloom & Crabtree, 2006). The other end of the interview spectrum is the structured interview which resembles a survey data collection methodology by producing quantitative data (DiCicco-Bloom & Crabtree, 2006). The third and most commonly applied interview format is the semi-structured interview (Saunders et al., 2009). DiCicco-Bloom & Crabtree (2006) explain that the semi-structured interview is usually scheduled in advance, organized around predetermined open-ended questions and take between 30 minutes and several hours. Semi-structured interviews are common in the business literature to follow up on quantitative data results since those allow for cross-checking of data and allows for accessing different levels of reality (Bryman, 2005).

Applying such multiple methods in organizational studies has proven useful as in addition to the quantitative findings, the researcher could identify 'stories' among employees concerning

the topic in question (Faules, 1982). Identifying such 'stories' is gaining relevance in marketing research (Grayson, 1997; Thompson, 1997; Escalas & Bettman, 2000; Hopkinson & Hogarth-Scott, 2001; Deighton & Das Narayandas, 2004). The rise of interest about stories is embedded in the fact that organizational symbolism and culture are gaining importance (Bryman, 2005). This can be verified for this research since organizational culture plays an important role in the interplay between sustainability place branding and place identity (Kavaratzis & Ashworth, 2015). Despite the age of Faules' study (1982) who identified stories among employees, it has not lost its relevance for today's research. Whereas the survey in their respective study highlighted results that were partially supported by the semi-structured interviews, new and valuable findings have emerged (Faules, 1982). This was due to the fact that despite thorough reviewing of the literature before developing the questionnaire, some elements have not been picked up on and were therefore missing in that particular quantitative data collection method (Bryman, 2005).

Summarizing, quantitative data collection as a starting point provides general attitudes but stories uncovered through semi-structured interviews allow access to reasons as to why things are happening and sheds light on particular views (Bryman, 2005). Despite the literature providing a lot of theory necessary for drafting the conceptual model, some of the concepts of this research do not seem adequately covered. In order to ensure that none of the important elements are missing in the overall analysis, semi-structured interviews are conducted. When reviewing 200 social science articles that applied a mixed method design, semi-structured interviews tend to be the predominant approach on the qualitative side (Bryman, 2006). Saunders et al. (2009) illustrate some of the main reasons why mixed methods are applied based on the study undertaken by Bryman (2006). These range from triangulation over complementarity, aid interpretation to solving a puzzle. This research justifies the use of mixed methods as complementarity and aiding interpretation since additional meaning and explanation is strived for through the semi-structured interviews.

6.2. Semi-structured interviews

Semi-structured interviews are usually planned outside of everyday events at an agreed time and location (DiCicco-Bloom & Crabtree, 2006). Questions are predetermined and in this research, guided by the research questions (Creswell, 2009) as well as through the quantitative data analysis. This was indicated in the sequential explanatory research design which requires quantitative data collection as well as analysis before the qualitative data collection commences (Creswell et al., 2003). Predetermined questions do not exclude the emergence of new questions throughout the dialogue between the interviewee and interviewer (DiCicco-Bloom & Crabtree, 2006). Individual semi-structured interviews were chosen in order to discuss social and personal matters, as sustainability and barriers to employing such can have reasons that are not willingly shared among others. The choice for participants for the semi-structured interviews will be stated and justified.

6.3. Qualitative sampling – selecting interviewees

In qualitative research merely a subset (a sample) of the study population is selected since it is not necessary to collect data from everyone in the community (Mack et al., 2005). The first step in the research process is to determine a target population in order to establish a relevant sample frame (Given, 2008; Wilson, 2006). Who and how many people to select is determined by the study's research objective and the characteristics of the study population (Mack et al., 2005). Approaches to sampling are often divided into probability and nonprobability sampling. Probability and nonprobability sampling are defined as 'the former uses a group's size in the population as the sole influence on how many of its members will be included in the sample, while the later concentrates on selecting sample members according to their ability to meet specific criteria' (Given, 2008, p. 797). Caution is required when discussing sampling for qualitative research as terminology might be confusing. Given (2008) highlights that a qualitative data sample does not aim to represent a population for generalizability but is rather aiming to establishing a relevant sample frame (Wilson, 2006).

Purposive, quota and snowball sampling are three of the most commonly applied sampling methods in qualitative research (Mack et al., 2005). Purposive sampling is about defining the population of eligible data sources before selecting the actual sample (Given, 2008). Mack et al. (2005) describe purposive sampling as grouping participants according to preselected criteria relevant to a specific research question and introduce the notion of theoretical saturation. Accordingly, sample sizes are determined by the point in data collection when no additional insights are gained when collecting new data. Also, time and resources available determine the sample size in purposive sampling (Mack et al., 2005). Some researchers see quota sampling as part of purposive sampling as quota sampling characterizes participants according to common features which allows the researcher to focus on participants that are likely to be knowledgeable about the research topic (Mack et al., 2005).

Snowball sampling for qualitative research is the process of participants suggesting other informants to partake in the study (Belk, 2006). Snowball sampling is advisable to gain trust among participants but bias is almost unavoidable in snowball samples (Belk, 2006).

As the first step in sampling, the population needs to be defined (Wilson, 2006). This research measures and explores the effects of sustainability place branding on place performance, especially the identification with stakeholders of the place brand is of interest. Therefore, the population of this research can be defined as winery owner and winery manager who have knowledge about sustainability in the wine industry. As Mack et al. (2005, p. 5) have pointed out participants have to be most likely to 'experience, know about or have insights into the research topic'. Based on those assumptions only wineries that have some form of experience with sustainability were deemed appropriate as the population to be studied. The second step requires recruiting those participants. Recruitment is referred to as the process of identifying and inviting participants to partake in the study (Eide, 2008).

This research applied a non-probability approach combining both purposive and snowball sampling. In order to ensure sustainability knowledge exists, only wineries have been contacted that were published in the German Travel Guide for Organic Wineries (Schrader, 2003) and wineries that were part of Organic Wine Australia (2015). All wineries published in the travel guide as well as on the website have been invited to participate in the research. Purposive sampling can be completed as soon as theoretical saturation is achieved (Mack et al., 2005). Therefore, the actual data collection started as soon as the first participants agreed to take part in the research and was aimed to be continued until no new findings became apparent. Contacting all members listed as organic wineries gave every winery that communicates being organic the chance of taking part in the study. Drew (2014) establish barriers to the successful recruitment of participants as issues of access and suspicion towards the interviewer as an outsider. Especially in organizational research, gatekeepers are very powerful in hindering the researcher to have access (Saunders et al., 2009). In order to overcome those barriers, a number of suggestions have been followed.

The German as well as the Australian population have been contacted in their respective language as suggested by Drew (2014) in order to accept the local culture. Furthermore, the researcher established herself as an expert in the prospective country by highlighting an affiliation with an Australian university and a German industry association when approaching the organizations (Welch et al., 2002). This purposive sampling allowed access to a number of subjects willing to participate in the study and during the data collection process; snowball recruiting was executed where subjects recommended other interested member of the population (Belk, 2006). Overall, 20 subjects were interviewed, eleven participants in the German and nine participants in the Australian wine industry.

6.4. Qualitative data collection – the interview process

The location of both participant populations made face to face interviews impossible due to time and financial restrictions of the researcher. Therefore, telephone interviews have been conducted with the subjects of this study. Telephone interviews have a number of advantages and being able to interview participants from any geographic region is just one of them (Knox & Burkard, 2008). Furthermore, Musselwhite, Cuff, McGregor, & King (2006) stress the economic and human resource efficiency and allowing for more openness in responses due to anonymity provided by the phone. In order to meet the needs of the participants, the researcher let them decide the time and date of the phone-interview (Bryman, 2006). Prior to conducting the interviews, the participants were sent an email with a consent form stating information concerning ability to exit at any point, confidentiality agreement as well as future data storage and usage information (see Appendix C for the interview consent form). Each telephone interview started with the participants confirming that they have received the letter of consent and that they accept being recorded (Bryman, 2006). All participants but two agreed to having received the consent letter and with being recorded. The two participants that had not read the consent letter were informed before the interview and their consent was provided vocally. Advancing to the actual interviews, an interview protocol was drafted according to Bryman (2006) including the following components (see Appendix D for a complete interview guide):

- A heading (date, place, interviewer, interviewee)
- Instructions for the interviewer to follow so that standard procedures are used from one interview to another
- The questions (typically an ice-breaker question at the beginning followed by 4-5 questions that are often the sub-questions in a qualitative research plan, followed by some concluding statement or a question, such as, “Who should I visit to learn more about my questions?”)
- Probes for the 4-5 questions, to follow up and ask individuals to explain their ideas in more detail or to elaborate on what they have said

- Space between the questions to record responses
- A final thank-you statement to acknowledge the time the interviewee spent during the interview

Five main questions were developed based on the quantitative analysis that aimed to explain and elaborate on findings, thus aiding interpretation and complementing the overall research (Bryman, 2006). Possible sub-questions have been identified that were used as probing questions in order to produce a fuller account of information (Saunders et al., 2009). The questions dealt with topics such as the meaning of sustainability, possible barriers and challenges in the use of sustainability, regional identification and marketing activities in general. Despite the fact that some questions were guiding the interview structure, participants were encouraged to talk at length about the topics they considered important (DiCicco-Bloom & Crabtree, 2006). When considered appropriate, the researcher probed deeper with the predetermined sub-questions. The interviews typically lasted between 25 to 45 minutes which is common for semi-structured interviews (DiCicco-Bloom & Crabtree, 2006).

6.5. Qualitative data analysis

These semi-structured interviews were guided by questions formed on the basis of the quantitative analysis in order to gain deeper insight and aid interpretation of the findings (Bryman, 2006). Particular areas of interest that have not been touched on thoroughly enough were discussed during the semi-structured interviews in order to forgo neglecting important areas of analysis that were not detected during the literature review (Bryman, 2005). The analysis of data for this research follows the deductive, theoretical thematic analysis (Braun & Clarke, 2006; Hayes, 1997).

Thematic analysis is defined as 'a method for identifying, analysing and reporting patterns (themes) within data (Braun & Clarke, 2006, p.79). Thematic analysis is very suitable to this research as it is not theoretically bounded (Braun & Clarke, 2006). Other qualitative analysis

tools such as grounded theory and IPA (Interpretative Phenomenological Analysis) are strongly linked to phenomenological epistemology (Smith & Osborn, 2003). Thematic analysis can be applied to different theoretical frameworks ranging from an essentialist and realist to a constructivist method (Braun & Clarke, 2006). This research follows the paradigm of inquiry of a critical realist. Based on that fact, the thematic analysis applied in this stage of the research highlights experiences, meanings and the reality of participants through the realist rather than the constructivist method.

In keeping with the thematic analysis, this research followed data analysis suggestions by Creswell (2009, p. 172) who states important steps of the data collection process in the figure below:

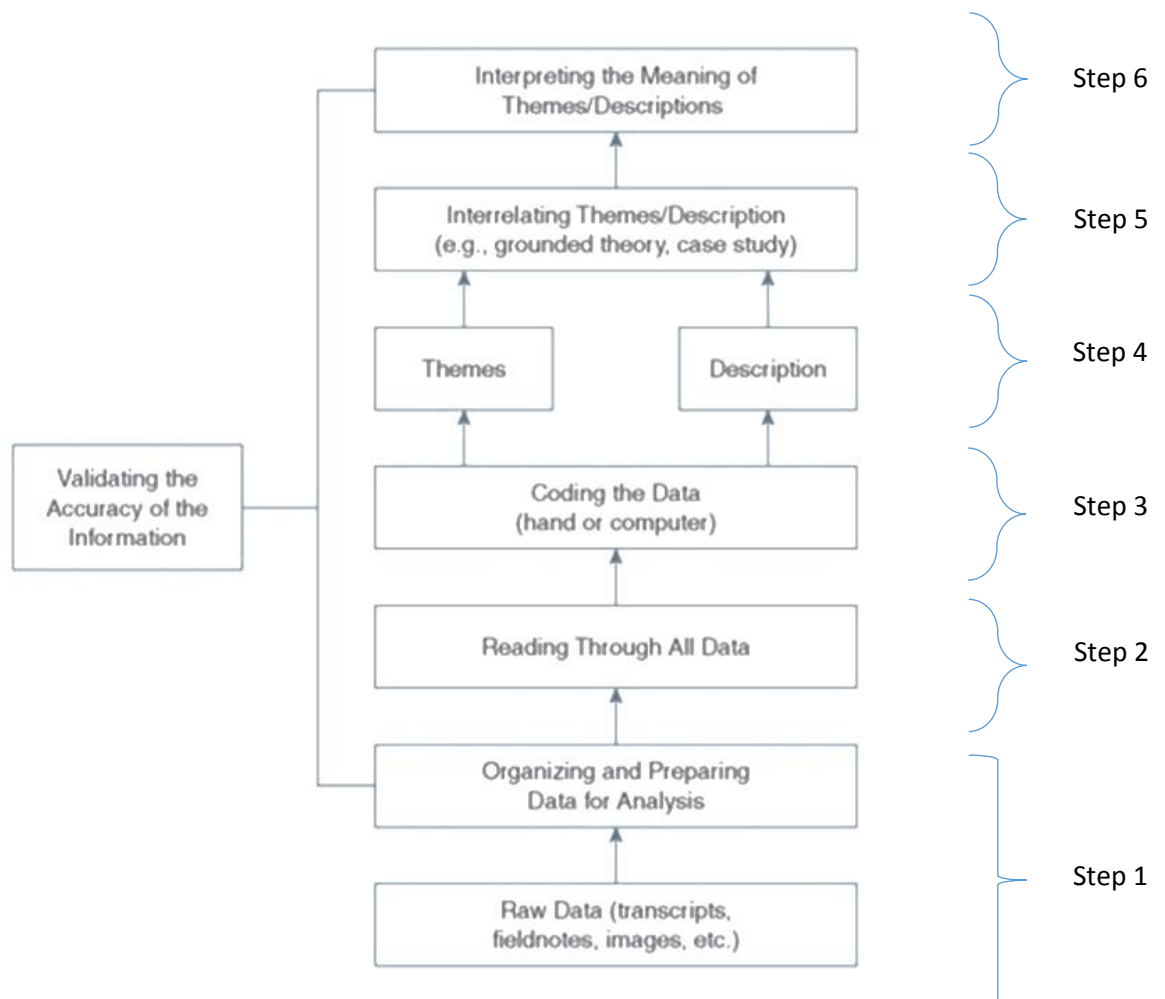


Figure 6-1: Data analysis in qualitative research

Each interview was recorded and the data analysis was started simultaneously to conducting the interviews as such an iterative process aims to lead to a point where no new categories or themes emerge (DiCicco-Bloom & Crabtree, 2006; Creswell, 2009). First, the semi-structured interviews were transcribed using Digital voice recorder, the researcher's own notes and Dragon Natural Speaking 13 software. The transcription helped in familiarisation with the data, and the transcripts have been checked against the original audio recording in order to ensure accuracy (Creswell, 2009).

Secondly, the data were read carefully looking for patterns of meanings and areas of potential interest especially in relation to the research aims. Microsoft Excel was used as a tool to group units of text dealing with similar issues together, generating provisional clusters of text. These clusters of text were then abbreviated with codes as suggested by Creswell (2009). Rossman and Rallis (1998) define coding as the collected information being organized into segments of text before attaching any meaning to them. Such chosen segments were then categorized and labelled with a term. This initially created list of codes was then transferred to the original interview transcripts to verify whether new categories and codes are emerging (Creswell, 2009; Braun & Clarke, 2006).

The data was uploaded to NVivo to code the occurring themes further according to the research aims and objectives of this research project (Step 3). The qualitative database (NVivo Nodes) is presented in Appendix E. Similar codes were then grouped into categories and themes for further analysis. One question a researcher needs to answer is whether to establish codes merely based on the emerging information collected from participants; based on predetermined codes; or a combination of both (Creswell, 2009). Based on the sequence of having completed the quantitative analysis first, some predetermined codes have been established and used for coding the data. However, during analysis the researcher was open for new codes to develop as well.

According to deductive thematic analysis, the coding process should take the specific research aims and objectives of the research into account (Braun & Clarke, 2006). Based on these and the findings of the quantitative analysis, specific categories have been identified that the transcripts have been checked against. Prior to continuing the analysis, the researcher considered what would count as a theme taking into consideration that 'a theme captures something important about the data in relation to the research question, and represents some level of *patterned* response or meaning within the data set.' (Braun & Clarke, 2006, p.82). The thematic analysis has been conducted in a deductive manner as the data has been collected specifically for this research and questions have evolved based on the quantitative part of this research (Braun & Clarke, 2006). Such a deductive data analysis approach is conforming to the quantitative paradigm of inquiry of post-positivism as it is based on the idea that existing theory is 'tested' rather than created solely through the qualitative data collection (Howell, 2013). Despite the fact that new findings are emerging throughout the analysis, the majority of findings is established through the quantitative analysis and merely further understood through the qualitative analysis. Therefore, the analysis is more analysts driven and leads to less a rich description of the overall data and more detailed analysis of certain parts of the data (Braun & Clarke, 2006). Furthermore, a semantic approach to the analysis has been taken, meaning that the researcher does not interpret the responses or looks beyond what the respondents have said but instead themes are identified within the explicit meanings of the data (Braun & Clarke, 2006).

The fifth step of the data analysis process involves the advancing of how the themes will be represented in the findings (Creswell, 2009). Here, a detailed discussion of the identified themes will be used, being supported by quotes of the individual participants (Saunders et al., 2009).

The final step involves making sense of the collected data by interpreting it to see what lessons have been learned (Denzin & Lincoln, 2005). Here, the interpretive facet of qualitative methodology becomes apparent as establishing meaning to the data is based on the researcher's interpretation (Bryant & Charmaz, 2007; Creswell, 2009; Howell, 2013). In addition to the researcher's interpretation, meaning will be established by comparing findings with information collected through the quantitative analysis as well as information in existing literature.

6.6. Interview constraints

There are a number of quality issues associated with interviews related to reliability, forms of bias, validity and generalizability (Saunders et al., 2009). In order to overcome those constraints, strategies have been implemented to ensure the collection and analysis of high quality data.

Reliability

In the light of qualitative research, reliable results would be those that different researchers would reveal similar information (Easterby-Smith et al., 2008, Guba & Lincoln, 2005). Based on the fact that qualitative research is so analyst centred and of interpretive nature, it is unrealistic to strive for results that could be completely duplicated by another researcher (Marshall & Rossmann, 1999). Yet, there are some guidelines on how reliability can be aimed for that have been implemented. The actual collection and analysis of the data throughout the research was following the same structure leading to consistency among participants. This is based on the interview protocol that was strictly followed as well as a systematic approach to the data analysis (Braun and Clarke, 2006; Creswell, 2009). The interview protocol would enable a different researcher to re-enact and possibly duplicate the study (Saunders et al., 2009). In order for fellow researchers to comprehend coding and interpretation of the data, interviews undertaken were all recorded and transcribed (Creswell, 2009). Furthermore, a fellow researcher has controlled the analysis and coding of the first five interviews to ensure

consistency (Silverman, 2007).

Respondent bias

It is crucially important to take potential bias into consideration when completing qualitative data collection. One type of bias to contemplate is interviewer bias which is when 'comments, tone or non-verbal behaviour of the interviewer creates bias in the way that interviewees respond' (Saunders et al., 2009, p. 326). Conducting telephone interviews rather than face-to-face interviews aimed to minimize this bias as much as possible since telephone interviews have been researched to reduce such bias through the absence of facial expressions making the respondent more comfortable (Musselwhite et al., 2006). In order to avoid imposing interviewer's views on the area of interest, the respondents were encouraged to elaborate on their own answers and the researcher aimed to speak as little as possible (Knox & Burkard, 2008).

Validity

Validity is discussed to be a strong point for qualitative data collection and is concerned with determining whether the findings are correct according to the researcher's standpoint, the interviewee or the reader and deal with topics such as trustworthiness, authenticity and credibility (Creswell & Miller, 2000). In order to evaluate the correctness of findings according to the researcher and in light of the reader, a number of strategies have been implemented. First of all, triangulation of a number of different participants was adopted to build coherent justification of themes (Creswell, 2009). As Braun & Clarke (2006) have pointed out there have to be a number of instances in the data set that support a theme. Throughout the interviews, the researcher summarized findings in order to verify whether the participants felt that they accurately reflected their opinions (Creswell, 2009). In addition to verifying with the participants, all the themes have continuously been compared against all the interviews ensuring that the meaning behind them really reflected the responses (Silverman, 2006).

Finally, to enhance accuracy, the study was discussed and shared with a fellow researcher to involve another interpretation beyond the researcher (Creswell, 2009).

Generalizability

The significance of qualitative research lies in the fact that it is true for a particular description and the themes that are identified hold true for a specific site and context (Creswell, 2009).

Yet, qualitative data is being criticised for its lack of significance to theoretical contribution (Yin, 2003). In order to overcome this highlighted shortcoming, the researcher ensured the demonstration of findings in the wider theoretical contexts by comparing findings with existing literature around the subjects of sustainability place branding and place identity (Saunders et al., 2009). Furthermore, establishing a relationship between the new findings and the existing theory will allow theoretical propositions to be advanced (Saunders et al., 2009).

6.7. Summary and conclusion

The previous three chapters have outlined the methodology applied in this present study. The philosophy of methodology has been reviewed and expressed as following a post-positivistic paradigm of inquiry with a mixed methods approach. A two stage research design, incorporating both quantitative and qualitative methods was justified and explained. This explanatory sequential research design requires the data analysis and collection of the quantitative data first, followed by the qualitative data collection and analysis (Creswell et al., 2003). Such research design was chosen in order to aid interpretation and achieve depth of the data findings that are not achievable with a single method design (Creswell & Plano, 2007; Creswell, et al., 2003). Qualitative research was therefore used to fill gaps identified through the quantitative research. The research methods applied was a survey as well as semi-structured interviews among Australian and German wineries. The sampling and data collection procedures for both research stages are justified and discussed in great detail. The analysis of the data involved partial least squares structural equation modelling to identify relationships between the variables of sustainability place branding, place identity and

performance. The interviews were analysed according to the thematic analysis since it can be applied to the theoretical framework of a critical realist (Braun & Clarke, 2006) and is therefore in accordance to the methodological stance taken throughout the complete research.

Research ethics reviewed the steps taken to ensure the safe guarding of participants as well as the researcher. By establishing a sound methodology, the research aims to highlight how the researcher goes about what she believes can be discovered (Howell, 2013) by resulting in high quality data. The following chapter presents the analysis of the research which begins with the quantitative data analysis and is followed by the qualitative data analysis.

7. CHAPTER: QUANTITATIVE ANALYSIS

This chapter analyses and reports the results developed by the quantitative analysis of the Australian and German sample. The structure of this chapter is as follows: it starts with the quantitative data analysis by reporting initial descriptive statistics of the Australian and German sample. These descriptive statistics include the respondents' profile, data distribution, missing values and outliers. Following the descriptive statistics, the structural models and measurements will be introduced using Partial Least Squares Structural Equation Modelling (WarpPLS-SEM 5.0). Firstly, the measurement model will determine the reliability and validity of the tested variables. Secondly, the structural model will evaluate the relationships between those tested variables. To be exact, the structural model assesses the Path coefficients, p-values, R squares and effect sizes in order to support or reject the proposed hypotheses. Then, the process mentioned above will be repeated for the German sample. Ultimately, results from Australia and Germany are compared to draw up similarities and differences. The sample size for Australia resulted in a total of 204 usable responses and 201 responses in Germany.

7.1. Descriptive statistics

7.1.1. Sample characteristics

Winery size

To control for different firm sizes, number of employees, vineyard size and winery sales are going to be presented in the following section.

Number of employees

A single question was included asking for the number of permanent employees at each winery. The following table shows the winery's size according to number of employees.

Australia			Germany		
Number of employees	Frequency	Percent	Number of employees	Frequency	Percent
< 5	125	60.9%	< 5	85	42.2%
5 - 9	33	16.2%	5 - 9	56	27.9%
10 – 19	24	11.9%	10 – 19	25	12.5%
20 – 49	9	4.5%	20 – 49	14	7.0%
50 – 99	4	2.0%	50 – 99	2	1.0%
Over 100	3	1.5%	Over 100	1	0.5%
Missing values	6	2.9%	Missing values	18	9%

Table 7-1: Number of winery employees

As the table above shows the majority of wineries (60.9%) in the Australian sample have less than five permanent employees. This group is followed by 16.2% of wineries that have between five and nine employees. Wineries that have between 10 – 19 employees form with 11.9% the third biggest group of the sample population. In total 89% of the sampled Australian population has between 1 – 19 employees. Only a marginal amount of wineries in this sample have above 20 permanent employees with 4.5% employing 20 – 49 employees, 2% employing 50 – 99 employees and merely three wineries (2.9%) having more than 100 permanent employees.

The majority of the German wineries have less than five permanent employees (42.2%). Still about 30% of the wineries have 5-9 employees (27.9%). Another 12.5% have 10-19 employees reflecting more than 80% of the sampled wineries have less than 20 full-time employees. Another 7% of the wineries indicated to have 20-49 employees, 1% has between 50-99 permanent employees and only 0.5% of the German sample has over 100 employees.

Vineyard size

A single question was included asking for the size of the vineyard in hectares.

Australia			Germany		
Vineyard size in ha	Frequency	Percent	Vineyard size in ha	Frequency	Percent
< 5	67	33.1%	< 5	11	5.5%
5 - 9	37	18.1%	5 - 9	37	18.5%
10 – 19	33	16.3%	10 – 19	72	36.0%

20 – 49	33	16.4%	20 – 49	45	22.5%
50 – 99	11	5.5%	50 – 99	9	4.5%
Over 100	15	7.5%	Over 100	13	6.5%
Missing values	8	3.9%	Missing values	14	7.0%

Table 7-2: Vineyard size (ha)

The table above clearly highlights the majority of the vineyards (33.1%) being under 5 hectares in the Australian sample. The amount of Australian wineries owning vineyards around 5 – 9 ha, 10 – 19 ha and 20 – 49 is almost equally distributed by 18.1%, 16.3% and 16.4% respectively. 5.5% of winery responded to own 50 – 99 ha and another 7.5% indicated to own vineyards above 100ha.

The German sample has a different dispersion of vineyard size. In Germany the vast majority (36%) own vineyards that range from 10 to 19 ha. About two fifth of the respondents own vineyards ranging from 5-9 ha (18.5%) and 20-49 ha (22.5%). Only 5.5% (as opposed to 33.1% of the Australian sample) own vineyards smaller than 5 ha. The final 10% own vineyards of the size 50-99 ha (4.5%) and over 100ha (6.5%)

Winery sales

Winery sales are measured in terms of volume by number of cases (1 case is equivalent to 9 litres (Marshall et al., 2010)) per year. Table 7.3 shows cases sold per year broken down into six categories ranging from less than 100 cases sold to more than a million cases sold each year.

Australia			Germany		
Cases sold per year	Frequency	Percent	Cases sold per year	Frequency	Percent
< 100	5	2.5%	< 100	1	0.5%
100 – 999	45	22.4%	100 – 999	0	0.0%
1,000 – 9,999	95	46.8%	1,000 – 9,999	85	43.0%
10,000 – 99,999	35	17.4%	10,000 – 99,999	80	40.0%
100,000 – 1 Mio	5	2.5%	100,000 – 1 Mio	9	5.0%
> 1 Mio	3	1.5%	> 1 Mio	3	1.5%
Missing values	16	7.8%	Missing values	22	10.9

Table 7-3: Winery sales (cases of wine sold per year)

As can be seen from the previous table above only 2.5% sell less than 100 cases each year in the Australian sample. More than 20% (22.4% to be exact) sell 100 – 999 cases. The vast majority in this sample of Australian wineries (46.8%) sells 1000 – 9,999 cases each year. Still, 17.4% sell 10,000 – 99,999 cases. Marshall et al. (2010) consider wineries to be large if they sell more than 200,000 cases each year. Therefore, this sample can be described as only resembling 4% of large wineries with 2.5% producing 100,000 – 1 Mio cases and 1.5% producing more than 1 million cases each year.

The German sample shows a different distribution in winery sales. More than 80% sell 1,000-9,999 cases per year (43.0%) and 10,000-99,999 (40.0%). Only half a percent of wineries in the German sample sells below 1000 cases of wine each year. 5.0% of German wineries sell cases ranging from 100,000 to 1 million and 1.5% even sell more than 1 million cases of wine each year.

Winery age

The wineries' age was measured with a single question asking in which year the winery was founded. Part of this research deals with differences concerning the age of wine regions.

Australia			Germany		
Founding year winery	Frequency	Percent	Founding year winery	Frequency	Percent
Before 1900	5	2.5%	Before 1900	85	42.5%
1900 – 1959	5	2.5%	1900 – 1959	40	20.0%
1960s	4	2.0%	1960s	15	7.5%
1970s	18	9.0%	1970s	14	7.0%
1980s	41	20.3%	1980s	11	5.5%
1990s	69	34.0%	1990s	12	6.0%
2000s	55	27.6%	2000s	2	1.0%
After 2010	2	1%	After 2010	0	0.0%
Missing values	5	2.5%	Missing values	22	10.9%

Table 7-4: Winery age

The previous table shows the vast majority (82.9%) of Australian wineries were founded since 1980 (20.3% in the 1980s, 34.0% in the 1990s and 28.6% after 2000). Only 2.5% of the wineries

were founded before 1900. The time period of 1900-1959 denominates the founding years of 2.5% of the wineries in the Australian sample. Only 2% of the wineries were established in the 1960s and almost 10.0% of the sample were founded in the 1970s (9.0%).

Winery age looks different in the German sample since almost half of the German wineries in this sample (42.5%) were founded before 1900. Another fifth of the wineries were established in the years ranging from 1900-1959. A total of roughly 20% of the German sample indicated wineries being founded in the sixties (7.5%), seventies (7.0%), eighties (5.5%), nineties (6.0%) and after 2000 (1.0%).

Firms' ownership

The studied sample can be divided into three different forms of ownership. The respondents had the choice between sole proprietorship, family ownership and partnership. The following table reflects that division of ownership for the current sample.

Australia			Germany		
Ownership	Frequency	Percent	Ownership	Frequency	Percent
Sole proprietorship	39	19.1%	Sole proprietorship	69	31.9%
Partnership	53	26.0%	Partnership	5	2.3%
Family ownership	99	48.5%	Family ownership	93	43.1%
Other	7	3.4%	Other	25	11.6%
Missing values	6	2.9%	Missing values	24	11.1%

Table 7-5: Winery ownership

Almost half of the respondents in the Australian sample have family-owned businesses (48.5%). 26% of the wineries in this sample are owned as partnerships and 19.1% are sole proprietorships. 3.4% of the respondents filled in the category 'other' with the responses including public company and trust. The family ownership was also reflected in the division of 86.8% of the wineries in this sample being managed by the owner and only 11.3% employ an appointed manager.

Like in the Australian sample family ownership is the most prevailing form of winery ownership in Germany (43.1%). Another 31.9% of the wineries are owned as sole proprietorship and only 2.3% are of the wineries in the German sample are owned as partnerships (as opposed to 26% of the Australian sample). More than 10% (11.6%) of the respondents indicated to have a different form of ownership which vary between being part of cooperation (about 5.0%) or foundation (roughly 3.0%) as well as belonging to governmental establishment (roughly 3.0%).

Key informant

The respondents were asked what position they hold in the company in order to determine their knowledgeability and authority when it comes to answering questions. The vast majority of Australian respondents are the owner with 73.5%. General Manager (8.3%) and winemaker (4.4%) are the second most common position held among the respondents.

The German sample displays similar key information distribution. 61.1% of the respondents were the owner. Another 9.7% indicated to be managing the winery. Marketing manager and winemaker are both equally distributed (5.6% and 6.0% respectively).

Firms' location

There are 64 official wine regions in Australia based on the official Australian & New Zealand Wine Industry Directory (Winetitles Pty Ltd, 2014). The sample of this research shows that every wine region is represented by the sample. Adelaide Hills, Canberra District Hunter Valley, Macedon Ranges, Mornington Peninsula, Yarra Valley and Tasmania are all represented individually by about 5% of the sample and form the wine regions with the highest number of represented wineries.

Germany on the other hand is divided into only 13 wine regions according to the official online representative of German winemakers 'Winzer' (Winzer, 2014). All 13 wine regions are represented in this sample. The wine region Mosel-Saar-Ruhe represents the largest amount of

participating wineries with 20.4%. The second biggest representation is from Rheinhessen (16.9%). The wine region of Baden (11.4%), Pfalz (14.4%) and Rheingau (10.0%) are all representing about 10% of the German sample. The remaining wine regions of Ahr (2.5%), Saale-Unrüt (1.0%), Sachsen (1.0%), Württemberg (5.5%), Hessische Bergstraße (1.0%), Mittelrhein (2.0%) and Nahe (5.5%) represent percentages ranging from 1.0% - 5.0%. This distribution is similar to the number of wineries in these wine regions.

Figures showing the range of different wine regions in the Australian as well as the German sample are displayed on the following page.

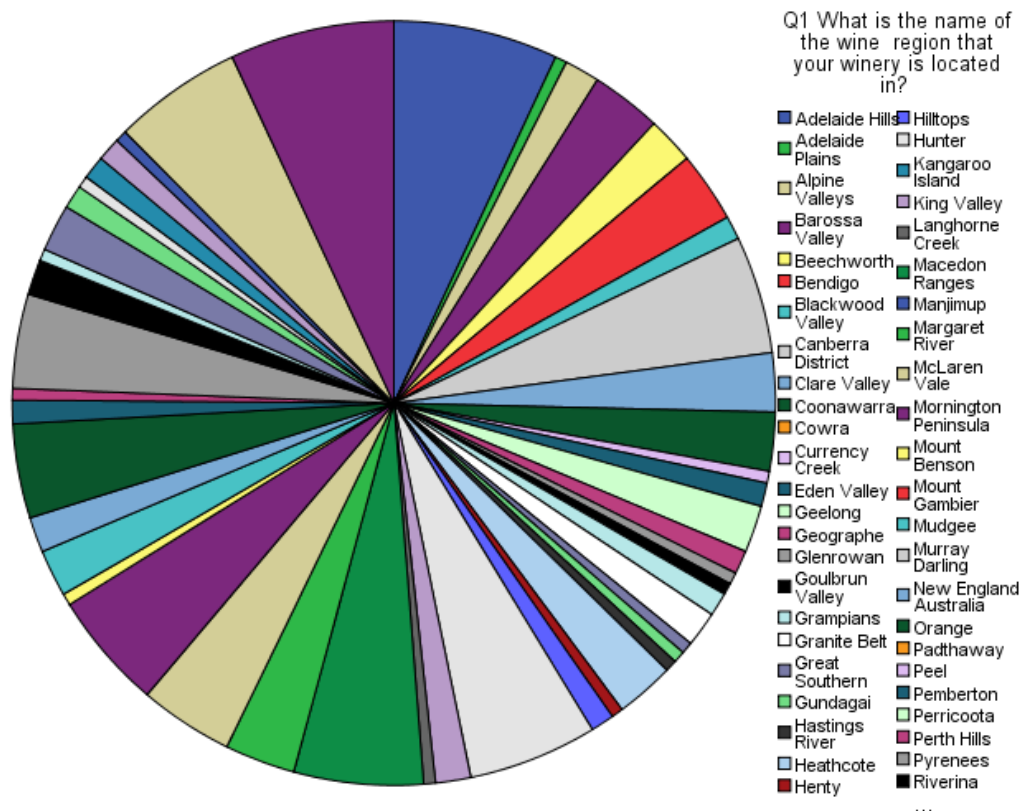


Figure 7-1: Australian wine regions represented in this study

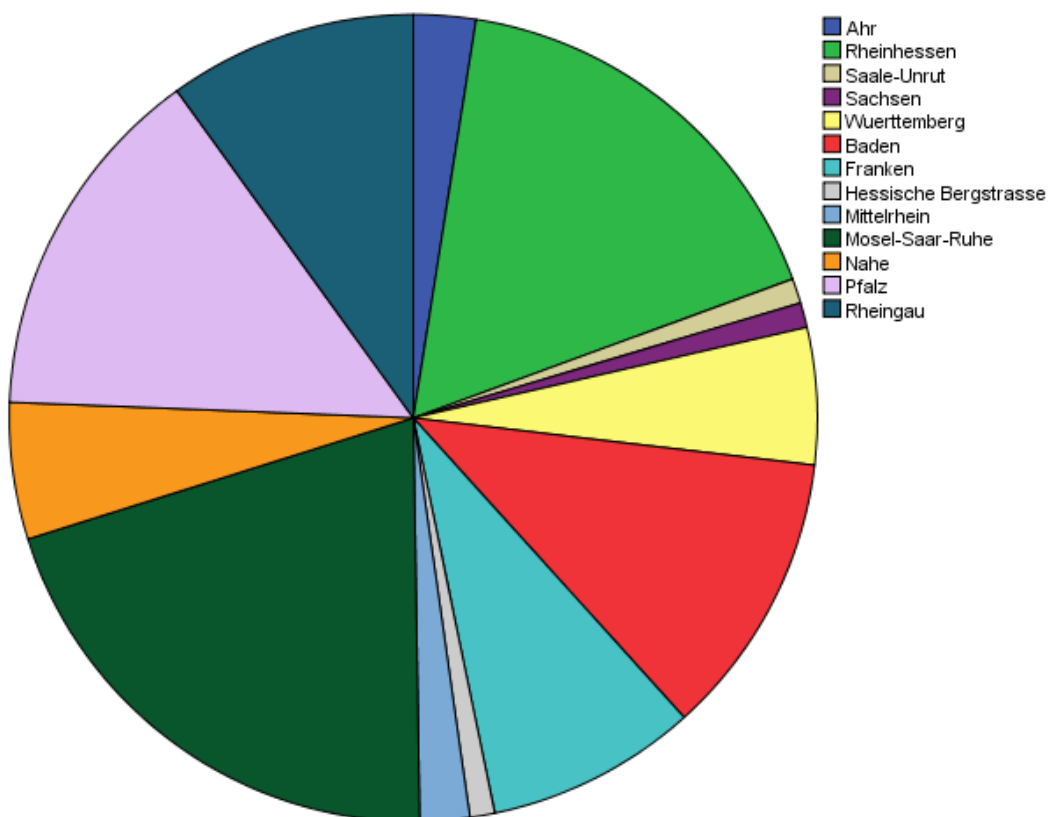


Figure 7-2: German wine regions represented in this study

Involvement with sustainability

The following table highlights sustainability practices in this sample for the Australian as well as German wineries. Aim is to find out how sustainability is understood and practiced in the context of the wine industry.

	Australia			Germany		
Sustainability practices	N	Mean	Std. Dev	N	Mean	Std. Dev
<u>Recycling environmental practices</u>						
Recycle waste materials from wine making	197	3.96	1.014	195	4.35	.705
Use renewable energy sources	198	3.12	1.335	195	3.46	1.451
Treat the farm as one cohesive living system	200	3.77	1.103	194	4.21	.954
<u>Land environmental practices</u>						
Use herbicides/pesticides that are environmentally friendly	200	3.87	1.092	193	3.80	1.308
Use of fertilizers that are environmentally safe	200	4.14	.935	193	4.08	1.120
Implements measures to save water	199	4.10	.969	194	2.19	1.302
Do not use artificial preservatives	200	3.51	1.330	194	4.43	.991
Implement wildlife habitat protection practices	198	3.13	1.428	193	3.56	1.345
Farm grapes organically	200	2.53	1.382	194	2.73	1.504
<u>Environmental management programmes</u>						
Aim for ecological self-sufficiency	197	3.25	1.140	194	2.90	1.266
Measure carbon footprint	198	2.53	1.328	194	1.87	1.221
Fund projects intended to improve environmental performance	199	2.69	1.304	193	2.49	1.347
Monitor environmental impact	199	3.27	1.265	194	3.31	1.237
Employ ethical considerations	198	3.97	.969	194	3.96	1.079
<u>Social practices</u>						
Ensure worker job satisfaction	197	4.05	.871	195	4.43	.657
Pay fair compensation (living wage) to all employees	199	4.21	.913	194	4.54	.629

Table 7-6: Sustainability practices

As can be seen from the table above the Australian sample has the highest means and therefore the highest form of agreement when being asked about sustainability practices for environmental safe fertilizers (Mean=4.14), implementing measures to save water (Mean=4.10) as well as ensure worker satisfaction (Mean=4.05) and paying fair wages (Mean=4.21). Recycling waste materials from wine making shows a mean almost as high as the

practices previously stated (Mean=3.96). The low end of the mean comparison has been measured for organically farming grapes (Mean=2.53), measuring carbon footprints (Mean=2.53) and funding projects intended to improve environmental performance (Mean=2.69).

The highest means in the German sample can be observed for the following social sustainability practices of ensuring worker job satisfaction (Mean=4.43) and paying fair wages (Mean=4.54). These figures are closely followed by environmental and recycling practices. High agreement could be researched for recycling waste material (Mean=4.35) and seeing the farm as one cohesive system (Mean=4.21). Not using artificial preservatives (Mean=4.43) and using fertilizers that are environmentally safe (Mean=4.08) are among the most agreed upon practices in the German sample. The practices not used in Germany or at least to a much lower degree are farming grapes organically (Mean=2.73), implementing measures to save water (Mean=2.19) and measuring carbon footprint (Mean=1.87).

The importance of sustainability to the wine industry and its players

In order to establish the importance of sustainability to the wine industry and its players, respondents in Australia as well as Germany have been asked about their attitude towards sustainability. These attitudes have been divided according to benefits, norms and challenges when it comes to sustainability.

	Australia			Germany		
Sustainability attitudes	N	Mean	Std. Dev	N	Mean	Std. Dev
<u>Benefits regarding sustainability</u>						
At our winery sustainable initiatives lead to enhanced reputation in the community.	198	3.41	1.047	193	3.22	1.088
At our winery sustainable initiatives lead to cost savings.	199	2.86	.964	194	2.51	1.004
At our winery sustainable initiatives lead to	200	3.37	1.019	193	3.36	1.178

improved wine quality.						
At our winery sustainable initiatives lead to increased customer demand.	199	2.84	1.035	194	2.84	1.107
<u>Norms concerning sustainability</u>						
At our winery people feel a personal obligation to exceed the requirements of sustainability regulations	199	3.27	1.066	194	3.43	1.137
At our winery people feel a personal obligation to do whatever they can to minimize environmental harm.	200	3.83	.941	194	3.37	1.010
At our winery sustainable initiatives are implemented completely voluntarily.	199	3.76	1.020	194	3.91	1.049
<u>Challenges and barriers to implement sustainability</u>						
At our winery sustainable initiatives are difficult to implement.	199	2.89	1.191	194	2.40	1.117
At our winery sustainable initiatives present an increased risk of crop failure.	199	2.98	1.121	194	2.84	1.135
At our winery sustainable initiatives are much more work than they are worth.	199	2.62	1.061	194	2.88	1.070
At our winery we must take stronger measures to conserve our nation's resources.	200	3.49	.997	194	2.90	1.150

Table 7-7: Sustainability attitudes

Concerning benefits regarding sustainability, the Australian respondents showed the highest means for an enhanced reputation (Mean=3.41) and increased wine quality (Mean=3.37) through sustainable initiatives. Cost savings (Mean=2.86) as well as customer demand (Mean=2.84) on the other hand are not perceived to be achieved through sustainability initiatives. All norms concerning sustainability have similar means reflecting slight indifference of the respondents when it comes to exceeding the requirements of sustainability regulations (Mean=3.27), minimizing environmental harm (Mean=3.83) as well as implementing initiatives voluntarily (Mean=3.76).

Challenges and barriers receive all lower than neutral scores meaning that the responses did not agree with those challenges of sustainable initiatives being difficult to implement (Mean=2.89), increase crop failure (Mean=2.98) and are more work than they are worth (Mean=2.62). The mean for having to take stronger measures to conserve our nation's resources on the other hand shows the majority agreeing (Mean=3.49).

The German sample reflects highest level of agreement with sustainable initiatives leading to improved wine quality (Mean=3.36). The norms concerning sustainability score all roughly equally high and the challenges equally low.

The role of sustainability in wine place branding strategies

In order to understand the role of sustainability in wine place branding strategies, branding strategies of the wine regions as well as the wineries have been researched. These branding strategies have been grouped into being based on sustainability, innovation, tradition and nature. The following two tables highlight branding strategies according to the German as well as the Australian sample according to wine regions and wineries subsequently.

Wine regions	Australia			Germany		
Branding strategies	N	Mean	Std. Dev	N	Mean	Std. Dev
<u>Branding based on sustainability</u>						
This wine region's branding strategy stresses benefits of sustainability.	201	2.88	1.044	200	3.13	1.051
This wine region's branding strategy addresses the relationship between the environment and its wine.	201	3.36	1.035	200	3.11	.966
This wine region brand is linked to an environmental cause or activity.	201	2.62	1.023	200	2.74	1.010
This wine region's branding strategy is linked to environmentally friendly efforts.	201	2.94	1.005	200	2.85	1.065
This wine region's branding strategy is associated with a green lifestyle.	201	3.09	1.094	200	2.66	.995
<u>Branding based on innovation</u>						
This wine region's branding strategy stresses industries other than the wine industry.	200	2.95	1.161	200	1.84	.927
This wine region's branding strategy is linked to innovative wine making.	200	3.28	.973	200	3.14	1.037
This wine region's branding strategy is linked to technological developments in wine making.	201	3.04	.979	200	3.06	1.083
<u>Branding based on tradition</u>						
This wine region brand is linked to the exceptional taste of its wines.	200	3.83	.903	200	4.05	.785
This wine region's branding strategy stresses	201	3.40	.872	200	3.62	1.005

traditional wine making approaches.						
This wine region brand stresses its European wine heritage.	200	2.34	1.127	199	2.74	1.247
This wine region's branding strategy is associated with an artisanal approach to wine making.	201	3.54	1.000	200	3.77	.856
This wine region's branding strategy stresses the craftsmanship of its winemakers.	201	3.76	.929	200	3.95	.852
The wine region's branding strategy emphasises an authentic experience to its visitors.	201	3.90	.949	200	3.86	.899
<u>Branding based on nature</u>						
This wine region brand stresses natural beauty.	201	3.76	.966	199	4.26	.804
This wine region brand portrays a strong connection between Australia/Germany and the region.	200	3.36	.971	200	3.23	.882
This wine region brand stresses its good climate for wine making.	201	4.09	.950	200	4.13	.868

Table 7-8: Regional sustainability branding strategies

The previous table shows that wine regions in Australia apply branding mostly based on nature and tradition. Especially the good climate (Mean=4.09) and emphasising an authentic experience to visitors (Mean=3.90) exemplifies high mean scores for Australian wine regions. Sustainability and innovation on the other hand show slightly lower means. Being linked to an environmental cause (Mean=2.62) shows the lowest mean in the sustainability and innovation section.

Wine regions in Germany also apply branding mostly based on nature and tradition. Especially stressing natural beauty (Mean=4.26) and stressing food climate for wine making (Mean=4.13) exemplifies high mean scores for German wine regions. Sustainability and innovation exemplify lower means just like in the Australian sample. Stressing industries other than the wine industry (Mean=1.84) shows the lowest mean in the innovation section.

The following table looks at the results for branding strategies for the individual wineries.

Wineries	Australia			Germany		
	N	Mean	Std. Dev	N	Mean	Std. Dev
<u>Branding based on sustainability</u>						
Our wine branding strategy stresses the benefits of sustainability.	199	3.19	1.112	192	3.18	1.068
Our wine brands address the relationship between the environment and our wine.	199	3.44	1.139	192	3.84	.997
Our wine brands are linked to an environmental cause.	199	2.42	1.236	192	2.07	1.049
Our wine brands are well established for environmental concern.	199	2.75	1.108	192	2.77	1.236
<u>Branding based on innovation</u>						
Our wine branding strategy is linked to new technologies of wine making.	199	2.80	1.053	190	2.38	1.152
Our winery branding strategy stresses wine education possibilities.	198	2.70	1.066	192	2.69	1.147
<u>Branding based on tradition</u>						
Our wine brands stress our European wine heritage .	198	2.48	1.362	192	3.31	1.264
Our wine branding strategy stresses the craftsmanship of our winemakers.	199	4.12	.814	192	4.36	.773
Our wine branding strategy stresses the grape variety on bottles.	199	4.53	.716	192	4.65	.685
Our wine brands are associated with the exceptional taste of our wines.	199	4.19	.787	192	4.14	.835
<u>Branding based on a focused business strategy</u>						
Our winery has one key brand that represents our winery.	199	4.03	1.047	192	3.23	1.395
Our wine branding strategy is very focused.	199	3.50	1.004	192	3.09	1.152
Our winery tries to reduce the number of brands in our portfolio.	199	2.86	1.162	192	3.23	1.184
Our winery has a limited amount of brands in our portfolio.	199	3.93	1.099	192	3.66	1.183
Our winery tries to avoid having too many brands in our portfolio.	199	3.84	1.080	192	3.71	1.077
<u>Branding based on nature</u>						
Our wine branding strategy stresses the natural beauty of our surroundings.	199	3.83	1.038	192	3.91	.964
Our wine brands are associated with the good climate prevailing in this region.	200	4.15	.817	192	3.22	1.255
<u>Branding based on Country of Origin</u>						
Our wine brands stress a strong connection between the wine region and our wine.	199	4.16	.829	192	4.10	.816

Our wine branding strategy stresses a strong connection between Australia/Germany and our wine.	199	3.51	1.110	192	3.11	1.217
Our wine brands stress the wine region of origin.	200	4.48	.763	191	4.51	.767
Our wine brands are linked to the protected geographical origin of our wine region.	199	4.27	.982	192	4.51	.812

Table 7-9: Individual sustainability branding strategies

Branding strategies for the individual wineries in Australia are mainly based on origin factors with an overall mean of 4.10. Branding features such as stressing the region of origin (Mean=4.48) and the connection between the wine region and our wine (Mean=4.16) is followed by traditional messages such as stressing craftsmanship (Mean=4.12). Branding strategies based on nature such as stressing the natural beauty (Mean=3.83) and prevailing climate (Mean=4.15) closely follow. Branding based on sustainability is somewhat lacking major support (Mean=2.95) with addressing the relationship between the environment and their wine having the most support (Mean=3.44).

Branding strategies for the individual wineries in Germany experience the highest support for country of origin factors with means such as 4.51 for stressing the wine region of origin. Branding features such as being linked to the protected geographical origin of the wine region (Mean=4.51) and the connection between the wine region and our wine (Mean=4.10) is followed by traditional messages such as stressing craftsmanship (Mean=4.36). Branding strategies based on nature such as stressing the natural beauty (Mean=3.91) and stressing the taste of the wine (Mean=4.14) follow closely. Just like in the Australian sample, branding based on sustainability is not stressed as frequently with supporting an environmental cause having the least support (Mean=2.07).

Involvement with sustainability

One overall question has been asked concerning how well the wine region as well as the individual winery is established for environmental concern. The following tables show the results to this question.

Australia			Germany		
Wine region established for sustainability	Frequency	Percent	Wine region established for sustainability	Frequency	Percent
Totally disagree	4	2.0%	Totally disagree	17	8.5%
Disagree	26	12.7%	Disagree	57	28.4%
Neither agree nor disagree	69	33.8%	Neither agree nor disagree	81	40.3%
Agree	78	38.2%	Agree	34	16.9%
Totally agree	27	13.2%	Totally agree	10	5.0%
Missing values	0	0	Missing values	2	1.0%

Table 7-10: Wine region established for sustainability

The previous table shows that more than half of all Australian respondents (51.4%) claim that their wine region is well established for environmental concern. Among the German respondents on the other hand only 21.9% agree with their wine region being established for sustainability. The following table looks at the wineries itself and in how far those perceive themselves well established for environmental concern.

Australia			Germany		
Winery established for sustainability	Frequency	Percent	Winery established for sustainability	Frequency	Percent
Totally disagree	10	4.9%	Totally disagree	3	1.5%
Disagree	15	7.4%	Disagree	26	12.9%
Neither agree nor disagree	46	22.5%	Neither agree nor disagree	74	36.8%
Agree	80	39.2%	Agree	48	23.9%
Totally agree	49	24.0%	Totally agree	44	21.9%
Missing values	4	2.0%	Missing values	6	3.0%

Table 7-11: Winery established for sustainability

The Australian sample shows that 63.2% of wineries claim to be well established for environmental concern. Only 12.3% state to disagree or totally disagree with that statement. The German sample merely shows that 45.8% of the wineries feel established for sustainability.

The following table describes the amount of wineries in this sample that claim to have been involved with sustainability efforts. The respondents were advised that sustainability entails striving towards environmental consciousness, economic viability and social equality. The respondents were then asked to indicate their years of sustainability involvement.

Australia			Germany		
Years involved with sustainability	Frequency	Percent	Years involved with sustainability	Frequency	Percent
0 years	22	10.8	0 years	1	0.5%
< 5 years	10	5.0%	< 5 years	16	8.0%
5 – 9 years	30	14.7%	5 – 9 years	22	11.0%
10 – 19 years	51	25.0%	10 – 19 years	28	14.0%
20 – 50 years	36	17.9%	20 – 50 years	47	23.5%
Missing values	55	27.0%	Missing values	88	43.8%

Table 7-12: Years involved with sustainability

Out of the Australian sample 62.1% of the respondents claim to be involved in some form of sustainability efforts. What kind of practices this entails will be elaborated on in the following chapter. The years of sustainability involvement range from two (2.0%) to 44 years (0.5%). The majority indicated involvement with sustainability between ten and 19 years (25.0%). The group of wineries having indicated an involvement with sustainability for five to nine years (14.7%) is equal to the group of wineries involved for 20 to 50 years (17.9%). 5.0% of the Australian sample indicated to be involved in sustainability for less than five years. 10.8% state that they are not involved in sustainability efforts by stating zero years being involved in sustainability efforts. Another 27% are missing data which can be assumed as not being involved in sustainability efforts either since common previous missing data was only 2.5% - 7.8%. Thus, one can assume that at least 30% of the sample of wineries are not involved in sustainability measures.

The majority of German wineries indicated to have been involved in some form of sustainability efforts for 20 – 50 years (23.5%). The second largest group is involved for ten to 19 years (14.0%) followed by five to nine years with 11.0%. 8.0% of the German sample claim to be involved with sustainability for less than five years. Only half a percent (0.5%) indicated not being involved with sustainability by stating zero when asked how many years the winery has been involved with sustainability. However, 43.8% of the respondents result in missing data. Based on deduction of the missing data from previous tables ranging from 7.0% to 11.0% one can assume that out of those 43.8% missing data responses only about 33.7% account for deliberately being left blank. Therefore, in total 56.5% of the German wineries can be regarded as definitely being involved with some form of sustainability.

Sustainability certification

Australia			Germany		
Sustainability certifications	Frequency	Percent	Sustainability certifications	Frequency	Percent
Australian Certified Organic	8	3.9%	Fair and Green	7	2.9%
NASAA Certified Organic	2	1.0%	Netzwerk Nachhaltiger Wein		
Sustainable Winegrowing	4	2.0%	ECOVIN	8	3.3%
Demeter Bio-dynamic	3	1.5%	Deutsche, Staatliche Bio-Siegel	7	2.9%
ISO 14001	6	2.9%	ISO 14001	3	1.2%
Freshcare Australia	16	7.8%	Demeter	1	.4%
Entvine Australia	14	6.9%			
None	114	55.9%	None	121	49.6%
Other	12	5.9%	Other	38	15.6%
Missing values	25	12.2%	Missing values		
Other certification included: BRC Certificate, degree in holistic management, Green Tea Project, HASAP, Landcare, McLaren Sustainable Viticulture, WFA Environmental Sustainability, ENT00442, ENT00441			Other certification included: Bioland, Naturland, La Renaissance des Appellations, EMAS II, Oekoweine, Fair choice, EU Bio, geprüfte Qualität Thüringen, IFS/HACCI, kontrolliert umweltschonender Weinbau, KUW Kontrolliert umweltfreundlicher Weinbau (Eigenmarke von Rheinland Pfalz)		

Table 7-13: Sustainability certification

The previous table presents an overview of the sustainability certification in both countries.

Roughly half of the respondents in the Australian (55.9%) as well as the German (49.6%)

indicate to not possessing any form of certification. Among Australians, Freshcare Australia has been chosen by the highest percentage (7.8%) of wineries. In Germany, Ecovin, Deutsche Staatliche Bio-Siegel and Fair & Green all experience about the same amount of support with each representing 3% of the respondents. The amounts of other certification was interesting to note for both countries.

7.1.2. Data distribution

Ideally, frequencies of occurrence in the sampled population should follow a normal distribution, meaning the highest occurrences measured towards the centre (Pallant, 2011). It seems to be accepted in the field of social science to assume normality as many authors do (Rao & Holt, 2005; Rust, Lemon, & Zeithaml, 2004). This research applies PLS-SEM and the assumption of the normality of distribution is not required as PLS-SEM does not presume that the data are normally distributed (Hair et al., 2011b). In fact PLS-SEM is capable of dealing with non-normal data since it applies non-parametric bootstrapping and assumes the sample distribution being a realistic reflection of the intended population distribution (Hair et al., 2011b). Therefore, this research does not have to check or assume normal distribution.

7.1.3. Non-response bias

One of the unique value of surveys is the possibility to describe large populations 'without bias and within measurable levels of uncertainty' (Groves, 2006, p.646). Therefore, a crucial characteristic when using surveys is that the survey sample is representative of the population of interest (Groves, 2006; Lewis, Hardy, & Snaith, 2013). This representation is dependent on full measurement of a probability sample and non-response being absent (Groves, 2006). Yet, it is very unlikely to obtain complete data from every case when conducting research with human beings (Pallant, 2011). Since full measurement cannot be achieved, a reduction of non-response bias (also called non-response error) should be aimed for (Groves, 2006). Non-response bias is defined as 'a systematic and significant difference between those who respond to a survey and those who do not in terms of characteristics central to the research

focus' (Lewis et al., 2013, p.240). In other words non-response bias results from an intervening variable which effects participation in a study in a specific way that the participants do not represent non-participants (Thompson, Loveland, & Fombelle, 2014). Armstrong & Overton (1977) caution that before a sample can be generalized to the population the non-response bias needs to be estimated. There are different methods in the literature how to estimate non-response bias ranging from comparisons with known values for the population to extrapolation (Armstrong & Overton, 1977). The literature on sustainability practices, if reported, seem to favour the extrapolation method. This method studies the variation within the existing survey often based on the time factor of first wave and remaining respondents (Atuahene-Gima & Ko, 2001; Pullman et al., 2010; Sinha & Akoorie, 2010). This method is relying on the postulation that subjects who respond less readily (at a later stage) are more like non-respondents (Armstrong & Overton, 1977).

In order to test for non-response bias in this research, 50 early respondents were compared to 50 late respondents (reflecting non-respondents) using a t-test analysis on the key survey variables (Atuahene-Gima & Ko, 2001; Ketkar, Kock, Parente, & Verville, 2012). Differences in the means of these two groups were analysed. The tables in Appendix F show the results for the t-test analysis. Both tables show the independent samples t-test that firstly shows the equality of variance based on the Levene's test for Equality of Variances. The vast majority of the key variables show a significance value higher than 0.05 and therefore both groups share the same variance. Secondly, the t-test assuming equality of means measure p-values above 0.05 which results in the fact that the t-values are insignificant and there are no difference between the two groups of early and late respondents (Armstrong & Overton, 1977).

Concluding, no significant differences are found between groups either in the Australian or the German sample, demonstrating no evidence to suggest problems with non-response bias or the respondents not being a representative sample (Armstrong & Overton, 1977).

7.1.4. Missing data

It is important to check the data file for missing data. Descriptive statistics in SPSS aim to identify the percentage of missing data (Pallant, 2011). This research applies the software WarpPLS-SEM and with this software the missing values are replaced with column averages/means of that particular factor (Kock, 2013). In order to be cautious about not distorting the results a 'rule of thumb' is that the dataset should not have any column with more than 10 percent of its values missing' (Kock, 2013, p.36). The Australian as well as the German data set was checked for missing values and questionnaires with more than 10 percent missing data have been removed from the data set (16 questionnaires for Australia and 9 questionnaires for Germany).

7.1.5. Outliers

Outliers are defined as 'cases with values well above or well below the majority of other cases' (Pallant, 2011, p.64). Such cases can bias the mean and inflate standard deviation as well as affect the values of the estimated regression coefficients (Field, 2009). Field (2009) suggests three different options when dealing with outliers: removing cases, transforming the data and changing the score. As with the missing data, WarpPLS-SEM software has an effective way of treating outliers without removing them and it is cautioned that outliers should only be removed if they occur due to measurement error (Kock, 2013). Due to the fact that the outliers can remain in the sample the sample size is not unnecessarily reduced by removing outliers.

7.2. Common method bias

MacKenzie & Podsakoff (2012) establish that common method bias can influence item validities, item reliabilities and the covariation between latent constructs. Harman's single factor test using exploratory factor analysis has been applied to control for common method bias. The test would show problems with bias if a single latent factor accounts for the majority of the covariance among measures (Podsakoff et al., 2003). The first factor accounted for 19.37% of the variance in the Australian and 16.84% in the German sample (see Appendix G).

Since both of these variances are less than the majority (less than 50%), the Harman's single factor test provides evidence for the absence of common method bias (Karatepe, 2010).

7.3. The PLS-SEM Analysis

Structural equation modelling (SEM) has almost become a standard in marketing research when analysing the cause-effect relationships between latent constructs (Hair et al., 2011). It is a multivariate technique that combines parts of factor analysis and regression making it possible to research relationships between measured variables and latent variables as well as between latent variables (Hair, 2014).

A PLS-SEM path model (as shown in the theoretical framework, chapter 3.6) can be divided into a structural and a measurement model. The structural model (sometimes referred to as inner model) represents the constructs and highlights the relationships between these constructs. The measurement model (sometimes referred to as outer model) displays the relationships (paths) between the constructs and the indicator variable (Hair, 2014). The analysis and interpretation of data is commonly split into the assessment of the measurement model and consecutively the assessment of the structural model (Hair, 2014). The assessing of the measurement model is necessary to start with as 'a sound measurement theory is a necessary condition to obtain useful results for PLS-SEM' (Hair, 2014, p.41). The previous statement is based on reliability and validity of hypotheses tests involving the structural relationships among constructs as these tests will only be as reliable or valid as are the measurement models explaining how these constructs are measured (Hair, 2014).

Table 7.14 demonstrates the first-order scales applied in this research with their assigned codes before determining the measurement of the model specifications in the next section.

CODE	VARIABLE
FIRST-ORDER SCALES	
Collective/Regional sustainability place branding (CBRA)	
CBRA_S1	This wine region's branding strategy stresses benefits of sustainability.
CBRA_S2	This wine region's branding strategy addresses the relationship between the environment and its wine.
CBRA_S3	This wine region brand is linked to an environmental cause or activity.
CBRA_S4	This wine region's branding strategy is linked to environmentally friendly efforts.
CBRA_S5	This wine region's branding strategy is associated with a green lifestyle.
Individual sustainability place branding (IBRA)	
IBRA_S1	Our wine branding strategy stresses the benefits of sustainability.
IBRA_S2	Our wine brands address the relationship between the environment and our wine.
IBRA_S3	Our wine brands are linked to an environmental cause.
IBRA_S4	Our wine brands are well established for environmental concern.
Place attachment (PLAT)	
PLAT1	There is a sense at our winery that we belong in this region.
PLAT2	It is hard to imagine our winery in another region.
PLAT3	Our winery identifies strongly with the wine region we are located in.
PLAT4	Our winery feels attached to the wine region we are located in.
PLAT5	Our winery feels a strong sense of belonging to this wine region and its setting/facilities.
Involvement (INVO)	
INVO1	Our winery has good relations with the regional office.
INVO2	Our winery co-created the wine region brand with the regional office.
INVO3	Our winery communicates well with the regional office.
INVO4	Our winery has been involved in creating the wine region brand.
INVO5	Our winery and the regional office solve problems as soon as they occur.
INVO6	Our winery shares information with the regional office and vice versa.
INVO7	Our winery perceives the work of the regional office to be very transparent
SECOND-ORDER SCALES	
Sustainability practices (PRA)	
PRA_SOC1	At our winery we ensure worker job satisfaction.
PRA_SOC2	At our winery we pay fair compensation (living wage) to all employees
PRA_RECY1	At our winery we recycle waste materials from wine making.
PRA_RECY2	Our winery uses renewable energy sources.
PRA_RECY3	At our winery we treat the farm as one cohesive, interconnected living system.
PRA_ENV1	At our winery we use herbicides/pesticides that are environmentally friendly.
PRA_ENV2	Our winery uses fertilizers that are environmentally safe.
PRA_ENV3	Our winery does not use artificial preservatives.
PRA_ENV4	At our winery we farm grapes organically.
PRA_ENV5	At our winery we have implemented wildlife habitat protection practices.
PRA_ENV6	Our winery implements measures to preserve water.
PRA_MNG1	At our winery we monitor our environmental impact.
PRA_MNG2	Our winery aims for ecological self-sufficiency.
PRA_MNG3	At our winery we measure our carbon footprint.
PRA_MNG4	Our winery provides funds for projects intended to improve environmental performance.
PRA_MNG5	At our winery we employ ethical considerations.
Place Identity (ID)	
ID_C1	Our winery's image is supported by the wine region brand.
ID_C2	Our winery portrays the wine region brand on our wine products and merchandise

ID_C3	Our winery perceives the wine region brand as a differentiating factor from other wine regions.
ID_C4	Our winery perceives the wine region brand as providing a label that describes us.
ID_S1	Our winery's brand stresses the same things as the wine region brand.
ID_S2	Our winery's brand shares the same identity as the wine region brand.
ID_S3	Our winery recognizes itself in the wine region brand.
ID_S4	Our sense of what our winery stands for matches the sense of the wine region brand.
Sustainability attitudes (ATT)	
ATT_BEN1	At our winery sustainable initiatives lead to enhanced reputation in the community.
ATT_BEN2	At our winery sustainable initiatives lead to cost savings.
ATT_BEN3	At our winery sustainable initiatives lead to improved wine quality.
ATT_BEN4	At our winery sustainable initiatives lead to increased customer demand.
ATT_NOR1	At our winery people feel a personal obligation to exceed the requirements of sustainability regulations
ATT_NOR2	At our winery people feel a personal obligation to do whatever they can to minimize environmental harm.
ATT_NOR3	At our winery sustainable initiatives are implemented completely voluntarily
Collective/Regional place performance (CPRF)	
CPRF_TOU1	Growth of domestic visitors to this wine region
CPRF_TOU2	Growth of visitors from Asia
CPRF_TOU3	Growth of visitors from Europe to this wine region
CPRF_TOU4	Growth of visitors from US
CPRF_TOU5	Attracting high income visitors
CPRF_TOU6	Rate of revisit by wine tourists (visitor loyalty) to this region
CPRF_TOU7	Expenditure of visitors in this wine region
CPRF_TOU8	Percentages of wine sold through cellar doors
CPRF_FIN1	Revenue growth of wine producers in the region
CPRF_FIN2	Profitability of the wine producers in the region
CPRF_FIN3	Margin growth by wine producers in the region
CPRF_FIN4	Volume growth (litres) in the region
CPRF_FIN5	Attracting infrastructure investment
CPRF_FIN6	Average wine retail price by wineries in the region
CPRF_MAR1	Generating positive regional news
CPRF_MAR2	Percentages of wine sold through restaurants
CPRF_MAR3	Ability to attract website visitors and social media visitors
CPRF_MAR4	Wine awards won by wineries in the region
CPRF_MAR5	Brand equity (awareness and positive association) of this wine region
CPRF_INNO1	Responsiveness of this wine region to consumer trends
CPRF_INNO2	Innovativeness of wineries in the region
CPRF_INNO3	Using social media to connect to wine consumers
Individual place performance (IPRF)	
IPRF_TOU1	Growth of domestic visitors to this winery
IPRF_TOU2	Growth of visitors from Asia
IPRF_TOU3	Growth of visitors from Europe to this winery
IPRF_TOU4	Growth of visitors from US
IPRF_TOU5	Attracting high income visitors to this winery
IPRF_TOU6	Rate of revisit (visitor loyalty) to this winery
IPRF_TOU7	Cellar door sales as percentage of total sales
IPRF_TOU8	Expenditure of visitors at this winery
IPRF_FIN1	Revenue growth of this winery
IPRF_FIN2	Sales growth of this winery

IPRF_FIN3	Volume growth (litres)
IPRF_FIN4	Obtaining investment subsidies
IPRF_FIN5	Overall profitability of this winery
IPRF_FIN6	Margin growth of this winery
IPRF_FIN7	Return on investment
IPRF_FIN8	Wine quality produced at this winery
IPRF_FIN9	Average wine retail price of wines from this winery
IPRF_FIN10	Growth of wine prices at this winery
IPRF_FIN11	Access to distribution channels
IPRF_MAR1	Generating positive news
IPRF_MAR2	Creating successful wine brands
IPRF_MAR3	Success of premium brands offered at this winery
IPRF_MAR4	Brand equity (awareness and positive association) of this winery
IPRF_MAR5	Wine awards won by this winery
IPRF_MAR6	Review scores achieved by this winery
IPRF_MAR7	Ability to attract website and social media visitors
IPRF_INNO1	Successful new product introductions
IPRF_INNO2	Innovativeness of this winery
IPRF_INNO3	Responsiveness of this winery to consumer trends
IPRF_INNO4	Responsiveness of this winery to policy changes

Table 7-14: Variable coding

7.3.1. Measurement model specifications

Due to the fact that the majority of the variables are latent variables and therefore not directly observed, a measurement model for each construct needs to be stated (Hair, 2014). The specification of the measurement model firstly needs to consider the use of multi-item versus single-item measures (Diamantopoulos, Sarstedt, Fuchs, Wilczynski, & Kaiser, 2012; Hair, 2014). When reviewing the literature in marketing research, the establishment of predictive validity of measures is a major concern (Diamantopoulos et al., 2012). Empirical results have found multi-item scales ‘clearly outperform single items in terms of predictive validity’ (Diamantopoulos et al., 2012, p.434). Others (Hair, 2014) agree that single-item measurements lower the quality of measurements. Diamantopoulos et al. (2012) published guidelines on whether the choice of single-item variables is favourable based on (1) small sample sizes (<50), (2) expectation of weak effect sizes (cross-item correlation <.30), (3) high item-homogeneity (inter-item correlation >.80) and (4) the items are semantically redundant. None of the aforementioned guidelines are met and the high establishment of predictive validity from multi-item scales resulted in this research applying solely multi-item scale measures.

Reflective vs. formative variables

Two types of measurement specifications need to be taking into consideration when developing constructs: reflective and formative. For every latent variable it needs to be considered whether the indicators are more likely to be causal (formative) or effect (reflective) indicators (MacCallum & Browne, 1993). According to the reflective measurement theory 'measures represent the effects of an underlying construct' (Hair, 2014, p.43). The causality is from the construct (or latent variable) to its measures. The reflective measure dictates that all items are caused by the same construct and therefore lead to high correlation with each other. This leads to the fact that individual items should be interchangeable and can even be omitted without changing the meaning of the construct (Hair, 2014).

The majority of organizational studies measures latent variables using reflective (also called effect) indicators (Diamantopoulos & Siguaw, 2006). Yet, it has been highlighted that 'in many cases, indicators could be viewed as causing rather than being caused by the latent variable measured by the indicators' (MacCallum & Browne, 1993, p.533). Therefore, formative measures stem from the assumption that the indicators cause the construct (Hair, 2014) and it is changes in the indicators, that regulate changes in the value of the latent variable rather than the other way round (Jarvis et al., 2003). In comparison to reflective measurement model, formative indicators are not interchangeable and every indicator from a formative construct refers to a specific aspect of the construct (Hair, 2014). Therefore, formative measurement models have different implications for correlations among each other as causal indicators do not need to be internally consistent or show high positive correlations. Instead correlations among indicators within a construct do not need to be higher than correlations between indicators of different constructs (MacCallum & Browne, 1993). Numerous sources show that PLS-SEM can deal with reflective as well as formative indicators (Becker, Klein, & Wetzels, 2012; Hair, 2014; MacCallum & Browne, 1993; Ringle, Sarstedt, & Straub, 2012).

First vs second order constructs

Constructs can be single layered (first-order component) or they can be operationalized more abstract with multiple layered components (higher-order component) (Edwards, 2001; Hair, 2014; Jarvis et al., 2003; Wetzels & Odekerken-Schröder, 2009). Wetzels & Odekerken-Schröder (2009) define hierarchical constructs or multidimensional constructs as constructs involving more than one dimension. Even though these constructs can have multiple layers of components, usually the modelling approach is restricted to two layers (Hair, 2014; Wetzels & Odekerken-Schröder, 2009). Supporters of higher-order construct modelling argue that it leads to theoretical parsimony and reduces model complexity (Edwards, 2001; Hair, 2014; Wetzels & Odekerken-Schröder, 2009).

At the core, a second order factor is directly measured through observed variables for all the first order factors (Chin, Marcolin, Newsted, Chin, & Marcolin, 1996; Chiu, Wang, Fang, & Huang, 2014). Considerations need to be made whether constructs should be modelled as first-order or second-order configuration (O'Cass & Weerawardena, 2010). Authors apply different reasoning for whether to use first or second-order constructs. O'Cass & Weerawardena (2010) for example explain their choice based on weak covariance among second order constructs. It has been reasoned that a weak covariance (in this example among industry competitive forces) highlights these forces not being necessarily related to each other and therefore specifying the construct as being second-order. Other authors base their decision as to which order construct to use on previous research suggestions in their field (see for example Chiu et al. (2014, p.91) for perceived values). Ruiz, Gremler, Washburn, & Carrión (2008, p.1281) state that according to Podsakoff, Shen, & Podsakoff (2006), social researchers should use higher-order models if the construct is complex as such models treat each dimension as an important component of the construct.

Four constructs (regional sustainability place branding, individual sustainability place branding,

place attachment and involvement) in this research are specified as first-order factors having reflective indicator variables. Reflective measurements represent the effects of an underlying construct and reflective indicators 'can be viewed as a representative sample of all the possible items available within the conceptual domain of the construct' (Hair, 2014, p.43). Since there is a causal priority from the construct to the indicator (Diamantopoulos & Winklhofer, 2001) and the items are mutually interchangeable (Jarvis et al., 2003) the first-order constructs of regional sustainability place branding, individual sustainability place branding, place attachment and involvement are specified as reflective measurement model. Refer to Table 7.14 for the multiple reflective items that represent consequences to the four latent variables.

This research specifies five constructs (sustainability practices, sustainability attitudes, place identity, individual place performance and regional place performance) as second-order factors having first-order factors as formative indicators and the first-order factors themselves have reflective indicators. Table 7.15 shows an overview of first- and second-order constructs. One reason for the choice of constructs is based on the complexity of the model (Podsakoff et al., 2006). Additionally, based on marketing and especially tourism literature sustainability is a highly complex term (Butler, 1999; Charter et al., 2002; Porter, 1995; Rebollo & Baidal, 2003; Zouganeli et al., 2012). Sustainability practices differ significantly across industries and applying sustainability practices to the wine industry required the formation of second-order constructs with four first-order formative constructs. These measured variables form the latent variable of sustainability practices rather than being reflected by it. Furthermore, the first-order factors are not interchangeable and do not have high correlations which is reason for them to be formative rather than reflective (Hair, 2014). Attitudes can be regarded similar to values and these are suggested to be measured as second-order constructs formed by underlying benefits that drive values (Chiu et al., 2014) or in this case attitudes since they are made out of different dimensions that represent distinct facets of the construct (Ruiz et al., 2008).

Individual as well as regional place performance is measured as second-order factors having first-order factors as formative indicators the first order factors themselves having reflective indicators. Performance measures are widely discussed in the tourism and especially wine tourism literature and range from marketing terms such as successful brands (Benjamin & Podolny, 1999; Boo, Busser, & Baloglu, 2009), to economic assets (Amadiou & Viviani, 2011), visitor behaviour (Cohen & Ben-Nun, 2009; Dwyer & Kim, 2003; Orth et al., 2005; Orth et al., 2012) and innovation implementation (Paget, Dimanche, & Mounet, 2010) as indicators of strong performance. In this sense it can be argued that place performance, tourism numbers, financial assets, marketing success and innovations cause successful place performance. The individual performance measures are reflected by multiple items. The last second-order latent construct is a shared place identity being caused (therefore formative measures) by similarity between the branding of wineries and wine regions as well as congruency between the aforementioned. A shared place identity in the form of support and similarities between wine regions and wineries are considered as the key factors (Blain, 2005; Bhattacharya & Sen, 2003).

FIRST-ORDER VARIABLES	MULTI-ITEM MEASURES
Collective/Regional sustainability place branding (CBRA)	CBRA_S1-5
Individual sustainability place branding (IBRA)	IBRA_S1-4
Place attachment (PLAT)	PLAT1-5
Involvement (INVO)	INVO1-7
SECOND-ORDER VARIABLES	FIRST-ORDER COMPONENTS
Sustainability practices (PRA)	PRA_SOC1-2 (SOCIAL), PRA_RECY1-3 (RECYCLING), PRA_ENV1-6 (ENVIRONMENT), PRA_MNG1-5 (Management)
Sustainability attitudes (ATT)	ATT_BEN1-4 (BENEFITS), ATT_NOR1-3 (NORMS)
Collective/Regional place performance (CPRF)	CPRF_TOU1-8 (TOURISM), CPRF_FIN1-6 (FINANCIAL), CPRF_MAR1-5 (MARKETING), CPRF_INNO1-3 (INNOVATION)
Individual place performance (IPRF)	IPRF_TOU1-8 (TOURISM), IPRF_FIN1-11 (FINANCE), IPRF_MAR1-7 (MARKETING), IPRF_INNO1-4 (INNOVATION)
Place Identity (ID)	ID_C1-4 (CONGRUENCY), ID_S1-4 (SIMILARITY)

Table 7-15: First- and Second order variables

7.3.2. Assessing results of reflective first-order construct measurement model

PLS-SEM models are normally analysed and interpreted in two sequences: (1) the assessment of the reliability and validity of the measurement model and (2) the assessment of the structural model. This sequence aims to ensure reliable and valid measures of constructs in advance to drawing conclusions about the constructs relationships (Hulland, 1999). The acceptability of the measurement model can be evaluated by reviewing the (1) internal consistency reliability, (2) convergent as well as (3) discriminant validity (Hair, 2014; Hulland, 1999).

Internal consistency reliability

Individual item reliability in PLS is measured by examining simple correlations (or loadings) of the measures with their particular construct (Hulland, 1999). Items with loadings of 0.7 and higher are accepted by many researchers since they show that the variance shared between the constructs is more than error variance according to Hulland (1999). It is cautioned that especially where new items or newly developed scales are employed factor loadings can show loadings below the 0.7 threshold which might be due to wrong wording of the construct, an inappropriate item or changing the context of the item too severely (Hair, 2014; Hulland, 1999). Hulland (1999) summarizes that whereas factor loadings of 0.7 are meant to be aimed for, only items with loadings of less than 0.5 need to be dropped since those indicate a lack of internal consistency reliability. The tables in Appendix H show the individual item factor loadings and its p-value for the Australian as well as the German sample. They show that almost all indicators are above the indicated threshold of 0.7 with significant p-values below 0.05 as desired for reflective indicators (Kock, 2015). The three indicators (Iv_PRAE, Iv_PRAS and Iv_IPRF) that are below the threshold of 0.7 still remain acceptable as Hair (2014) and Hulland (1999) have pointed out only items below 0.5 definitely need to be dropped. This means that the remaining indicators applied have an acceptable individual reliability. Some

items below the thresholds of 0.7 have been deleted which did not affect the measurement of the variable as the removed indicators belong to reflective constructs. The deleted indicators are: INVO2, PLAT2, PRA_ENV3-6, PRA_MNG3+5, CPRF_MAR4, CPRF_FIN4, CPRF_TOU6-8, IPRF_MAR1+5-8, IPRF_FIN4+8-11, IPRFTOU6+7, INVO_4 for the Australian sample. The deleted indicators for the German sample are PLAT2, PRA_ENV3+6, IPRFTOU2+6+7, IPRF_FIN4+8-11, CPRF_TOU2+6-8, CPRF_FIN4-6, CPRF_MAR2.

Constructs' reliability

The construct's internal reliability needs to be evaluated in order to measure the construct's internal consistency (Hair et al., 2011). Reliability can be measured in two ways: (1) Cronbach's alpha which provides an estimate of the reliability based on the inter correlations of the observed indicator variables (Hair, 2014) or (2) composite reliability (Hair, 2014). Cronbach's alpha and the composite reliability can be interpreted in the same way with composite reliability values between 0.60 and 0.70 being acceptable in exploratory research but higher than 0.70 should be aimed for (Hair et al., 2011; Hair, 2014). The following table shows the Cronbach's alpha as well as the composite reliability for constructs applied in this research.

Constructs	Cronbach's alpha	Composite reliability
INVO	0.930	0.947
PLAT	0.878	0.917
NORM	0.705	0.836
BENEF	0.765	0.850
CONGRU	0.815	0.879
SIMIL	0.886	0.921
CBRA	0.868	0.905
IBRA	0.859	0.904
PRASoc	0.561	0.820
PRARec	0.599	0.789
PRAEnv	0.749	0.889
PRAMng	0.847	0.908
CPRFinn	0.758	0.861
CPRFMar	0.788	0.863
CPRFFin	0.843	0.896
CPRFTou	0.902	0.928

IPRFInn	0.859	0.905
IPRFMar	0.820	0.893
IPRFFin	0.898	0.922
IPRFTou	0.895	0.920

Table 7-16: Internal reliability (Australia)

Constructs	Cronbach's alpha	Composite reliability
INVO	0.915	0.933
PLAT	0.856	0.903
NORM	0.729	0.848
BENEF	0.702	0.835
ID_CON	0.841	0.894
ID_SIM	0.849	0.899
CBRA	0.899	0.926
IBRA	0.738	0.836
PRA_Soc	0.667	0.857
PRA_Rec	0.546	0.768
PRA_Env	0.748	0.842
PRA_Mng	0.729	0.823
IPRF_Tou	0.725	0.820
IPRF_Fin	0.897	0.921
IPRF_Mar	0.858	0.899
IPRF_Inn	0.774	0.870
CPRF_Tou	0.712	0.823
CPRF_Fin	0.873	0.922
CPRF_Mar	0.674	0.803
CPRF_Inn	0.779	0.872

Table 7-17: Internal reliability (Germany)

Most of the Cronbach's alpha as well as the composite reliability measures are all above the indicated threshold of 0.7 as previously discussed. However, some of the Cronbach's alphas are below the threshold of 0.7. This is acceptable as those measurements have high composite reliability and low items in the construct which can cause lower Cronbach's Alpha (Hair, 2014; Kock, 2015). None of the Cronbach's alphas are well below the threshold. Therefore, the internal consistency of the measurements can be regarded as reliable.

Validity of the construct

As part of assessing the results of the reflective measurement model the convergent validity needs to be evaluated by analysing the average variance extracted (AVE) as well as applying the Fornell-Larcker criterion cross loadings to assess discriminant validity (Hair, 2014).

Convergent validity

Convergent validity is described as ‘the extent to which a measure correlates positively with alternative measures of the same construct’ (Hair, 2014, p102). To measure convergent validity the average variance extracted need to be taken into consideration (Hair, 2014). The average variance extracted (AVE) is suggested to be higher than 0.50 (Hair et al., 2011) which would mean that the latent construct can explain more than 50% of the indicator’s variance. If the AVE is less than 0.50 on the other hand means that on average, more error remains in the items than the variance explained by the construct (Hair, 2014). The following table illustrates the AVE of each reflectively measured construct.

Constructs	AVE
INVO	0.783
PLAT	0.733
NORM	0.631
BENEF	0.588
CONGRU	0.645
SIMIL	0.746
CBRA	0.657
IBRA	0.703
PRASoc	0.695
PRARec	0.555
PRAEnv	0.800
PRAMng	0.767
CPRFIIn	0.674
CPRFMar	0.613
CPRFFin	0.683
CPRFTou	0.722
IPRFInn	0.705
IPRFMar	0.736
IPRFFin	0.685
IPRFTou	0.659

Table 7-18: Convergent Validity: Average variance extracted (AVE) (Australia)

Constructs	AVE
INVO	0.667
PLAT	0.701
NORM	0.651
BENEF	0.631
ID_CON	0.680
ID_SIM	0.690
CBRA	0.714
IBRA	0.563
PRA_Soc	0.750
PRA_Rec	0.525
PRA_Env	0.573
PRA_Mng	0.483
IPRF_Tou	0.479
IPRF_Fin	0.662
IPRF_Mar	0.640
IPRF_Inn	0.690
CPRF_Tou	0.539
CPRF_Fin	0.789
CPRF_Mar	0.506
CPRF_Inn	0.694

Table 7-19: Convergent Validity: Average variance extracted (AVE) (Germany)

As the table 7.18 and 7.19 show all of the constructs show an average variance extracted (AVE) above the threshold of 0.50 (for Australia as well as Germany) which means that more than 50% of the indicators' variance is explained by the latent construct.

Discriminant validity

Discriminant validity is stated as 'the extent to which a construct is truly distinct from other constructs by empirical standards' (Hair, 2014, p.104). In other words it is the extent to which measures of a given construct differ from measures of other constructs in the same model (Hulland, 1999). Therefore, once discriminant validity is established it can be implied that a construct is unique and describes occurrences that are not embodied by other constructs in the model (Hair, 2014).

There are two ways how discriminant validity should be measured and reported. Fornell & Larcker (1981) demonstrate that the square root of AVE in each latent variable can be used to establish discriminant validity. Therefore, the Fornell-Larcker criterion states that the AVE of each latent construct should be higher than the construct's highest squared correlation with any other latent construct (Hair et al., 2011). The second test for discriminant validity states that an indicator's loadings should be higher than all of its cross-loadings (Hair et al., 2011). Appendix I contains tables that show the square root of AVE for both samples. Both tables display the squares root of AVE of each latent variable is higher than the construct's highest squared correlation with any other latent construct. Furthermore, the indicator's loadings are higher than all of its cross loadings. Concluding, the latent variables in this study have satisfying discriminant validity for the Australian and the German sample.

Collinearity testing

Vertical (classical collinearity)

Authors caution that widely used validity and reliability tests often fail to measure collinearity. Two or more variables are seen to be collinear when 'they measure the same attribute of a construct' (Kock & Lynn, 2012, p.547). It is noted that collinearity should usually be assessed in models with multiple variables to ensure that different predictors do not measure the same and could therefore possibly be made redundant (Kock & Lynn, 2012). This form of collinearity is labelled vertical or classic collinearity.

One way of assessing vertical collinearity has been through the calculation of a variance inflation factor (VIF) for each of the predictor latent variables. These measures are then compared to a threshold (Hair, 2011b; Kock & Lynn, 2012). Authors (Hair et al., 2011a; Hair et al., 2011b) suggest the value for each indicator's variance inflation factor (VIF) should be less than 5. This means that a VIF equal to or greater than the threshold value would suggest collinearity between the variables. The following table displays the full collinearity.

Constructs	FULL VIF
INVO	1.685
PLAT	1.979
NORM	2.154
BENEF	2.482
CONGRU	4.487
SIMIL	4.579
CBRA	1.681
IBRA	2.558
PRASoc	1.487
PRARec	2.426
PRAEnv	1.551
PRAMng	3.083
CPRFInn	2.186
CPRFMar	3.504
CPRFFin	3.492
CPRFTou	2.409
IPRFInn	1.905
IPRFMar	1.767
IPRFFin	1.933
IPRFTou	1.946

Table 7-20: Full Variance Inflation Factor (VIF) (Australia)

Constructs	FULL VIF
INVO	1.557
PLAT	1.599
NORM	2.964
BENEF	2.006
ID_CON	3.806
ID_SIM	4.290
CBRA	1.794
IBRA	2.570
PRA_Soc	1.483
PRA_Rec	2.228
PRA_Env	2.016
PRA_Mng	3.087
IPRF_Tou	1.749
IPRF_Fin	1.546
IPRF_Mar	1.905
IPRF_Inn	1.461
CPRF_Tou	1.508
CPRF_Fin	1.732

CPRF_Mar	2.431
CPRF_Inn	2.832

Table 7-21: Full Variance Inflation Factor (VIF) (Germany)

As both previous tables show none of the full VIFs of either the Australian or the German samples are higher than the threshold of 5 therefore there is no issue with collinearity among the variables.

Conclusion for the assessment of the reflective first-order measurement model

The previous section reviewed the reliability as well as validity of the measurement model. The individual constructs have been reviewed according to internal consistency reliability. Some measures had to be removed in order to fulfil the internal reliability. Since these were reflective measures there was no problem associated with deleting individual items. Furthermore, the convergent as well as discriminant validity has been tested and satisfying results retrieved. Finally collinearity testing indicated no problem with possible predictor-predictor redundancy. The following section assesses the results of the formative second-order constructs measurement model.

7.3.3. Assessing results of formative second-order constructs measurement model

Reflective measurement models have the underlying assumption that there is an internal consistency between the variables. This assumption cannot be applied to formative models since formative measures do not necessarily co-vary (Hair, 2014). Therefore, no attempts should be made to improve formative indicators based on correlation pattern as this can have negative consequences for a construct's content validity. Instead there are other criteria that assess the quality of formative measurement models (Hair, 2014).

Hair (2014) suggests three steps in the formative measurement models assessment procedure:

- (1) Assess the convergent validity of formative measurement model

- (2) Assess formative measurement models for collinearity issues
- (3) Assess the significance and relevance of the formative indicators

Assessing the content validity of the construct is the most important aim whereby content validity assesses to which extent the indicators capture the major facets of the construct (Hair et al., 2014). Hair et al. (2014) stress that the empirical evaluation of formative outer models requires assessing convergent validity or the extent to which a measure correlates positively with other measures of the same construct. Cenfetelli & Bassellier (2009) argue that the primary statistic for assessing a formative indicator is its weight. It is mentioned that when all weights are significant, there is empirical support to keep all indicators (Cenfetelli & Bassellier, 2009). Kock (2011) indicates that p-values are provided for weights in the applied software WarpPLS and that these p-values can be reported as an indication that formative measurement item are properly constructed. An acceptable threshold for a valid item is a weight with p-value lower than .05. Formative indicators whose weight do not comply with this criterion should be considered for removal (Kock, 2011).

The literature cautions though that there might be valid reason for insignificant weights and before eliminating indicators, further considerations need to be made. High levels of multicollinearity in the formative measurement model can cause indicators to be non-significant (Hair et al., 2011a). Therefore, the degree of multicollinearity should be examined, for example by assessing the variance inflation factor (VIF). Hair et al. (2011a) state that a VIF value of 5 indicates potential multicollinearity problems. A VIF value of 5 would infer that 80 percent of an indicator's variance is accounted for by the remaining formative indicators related to the same construct.

The following tables reflect the indicator's loadings, weights and VIFs for the second order formative variables.

	ATT	PRA	CPRF	IPRF	ID	P value
lv_BENE	(0.884)	-0.197	0.004	0.049	-0.098	<0.001
lv_NORM	(0.884)	0.197	-0.004	-0.049	0.098	<0.001
lv_PRAM	0.149	(0.859)	0.021	-0.061	-0.067	<0.001
lv_PRAE	-0.4	(0.620)	-0.054	-0.041	0.28	<0.001
lv_PRAR	0.125	(0.851)	-0.027	-0.043	-0.11	<0.001
lv_PRAS	0.022	(0.586)	0.065	0.195	-0.038	<0.001
lv_CPRF	-0.183	0.105	(0.793)	-0.194	0.068	<0.001
lv_CPRF	0.13	-0.037	(0.885)	-0.001	-0.018	<0.001
lv_CPRF	0.005	-0.048	(0.894)	0.147	-0.073	<0.001
lv_CPRF	0.033	-0.01	(0.775)	0.03	0.036	<0.001
lv_IPRF	0.176	0.036	-0.1	(0.766)	0.052	<0.001
lv_IPRF	-0.164	0.065	-0.123	(0.799)	0.095	<0.001
lv_IPRF	-0.056	-0.062	0.016	(0.783)	-0.198	<0.001
lv_IPRF	0.058	-0.045	0.232	(0.698)	0.057	<0.001
lv_SIMI	-0.024	-0.067	0.063	0.008	(0.961)	<0.001
lv_CONG	0.024	0.067	-0.063	-0.008	(0.961)	<0.001

Table 7-22: Second order indicator loadings and their p-values (Australia)

	ATT	PRA	ID	IPRF	CPRF	P value
lv_NORM	(0.889)	0.333	-0.109	-0.066	-0.003	<0.001
lv_BENE	(0.889)	-0.333	0.109	0.066	0.003	<0.001
lv_PRA_	-0.112	(0.627)	0.005	-0.009	-0.066	<0.001
lv_PRA_	-0.05	(0.857)	0.057	-0.131	-0.028	<0.001
lv_PRA_	0.081	(0.765)	-0.189	0.04	0.091	<0.001
lv_PRA_	0.061	(0.835)	0.111	0.105	-0.005	<0.001
lv_ID_C	-0.017	0.01	(0.959)	-0.006	0.03	<0.001
lv_ID_S	0.017	-0.01	(0.959)	0.006	-0.03	<0.001
lv_IPRF	0.115	-0.06	-0.212	(0.749)	0.032	<0.001
lv_IPRF	-0.068	0.129	0.223	(0.706)	0.112	<0.001
lv_IPRF	-0.01	-0.113	-0.054	(0.832)	-0.056	<0.001
lv_IPRF	-0.046	0.074	0.071	(0.649)	-0.087	<0.001
lv_CPRF	-0.067	-0.072	-0.193	0.118	(0.658)	<0.001
lv_CPRF	-0.287	-0.034	0.055	0.011	(0.748)	<0.001
lv_CPRF	0.028	0.08	0.073	-0.022	(0.866)	<0.001
lv_CPRF	0.292	0.004	0.029	-0.083	(0.805)	<0.001

Table 7-23: Second order indicator loadings and their p-values (Germany)

Table 7.22 and 7.23 show the second order indicator loadings for both sampled countries all being significant and above the threshold of 0.7 (or just below which is still acceptable (Hair, 2014)).

The following tables highlight the second order formative indicators' weights as well as their VIFs for Australia and Germany respectively.

	ATT	PRA	CPRF	IPRF	ID	P value	VIF	Effect Size
lv_BENE	(0.566)	0	0	0	0	<0.001	1.46	0.500
lv_NORM	(0.566)	0	0	0	0	<0.001	1.46	0.500
lv_PRAM	0	(0.392)	0	0	0	<0.001	1.998	0.337
lv_PRAE	0	(0.283)	0	0	0	<0.001	1.223	0.175
lv_PRAR	0	(0.389)	0	0	0	<0.001	1.95	0.331
lv_PRAS	0	(0.268)	0	0	0	<0.001	1.183	0.157
lv_CPRF	0	0	(0.282)	0	0	<0.001	1.821	0.224
lv_CPRF	0	0	(0.315)	0	0	<0.001	2.762	0.279
lv_CPRF	0	0	(0.318)	0	0	<0.001	2.862	0.284
lv_CPRF	0	0	(0.276)	0	0	<0.001	1.76	0.214
lv_IPRF	0	0	0	(0.329)	0	<0.001	1.496	0.252
lv_IPRF	0	0	0	(0.344)	0	<0.001	1.577	0.275
lv_IPRF	0	0	0	(0.337)	0	<0.001	1.522	0.264
lv_IPRF	0	0	0	(0.300)	0	<0.001	1.324	0.209
lv_SIMI	0	0	0	0	(0.520)	<0.001	3.544	0.500
lv_CONG	0	0	0	0	(0.520)	<0.001	3.544	0.500

Table 7-24: Second order constructs' indicator weights and VIF (Australia)

	ATT	PRA	ID	IPRF	CPRF	P value	VIF	Effect size
lv_NORM	(0.563)	0	0	0	0	<0.001	1.505	0.5
lv_BENE	(0.563)	0	0	0	0	<0.001	1.505	0.5
lv_PRA_	0	(0.260)	0	0	0	<0.001	1.348	0.163
lv_PRA_	0	(0.356)	0	0	0	<0.001	2.004	0.305
lv_PRA_	0	(0.318)	0	0	0	<0.001	1.634	0.243
lv_PRA_	0	(0.346)	0	0	0	<0.001	1.94	0.289
lv_ID_C	0	0	(0.521)	0	0	<0.001	3.402	0.5
lv_ID_S	0	0	(0.521)	0	0	<0.001	3.402	0.5
lv_IPRF	0	0	0	(0.345)	0	<0.001	1.502	0.258
lv_IPRF	0	0	0	(0.325)	0	<0.001	1.291	0.229
lv_IPRF	0	0	0	(0.383)	0	<0.001	1.714	0.318

lv_IPRF	0	0	0	(0.299)	0	<0.001	1.25	0.194
lv_CPRF	0	0	0	0	(0.275)	<0.001	1.331	0.181
lv_CPRF	0	0	0	0	(0.313)	<0.001	1.433	0.234
lv_CPRF	0	0	0	0	(0.362)	<0.001	2.223	0.314
lv_CPRF	0	0	0	0	(0.337)	<0.001	1.965	0.271

Table 7-25: Second order constructs' indicator weights and VIF (Germany)

Table 7.24 and 7.25 show that all p-values are significant (p-value < 0.05) and the VIFs are all well below the threshold of 5. Concluding based on the three steps when assessing formative measurement models it can be assumed that the sample has good validity.

Collinearity testing

Testing the full variance inflation factor (Full VIFs) for each predictor has previously been done for the first order variables and is recommended for the second order constructs as well in order to test for collinearity (Kock & Lynn, 2012).

	INVO	PLAT	CBRA	IBRA	ATT	PRA	CPRF	IPRF	ID
Full VIFs	1.585	1.889	1.593	2.163	2.444	2.196	1.688	1.780	2.314

Table 7-26: Full VIFs of the second order constructs (Australia)

	INVO	PLAT	CBRA	IBRA	ATT	PRA	ID	IPRF	CPRF
Full VIFs	1.470	1.432	1.711	2.249	2.657	2.410	1.796	1.387	1.335

Table 7-27: Full VIFs of the second order constructs (Germany)

Concluding, the previous section indicated satisfactory results concerning validity, reliability and collinearity of the structural model. As stated earlier PLS-SEM models are normally analysed and interpreted in two sections: (1) the assessment of the reliability and validity of the measurement model and (2) the assessment of the structural model. As Hulland (1999) points out only when reliable and valid measures are ensured can conclusions be drawn about the constructs relationships. The following section is going to test and communicate the results of the structural model and conclude with hypotheses results.

7.3.4. Evaluation of the structural model

This chapter continues the analysis and the focus will be put on the theory of the path model. It is aimed to be concluded whether the proposed theory can be empirically confirmed. This chapter is structured based on four steps suggested by Hair (2014). First the model fit and quality indices will be reported and the significance and relevance of the structural model relationships will be assessed. Then the level of R^2 as well as the effect sizes f^2 will be evaluated. This section ends by assessing the predictive relevance Q^2 .

Model fit and quality indices

Model fit and quality indices are assessed in PLS-SEM using following measures: average path coefficient (APC), average R^2 (ARS) and average variance inflation factor (AVIF) (Kock, 2015). The literature recommends p-values all to be equal to or lower than 0.05 which means significant at the 0.05 level (Kock, 2015). Kock (2015) also suggests to report AVIF and AFVIF which should be lower than 3.3 (in models where most of the variables are measured through two or more indicators). It is cautioned though that a more relaxed criterion for both indices is being lower than 5 especially in models where most variables are single-indicator variables.

In addition to the average R^2 (ARS), the model explanatory power can be reported by the 'Tenenhaus GoF' (Kock, 2015). The following thresholds for GoF are proposed: small if equal to or greater than 0.1, medium if equal to or greater than 0.25, and large if equal to or greater than 0.36 (Wetzels & Odekerken-schröder, 2009). It is further noted that a value lower than 0.1 for the GoF entails that the explanatory power of a model may be too low to be considered acceptable (Kock, 2015). The following table presents the model fit and quality indices for the Australian and German sample.

Indices	Results	Criterion
Average path coefficient (APC)	0.216 p-value < 0.001	p-value < 0.05
Average R^2 (ARS)	0.340 p-value <	p-value < 0.05

	0.001	
Average adjusted R ² (AARS)	0.328 p-value < 0.001	p-value < 0.05
Average variance inflation factor (AVIF)	1.285	Acceptable if ≤5, ideally ≤ 3.3
Average Full variance inflation factor (AFVIF)	1.718	Acceptable if ≤5, ideally ≤ 3.3
Tenenhaus GoF	0.506	small ≥ 0.1, medium ≥ 0.25, large ≥ 0.36

Table 7-28: Model fit and quality indices (Australia)

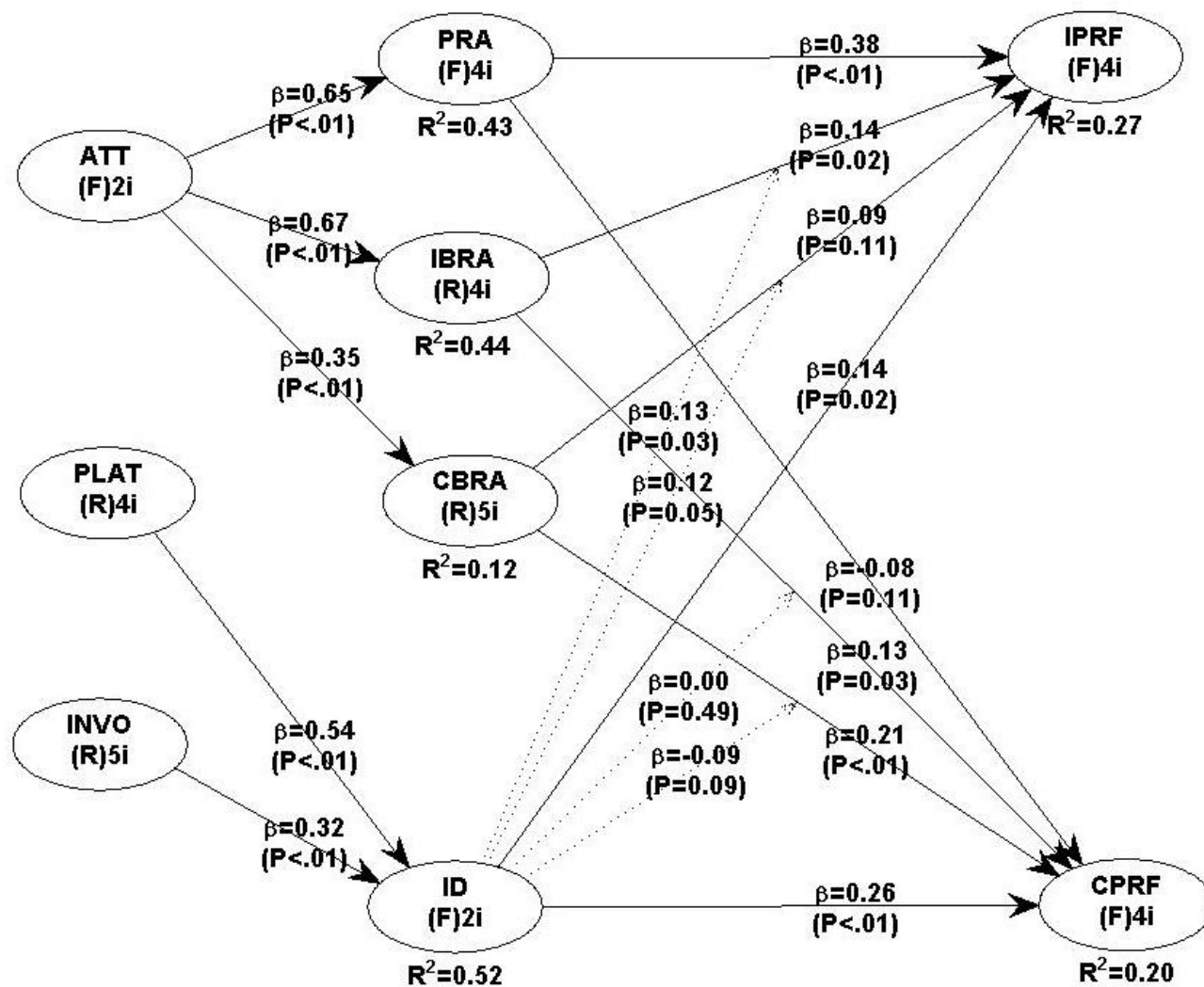
Indices	Results	Criterion
Average path coefficient (APC)	0.242 p-value < 0.001	p-value < 0.05
Average R ² (ARS)	0.317 p-value < 0.001	p-value < 0.05
Average adjusted R ² (AARS)	0.306 p-value < 0.001	p-value < 0.05
Average variance inflation factor (AVIF)	1.349	Acceptable if ≤5, ideally ≤ 3.3
Average Full variance inflation factor (AFVIF)	1.733	Acceptable if ≤5, ideally ≤ 3.3
Tenenhaus GoF	0.461	small ≥ 0.1, medium ≥ 0.25, large ≥ 0.36

Table 7-29: Model fit and quality indices (Germany)

As can be seen from the table above all the model fit and quality indices fulfil the criteria necessary. The GoF is large reflecting an acceptable explanatory power of the model.

The path analysis

The following models show the structural theorized relationships between the variables for the Australian and the German sample respectively. As suggested by Hair (2014) the path coefficients in the structural model need to be assessed and can be seen in the following model as β and their p-values. Then the coefficients of determination are evaluated and can be observed as R² in the model.



VARIABLES ACRONYMS
Collective/Regional sustainability place branding (CBRA)
Individual sustainability place branding (IBRA)
Place attachment (PLAT)
Involvement (INVO)
Sustainability practices (PRA)
Sustainability attitudes (ATT)
Collective/Regional place performance (CPRF)
Individual place performance (IPRF)
Place Identity (ID)

Control variables:
winery size
sustainability active years

Figure 7-3: Structural model with results (Australia)

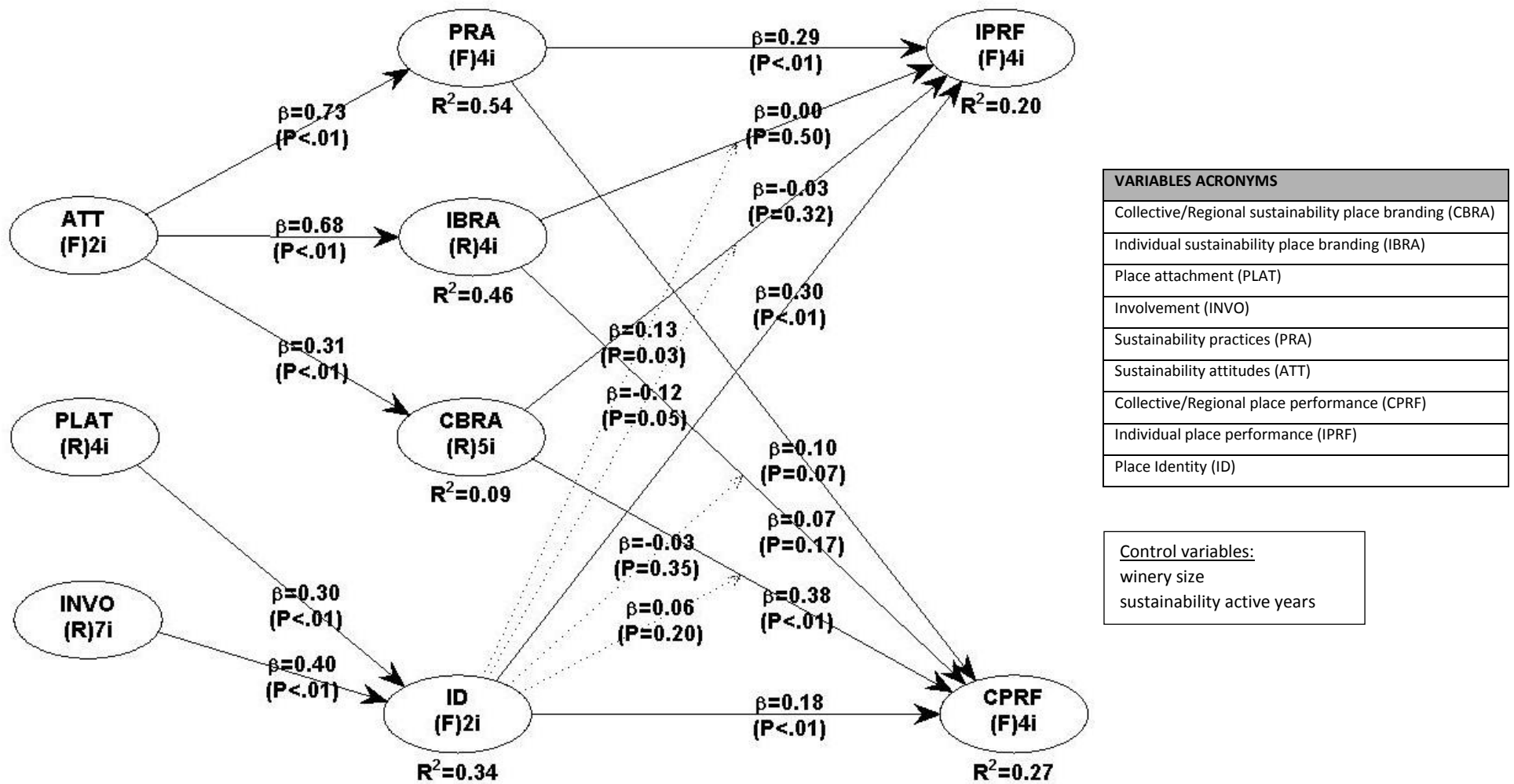


Figure 7-4: Structural model with results (Germany)

7.3.5. Structural model path coefficients (β)

Following the PLS-SEM analysis, estimates can be made for the structural model relationships which embody the hypothesized relationships among the constructs. As stated earlier these can be observed as path coefficients and are represented as β . These path coefficients have standardized values between -1 and +1 where values close to +1 represent strong positive relationships and close to -1 represent strong negative relationships (Hair, 2014).

For the Australian sample strong positive relationships can be observed between sustainability attitudes on sustainability practices ($\beta=0.65$, $p<0.01$), on individual sustainability place branding ($\beta=0.67$, $p<0.1$) and on regional place branding ($\beta=0.35$, $p<0.01$). Similar positive relationship in strength are estimated between place attachment on place identity ($\beta=0.54$, $p<0.01$) and for involvement on place identity ($\beta=0.32$, $p<0.01$). As for the influence of place identity on performance, there are positive significant effects measured on regional place performance ($\beta=0.26$, $p<0.01$) as well as on individual place performance ($\beta=0.14$, $p=0.02$). As can be seen though the effect being stronger on regional place performance than on individual place performance. Regional sustainability place branding has a significant influence on regional place performance ($\beta=0.21$, $p<0.01$) as well as individual sustainability place branding is having a significant positive influence on individual place performance ($\beta=0.14$, $p=0.02$). Regional sustainability branding however, does not significantly influence individual place performance ($\beta=0.09$, $p=0.11$) and individual sustainability place branding has a significant but very weak influence on regional place performance ($\beta=0.13$, $p=0.03$). Sustainability practices have a statistically significant effect on individual place performance ($\beta=0.38$, $p<0.01$) but not on regional place performance ($\beta=0.08$, $p=0.11$).

For the German sample strong positive relationships can be observed for sustainability attitudes on sustainability practices ($\beta=0.73$, $p<0.01$), on individual sustainability place

branding ($\beta=0.68$, $p<0.1$) and on regional place branding ($\beta=0.31$, $p<0.01$). Similar positive relationship in strength are estimated between place attachment and place identity ($\beta=0.30$, $p<0.01$) and for involvement and place identity ($\beta=0.40$, $p<0.01$). As for the influence of place identity on performance, there are positive significant effects measured on regional place performance ($\beta=0.18$, $p<0.01$) as well as on individual place performance ($\beta=0.30$, $p<0.01$). As can be seen though the effect being stronger on individual place performance than on regional place performance. Regional sustainability place branding has a significant influence on regional place performance ($\beta=0.38$, $p<0.01$) but not on individual place performance ($\beta=0.03$, $p=0.32$). No significant effect from individual sustainability place branding on individual place performance ($\beta=0.00$, $p=0.50$) or regional place performance ($\beta=0.07$, $p=0.17$) can be measured. Sustainability practices have a statistically significant effect on individual place performance ($\beta=0.29$, $p<0.01$) but not on regional place performance ($\beta=0.10$, $p=0.07$) in the German sample.

7.3.6. Coefficient of Determination (R^2 Value)

In order to evaluate the structural model, the coefficient of determination (R^2 value) is most commonly used and is a measure of the model's predictive accuracy (Hair, 2014). The literature states that researchers employing PLS should report R^2 values for all constructs included in their PLS model (Hulland, 1999). Hair (2014, p.175) explains R^2 being calculated as the squared correlation between a specific endogenous construct's actual and predicted values and it represents the amount of variance in the endogenous constructs explained by all of the exogenous constructs linked to it.

The R^2 value is described to range from 0 to 1 whereby higher levels are preferred since those indicate higher levels of predictive accuracy. However, authors caution that it is complicated to provide 'one rule fits all' for threshold levels of R^2 value since it depends on model complexity and the research discipline (Hair, 2014). The examples of consumer behaviour (where a R^2

value of 0.20 is considered high) and driver studies (R^2 values are expected to exceed 0.75) are given to show how the threshold levels for the R^2 value can vary (Hair, 2014). Scholarly research focusing on marketing issues (as is the case for this thesis) are advised to follow R^2 values of 0.75 (substantial), 0.50 (moderate) and 0.25 (weak) (Hair, 2014). However, other thresholds discussed are R^2 values ranging between 0.67 (substantial), 0.33 (moderate) and 0.19 (weak) (Henseler, Ringle, & Sinkovics, 2009). The following table reports the path coefficients (β) and the coefficient of determination (R^2 values) for all endogenous variables in the Australian and German sample respectively.

Relationships	β	p-value	R^2	Description
ATT → PRA	0.65	< 0.01	0.43	positive, significant and moderate
ATT → IBRA	0.67	< 0.01	0.44	positive, significant and moderate
ATT → CBRA	0.35	< 0.01	0.12	positive, significant and weak
PLAT → ID	0.54	< 0.01	0.52	positive, significant and moderate
INVO → ID	0.32	< 0.01	0.52	positive, significant and moderate
ID → CPRF	0.26	< 0.01	0.25	positive, significant and weak
ID → IPRF	0.14	0.02	0.29	positive, significant and moderate
CBRA → CPRF	0.21	< 0.01	0.25	positive, significant and weak
CBRA → IPRF	0.09	0.11	0.27	non-significant
IBRA → CPRF	0.13	0.03	0.20	positive, significant and weak
IBRA → IPRF	0.14	0.02	0.27	positive, significant and moderate
PRA → CPRF	0.08	0.11	0.20	non-significant
PRA → IPRF	0.38	< 0.01	0.27	positive, significant and moderate

Table 7-30: Path coefficients (β) and coefficient of determination (R^2) (Australia)

Relationships	β	p-value	R^2	Description
ATT → PRA	0.73	< 0.01	0.54	positive, significant and moderate
ATT → IBRA	0.68	< 0.01	0.46	positive, significant and moderate
ATT → CBRA	0.31	< 0.01	0.09	positive, significant and weak
PLAT → ID	0.30	< 0.01	0.34	positive, significant and moderate
INVO → ID	0.40	< 0.01	0.34	positive, significant and moderate
ID → CPRF	0.18	< 0.01	0.27	positive, significant and moderate
ID → IPRF	0.30	< 0.01	0.20	positive, significant and weak
CBRA → CPRF	0.38	< 0.01	0.27	positive, significant and moderate
CBRA → IPRF	0.03	0.32	0.20	non-significant
IBRA → CPRF	0.07	0.17	0.27	non-significant
IBRA → IPRF	0.00	0.50	0.20	non-significant
PRA → CPRF	0.10	0.07	0.27	non-significant

PRA → IPRF	0.29	< 0.01	0.20	positive, significant and weak
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Table 7-31: Path coefficients (β) and coefficient of determination (R^2) (Germany)

The previous findings of the R^2 value are interpreted against the thresholds suggested by Henseler et al. (2009). In the Australian sample the prediction of sustainability practices, individual sustainability branding, place identity as well as individual place performance was statistically meaningful and moderate ($R^2=0.43/0.44/0.52/0.27$). Significant, positive but weak predictions were measured for regional sustainability place branding and regional place performance ($R^2=0.12/0.20$).

In the German sample the prediction of sustainability practices ($R^2=0.54$), individual sustainability branding ($R^2=0.46$), place identity ($R^2=0.34$) as well as regional place performance ($R^2=0.27$) was statistically meaningful and moderate. Significant, positive but weak predictions were measured for individual sustainability place branding ($R^2=0.20$) and regional sustainability place branding ($R^2=0.09$).

Overall, the proposed relationships can be regarded as statistically meaningful. It is important to note that when controlling for winery size as well as years of sustainability involvement the correlations stay almost the same which confirms the results of this study taking the control variables into account.

Effect size f^2

The f^2 effect size is a measure that described 'the change in the R^2 value when a specified exogenous construct is omitted from the model and can be used to evaluate whether the omitted construct has a substantive impact on the endogenous construct (Hair, 2014).

Henseler et al. (2009) indicate acceptable f^2 effect size values of 0.02 (weak), 0.15 (medium), and 0.35 (large) to determine the effect at the structural level. The following tables reflect the effect sizes for the theorized relationships in the Australian as well as the German sample.

Relationships	Effect size (f^2)	Description
ATT → PRA	0.428	large
ATT → IBRA	0.442	large
ATT → CBRA	0.120	medium
PLAT → ID	0.355	large
INVO → ID	0.164	medium
ID → CPRF	0.100	medium
ID → IPRF	0.027	weak
CBRA → CPRF	0.079	weak
CBRA → IPRF	0.016	weak
IBRA → CPRF	0.038	weak
IBRA → IPRF	0.047	weak
PRA → CPRF	0.020	weak
PRA → IPRF	0.160	medium

Table 7-32: Effect sizes (f^2) for theorized relationships (Australia)

Relationships	Effect size (f^2)	Description
ATT → PRA	0.539	large
ATT → IBRA	0.458	large
ATT → CBRA	0.094	medium
PLAT → ID	0.137	medium
INVO → ID	0.207	medium - large
ID → CPRF	0.067	weak
ID → IPRF	0.112	medium
CBRA → CPRF	0.172	medium
CBRA → IPRF	0.009	weak
IBRA → CPRF	0.009	weak
IBRA → IPRF	0.000	weak
PRA → CPRF	0.018	weak
PRA → IPRF	0.099	weak

Table 7-33: Effect sizes (f^2) for theorized relationships (Germany)

The previous table shows the effect sizes for the structural relationships theorized in the model. For Australia the effect size of sustainability attitudes on sustainability practices as well as on individual place branding is large. The same hold for the effect size of place attachment on place identity. Medium effect sizes could be estimated for place attachment on regional sustainability place branding, as well as involvement on place identity and place identity on regional place performance. On the other hand weak effect sizes could be observed for place identity on individual place performance, regional place branding on regional and individual

place performance, as well as individual place branding on regional and individual place performance. Finally, the effect size for sustainability practices on regional place performance is very weak.

For Germany the effect size of sustainability attitudes on sustainability practices as well as on individual place branding is large. The effect size of place attachment on place identity is medium. Medium effect sizes could also be estimated for sustainability attitudes on regional sustainability place branding, as well as involvement on place identity and place identity on individual place performance. Finally regional sustainability place branding on regional place performance can also be described as having a medium effect size. Weak effect sizes on the other hand could be observed for place identity on regional place performance, regional place branding on individual place performance, as well as individual place branding on regional and place performance. The effect size for sustainability practices on regional place performance is also weak and finally there is no effect between individual sustainability place branding and individual place performance.

7.3.7. Predictive relevance Q^2

The final step when assessing the structural model includes examining the Stone-Geisser's Q^2 value which is said to be an indicator of the model's predictive relevance (Hair, 2014). Hair (2014) draws figures of 0.02, 0.15, and 0.35 with the indication that an exogenous construct has a small, medium or large predictive relevance for a certain endogenous construct. Other authors state that Q^2 values above zero are proof that the observed values are well reconstructed and that the model has predictive relevance (Henseler et al., 2009).

	CBRA	IBRA	PRA	CPRF	IPRF	ID
Predictive relevance Q^2	0.120	0.442	0.428	0.256	0.263	0.521

Table 7-34: Predictive relevance (Q^2) (Australia)

	CBRA	IBRA	PRA	CPRF	IPRF	ID
Predictive relevance Q^2	0.096	0.458	0.541	0.253	0.258	0.348

Table 7-35: Predictive relevance (Q^2) (Germany)

The predictive relevance has been proven based on Henseler et al. (2009) criteria of all Q^2 values being above zero for both Australia and Germany as can be seen in the tables 7.34 and 7.35. To be more precise, individual sustainability place branding, sustainability practices and place identity have a large predictive relevance. Regional sustainability place branding as well as regional and individual place performance have a medium predictive relevance.

7.4. Indirect effect – Moderation test

Moderation describes a concept when a construct directly affects the relationship between the exogenous and the endogenous latent variable. Here, the moderator effect can be referred to when the moderator (an independent variable or construct) changes the strength or even the direction of a relationship between two constructs in the model (Hair, 2014). Moderating links are typically associated with moderating cause-effect hypotheses and there are two types of moderating relationships: continuous and categorical moderation (Hair, 2014). The differences between those two types of moderation are the measurements of the moderating variable. A continuous moderating effect can be seen when the moderating variable is metrically measured and a categorical moderating effect can be measured when the moderating variable is categorical (Hair, 2014). In the case of a categorical moderating effect, the moderating variable often serves as a grouping variable that divides the data into subsamples since researchers are commonly interested in learning significant differences between the subsamples (Hair, 2014).

Both formative and reflective latent variables can be part of moderating links when the underlying algorithm used for the outer model estimation is PLS Regression of one of the Factor-based PLS algorithms (Kock, 2015). Establishing a moderation effect is done by testing the moderating link's strength through the calculation of a path coefficient and determining its

statistical significance through the calculation of a p-value (Kock, 2015). A moderating effect can only be significant if the direct relationship between two constructs in the model is measured to be significant (Kock, 2015).

Authors caution that moderating links should not be applied to models too extensively as they might introduce multicollinearity and tend to add nonlinearity (Kock, 2015). The following table shows the path coefficients and their significance levels.

Relationships	β	p-value	Description
ID \rightarrow IBRA*IPRF	0.13	= 0.03	positive, significant
ID \rightarrow CBRA*IPRF	0.11	= 0.05	positive, significant but CBRA*IPRF non-significant
ID \rightarrow IBRA*CPRF	0.00	= 0.49	positive, non-significant
ID \rightarrow CBRA*CPRF	0.09	= 0.09	positive, non-significant

Table 7-36: Indirect moderation effect (Australia)

Relationships	β	p-value	Description
ID \rightarrow IBRA*IPRF	0.13	= 0.03	positive, significant but IBRA*IPRF non-significant
ID \rightarrow CBRA*IPRF	-0.12	= 0.05	negative, significant but CBRA*IPRF non-significant
ID \rightarrow IBRA*CPRF	0.03	= 0.35	positive, non-significant
ID \rightarrow CBRA*CPRF	0.06	= 0.20	positive, non-significant

Table 7-37: Indirect moderation effect (Germany)

As can be seen in table 7.36 and 7.37, there are two positive, significant moderating effects in the Australian sample. With high place identity the effect of individual sustainability place branding on individual performance is stronger ($\beta=0.13$, $p=0.03$). The graph below depicts the positive significant moderating effect:

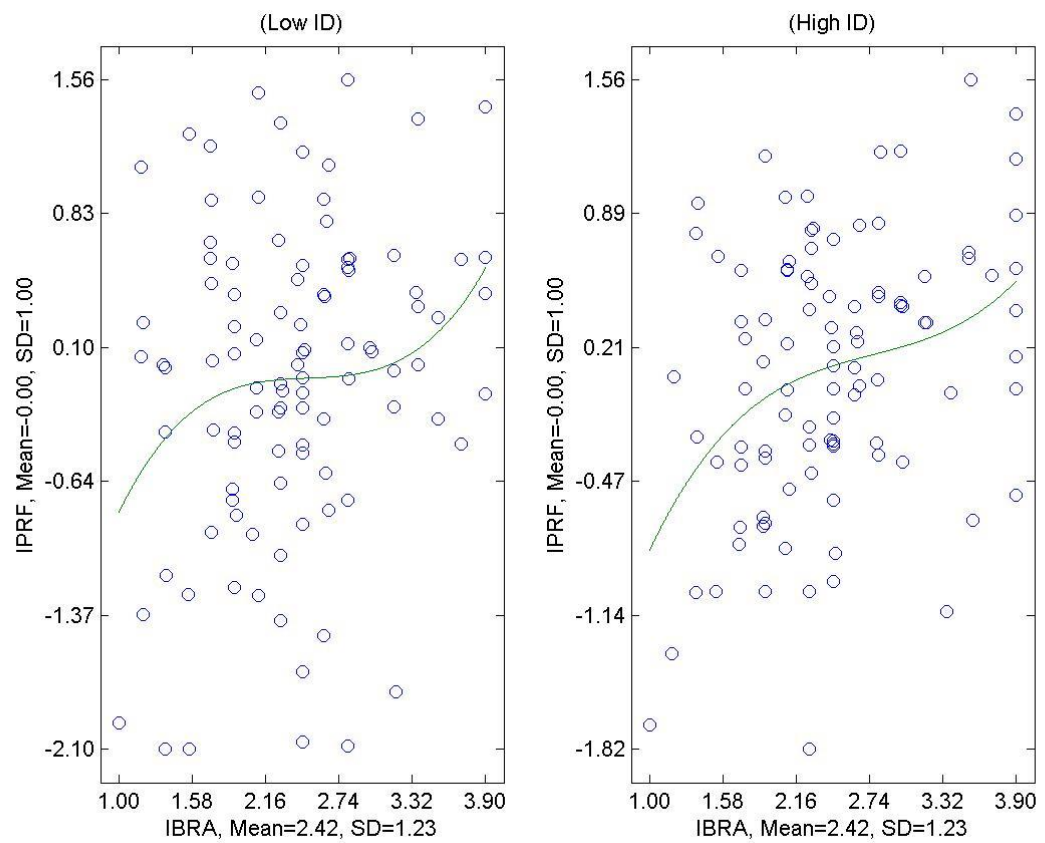


Figure 7-5: Moderating relationship of ID on IBRA*IPRF

The second significant moderating effect in the Australian sample can be observed between regional sustainability branding and individual place performance whereby high identity makes the relationship stronger ($\beta=0.11$, $p=0.05$). However, the direct relationship between regional sustainability and individual place performance is non-significant which eliminates any possible moderating effect on that relationship ($\beta=0.09$, $p=0.10$). Place identity does not moderate the effect of individual sustainability place branding significantly ($\beta=0.00$, $p=0.49$) nor the effect of regional sustainability place branding on regional place performance ($\beta=0.09$, $p=0.09$). Even though it is necessary to note that a lower significant level threshold would make the moderating effect of higher place identity on the effect of regional sustainability place branding on regional place performance significant. Therefore, a moderating relationship between these variables should not be completely dismissed.

The German sample shows one positive, significant moderating relationship. With high place

identity the effect of individual sustainability place branding on individual performance is stronger ($\beta=0.13$, $p=0.03$). However, the direct relationship between individual sustainability place branding and individual place performance is non-significant which eliminates any possible moderating effect on that relationship ($\beta=0.00$, $p=0.50$). Place identity does not moderate the effect of individual sustainability place branding significantly ($\beta=0.03$, $p=0.35$) nor the effect of regional sustainability place branding on regional place performance ($\beta=0.06$, $p=0.20$). One negative, significant moderating effect can be observed in the German sample. The effect of regional sustainability place branding on individual place performance would get weaker with high place identity ($\beta=-0.12$, $p=0.05$). However, the direct effect of regional sustainability branding on individual place performance is non-significant which makes the previous moderating effect irrelevant.

Effect sizes of second order indicators

In order to understand how the individual variables contribute to the corresponding latent variable, the second order indicators' weights (with their effect size) need to be assessed. The effect sizes of the latent variables' indicators weights represent the individual contribution of these indicators to the R^2 value of the corresponding latent variable (Kock, 2015). As Henseler et al. (2009) indicate acceptable f^2 effect size values are 0.02 (weak), 0.15 (medium), and 0.35 (large). Sustainability practices are formed by the first-item constructs of social sustainability, recycling, environmental issues and sustainability in management. Being able to determine which of these sub factor are more important can enhance managerial implications (Hair, 2014). Furthermore, the individual and regional performance measures will be calculated according to their weights and effect size.

The following table shows the indicators' weights and effect sizes of the place identity as well as sustainability practices.

Variables	Indicator's weight	Effect size (f^2)	Rank
Social sustainability	0.268	0.157	4
Recycling	0.389	0.331	2
Environmental issues	0.283	0.175	3
Sustainability in management	0.392	0.337	1
Individual Tourism performance	0.300	0.209	4
Individual Finance performance	0.337	0.264	2
Individual Marketing performance	0.344	0.275	1
Individual Innovation performance	0.329	0.252	3
Regional Tourism performance	0.276	0.214	4
Regional Finance performance	0.318	0.284	1
Regional Marketing performance	0.315	0.279	2
Regional Innovation performance	0.282	0.224	3

Table 7-38: Second order indicators' weights (Australia)

Variables	Indicator's weight	Effect size (f^2)	Rank
Social sustainability	0.260	0.163	4
Recycling	0.356	0.305	1
Environmental issues	0.318	0.243	3
Sustainability in management	0.346	0.289	2
Individual Tourism performance	0.345	0.258	2
Individual Finance performance	0.325	0.229	3
Individual Marketing performance	0.383	0.318	1
Individual Innovation performance	0.299	0.194	4
Regional Tourism performance	0.275	0.181	4
Regional Finance performance	0.313	0.234	3
Regional Marketing performance	0.362	0.314	1
Regional Innovation performance	0.337	0.271	2

Table 7-39: Second order indicators' weights (Germany)

As can be seen from the previous tables the effect sizes in the Australian as well as the German sample are roughly evenly distributed. Recycling ($f^2=0.331$) and sustainability management ($f^2=0.337$) had an almost similar effect in the sustainability practice construct. The same accounts for environmental issues ($f^2=0.175$) as well as social sustainability ($f^2=0.157$) having a similar if somewhat smaller effect size in the Australian sample. The effect sizes for the different performance measures share roughly the same effect sizes so no most influential

factor can be reasonably identified.

In the German sample, recycling has the biggest effect in the sustainability practices variable with $f^2=0.305$. Sustainability management ($f^2=0.289$), environmental issues ($f^2=0.243$) and social sustainability ($f^2=0.163$) diminish in their effect size. Marketing performance has the strongest effect for both the individual place performance ($f^2=0.318$) as well as for the regional place performance ($f^2=0.314$) construct in the German sample. The weakest effect in the performance measures can be observed for individual innovation performance ($f^2=0.194$) and regional tourism performance ($f^2=0.181$).

7.5. Country comparison

In order to compare identical models based on different samples (like an analysis of the same model but with data collected in two different countries) can be done by employing standard errors for path coefficients and is often referred to as a multi-group analysis (Kock, 2014; Keil, Tan, & Wei, 2000). Instead of solely looking at the numerical values of path coefficients between models, a statistical test is suggested by numerous researchers to avoid bias (Keil et al., 2000; Kock & Lynn, 2012; Kock, 2014).

There are two steps when comparing multi-groups. First a pooled standard error needs to be calculated for each of the path coefficient pairs in the two models. This can be done according to the following equation established by Wynne Chin and reported by Keil et al. (2000). Here, N_1 is the sample size for the first model and N_2 is the sample size for the second model. S_1 is the standard error for the path coefficient in the first model and, and S_2 is the standard error for the patch coefficient in the second model. However, this equation can only be applied if the standard errors S_1 and S_2 are not significantly different from one another (Kock, 2014). This is referred to as the pooled standard error method:

$$S_{12} = \left(\sqrt{\frac{(N_1-1)^2}{(N_1+N_2-2)} \cdot S_1^2 + \frac{(N_2-1)^2}{(N_1+N_2-2)} \cdot S_2^2} \right) \cdot \left(\sqrt{\frac{1}{N_1} + \frac{1}{N_2}} \right)$$

However, if this assumption that the absolute difference between standard errors S_1 and S_2 is indistinguishable from zero is not met the Satterthwaite method should be employed (Kock, 2014:5). See the following equation:

$$S_{12} = \sqrt{S_1^2 + S_2^2}$$

When S_{12} has been calculated the second step involves the calculation of the critical ratio T_{12} whereby $(\beta_1 - \beta_2)$ is the difference between the path coefficients in the first and the second model.

$$T_{12} = (\beta_1 - \beta_2)/S_{12}$$

The T_{12} is then used to calculate the p-value associated with the difference between the path coefficients.

The two countries compared in this present study yield both equal standard errors as well as varying standard errors for the different path relationships. Therefore, the Satterthwaite method will be applied to measure T_{12} and its relating p-value. Kock (2014) claims that this method is less frequently used since it yields slightly higher values for S_{12} . The table below highlights values for both the pooled standard error method as well as the Satterthwaite method to exemplify that the differences are only marginal.

Paths	N_1	N_2	β_1	β_2	SE_1	SE_2	T_{12} <i>(Satterthwaite method)</i>	p-value <i>(Satterthwaite method)</i>	T_{12} <i>(pooled method)</i>	p-value <i>(pooled method)</i>
ATT → PRA	204	201	0.65	0.73	0.062	0.062	-0.9124	0.1811	-0.9146	0.1805
ATT → IBRA	204	201	0.67	0.68	0.062	0.063	-0.1131	0.4550	-0.1134	0.4549
ATT → CBRA	204	201	0.35	0.31	0.066	0.067	0.4253	0.3354	0.4262	0.3350
PLAT → ID	204	201	0.54	0.30	0.064	0.067	2.5902	0.0050***	2.5974	0.0049
INVO → ID	204	201	0.32	0.40	0.066	0.066	0.8571	0.1959	-0.8592	0.1954
ID → CPRF	204	201	0.26	0.18	0.067	0.069	0.8318	0.2030	0.8340	0.2024
ID → IPRF	204	201	0.14	0.30	0.069	0.068	-1.6516	0.0497**	-1.6554	0.0493
CBRA → CPRF	204	201	0.21	0.38	0.068	0.067	-1.7808	0.0378**	-1.7849	0.0375
CBRA → IPRF	204	201	0.09	0.03	0.069	0.071	0.6060	0.2724	0.6076	0.2719
IBRA → CPRF	204	201	0.13	0.07	0.069	0.071	0.6060	0.2724	0.6076	0.2719
IBRA → IPRF	204	201	0.15	0.00	0.068	0.072	1.5146	0.0653*	1.5189	0.0648
PRA → CPRF	204	201	0.09	0.10	0.069	0.070	-0.1017	0.4595	-0.1020	0.4594
PRA → IPRF	204	201	0.36	0.29	0.066	0.068	0.7387	0.2303	0.7406	0.2296

Table 7-40: Path comparison Australia and Germany

***Significant at 1%; **Significant at 5%; *Significant at 10%

In addition to comparing and testing the standard errors in studies with multiple groups, weights should also be compared resulting in not statistically significant differences (Kock, 2014). It is further reasoned that comparing weights is important as differences between path coefficients can be artificially caused by significant differences between weights in different models. Problems that can lead to common method bias are raised as stemming from translating errors whilst employing questionnaires with two different languages. Therefore, weights could be affected by wrongly worded questions and therefore, these different weights could then artificially inflate differences between path coefficients (suggesting between country differences) (Kock, 2014).

In order to eliminate such a possibility and to validate the previous measurements of structural model elements (comparing standard errors), the measurement models need to ensure similarity. Such a similarity would be indicated by equivalent weights where the p-values are

expected to be greater than .10 for the conclusion that no significant differences exist (Kock, 2014).

CONSTRUCTS	AUSTRALIA Indicator weights	CONSTRUCTS	GERMANY Indicator weights	P-value
INVO1	0.225	INVO1	0.182	0.3226
INVO3	0.234	INVO3	0.188	0.3112
INVO5	0.217	INVO5	0.187	0.3740
INVO6	0.229	INVO6	0.190	0.3381
INVO7	0.225	INVO7	0.176	0.2999
INVO2	NA	INVO2	0.146	NA
INVO4	NA	INVO4	0.149	NA
PLAT1	0.274	PLAT1	0.260	0.440
PLAT3	0.306	PLAT3	0.311	0.4785
PLAT4	0.294	PLAT4	0.316	0.4062
PLAT5	0.293	PLAT5	0.304	0.4528
CBRA_S1	0.231	CBRA_S1	0.230	0.4959
CBRA_S2	0.253	CBRA_S2	0.218	0.3600
CBRA_S3	0.239	CBRA_S3	0.250	0.4552
CBRA_S4	0.269	CBRA_S4	0.247	0.4109
CBRA_S5	0.241	CBRA_S5	0.237	0.4837
IBRA_S1	0.303	IBRA_S1	0.349	0.3212
IBRA_S3	0.305	IBRA_S3	0.311	0.4759
IBRA_S4	0.300	IBRA_S4	0.370	0.2400
IBRA_S2	0.285	IBRA_S2	0.298	0.4478
lv_NORM	0.566	lv_NORM	0.563	NA
lv_BENE	0.566	lv_BENE	0.563	NA
lv_PRA_Soc	0.268	lv_PRA_	0.260	0.4959
lv_PRA_Rec	0.389	lv_PRA_	0.356	0.4810
lv_PRA_Env	0.283	lv_PRA_	0.318	0.7499
lv_PRA_Mng	0.392	lv_PRA_	0.346	0.4736
lv_ID_C	0.520	lv_ID_C	0.521	0.4959
lv_ID_S	0.520	lv_ID_S	0.521	0.4959
lv_IPRF_Tou	0.300	lv_IPRF	0.345	NA
lv_IPRF_Mar	0.344	lv_IPRF	0.325	NA
lv_IPRF_Fin	0.337	lv_IPRF	0.383	NA
lv_IPRF_Inn	0.329	lv_IPRF	0.299	NA
lv_CPRF_Tou	0.276	lv_CPRF	0.275	NA
lv_CPRF_Fin	0.318	lv_CPRF	0.313	NA
lv_CPRF_Mar	0.315	lv_CPRF	0.362	NA
lv_CPRF_Inn	0.282	lv_CPRF	0.337	NA

Table 7-41: Weight comparison Australia and Germany

As can be seen at the previous table none of the weights have p-values below the threshold of .10 therefore all the weights can be regarded as equivalent which means that that path comparison undertaken beforehand is valid. As the path comparison highlights there are four statistically different relationships in the two compared countries of Australia and Germany. These relationships are the effect of place attachment on place identity (the effect being significantly higher in Australia than in Germany), the effect of place identity on individual place performance (the effect being significantly higher in Germany than in Australia), regional sustainability place branding on regional place performance (the effect being significantly higher in Germany than in Australia), and finally individual sustainability place branding on individual place performance (the effect being significantly higher in Australia than in Germany).

7.6. Hypothesis testing

Based on the previous PLS-SEM analysis the cause-effect relationships between latent constructs as proposed in this research can be either accepted or dismissed. The previous analysis was divided into the assessment of the measurement model and consecutively the assessment of the structural model. It is aimed to be concluded whether the proposed theory can be empirically confirmed. The following table provides an overview of the theorized hypotheses and whether these can be supported or not.

Hypotheses	Australia	Germany
H1: Involvement positively influences place identity.	Supported	Supported
H2: Place attachment positively influences place identity.	Supported	Supported
H3a: Sustainability attitudes positively influence regional sustainability place branding.	Supported	Supported
H3b: Sustainability attitudes positively influence individual sustainability place branding.	Supported	Supported
H3c: Sustainability attitudes positively influence sustainability practices.	Supported	Supported
H4a: Place identity positively influences regional place performance.	Supported	Supported
H4b: Place identity positively influences individual place performance.	Supported	Supported
H5a: Regional sustainability place branding positively influences regional place performance.	Supported	Supported
H5b: Regional sustainability place branding positively influences individual place performance.	Not supported	Not supported
H6a: Individual sustainability place branding positively influences regional place performance.	Supported	Not supported
H6b: Individual sustainability place branding positively influences individual place performance.	Supported	Not supported
H7a: Sustainability practice positively influences regional place performance.	Not supported	Not supported
H7b: Sustainability practice positively influences individual place performance.	Supported	Supported
H8a: The effect of regional sustainability place branding on regional place performance is moderated by place identity, this effect being significantly greater among identifiers than un-identifiers.	Not supported	Not supported
H8b: The effect of regional sustainability place branding on individual place performance is moderated by place identity, this effect being significantly greater among identifiers than un-identifiers.	Not supported	Not supported
H8c: The effect of individual sustainability place branding on regional place performance is moderated by place identity, this effect being significantly	Not supported	Not supported

greater among identifiers than un-identifiers.		
H8d: The effect of individual sustainability place branding on individual place performance is moderated by place identity, this effect being significantly greater among identifiers than un-identifiers	Supported	Not supported

Table 7-42: Hypotheses results

As can be seen in table 7.42 being stakeholder involvement and co-creation has a positive, significant effect on a shared place identity. This holds true for the Australian as well as the German sample. The same relationship is confirmed for place attachment and place identity. In other words, wineries that claim to be attached to a certain wine region have a high shared place identity with that particular region. Positive sustainability attitudes influence three variables positively in Australia as well as Germany. These three variables are regional sustainability place branding, individual place branding as well as sustainability practices. High shared place identity between the wineries and their wine regions has a positive influence on regional as well as individual place performance in Australia and Germany.

Another hypothesized relationship was between regional as well as individual sustainability place branding on regional as well as individual place performance. These relationships could only be supported for regional sustainability place branding having a positive influence on regional place performance for both countries. Individual sustainability place branding only affects individual and regional place performance in the Australian sample but not in the German sample. Sustainability practices empirically only influence individual place performance but not regional place performance. The final relationships that were hypothesized dealt with the moderating effect that a shared place identity was proposed to have on the relationships between individual as well as regional sustainability place branding on individual as well as regional place performance. This effect could only be empirically supported for the relationship between individual sustainability place branding on individual place performance being moderated by place identity in the Australian sample. Here, the

effect of individual sustainability place branding on individual place performance being significantly greater among wineries that identify with the wine region than wineries that do not identify with the wine region. In the following, the findings of the qualitative data collection will be analysed.

8. CHAPTER: QUALITATIVE DATA ANALYSIS

The previous chapter reported the findings of the quantitative data analysis. This chapter presents the data of the qualitative data collection. It intends to aid interpretation of the quantitative findings. Also, complementary findings will be presented to answer some of the research questions that did not result in satisfying findings with the quantitative data alone. As such, the results given in this chapter focus on the meaning of sustainability, barriers and challenges when applying sustainability practices as well as in place branding strategies and the relationship between regional identification and place performance. The findings presented in this chapter were collected from 20 participants – nine respondents from Australia and eleven from Germany. The semi-structured interview protocol is provided in Appendix D.

This chapter begins with a review of participants characteristics and is followed by the analysis of this study's research questions. Finally, this chapter will end with a summary of the most important findings.

8.1. Participant characteristics

As discussed, interview participants were recruited via the Travel Guide for Organic Wineries in Germany (Schrader, 2003) and the website Organic Wine (2015). In order for every organic winery to have the chance to take part in interviews, all of the wineries published in both portals were contacted via email. This was perceived to be the most ethical method as it provided potential participants to decide voluntarily whether they want to take part in the study. Another advantage of this participation recruitment was the omission of the gatekeeper since most of the wineries published on both portals provided owner names and email addresses. Of all the contacted wineries fourteen wineries (eight in Germany and six in Australia) replied with the suggestion for an interview date. The remaining participants were

recruited through snowball sampling via referral from existing participants (Saunders, et al. 2009). Within a time frame of four months (February 2015 – May 2015), 20 semi-structured interviews were conducted. In the following table an overview of characteristics of each participating winery along with a ‘winery code’ can be found. In order to protect each participant’s confidentiality, only the initials of the respondents will be presented. The characteristics are based on the same descriptive firm criteria as those described for the quantitative data set (vineyard size, sales, age, ownership, involvement with sustainability and location) (Sinha & Akoorie 2010; Marshall et al., 2010) and are presented in the following table.

Nr.	Initials	Respondent code	Vineyard Size (in ha)	Winery sales (cases of wine sold per year)	Winery/vineyard age in years	Winery/vineyard ownership	Years sustainability	Wine region
Australia								
1	K.K.	R1	19.4	3,000	44	PTY LTD	44	Mudgee
2	M.E.	R2	6	1,000	12	Family ownership	7	Great Southern
3	T.M.	R3	5.5	5,000	17	Family ownership	10	McLaren Vale
4	T.K.	R4	40	15,000	50	PTY LTD	17	Barossa Valley
5	D.L.	R5	41.3	17,000	62	Family ownership	8	Mudgee
6	M.S.	R6	4	800	35	n/a	35	Mudgee
7	W.A.	R7	27	1,500	10	Family ownership	1	Barossa Valley
8	V.A.	R8	56	18,000	35	n/a	20	Langhorne Creek,
9	S.S.	R9	20	n/a	14	Family ownership	4	Currency Creek
Germany								
1	A.P.	R10	20	14,000	100	Family ownership	20	Pfalz (Palatinate)
2	H.S.	R11	4	3,000	33	Family ownership	33	Mosel
3	H.K.	R12	7	n/a	28	Family ownership	20	Rheinhessen (Rhine Hesse)
4	P.M.	R13	n/a	n/a	120	Family ownership	32	Mosel
5	P.H.	R14	129	90,000	109	Cooperative	2	Wuerttemberg
6	S.S.	R15	30	17,000	250	Family ownership	25	Rheinhessen (Rhine Hesse)
7	T.D.	R16	10	n/a	38	Family ownership	20	Mosel
8	C.B.	R17	2.5	1,500	25	Family ownership	25	Ahrtal

9	H.S.	R18	20	11,000	28	Family ownership	28	Pfalz (Palatinate)
10	H.S.	R19	10	n/a	100	Family ownership	39	Wuerttemberg
11	A.S.	R20	1.5	580	40	Family ownership	30	Franken (Franconia)

Table 8-1: Interview characteristics

Table 8.1 highlights the characteristics of the qualitative data collection participants. The overview of the vineyard size and wine sales display a range of wineries. These range from merely 1.5 hectares and 580 cases sold yearly to 129 hectares and 90,000 cases sold. The majority of German vineyards are between 10 and 30 hectares and the Australian sample shows vineyards between 20 and 60 hectares. The age of the participating businesses shows a clear distinction between old and new world regions. Whereas the average of participating Australian wineries is 31 years, German wineries are 150 years old. Looking at years of involvement with sustainability which is on average 16 years in Australia and 22 years in Germany, this difference is getting much smaller. Almost all of the responding wineries are family owned. Six out of 64 wine regions in Australia are represented as well as six out of 13 German wine regions. Qualitative data sampling is not meant to be generalizable to a population and instead only holds true for a specific context (Creswell, 2009). Yet, the presented participants are meant to give a broad overview of the Australian and German wine industry.

The analysis of data for this research follows the deductive, theoretical thematic analysis (Braun & Clarke, 2006; Hayes, 1997). Thematic analysis is defined as ‘a method for identifying, analysing and reporting patterns (themes) within data (Braun & Clarke, 2006, p.79). Prior to analysing the collected data the researcher considered what would count as a theme taking into consideration that ‘a theme captures something important about the data in relation to the research question, and represents some level of *patterned* response or meaning within the data set’ (Braun & Clarke, 2006, p.82). The thematic analysis has been conducted in a deductive manner as the data has been collected specifically for this research and questions have been derived from the results of the questionnaire. The analysis is thus more analyst driven and whilst leading to a lesser rich description of the overall data, it enables a more detailed analysis of the data (Braun & Clarke, 2006). Furthermore, a semantic approach to the analysis has been employed, meaning that the researcher does not interpret the responses or

looks beyond what the respondents have said, but rather identifies themes within the explicit meanings of the data (Braun & Clarke, 2006).

First, the semi-structured interviews were transcribed using Digital voice recorder, the researcher's own notes and Dragon Natural Speaking 13 software. The transcription helped the data familiarization and the transcripts have been checked against the original audio recording in order to ensure accuracy. Secondly, the data were read carefully looking for patterns of meanings and areas of potential interest especially in relation to the research aims. Microsoft Excel was used to group units of text dealing with similar issues together, generating provisional codes. The transcripts were revisited and cross checked with the potential codes that were given and themes were searched for by collating codes (Braun & Clarke, 2006). Thirdly, the data have been uploaded to NVivo to code the reoccurring themes further according to the research aims and objectives.

8.2. Coding structure

Following the theoretical approach to thematic analysis, the coding process is conducted drawing specifically on the study's aims and objectives rather than coding in isolation thereby resulting in the formation of additional research questions (Braun & Clarke, 2006). Therefore, the coding for this analysis focused on the following themes:

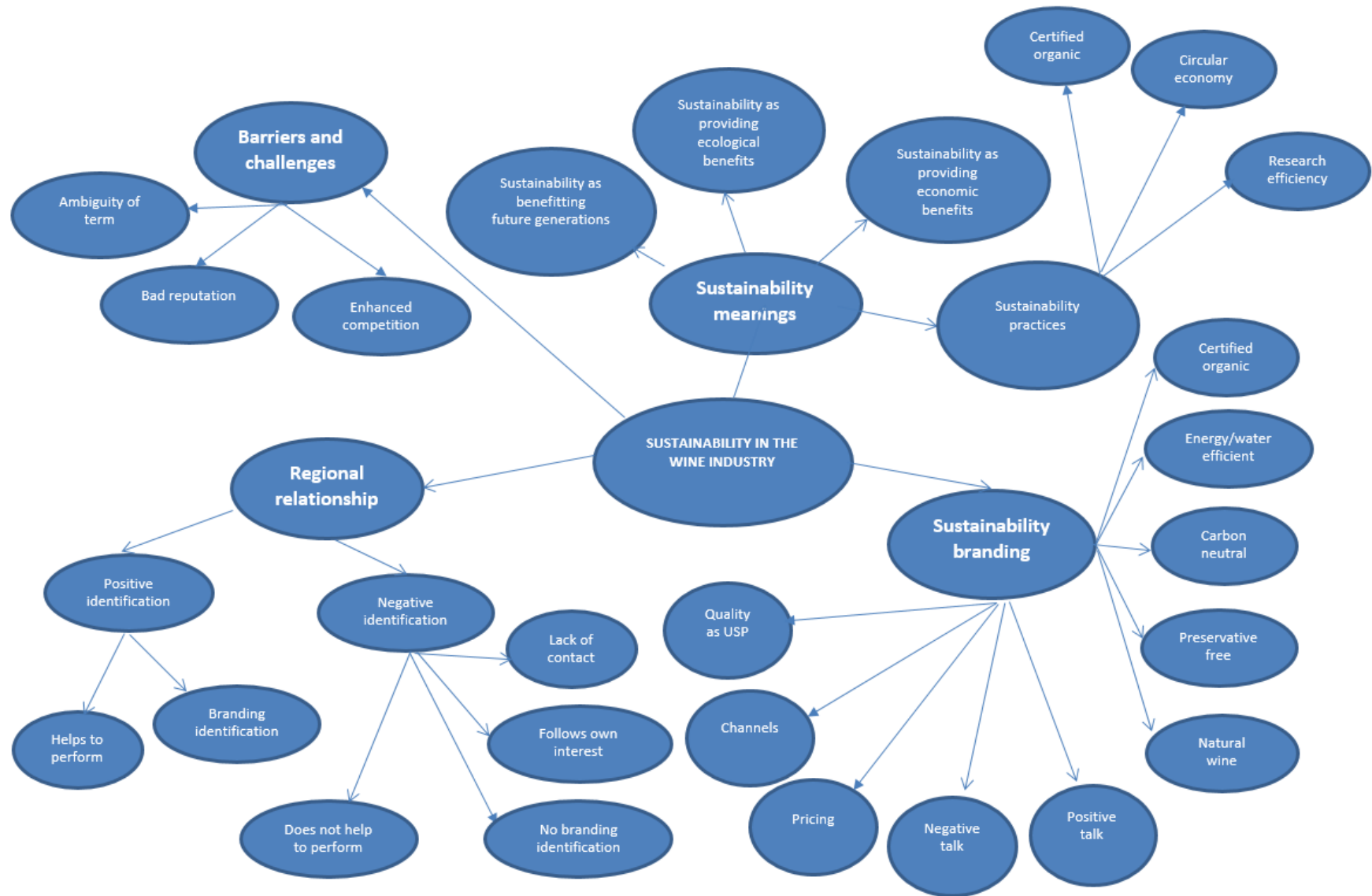
Aim 1	To determine the meaning of sustainability in the context of the wine industry. To establish the role of sustainability in individual and regional wine place branding strategies. To examine the benefits of sustainability to wine place branding strategies
Aim 2	To determine the barriers and challenges encountered in the use of sustainability in wine place branding strategies. To explore ways in which barriers and challenges (if any) in the use of sustainability in wine place branding strategies might be overcome.
Aim 3	To determine the role of sustainability in wine regions and wineries' place identity.
Aim 4	To identify differences (if any) in the meaning and nature of sustainability in new

	<p>and old wine producing regions.</p> <p>To study how wine regions place identities relating to sustainability are different (if they are different) among old and new wine producing regions.</p>
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Table 8-2: Coding structure according to themes

The theoretical thematic analysis of the data resulted in four main themes with twenty categories and three of these categories have been analysed to have nine sub-themes as illustrated in the following thematic map of the analysis.

Figure 8-1: Thematic analysis map



8.3. Findings

The findings of the semi-structured interviews will be presented based on the themes, categories and sub-categories as shown in thematic map. German and Australian data will be directly compared and only if noteworthy differences appear, will they be discussed.

Therefore, Aim 4 (in table 8.2) will be integrated into the complete findings section rather than treated as a separate section. This is done in order to avoid repetition. All of the quotations will be denoted according to the respondent's code given in table 8.1 and the initial A or G will be added for the Australian and German sample respectively. Quotations are limited to one per emerged category due to word count restrictions. A complete overview of the themed quotations will be presented in Appendix E.

8.3.1. Sustainability meanings

Striving towards sustainability and a sustainable business model is commonly emphasised when regarding the well-being of our planet (Warner, 2007). A common focus of sustainability has been discussed as its triple bottom line to improve the environment and to create social and lasting economic welfare. Sustainability is discussed as being socially constructed and an ambiguous term (Warner, 2007). In order to clarify the meaning of sustainability in the wine industry the semi-structured interviews contained the opening question enquiring about what sustainability actually means to winemakers and winery owners. A number of categories have emerged from the data set that divides the theme of sustainability meanings, these are:

- Sustainability as benefitting future generations
- Sustainability providing ecological benefits
- Sustainability providing economic benefits
- Practicing sustainability

Respondents commonly referred to generational aspect of sustainability when asked about the meaning of sustainability. Eight interviewees (five German and three Australian) mention the

importance of the next generation being able to continue living and working on their land.

Many described it as:

“For me sustainability means that I am planting grapevines today that my son will use in the future”. (R18/G)

What is interesting is that the generational attribute might measure such high importance due to the common business model of family ownership in the wine industry. The majority (Australia: 48.5% and Germany: 43.1%) of wine companies amongst the 430 businesses that took part in the quantitative part of this research are family owned. Therefore it makes sense that sustainability in the wine industry entails the generational discussion. Another category which emerged from the data is nature conservation. Healthy soils and ecosystems formed a vast contribution to the discussion amongst all respondents of the meaning of sustainability, clearly relating to the ecological attribute of sustainability which has been identified as carrying the strongest meaning for the wine industry. An example is:

“Sustainability means to me that the soil is healthy”. (R9/A)

Soils are the livelihood of any farmer. Therefore, it seems justified to make such a strong contribution to the sustainability discussion. Revealing that this is what sustainability is mainly about for the winemaker highlights the fact that the respondents perceive sustainability to include the generational considerations which can be achieved through soil and land conservation. In addition, for four respondents the future outlook also includes economic sustainability. For instance, one wrote,

“There is no point in being environmentally sustainable if you are making no money and the other way around. There is no point in making money if you are ruining the environment. We see it a bit as being environmentally as well as economical liable”. (A)

The meaning of sustainability in the wine industry can be summarized in a way that the foundation for doing business, in this case the soil, needs to be treated in a way that future

generations can live and prosper.

Both German and Australian wineries establish similar meanings when it comes to the generational, ecological and economic approaches to sustainability. The main point of observed difference arises in relation to interpretations of social sustainability. It seems to form a major part of sustainability for the German respondents. Five wineries described a sense of belonging and unity among colleagues as crucial with an example being:

“We are setting very high social standards which is part of our culture. This includes a unity among employees who are working for us for up to 15-20 years. Every day everybody is having lunch together. That is part of who we are”. (R10/G)

It is interesting to note why there might be such a strong social component in the German market but not in the Australian. The responses might map onto the fact that eating together has always been a popular way of bonding and creating a sense of belonging in the German culture (Hauschild, 2014) which might not be as strongly anchored in the Australian culture.

8.3.2. Sustainability practices

In order to understand the meaning of sustainability, it is helpful to explore the actual sustainability practices. Not using any chemicals in the pest management of the vineyard is discussed as part of practiced sustainability among all of the respondents. A typical response is for example:

“The main aspect is that we are certified organic so we are not using any chemicals, pesticides or fertilizers”. (R19/G)

A common denominator was the thought of treating the vineyard and the business in itself as one coherent system. Thus, a sub-category which emerged was that of aiming for a circular economy. In essence, a circular economy ‘seeks to rebuild capital, whether this is financial, manufactured, human, social or natural’ (Ellen MacArthur Foundation, 2015). Indeed, there

are a number of examples, recycling glass bottles among those, which demonstrate the fact that sustainability practices include a rebuilding and reusing of natural capital. Other examples are:

“A good example of that would be instead of copper and sulphate which is allowed as original organic input we base our fungicide programme on waste from the local cheese factory. So we take a waste product from another industry and utilise that and recycling that out of the waste stream and using it as an input for our product so we are aiming to close the circle, close the loop”. (R7/A)

Energy and water usage emerged as an important sub-category of sustainability practices. One wrote,

“I guess we are sustainable in terms of energy usage. We are self-sufficient with solar power and in fact we are producing excess power which is more than we use.” (R4/A)

Such responses map onto sustainability as an all-encompassing concept not restricted to the abstinence of chemicals in the vine growing and wine making process.

There were no noticeable differences between Germany and Australian respondents that emerged regarding sustainability practices. If anything, answers were comparable. By way of illustration of this fact, one Australian respondent described the return of native grasses and use of these for the health of the soil. To compare with a German respondents, it was stated that revegetation helped the biodiversity of the vineyard.

Having established what sustainability means and how it is practiced in the wine industry, perhaps the next pertinent question to ask is to what extent these meanings and practices are actually communicated to the consumer.

8.3.3. Sustainability in wine branding strategies

The conversation about the role of sustainability in branding strategies resulted in an interesting finding that the individual wineries did not refer to their winery or vineyard in terms of marketing a 'place'. When talking about sustainability in branding strategies, winery owners usually referred to their own wine brand. This is interesting as it shows that theoretically, there is strong support for wine brands being perceived as place brands (Thode & Maskulka, 1998) but in practice, managers seem to regard wine brands in terms of conventional product brands.

When talking about sustainability branding, wineries could be divided into two groups, the first group consisting of those that perceive sustainability branding as something positive and noteworthy to communicate and those which describe the communication of sustainability negatively. This negativity was partially due to feared customer responses but also due to a personal lack of recognition that sustainability was something worthy to communicate. Another category which emerged was that of communication channels. Communicating sustainability seems like a highly complicated construct in marketing terms as it entails so many different meanings. Establishing quality in wine marketing has been claimed by three German as well as two Australian winery owners to be far more important than the sustainability could ever be. The answers referring to the promotion of sustainability differed to a great extent among respondents. About half of the wineries stated that they used the certified organic logo on their promotional material. One wrote:

"It is probably the main reason why people buy our wine is that it is certified organic."

(R8/A)

Interestingly 'just' being certified organic does not seem to be a strong enough point of differentiation. It was noted that on top of being certified organic two German respondents emphasised the fact that they are pioneers in the organic sector. An example was:

“As great as it is that the number of wineries producing organically is constantly rising, as bad is it for us since we are losing our unique selling point. It is for this reason that we are trying to establish ourselves as pioneers in organic wine making”. (R18/G)

Whereas, being pioneers became especially apparent among German wineries, the Australian respondents were particularly keen on acknowledging additional features that could be labelled under the sustainability umbrella. One participant noted,

“In terms of organic it is still a very strong focus for us as a business but we had a bit of a shift towards producing preservative free wine [...] that is where we are finding a real market niche.” (R1/A)

Another one stated that,

“It is definitely the carbon neutral aspect that is getting us a lot of publicity. So in terms of identity and PR is it a huge part of our identity.” (R8/A)

In addition to the benefits of producing preservative free and carbon neutral wine, three Australian respondents mentioned that natural wine, sulphate free wine and sustainable wine were providing them with a competitive advantage.

Communication channels in the wine industry can be divided into traditional media, the digital channel, the wine bottle itself and most of all personal selling (Pullman, et al. 2010). The most important channel of communication mentioned by all of the interviewees was the direct communication with the customer at the cellar door and at conventions. One described:

“The cellar door is the principle method of communication. And it is a very strong one and it is very successful. Nobody gets to change the message. It comes from me and my own staff here to the public directly and I am delighted by it.” (R5/A)

There seems to be a number of reasons why this is the preferred method of communication.

First of all, as indicated above, nobody gets to change the message or misinterpret what is

aimed to be communicated. Furthermore, the personal manner seems to play an important role. One noted,

“A lot of communication takes place directly with the customer since you can answer specific and individual questions.” (R11/G)

In addition to the personal conversation at the cellar door, conventions are indicated among two German and one Australian respondent. Respondents are not unanimous concerning whether sustainability should be communicated on the wine bottle. Three respondents indicated that they do communicate being sustainable on the wine bottle but only on the back label and not on the front of the wine bottle. One wrote:

“Generally, we are printing the organic logo on the bottle labels and all of our existing customers know that we are certified organic. We do put the logo on the back label of our wine labels since we don’t want first time customers to depend their choice for us on the fact that we are organic” (R16/G).

This finding will be further explored in the section on barriers and challenges in the use of sustainability in wine place branding strategies.

When comparing Germany and Australia concerning the role of sustainability in branding strategies it was noted that German respondents put a stronger emphasis on personal communication and Australian respondents seem to be stronger in digital communication. Three Australian wineries referred to their website and also email newsletters as a form of communication with their customers. Four German wineries in contrast stressed the personal manner of communication. One reason for the difference between the digital and personal channel might be the distances in both countries. Having an online presence might be more important for the Australian wineries as potential clients might get their information preliminary online as opposed to from the cellar door directly as it is often the case in

Germany. A further explanation might be that German is behind Australian technology as one respondent noted:

“We have slept a little bit when it came to digital development and are planning to rejuvenating our website and use Facebook and other social media in the future.”

(R18/G)

Generally, the role of sustainability in the wine industry does not seem to play the most important role in branding activities. German as well as Australian winery owners establish that often customer choose their wine foremost for its taste and quality and the fact that is has been produced in a sustainable way is only an added bonus. Only two wineries described that customers specifically choose their wine because it was organic. Examples of such responses include:

“So first of all, marketing needs to stress the good quality of the wine at the correct price point and then it is added bonus if it is organic, sustainable that sort of thing. It can’t be the other way round, it can’t be faulty, poor quality, expensive wine but please by it because it is sustainable and organic so that is wonderful”. (R4/A)

Sustainability and quality seem to be interdependent on one another as one respondent said,

“The conditions for making quality wine are much better when being organic since one has lower yield vines and takes much more care in the winery.” (R13/G)

In order to fully understand the role of sustainability branding activities the following part analyses in more detail the benefits of sustainability to wine branding strategies.

8.3.4. Sustainability benefits in wine branding strategies

This study aims to find out whether building place brands based on sustainability influences the performance of wineries and wine regions. It was noticed that respondents drew a clear link between perceiving the wineries as conventional product brands and only referred to the

wine regions as place brands. Eight interviewees draw a clear link between positive performance and sustainability in the form of growing demand compared to conventional production. This is illustrated by the following statement:

"Of course we also have an economic advantage. Especially the organic boom over the past years contributed to that. Since 2006 we have a continuously growing demand and an economic advantage". (R12/G)

Other advantages outlined were the ability to charge premium prices for sustainable wine which was supported by four interviewees. Given that price is a stable indicator for performance measures, many described how pricing decisions have a positive effect on their performance:

"I have only 50 acres of vine and I can sell that at a premium price because it is organic. If I was here sitting on 50 acres of conventional fruit which is about 30-40 tonnes in a real good year, I would struggle to sell it for you know 600-700 dollar a tonne. Actually, my actual starting price is 1450 Dollar and an average I'll get around 1300 a tonne. You know it is a huge difference". (R9/A)

The previous statements show that some wineries perceive the incorporation of sustainability in branding as a positive thing and state that it does make them perform better. This was observed among the Australian as well as the German data. Therefore, a direct influence of being and promoting sustainability has been observed. This can be explained partially by the trendiness of sustainability. Three respondents referred to sustainability having experienced a continuous growth over the past decade which showed an economic benefit for the wineries. One respondent noted,

"I would say that we are experiencing continuous growth in our profit because at the moment it is trendy to buy organic produce". (R15/G)

This statement shows a direct link between growing profit and sustainability as a consumer trend. In contrast four respondents expressed a very critical stance towards sustainability

efforts and performance and did not agree with the previously mentioned answers. One respondent states that producing sustainably is neither the only way nor the easiest way to make profit.

Not all of the respondents agreed with the earlier statement concerning the ability to charge higher prices for sustainable wine. Rather the opposite, two wineries claimed that it is not valid to charge premium prices for sustainability.

“Whenever you produce good quality organic wine it comes at an added cost to us for our certification and what not but we can’t ask more for the product as a result because it is in such a competitive market you would just price yourself out of the water”. (R3/A)

In addition to the difficult pricing decision, a number of wineries emphasise that they do not want the clients to see right away that their wines are organic. In order to understand such reluctance to communicate being sustainable, the following section assesses barriers and challenges in the use of sustainability in wine place branding strategies.

8.3.5. Sustainability challenges in wine branding strategies

When analysing the challenges and barriers in the use of sustainability in place branding three categories have emerged from the data: (1) poor quality perception (including limiting the number of potential customers), (2) enhanced competition and (3) ambiguity of the term sustainability. All of these three categories will be analysed in detail in order to understand which challenges there are when branding a product as sustainable and how these challenges might form barriers. Also, interviews have been analysed according to how those challenges might be overcome.

Most wineries mentioned the poor quality perception that organic wine has had in the past. Organic wine is just one of the examples for sustainable efforts in the wine industry but presents a good opportunity to understand where the challenges lie. The common

denominator when it comes to challenges in the branding of wineries in Australia and Germany is the poor quality perception that early examples of organic wine caused. An example includes:

“In fact a lot of people say they have tried organic wine but it was awful and it made them sick and they didn’t like it and are therefore scarred for life”. (R5/A)

Businesses overcame this barrier of poor quality perception by actually not mentioning the fact that they aim for sustainability in any form in their communication strategies. In total five of the German as well as the Australian respondents described that when they first changed their production and crop growing to organic methods, they chose not to communicate this fact.

“In the early days we put it on our label ‘preservative free’. We found that some found preservative free good but others thought it would not keep. And so we took it off. For many years we didn’t have that on our bottles”. (R6/A)

The previous statement show that in order to overcome barriers and challenges a market orientation has been taken by a number of wineries. Applying this to the respondents in this research, based on market development, organizations decided to either communicate sustainability or not. Some of the wineries still see this poor quality perception as a reason why people nowadays might decide not to communicate their sustainable ambitions.

“I think the reason why a lot of businesses decide not to communicate the fact that they are certified organic is because they are afraid of being associated with other ‘eco-warriors’. This is a very conservative profession and the first organic businesses have been pushed into the extreme side of the green movement whether it was true or not”. (R18/G)

Some businesses fear being put in the category of being an organic winemaker rather than being known for quality. This in turn could lead to the loss of potential customers. One noted,

“If you let yourself be labelled as organic at wine retailers you reduce the number of potential customers interested in your wine to about 5%. If on the other hand you

choose to be in the conventional section of the wine shop, you have many more potential buyers.” (R15/G)

An Australian respondent confirmed the same issue by stating,

“Yes, we are trying to sell the wine on its merit not trying to hang it all on the fact that it is organic. There are a lot of sales outlet that have an organic and a non-organic section in the outlet and our wine is kind of placed in both. A lot of sales are actually better through the non-organic section.” (R3/A)

A way of overcoming this challenge has been observed as limiting the communication. Three respondents said they only communicate it on their back label so that a first-time buyer does not see it right away.

Furthermore, twelve respondents have said that they communicate the fact that they are organic but that they do not overly emphasise it. Those respondents explained that they would only tell consumers who ask. Another barrier that has been encountered by six respondents is the rise of competition among sustainable businesses.

Other businesses doubt the capability of being sustainable and producing organic wine as being unique enough. One wrote:

“Hmm, and now, yeah I don’t know if there is a market saturation point for organic wine but that could be part of the reason why. Being organic now is not really that different if you know what I mean. So it’s not, I think it is just a good way to make wine and doing business in an organic manner. But in terms of being a selling point I don’t think it is as strong as it was even five years ago. There are just so many people doing organic now.” (R8/A)

This shows that there is a thin line between being too early in the market to communicate sustainability, and being too late since the unique selling point is diminishing.

Enhanced competition and poor quality perception of early adopters have been identified as

challenges for both the Australian and the German market. Answers were comparable and both markets struggled with the same barriers. The remaining barrier includes the ambiguity of the term 'sustainability' which was identified mostly among German respondents.

"Producing sustainable is advertised by a number of businesses that do not produce organically. If a company for example produces a large amount of toxic waste but uses solar energy and advertises the business as sustainable then that is rather controversial. For me the term organic includes everything, being green, sustainable and organic agriculture." (R12/G)

Such responses highlight the fact that sustainability does not seem well-defined enough.

Another respondent noted that a number of consumers do not know what sustainability means which leads to the challenge of communicating it in a way that the consumer actually understands how much effort and additional costs are put into being sustainable. A way of overcoming this challenge was noted as the personal conversation with the customer. Personal selling is possible among wineries that have open cellar door facilities and seem the preferred way of communication with the potential consumers. This channel was preferred since no one can change the message. Also demonstrating to the consumer what is done differently helps to understand why it might be necessary to charge premium prices. This leads to the question of how wineries without open cellar doors can overcome this challenge. Five respondents said that they are looking for potentially interested customer groups, therefore segmenting the market and focussing the communication on those. One Australian winery noted:

"The majority of our communication goes through the rural press, so agricultural press. So in terms of tapping into sort of capital cities with that message I suspect people of the land so people with a stronger connection to the land kind of are more receptive to the message of our brand". (R8/A)

Segmenting the market is seen as a way to overcome the challenge of addressing customers that might not be interested in the topic and therefore might lack the knowledge necessary to understand the additional effort put into organic wine. There seem to be regional differences

among the degree of acceptance and knowledge about sustainable production methods. One noted,

“We were going to put it [the organic certification] on the front of the label but here in Western Australia some people are right off the wine just because it is organic. That is why we put it on the back of the label. So it can work for us but it can also work against us.” (R2/A).

This leads to the question whether communication efforts of the wine region could aid in overcoming the discussed barriers and challenges when it comes to sustainability in place branding strategies.

8.3.6. Sustainability in regional wine place branding strategies

This section considers regional place branding regarding sustainability in the wine industry. It is interesting to note that only when referring to the regional relationship did respondents refer to branding strategies as place branding. This supports the fact that regional wine branding can indeed be in line with place branding strategies. About fifteen interviewees verified that they communicate their wine region on bottles and in other promotional material therefore executing some form of country-of-origin branding. Thus, it is important to analyse in how far wine regions actually stress sustainability in their promotional strategies. It turns out that there is no straight forward answer to this. Some regions clearly emphasise sustainability:

“There is the marketing association in Southern Palatinate (Südpfalz) which does a lot for us. They have a lot of festivals, for example ‘Weintage in der Südpfalz’ and they organize a wine competition that is very renowned. I would say a lot is happening and yes, it [sustainability] is communicated quite strongly”. (R18/G)

Another interesting attribute of regional sustainability place branding is based on the question of certification. One respondent from Franconia noted the tendency to develop sustainability documentation,

“The topic [sustainability] is very important and has gained momentum in the past couple of years. It was discussed whether general regional guidelines should be implemented but this never resulted in an actual document but the topic of sustainability has definitely been picked up.” (R20/G)

Others claimed that there is indeed a lot of support and information regarding alternative and sustainable production methods in the region [Moselle region] but this is not necessarily communicated to the end consumer or written down in a document. Four respondents highlight the fact that sustainability is definitely strongly communicated but others said there is some form of sustainability communication but were not sure what that really included. It was noticed that only one Australian wine region seem to openly try to be known for its sustainability efforts, this being McLaren Vale. German wine regions in comparison seem to communicate their sustainability efforts indirectly to the wineries itself and in some form or another to visitors by organizing wine festivals.

8.3.7. Sustainability in wine regions' and wineries' place identity

Place identity has been previously discussed as the identification of the local community (in this case wineries) with the overall communicated place brand of the wine regions. The idea is that brands perform better if stakeholders identify with the brand. In order to understand how far respondents identify with the region they are located in, enquiries were made as to whether wineries stress the region they are located in in their promotional material. Eighteen respondents explained mentioning the wine region in their communication mostly on the bottles and sometimes even as part of their name. Typical responses included:

“We strongly identify with the region and our brand [...] on the bottle it says XX Mudgee and the region which is Mudgee is just as big on the front as our label. It has got our name on there too. So we are identifying with the region very strongly”. (R6/A)

Eight wineries explicitly stated the importance of identifying with the wine region they are located in. One noted,

"We position ourselves as 'the organic winery in Württemberg' so stressing both the organic and the regional characteristic." (R19/G)

An interesting fact was that some wineries mentioned they use the regional identification as a way of creating a unique selling point. One wrote,

"We are trying to say that we are different from other regions and we use a number of examples [...] and we will do anything we can to make our wine different from other regions." (R5/A)

There was no obvious difference between Australian and German responses. Both wine producing countries overwhelmingly agreed that the region is mentioned in promotional material. This identification also included stressing a strong identification with the wine of the region.

Three of the respondents stated that they do not communicate the regional belonging. One mentioned:

"In fact, on our label we don't even mention Currency Creek".

When enquired why that is, the respondent explained,

"Back in the 60s there was a fella down here growing grapes and it didn't have a huge reputation [...] it kind of got a hangover from a long time ago." (R9/A).

8.3.8. Relationship with wine region and influence on performance

The relationship between wine regions and the wineries has been analysed. Twelve wineries responded positively to the question whether their business profits from being located in the particular wine region. Four German respondents referred to the touristic communication as a way of profiting from the regional communication.

"Our winery has a very good relationship with the marketing department of Stuttgart. They offer and organize vineyard tours that always stop at our vineyard as well. That way we are getting a large amount of visitors that take part in a cross between a sight-

seeing tour and a wine tasting event. Yes, there is a good cooperation indeed and people really seem to like this attraction". (R14/G)

Having those additional visitors through a focused communication method of the regional management has been mentioned particularly by wineries in Germany. Another one stated,

"There is the umbrella brand of the Mosel which has really clever people that organize great programmes for visitors. They apply modern marketing techniques and stimulate a united front of all the different businesses to follow one direction." (R11/G).

Such a unity within wine regions is not agreed upon by all respondents. Another German winery complained,

"Palatinate [Pfalz] is missing a distinct slogan what it stands for. In my opinion, it is very important to find something like that, to have a common denominator." (R10/G)

Interestingly, three wineries in Germany and Australia described association and groups that have not been developed from a governmental, top down, regional management approach but rather developed from the bottom up among wineries. Such group formation is not based on a political or business decision but rather has developed over time and from the wineries own initiatives.

Similar feelings have been explored among other regions and the question arises whether such a closely knitted community has the same effect on performance as the regional associations.

One winemaker confirmed,

"Winemakers have become more open and have realized that business is much better when working within a network." (R11/G)

In relation to sustainability groupings one respondent explains:

"At the beginning we have been a small group of seven businesses that were interested in sustainability and met regularly to talk and to exchange ideas. We were the first ones in Germany to set binding standards and guidelines for the organic viticulture. We established an official association in order to be a legal entity. That developed further with other regions and wineries continuously wanting to be part of it." (R13/G)

This describes beautifully how the main organic association in Germany was founded based on a handful of wineries who cared for sustainability. Such own initiatives were not the only way of how regional groups are aiding in the performance of wineries. One respondent explained,

“When we founded ‘Message in a bottle’ we were around 16 businesses, nowadays we are more than 20 and that delivers the advantage of not just running advertising for one winery but instead portraying a mood of a whole generation.” (R15/G).

Four wineries indicated not being part of any network. Typical answers included the lack of innovation at a regional level especially when it comes to communicating a sustainable identity. This included the fact that some of the wineries feel that it is always the same, usually large businesses that profit from regional promotion rather than the smaller ones. One noted

“We are the only organic winery and vineyard in Langhorne Creek so the region is very traditional not hugely innovative or challenging in a way they have done things for so many years”. (R8/A)

One winery even explained that the region profits from the strong wine brand of their winery, [in response to whether they benefit from regional marketing]

“Hmm, not a huge amount. If anything, Langhorne Creek benefits from the fact that XXX has such momentum with its brand.” (R8/A).

Another reason for complaints especially with regard to being sustainable was the lack of support from the region. One noted

“I’m terribly disappointed about the lack of support for organic farming from our local and regional bodies and growers organizations. Too many people are against it and advise not to go that way. It is political I think and it is not important at all for our region [Barossa].”(R7/A)

This lack of support has been established by a couple of the wineries as a reason why voluntary initiatives have been established over the past years.

Interestingly, the wineries that felt supported by the government are the ones that seem to be

larger businesses. These are usually wineries that have open cellar door facilities and profit from additional visitors. This can be measured well and therefore a positive influence can be seen directly. Whereas for the smaller wineries it is hard to notice which of the customers is new due to regional marketing efforts. One of the respondents noted,

"I don't notice any effects from the marketing strategy of the Palatinate [Pfalz] but I also find it very hard to distinguish which of the new customers are coming to me because of how Palatine is positioning itself but personally I don't feel much from it." (R10/G)

8.4. Conclusion

In conclusion, the qualitative analysis contributed to interpreting and understanding a number research questions set in this project. One main aim of this research was to understand what sustainability means in the wine industry and how this might differ between Germany and Australia. Both countries highlight the generational responsibility on the one hand and the ecological position on the other hand as crucial in the sustainability discussion in the wine industry.

Barriers and challenges were discussed as sustainable efforts having experienced a poor quality perception in its early days from which wineries nowadays are still suffering. In addition, rising number of sustainable wineries seem to eliminate the unique selling point for a number of wineries. An important part of this analysis was formed by the role of sustainability in branding for wineries as well as on a regional level.

Australian respondents seem to have mentioned a wider array of sustainability practices in their wine branding. It became apparent that rather than perceiving their branding efforts as place branding wineries would treat their wine brand as conventional product brands rather than seeing it as a place brand. Carbon neutral, preservative free and natural wine formed a number of sustainability efforts in branding. German wineries on the other hand focused on

the traditional organic attribute when branding wine. Another difference could be detected in the communication channels. German wineries seem to put a much stronger emphasis on the traditional communication channels such as brochures whereas Australia focused on a number of digital channels. Respondents from both countries confirmed the importance of producing and communicating high quality wine above anything else. Therefore, the aim for quality precedes the striving towards sustainability.

When analysing the relationship between wineries and wine regions, the majority of wineries seem to identify with the regions independent of the fact whether the region is strongly focusing on sustainability. Such identification is portrayed by stating the region in communication material. Yet, when it came to discussing the relationship between wine regions and the wineries, both positive as well as negative answers were observed. On the one hand, wineries complained about the lack of support in particular when it comes to striving for sustainability. On the other hand, wineries specified that their regional promotional activities are responsible for enhanced visitor numbers. A possible connection between winery size and profiting from regional promotion efforts was drawn. The following chapter will discuss the findings from the quantitative and qualitative data analysis.

9. CHAPTER: DISCUSSION OF FINDINGS

This study explores the role of sustainability in enhancing place performance through an identity-based approach to place branding. The previous chapters introduced a new model for explaining the effect of applying sustainability in place branding on place performance and tested it empirically. Structural equation modelling first tested the model quantitatively and qualitative thematic analysis aided in interpreting the results as well as adding complementary findings.

Research suggests that integrating sustainability into place branding strategies leads to success (Barber et al., 2010a; Bell, 2008; Buckley, 2002; Fairweather, Maslin, & Simmons, 2005; Font et al., 2001; Font, 2002; Zouganeli et al., 2012). This study is set in the Australian and German wine industry. The regional brand as well as the individual winery brand are treated as place brands because wine brands are ultimately linked to a place in the form of country and region of origin (Carter, Krissoff, & Zwane, 2006). The linkages between wine brands and its place of production can be a place as narrowly defined as a vineyard (Thode & Maskulka, 1998). In addition, visitation to wine regions and wineries in form of wine tourism can be crucial for the wine industry's success which leads to wine regions and wineries possibly being seen as destinations (Hall et al., 2000; Carlsen, 2004). Thus, brands of wine regions as well as wineries are treated as place brands. Place branding rather than destination branding is applied in this research as the communication of places in the wine industry does not only attract visitation but also aims to influence product choice (Flint & Golic, 2006). Yet, the tourism literature on destination branding is often consulted as the extant place branding literature does not provide enough information. This research advances place-based marketing in the wine industry by establishing the role of sustainability within it, and therefore merges two research fields of sustainability and place branding together.

This chapter discusses the findings of both the quantitative and qualitative data collection and relates these to the results of previous research within the extant literature. The chapter is structured around the discussion of the study's aims and objectives. Therefore, attention is firstly given to investigating the role of sustainability in the wine industry followed by a discussion of barriers and challenges in the use of sustainability in wine place branding strategies (Aim 1). The second part of this chapter focuses on the moderating role of place identity in the relationship of sustainability place branding and place performance (Aim 2). In the third part, differences between new and old world wine producing regions will be reported. Specifically, this provides an overview of how differences between those two wine worlds affect the outcome of successfully performing places (Aim 3).

9.1. The role of sustainability in wine place branding strategies

9.1.1. The meaning of sustainability in the context of the wine industry

Sustainability is commonly applied when expressing concern regarding our planet across numerous industries and yet it is dismissed as a socially constructed and ambiguous term (Warner, 2007). Sustainability in its most basic form is defined as 'the ability to sustain, maintain or continue something over time' (Hay et al., 2014, p. 232). Experts claim that our society is not a sustainable one despite the fact that research concerning sustainability has continuously grown over the past decade (Hay et al., 2014). Clearly defined industry related parameters of sustainability are suggested as a step towards securing more sustainable forms of tourism (Lindsey, 2010). Hannon & Callaghan (2011) agree that large amounts of sustainability guidelines and information confuse business owners rather than supporting them towards sustainable development.

The wine industry has its shares of criticism for impacts on the environment that range from the use of environmentally harming chemicals to wasting scarce water resources and creating

a heavy 'carbon footprint' through packaging and transportation costs (Baughman et al., 2000; Barber, 2010; Colman & Päster, 2009). For this reason, the first research objective was formulated, outlining that the study would determine the meaning of sustainability in the context of the wine industry. To accomplish this objective, both, quantitative survey methods and semi-structured interviews were used. Results of the qualitative data was given precedence for identifying the meaning of sustainability as deeper insights and interpretation was necessary (Bryant & Charmaz, 2007; Creswell, 2009). Reference is made to quantitative findings where necessary.

Three main areas of sustainability meanings have been identified and will be discussed in more detail:

- Sustainability as benefitting future generations
- Sustainability providing ecological benefits
- Sustainability providing economic benefits

Sustainability as benefitting future generations

Eight interviewees (five German and three Australian) mentioned the importance of the next generation being able to live and work on the same land when considering the meaning of sustainability. As such, the time factor seems to have its roots in the historical meaning of sustainability since the historical meaning refers to the maintenance and continuation of processes or systems over time (Kajikawa et al., 2007). The qualitative results of this study verify this fact by stipulating that the historical roots of sustainability stem from the forestry industry. For every tree chopped, a new one must be planted so that it has a lifetime to grow and can be chopped by the following generation. This fact has been recognized in sustainability studies. Campbell & Garmestani (2012) emphasise that using resources faster than they can be regenerated can lead to depletion of renewable resource stocks. This future outlook and

generational characteristic of sustainability in the wine industry can possibly be explained by a number of factors.

The wine industry is characterized by small and medium enterprises (Cordano et al., 2010) often in family ownership for decades (Veseth, 2015). A number of researchers reviewed the strengths of family-owned businesses (Chirico et al., 2011; Le Breton-Miller & Miller, 2006; Hoffman et al., 2006) and common results are that families take a multi-generational approach and focus on long-term investments (Veseth, 2015; Le Breton-Miller & Miller, 2006). The competitive advantage is thereby extended when capabilities evolve over time due to investments in staff development and enduring relationships with partners being farsighted and on-going (Le Breton-Miller & Miller, 2006). The generational take on the meaning of sustainability can therefore be explained based on the capital family theory (Hoffman et al., 2006). Such family-ownership is similar to this research where the majority (Australia: 48.5% and Germany: 43.1%) of wine companies are family-owned.

Sustainability providing ecological benefits

Conserving nature emerged from the qualitative data as another category of sustainability meaning. Healthy soils and ecosystems clearly relate to the ecological meaning of sustainability and was a major part of the discussion amongst all of the 20 participants. This matches existing definitions as ecological sustainability contains biodiversity and resilience as well as sustainable agriculture (Patterson, 2006). Also, Szolnoki (2013) researches the meaning of sustainability in the wine industry and supports the importance of ecological meaning of sustainability.

Protecting soil fertility, preventing resource depletion, conserving land for wildlife/ecological services, conserving biodiversity and species communities are just a number of practices discussed in recent sustainability studies (Walter & Stützel, 2009). Soils are the livelihood of any farmer which justifies its strong contribution to the sustainability discussion.

Environmental practices that display strong support in the quantitative part of this research

are implementing measures to save water as well as the use of environmentally safe fertilizers.

These environmental practices reflect the importance of the land for the wine industry.

Especially in a country such as Australia where water resources are scarce (Wheeler, Zuo, & Bjornlund, 2013), preserving water should form part of the sustainability discussion. This is not dissimilar to previous findings that show that safeguarding the use of water is part of environmentally responsible wineries (Gabzdylova et al., 2009). Traditional wine production uses chemicals for cleaning and synthetic fertilizers which can harm people and the environment (Desta, 2008). This research shows that the use of environmental friendly fertilizers is part of sustainability practices in the German as well as the Australian wine industry. Gabzdylova et al. (2009) agree that the main difference between traditional and environmentally friendly approaches is that sustainable wineries tend not to use pesticides and synthetic fertilizers and instead employ natural measures.

A general definition of agricultural sustainability is discussed as focusing on 'both genotype improvements through the full range of modern biological approaches and improved understanding of the benefits of ecological and agronomic management, manipulation and redesign' (Pretty, 2008, p. 447). Such ecological management of the soil and land can be linked back to the generational and long-term meaning of sustainability. Seven interviewees state that the main reason for switching from conventional wine making was the safe guarding of the work place from a personal health perspective. Stories of pesticide poisoning in the vineyards have been mentioned by three of the interviewees. Existing research concedes that creating a safe environment for workers forms part of the existing sustainability discussion (Porter & Kramer, 2006; Pretty, 2008; Walter & Stützel, 2009). Gemmrich & Arnold (2007) agree that sustainable wine growing is of such conspicuous importance to the wine industry due to its labour intensiveness and health endangering jobs.

In the quantitative part of the study, the individual variable of sustainability practices is formed of different measures. Recycling contributes most strongly (in the German sample) and second most strongly (in the Australian sample) to the overall variable of sustainability practices. This means that the sample in this study reflects strong support for waste management in the form of recycling and the employment of renewable energy sources as part of their sustainability practices. Indeed, the literature states that a single bottle of wine produces 0.5 kg waste and emits 16g of CO₂ (Rosenthal, 2006) and that waste needs to be handled responsibly (Gemmrich & Arnold, 2007). When talking to the wine managers, there were a number of examples which demonstrate the fact that sustainability practices include a rebuilding and reusing of natural capital. Recycling glass bottles is just among one of the recycling examples given. Looking at country specific measures, Australia as well as Germany are both among the top players of recycling countries in the world (Planet Ark, 2015). The same accounts for renewable energy sources. Recycling and waste management forming part of the sustainability discussion can therefore be explained.

An important part of the discussion around ecological sustainability is the abundance of terminology concerning sustainable wine. It is essential to understand the variations of meaning with regards to natural, vegan, biological, preservative-free, green, organic and biodynamic wine. These forms of wine are some of the ones discussed amongst current research regarding sustainability (Delmas & Grant, 2008; Cordano et al., 2010; Remaud, et al., 2008; Cederberg et al., 2009; Bernabeu, 2008; Reeve et al., 2005). To clarify the two most common forms, organic wine growing includes the protection of the environment and the wine from as many external ingredients as possible (Gemmrich & Arnold, 2007). Meanwhile, biodynamic wine relates to the thinking of Rudolf Steiner (1861-1925) whereby followers produce wine in accordance with nature and the lunar phases. The importance of the biodynamic wine making movement is seen as treating the farm as one cohesive living system and creating a self-sufficient and healthy ecosystem (Delmas & Grant, 2008). The quantitative

data show high support for treating wineries as one cohesive living system. Even though the majority of respondents do not claim to employ biodynamic practices, treating the farm as one cohesive living system experienced a lot of support.

Sustainability as providing economic benefits

Four respondents of the qualitative part of the study address economic sustainability and explain that profits are necessary to sustain a business. The economic side of sustainability is highlighted in current research by adding to the discussion of whether being sustainable in the form of employing environmentally friendly production can lead to economic growth (Darnhofer et al., 2010; Lampkin & Padel, 1994). One official definition of sustainable wine growing is to 'sustain the ecological digestibility as well as the healthiness of living and following generations in an overall profitable and economical way' (Gemmrich & Arnold, 2007, p. 2). Despite the fact that sustainability is discussed as providing economic benefits, these in turn just relate to the future ability to continue doing business. The meaning of sustainability in the wine industry can therefore be summarized in a way that the foundation for doing business, in this case the soil, needs to be treated in a way that the future generation can live and prosper. The economic benefit of sustainability will be further considered in section 9.1.5 and 9.1.6 when the effect of sustainability on performance is discussed.

9.1.2. The role of sustainability in the wine industry

Improving wine quality is found to have the strongest support when assessing the importance of sustainable initiatives. In other words, wineries perceive sustainability as important in order to improve and maintain their wine quality. This finding is interesting as the qualitative results of this study show that the wine quality argument plays the most important role in the wine industry. Three German as well as two Australian winery owners emphasise that their wine is chosen mainly due to its quality. A connection between environmental measures and wine quality has often been assumed in the literature (Gabzdylova et al., 2009) and sometimes also measured (Marchettini et al., 2003). Yet, this research shows that compared to a wide range of

benefits achieved through sustainability, quality is perceived as the most important.

This research shows that second to improved wine quality is the benefit of an enhanced reputation in the community. So wineries in this research seem to believe that sustainability efforts improve their social status. This is particularly interesting as the wine industry has been criticized for generating bad press due to conflicting land-use options (Skinner, 2000; Baughman et al., 2000). The importance of sustainability as enhancing reputation might be explained by the fact that wineries aim to prevent such conflicts of interests. This is in line with the argument that sustainable wine farming is less obstructive on the land (Hansen, 1996). Also reputation seeking has been researched by Gabzdylowa et al. (2009) as driving sustainability efforts in the New Zealand wine industry. Additionally, the quantitative descriptive results of this research show that a high amount of the wine regions (50% of the Australian and 21% of the German sample) as well as individual wineries (60% of the Australian and 45% of the German sample) in this sample consider themselves to be well established for environmental concern. This finding shows the noteworthy importance of sustainability in the Australian as well as the German wine industry. Additionally, a large percentage claims to be involved with sustainability for more than ten years in Australia (42%) and more than twenty years in Germany (23.5%). This shows the lasting commitment of the wine industry to monitor their impact on the environment.

This research tries to establish the extent to which benefits and norms actually translate into sustainability actions. Claiming to perceive sustainability as important is something different than actively pursuing sustainability. The following section therefore discusses sustainability benefits and norms as statistical antecedents to sustainability practices.

Positive attitudes antecede sustainability

The literature suggests that decisions made in firms are influenced by manager's attitudes and norms (Cordano et al., 2010). This holds particularly true for small and medium enterprises (Rothenberg & Becker, 2004) which would suggest that the wine industry is particular influenced by such decision making behaviour. A number of existing studies have researched management drivers for sustainability in the wine industry with varying results (Gabzdylova et al., 2009; Marshall et al., 2010). The relationship between positive attitudes about sustainability and implementing sustainability practices on the one hand and its effect on sustainability place brands on the other hand was tested. The structural equation modelling analysis shows that there is a strong positive relationship between positive sustainability attitudes and the implementation of sustainability place branding as well as sustainability practices (in support of H3a-c). Positive sustainability attitudes and norms explain 43% of the variance in sustainability practices, 44% in individual sustainability place branding and a weaker 12% in regional place branding in the Australian sample. The German sample portrayed 54%, 46% and 9% respectively. This means that winery managers who perceive sustainability as being beneficial also translate these attitudes into actions as well as into the communication strategies in the form of place branding strategies.

This is an important finding as it shows that attitudes are indeed translated into actions when it comes to sustainability in the wine industry. This holds true for actual practices as well as the implementation of sustainability in place branding strategies. The qualitative part of this research supports that fact. Ten of the interviewees claim that they practice sustainability because they believe in the concept and because it is the right thing to do. This finding is supported by literature that measures in how far managerial attitudes are actually translated into corporate actions (see for example Graham et al., 2013). This positive relationship between positive managerial attitudes towards sustainability and its implementation in business actions is supported by existing research. Gabzdylova et al. (2009) find that internal values of the winemaker are the strongest driver for implementing sustainability practices. The

sustainability attitudes in this research concern norms and benefits and are therefore seen as internal values of the winemaker. The literature suggests that these norms do not necessarily have to be solely supported by the owner. Instead positive sustainability norms held by others in the organization function as an antecedent of sustainability implementation (Marshall et al., 2010).

One finding requires further explanation as the support of Hypothesis 3a is somewhat ambiguous. It indicates that norms and benefits perceived by the winery owner influence the sustainability branding activities of the wine region. This research finding would suggest that the positive attitudes of winery owners towards sustainability influence the implementation of regional sustainability place branding strategies. This acknowledges regional branding being based on community decision making as described by Foley & Fahy (2004) and Kerr (2006). The qualitative part of the study explains the finding by the fact that the individual winery owner influences regional place branding. One way of explaining the positive relationship between the individual sustainability attitudes and sustainability branding activities of the wine region is that some of the individual wineries are represented in regional associations. One German interviewee for example explains

“We established an official association in order to be a legal entity. That developed further with other regions and wineries continuously wanting to be part of it.” (R13/G).

This would explain how positive sustainability of the individual wineries might influence the regional sustainability branding. This research establishes that norms and beliefs are influencing sustainability practices as well as the communication of those in the wine industry thus contributing to the discussion of antecedents to sustainable behaviour. The following section discusses the role sustainability plays in regional as well as individual place branding strategies to continue pursuing the fulfilment of the first aim of this research.

Sustainability in individual and regional place branding strategies

Pugh & Fletcher (2002) summarize that Australia's success is not due to its ability to produce quality wines at reasonable prices but instead the skill of Australian wine companies to build brands that compete internationally. This research examines what these brands entail and the role that sustainability plays in the place branding process.

Winery managers in this research have been presented with a variety of place branding strategies based on the existing literature (Pullman et al., 2010). These different attributes, sustainability amongst others, have been examined according to their central tendency. Besides sustainability, different attributes include wine place branding based on innovation, tradition and nature surrounding wine regions and wineries, and country-of-origin (COO) branding. This part of the study aimed to establish what wineries stress in their wine branding and with this to determine the role of sustainability within those strategies. Interestingly, place branding among the wineries shows the strongest support for COO branding.

The qualitative data also revealed similar findings. The majority of interviewees in Australia as well as in Germany verified that they communicate the region on their bottles and in other promotional material. Another emphasis in the wineries' branding strategies is their relationship with the surrounding nature. Natural beauty as well as good climate form important parts of wine branding strategies. Sustainability is highlighted but seems to receive less support than the communication of the actual place in the form of COO branding. The importance of COO branding in the wine industry has been acknowledged by a number of sources (Bernabéu et al., 2008; Thode & Maskulka, 1998). The strong support for nature and COO branding is in agreement with common place branding literature by exemplifying the actual 'place' of the product (Anholt, 2007).

Another line of investigating the role of sustainability in place branding strategies was to

determine which of the items that form the sustainability branding variable received the strongest support. It became apparent that within the sustainability attribute in this research, wine brands addressing the relationship between the environment and wine production received strongest support. One way of outlining that relationship was communicating organic certification as part of sustainability branding. It is interesting to note though that when being presented with a variety of place branding strategies; the support for communicating sustainability only received marginal support. This is despite the fact that about 60 per cent of the Australian and 40 per cent of the German sample claims to be involved with sustainability. The Interviews revealed a possible explanation for this. The responses vary from sustainability playing a prominent role to being not highly emphasised. Interestingly, one important channel of communication was the direct communication with the customer at the cellar door. Respondents might not have perceived this form of communication as being a wine branding strategy. Therefore, they might not even perceive themselves to be actively communicating sustainability efforts, whereas in reality this is clearly being done. This explanation is supported in the literature since brand building around sustainability can be achieved by telling a story (Flint & Golobic, 2009; Ryan & Mizerski, 2010). Having established the role of sustainability for wineries it can be summarised that the classical branding activities might not emphasise sustainability as a major point of differentiation. This became apparent during the qualitative data analysis. When management referred to their wine brands especially in relation to sustainability efforts, only marginal support could be found. Therefore, when viewing wine as a product, the sustainability aspects was of lesser importance. Yet, when regarding wine in a tourism and therefore the place branding context sustainability was often outlined. This was done for example by telling a story to the consumer in form of direct-selling at the cellar door.

When looking at the wine industry, the communication of sustainability on a regional level needs to be discussed. Comparable to the individual wineries, the regional branding shows strongest support for branding based on nature such as stressing natural beauty and good

climate for wine making. This means that the majority of wine regions in Germany as well as Australia base their brand communication on natural surroundings and the prevailing climate.

Interestingly, wine regions in this research do not seem to employ sustainability as much as expected. This could be due to the fact that the winery owners were asked to judge how far the wine regions actually employ sustainability rather than asking somebody from the regional office. When verifying during the interviews whether the respective wine regions actually emphasise sustainability in their place branding, opposing findings have been observed. The regions where the wineries are located often play an important role in the individual branding strategies. The majority of interviewees verified that they mention the region on their bottles and in other promotional material. Therefore, it is important to analyse how far wine regions actually communicate sustainability in their promotional strategy. It turns out that there is no straight forward answer to this. Some regions clearly stress sustainability and other respondents explained that it is not communicated very strongly just yet but that there is a positive development towards communicating sustainability on a regional level. This is comparable to the quantitative part of this study as none of the notions of branding sustainability is as strongly supported as branding based on innovation, tradition or natural features. Yet, respondents did not disagree with the notion of applying sustainability in the regional place brands. It simply did not gain as much support as the other three attributes.

The regional place brand is discussed as important for the attraction of wine tourists. Wine tourism is defined as visiting wineries and vineyards as well as wine festivals with the purpose of tasting and experiencing wine (Hall et al., 2000). This definition reflects the integrative manner between wine regions' and wineries' branding efforts in order to attract consumers. The literature states that it is commonly accepted that destinations will compete based on the degree to which they are concerned about sustainability of their natural, economic and cultural resources (Kozak & Nield, 2004). It is however also noted that there are limited direct

benefits from acting environmentally friendly for tourism destinations (Font et al., 2001). Due to the lack of support of sustainability in place branding strategies when directly compared to other possible attributes, the following section aims to examine what the benefits of applying sustainability practices and sustainability in place branding strategies entails.

9.1.3. Benefits of sustainability practices to the wine industry

The central aim of this study is to test in how far sustainability in form of doing and communicating actually influences the performance of wineries as well as wine regions. A number of studies among various industries have researched the relationship between sustainability implementation and performance with varying results. Not many of these studies are based in the wine industry despite its high impact on the environment (Baughman et al., 2000; Barber, 2010; Colman & Päster, 2009). Previous studies conclude that the relationship between a company's social and environmentally responsible behaviour and its performance are inconclusive (Wahba, 2008). Additionally, none of those studies compare geographical locations to benchmark possible success or failure. It is for these reasons that a new model for sustainability and performance was established.

Based on the quantitative analysis, this study establishes that practicing sustainability indeed leads to a competitive advantage among wineries (in support of H7b). A significant, positive relationship of moderate strength between sustainability practices and individual place performance was tested. Performance measures among the quantitative part of this study have multiple factors as suggested by a number of studies (Bagozzi & Phillips, 1982; Chakravarthy, 1986) since 'performance' is too multifaceted a phenomenon to be characterized by a single criterion (Lo, 2010). As such, place performance is combined into visitor statistics (Dwyer & Kim, 2003), economic performance (Rao & Holt, 2005), brand relevant indicators (Blain, 2005) and innovation measures (Deshpande, Farley, & Webster, 1993) in order to show an all-encompassing place performance construct. Therefore, this study

shows that wineries that practice sustainability indeed perform better in all four contributors. This loosely corresponds to research that establishes positive effects of practising sustainability on performance (Forbes et al., 2009; Klassen & McLaughlin, 1996; Dowell et al., 2000; King & Lenox, 2002; Nowak & Washburn, 2002; Schnietz & Epstein, 2005; Lo & Sheu, 2007).

This positive effect however, could not be determined for the wine regions (no support for H7a). No significant relationship could be detected with the partial least square structural equation modelling. This resembles studies that indeed do not find a positive relationship (Chen & Metcalf, 1980; Jaggi & Freedman, 1992; Wagner et al., 2002). The literature argues that a negative relationship can best be explained by firms' who are investing in sustainability efforts might be at a cost to profitability (Lo, 2010). One explanation for this study might be the problem of practising sustainability in regional tourism networks. Barriers for profiting from sustainability practices for regions are identified as high costs for certification (Synergy, 2000) and uncertainty costs due to not knowing whether sustainability efforts are worth it (Kozak & Nield, 2004).

Practising sustainability of any format in any industry is unquestionably a valuable thing to do independent of whether it actually influences performance. Such positive effects are researched as network availability (Buckley, 2002) and satisfying the local community (Buckley & Clough, 1997). This research contributes to the existing body of literature by empirically showing that practicing sustainability enhances visitor numbers, revenues, brand equity and innovativeness of the individual winery. The majority of existing studies regarding sustainability and performance measures does not differentiate between actual practices and the communication of such. Awards and certification (Klassen & McLaughlin, 1996) are the main form of how sustainability efforts are displayed in the current literature on how communication affects performance. Yet, the majority of wineries and wine regions do not possess any form of certification. Every second winery taking part in this study claim not to

have any certification. In addition, the orientation towards environmentally friendly processes in the tourism industry has poorly defined terms such as green, nature or sustainable eco-tourism, all seemingly promoting the same thing (Buckley, 2002). Buckley (2002) further states the problem of terms being used so widely and loosely that it nearly becomes meaningless to consumers. Therefore, in addition to measuring sustainability practices only, this research extends existing studies by establishing whether communicating sustainability in place-branding strategies has the same effect. The following section therefore establishes the benefits of sustainability to wine place branding strategies.

9.1.4. Benefits of sustainability to wine place branding strategies

Often, the benefits of sustainability are implicitly assumed and not much empirical evidence is available that the display of sustainability in place branding actually leads to success (Font et al., 2001). Fairweather et al. (2005) demonstrate an increase in nature-based, environmentally-oriented tourism (known as eco-tourism) which is similar to the idea of consumers being interested in not harming the environment. Kozak & Nield (2004, p.142) highlight research findings that confirm that 'environmental considerations have become a significant element affecting destination choice'. In order for visitors to make an informed choice, communication of sustainability need to be visible in marketing collateral and part of the place branding strategy for wineries and wine regions.

This construct therefore aims to examine how far wineries and wine regions actually benefit from communicating sustainability in form of visitor number as well as other performance indicators.

A significant, positive relationship with moderate strength between individual sustainability place branding and individual place performance is measured among the Australian wineries. Therefore, wineries that communicate sustainability in their branding strategy recognize a positive effect on their performance (in partial support of H6b). This finding could not be

supported for the German sample. The conducted interviews aid interpretation for this result. Three out of eleven German interviewees claim if sustainability is promoted in branding strategies, potential consumer numbers are automatically reduced due to sustainability being associated with inferior wine quality. This is in agreement with research set in the wine industry where Loureiro (2003) cautions about quality perceptions for environmentally friendly wine. Yet another four German respondents claim that there is a definite economic advantage due to an organic boom in the past years. There might be regional differences in Germany with regards to the acceptance of sustainability. The four respondents that express positive attitudes towards sustainability are located around Stuttgart, a city one of the respondents explained to be well known for its green government. This might be one explanation of why some wineries indeed feel that sustainability enhances performance whilst others do not.

Interestingly, a positive, significant but weak relationship was measured between individual place branding and the regional place performance for the Australian sample (in partial support of H6a). This means that wine regions in Australia perform better if they consist of wineries that stress sustainability in their branding. Therefore, wine regions that consist of sustainable wineries seem to be doing better than wine regions where the wineries do not communicate sustainability. This finding is supported by the qualitative part of this study as one Australian winery notes [in response to whether they benefit from regional marketing]

“Hmm, not a huge amount. If anything, Langhorne Creek benefits from the fact that we have such momentum with our brand.” (R8/A).

This shows the interrelationship between the wine regions and the wineries. It is not merely a question of whether the wineries profit from their own sustainability branding but due to the relationship between wine and its place of production (albeit the vineyard, the winery or the wine region) all elements of the place need to be taken into consideration. The destination marketing literature supports this explanation by stating that ‘destinations offer an amalgam

of tourism products and services, which are consumed under the brand name of the destination' (Buhalis, 2000, p. 98). This exemplifies how the overall regional destination brand can benefit from the individual winery's tourism products.

This study did not find support for sustainability place branding of the wine regions influencing the performance of the individual wineries (no support for H5b). Therefore, there was no benefit for the individual wineries if wine regions were branded as sustainable neither for the German nor the Australian sample. The qualitative analysis of this research exemplifies similar findings. One interviewee explained that they are not profiting at all from the regional wine advertising and that it is always the same that seem to profit from regional branding activities. The structural equation modelling conducted in this research displays a positive, significant but weak (Australian sample) and moderate (German sample) effect of sustainability place branding and enhanced performance on a regional level. This means that there is a relationship between stressing sustainability in place branding strategies and place performance on a regional level (in support of H5a).

Studies of the tourism industry look at the relationship between portrayed sustainable efforts and performance with mixed results. There are different views about how branding a destination as environmentally friendly can benefit businesses. Some scholars argue that 'green' branding is a way of profiting from being able to charge higher prices (Buckley, 2002; Font et al., 2001). Font et al. (2001) state image enhancement which then can lead to competitive advantage which in return leads to augmented consumer choice (Kozak & Nield, 2004). Research in the Spanish accommodation sector concludes a positive relationship between environmental management and financial performance. It is emphasised though that this affect could only be measured for short-term performance (Alvarez Gil et al., 2001). Other studies support the positive relationship but also caution the unknown long-term effect on performance (Judge & Douglas 1998). Research in the tourism sector finds that eco-

certification leads to regional investment in form of new hotel investment (Blackman et al., 2014). Those results are not dissimilar to the empirical findings in this study and contrary to extant literature, this research statistically establishes a positive long-term effect. This long-term effect is based on the performance variables as these refer to long-term success such as visitor loyalty, growth of visitor numbers and attracting investment. These are performance measurements that could not be achieved in the short run.

Existing research in the wine industry shows that the environmental motives are stronger for some regions than for others (Orth et al., 2005). It is found that environmentally conscious wine consumers prefer wine from the US rather than Spain, Italy or France. This can be verified for this study as the established relationships between sustainability and performance vary between the two sampled countries. In addition, possible explanations for the mixed outcomes based on the qualitative sample show that regional differences within the two sampled countries also exist. These mixed results raise the question of what influences the long-term success of employing environmentally sound business practices. The following section is therefore going to discuss barriers and challenges in the use of sustainability in wine place branding strategies.

9.1.5. Sustainability challenges in wine place branding strategies

The semi-structured interviews form the basis of discussing barriers and challenges in the use of sustainability place branding. This is due to the intricacy of the concept which requires open questions and an interpretation of those (Bryant & Charmaz, 2007; Creswell, 2009). Reference is made to quantitative findings where necessary. An important observation was made in that winery owners referred to their wine brands in form of product brands rather than place brands which results in the question of whether sustainability on the individual winery level can be regarded as individual place branding or foremost as conventional product branding. When analysing the challenges and barriers in the use of sustainability in the wine industry

three categories have emerged from the data that fit both the conventional product as well as the place branding literature: (1) poor quality perception (including limiting the number of potential customers), (2) enhanced competition and (3) ambiguity of the term sustainability. All of these three categories will be discussed in detail.

Eight wineries (five Australian and three German) mentioned the poor quality perception that organic wine has had in the past. Organic wine is just one of the examples for sustainable efforts in the wine industry but presents a good opportunity to understand where challenges lie. The common denominator when it comes to challenges in the branding of wineries in Australia and Germany is the poor quality perception that early examples of organic wine caused. This differs to findings among general agricultural organic research where there seems to be a consensus that consumers perceive organic products as greater quality and a healthier option (Wolf et al., 2002; Conner, 2004; Yiridoe et al., 2005). Two of the interviewees noticed this disadvantage of organic wine as opposed to organic food. Some of the winery owners feared being known for producing organic wine rather than being known for quality. This in turn was accentuated as worrying as it would lead to the loss of potential customers. This potential limiting of customer has to be thought through thoroughly before deciding whether sustainability should be communicated. This not knowing whether promoting sustainability 'works' is acknowledged by Kozak & Nield (2004) who criticise that visitor choice is influenced by many more attributes than the environmental argument. Those attributes have been identified as location, price and specific customer requirements. All of these attributes form part of the destination choice process which leaves the supply side in doubt whether costly environmental strategies pay off (Kozak & Nield, 2004).

Another barrier that has been encountered by a number of the respondents is the rise of competition among sustainable businesses. One respondent in this research described how the rising numbers of organic wineries and vineyards is generally positive due to becoming a

cleaner planet. At the same time it is acknowledged that for marketing their product this means intensified competition. Another problem that was stated in this context is the number of businesses that exploit the grey area of sustainability based on the ambiguity of the term. A lack of certification and businesses claiming to participate in sustainable practices is therefore seen as a challenge. This is corresponding to findings in the general business and tourism literature. Bell (2008) describes how the tourism industry commonly includes information about tourism products such as being green, soft or sustainable without showing regulated standards that verify those claims. Members of the World Congress of Adventure Travel & Ecotourism are examined in existing studies and found that only half of the eco-tourism and management claims were supported by factual detail (Buckley & Clough, 1997). This figure leads to the assumption that 'greenwashing' might be a common problem in the tourism industry as verified in this research as a challenge for certified wineries. When reviewing the current quantitative sample similar figures regarding certification can be observed. 65 percent of the Australian (45 percent of the German) wineries claim to be established for sustainability and opposed to that only 27 per cent of the Australian wineries (and only 11 per cent of the German wineries) actually possess certifications. This discrepancy between being established for sustainability and actually being certified poses the question of how far the consumer knows which claims to trust. As Font (2002, p.203) states 'there are too many eco-labels, with different meanings, criteria, geographical scope, confusing messages, limited expertise ...'. In the German wine industry alone there have been 19 different forms of sustainability certification encountered in this research. In addition to those being certified, consumers are faced with promises of sustainable practices without any form of official verification. Therefore, only few consumers understand the environmental claims made (Font et al., 2001). Another problem highlighted by Bell (2008, p.347) is that none of 'green' labels in New Zealand are an 'assurance of any particular standard of actual sustainability in product delivery'. This is due to the fact that there are no clear guidelines as to what sustainable practices entail and due to the self-promotion of businesses as being 'green' without factual evidence of green

production methods. One interviewee mentioned how a number of businesses just jump on any sustainability band wagon.

Overcoming sustainability challenges in wine place branding strategies

Among the interviewees of this research, withholding the fact that wineries are applying sustainability practices or limiting the visibility of sustainability were identified as ways of overcoming the barrier of sustainability having a poor quality perception among consumers. About five of the German as well as four Australian respondents described that when they first changed their production and crop growing to organic methods, they chose not to communicate this fact. Instead of omitting sustainability completely in branding strategies, a number of respondents chose to limit their communication regarding sustainability. Many have said they only communicate it on their back label so that a first-time buyer does not see it right away. In contrast, the literature sees clear labels that are meaningful and reliable to the customer as a way forward (Buckley, 2002).

It was interesting to note how important the direct communication with the consumer was indicated as a way to overcome the ambiguity of the term sustainability. It was highlighted among the interviewees that a number of consumers do not know what sustainability means. This is often resolved by communicating it in a way that consumers actually understand how much effort and additional costs are put into striving towards sustainability. Personal selling is possible among wineries that have open cellar doors and seem the preferred way of communication with the clients. The wine marketing literature states that consumers are often unaware about the differences between organic, sustainable or bio-dynamic wine and branding needs to take the knowledge of the consumer into account in order to supply meaningful choice criteria (Remaud, 2008). Therefore, the clearer and more accessible the claims made by the destination the better they work in attracting tourists (Remaud, 2008).

Personal selling is recognized as a way of building competitive advantage by building close relationships with a selected number of customers (Weitz & Bradford, 1999) and is thus a good tool for overcoming ambiguity of the term sustainability. Additionally, clear audit criteria and penalties for non-compliance are a suggestion in the legislation for overcoming barriers to using sustainability in place branding strategies (Buckley, 2002). Ding & Pigram (1995) agree on the important contribution of environmental auditing and the monitoring of in how far a tourist organization satisfies environmental standards. Part of auditing includes the necessity of labelling schemes only being used when they have been earned and withdrawn 'if no longer available' (Buckley, 2002, p.189).

One question remaining is what wineries without open cellar doors can do in order to overcome this challenge. One solution was presented as focussing their communication on potentially interested customer groups. One Australian winery for example noted that the majority of their communication goes through the rural press. This consumer oriented approach (Deshpande et al., 1993) maps onto consumer segmentation in order to predetermine who might be more receptive to the message that sustainable wineries are aiming to communicate (Jobber & Fahy, 2012). Therefore, segmenting the market is seen as a way to overcome the challenge of addressing customers that might not be interested in the topic and therefore might lack the knowledge necessary to understand the additional effort put into organic wine.

9.2. The role of place identity in the relationship between sustainability and place performance

A number of scholars highlight place branding and place identity as integrated approaches (Kalandides, 2012; Kavaratzis & Hatch, 2013; Lindstedt, 2011). The literature on place identity and its role in place branding is far from agreeing on how identity should be taken into consideration in the place branding process (Kalandides, 2012). This research perceives place identity in relation to corporate identity (Burmann et al., 2009). Pursuant to the identity-based

equity model, place identity can be understood as the identification of the local community and stakeholders with the regional brand. The existing literature theorizes place identity in the branding process in a number of different ways (Aitken & Campelo, 2011; Anholt, 2007; Govers & Go, 2009; Kavartzis & Hatch, 2013; Kalandides, 2011, Lindstedt, 2011, Skinner, 2008).

This study hypothesises that a shared place identity between the individual wineries and wine region is believed to positively influence place performance based on the notion that effective place branding needs to be a tool for locals to express cultural features that are already part of their place identity (Kavartzis & Hatch, 2013). In addition, Lindstedt (2011) considers the connection between place, identity and brand construction in relation to the local population's identification with the place in the place branding process. It is argued that for a place brand to be sustainable, the local population is viewed as the internal target audience of brand construction. Antecedents of the local population being involved in brand construction are discussed in the literature as place attachment (Lindstedt, 2011; Ramkissoon, 2013) and co-creation of the brand construction process (Klijn et al., 2012; Hatch & Schultz, 2010). Finally, a moderating role is derived from the literature that establishes place identity as enhancing the relationship between sustainability place branding and place performance (Guardia & Pol, 2002). Guardia & Pol (2002) recognise that a community needs to identify and recognize itself with shared characteristics in order to enable the concept of sustainability. The results are discussed in the following sections stemming from the PLS-SEM analysis of this study. Wherever necessary, the results of the semi-structured interviews will assist the interpretation of the quantitative results.

9.2.1. To determine the role of sustainability in wineries' place identity and in regional place brands

Co-creation and involvement in the place branding process

This study argues that place identity, defined as the identification of the local community and stakeholders with the regional brand (Burmam et al., 2009), represents a correlation with co-creation of the place brand (Klijn et al., 2012; Hatch & Schultz, 2010). Therefore, wineries that feel they have been involved in place branding activities of the wine region show higher overall identification with the regional brand. A strong, significant relationship between co-creation of the place brand and place identity was found (in support of H1). This means that when the individual winery felt that they were involved in the regional brand creation the shared brand identity was stronger. This is in line with previous findings from Kavaratzis & Hatch (2013) and can be explained by the fact that identity emerges in the conversation between stakeholders and what brings them together. Other researchers (Foley & Fahy, 2004; Kerr, 2006) agree that community decision making needs to support the brand which is similar to the results in this research.

Place attachment of wineries with their wine region

This study establishes that place identity is strongly associated with place attachment (Lindstedt, 2011). In simple terms, wineries that feel attached to a wine region have higher overall identification with the regional place brand. The quantitative results of this study support this by demonstrating that stakeholders who feel attached to their surroundings actually feel a stronger shared place identity with the region. Place attachment in this research is seen as wineries feeling attached to their wine region and perceive the wine region as necessary to perform well.

A very strong, significant, positive relationship was found between place attachment and place identity (in support of H2). The place branding literature acknowledges that place attachment is an important feature in the creation of believable place brands (Klijn et al., 2012; Hatch & Schultz, 2010). As the literature states, place attachment describes the affective bond between individuals and their meaningful environments (Lindstedt, 2011) and fits Relph's (1976) sense

of belonging. This sense of belonging can be translated into only being initiated once there is a certain fit among the identity of the place and the individual. In fact wineries who claimed to be attached to their wine regions portray higher notions of place identity. Both place attachment and co-creation explain 52 per cent (Australian sample) and 34 (German sample) of the variance meaning those variables are good indicators of place identity.

9.2.2. Direct effect of a shared place identity on place performance

To recall, this research perceives place identity in relation to corporate identity (Burmam et al., 2009) whereby the identity-based equity model defines place identity as the identification of the local community and stakeholders with the regional brand. Aitken & Campelo (2011) suggested four R's (rights, roles, relationships and responsibilities) for stakeholders to design a place brand that reflects the experience of the community. Another approach is the dynamic view of place branding that perceives identity as a continuous dialogue between stakeholders (Kavaratzis & Hatch, 2013). Both mention a bottom-up approach centering the place brand around the individual stakeholder. This study aimed to empirically show that such a dynamic, identity-based approach to place branding is indeed the way forward and resulting in successful places. Therefore, it was hypothesised that a shared place identity between the individual wineries and wine regions is believed to positively influence place performance. This is based on the suggestion that effective place branding needs to be a tool for locals to express cultural features that are already part of their place identity (Kavaratzis & Hatch, 2013). Rather than measuring the effect of place identity on the performance of place brands only, this research aimed to measure a multi-factor performance measurement as suggested by multiple studies (Bagozzi & Phillips, 1982; Chakravarthy, 1986).

It was found that place identity has a positive impact on the performance of place brands on an individual as well as a regional level across both samples. This suggests that, there is a positive relationship between the individual winery's identification with the wine region and

the success of both, the winery itself and the region (in support of H4a and H4b). These results correspond to literature from different disciplines. Firstly, conceptual research asking for an identity-based approach to place branding can be empirically verified (Kavaratzis & Hatch, 2013, Kalandides, 2012, Govers & Go, 2009). Secondly, drawing from literature of consumer brand identification and its effect on performance measures can also be supported (Stokburger-Sauer, 2012; Bhattacharya & Sen, 2003). Remarkably, this relationship is supported for the individual place performance as well as the regional. This means that wineries that identify with the wine regions' place brand actually perform better. This matches previous research that suggests that place identity of tourism entrepreneurs affect entrepreneurial performance (Hallak et al. 2012). Put differently, 'a tourism entrepreneur's sense of identity with the place in which his/her business operates contributes toward entrepreneurial success' (Hallak et al. 2012, p. 143). This research extends findings from Hallak et al. (2012) by showing how the entrepreneur's sense of identity does not just contribute to his success but also to the region's success. This poses a fairly important question with regards to the role that place identity might play in the light of communicating sustainability in place branding strategies.

9.2.3. Moderation between sustainability place branding and place performance through place identity

A number of studies test the effect of sustainability on firm performance (Forbes et al., 2009; Klassen & McLaughlin, 1996; Dowell *et al.*, 2000; King & Lenox, 2002; Nowak & Washburn, 2002; Schnietz & Epstein, 2005; Lo & Sheu, 2007; Chen & Metcalf, 1980; Jaggi & Freedman, 1992; Wagner et al., 2002) with inconclusive results (Wahba, 2008). Building a place brand around eco-friendliness aims to create a unique identity which seeks to persuade the visitor of the place's uniqueness (Morgan & Pritchard, 2002). Some existing research finds positive associations between communicating such eco-friendliness and performance in form of visitor figures (see for example Capacci, et al., 2015). Yet, not much attention to date is paid to place identity and the role it might play in the effectiveness of sustainability branding strategies. This

is surprising given the fact that literature on place branding stress place identity as the most important attribute when building and maintaining a sustainable competitive brand (Anholt 2007; Govers & Go 2009; Aitken & Campelo 2011; Kavaratzis and Hatch 2013). This study aimed to close this gap by establishing whether a shared place identity moderates the relationship between sustainability place branding and place performance.

Moderation is established when an independent variable (moderator: place identity) changes the strength or the direction of a relationship between two constructs (sustainability place branding and place performance) in the model (Hair, 2014). The quantitative data of this research suggests that for the Australian sample the relationship between sustainability place branding and individual winery performance is indeed strengthened by a shared place identity (in partial support of H8d). This means that wineries that identify with their wine region and its communicated place brand, perform better than those who do not. This effect could not be observed among the German respondents. This is due to the fact that a moderating effect can only be significant if the direct relationship between two constructs in the model is measured to be significant (Kock, 2015). Unfortunately, the German sample does not show a significant relationship between individual sustainability place branding and individual place performance (no support for H8d/German sample). The same issue explains why there is no moderating effect measured between regional sustainability place branding and individual place performance (no support for H8b) in either of the samples.

No moderating effect of place identity was established between the regional sustainability place branding and regional performance (no support for H8a). The same holds for the individual sustainability place branding and regional place performance (no support for H8c). This is despite the fact that the direct relationships are tested to be significant. This might be explained in different ways.

Firstly, a direct correlation between regional sustainability branding and performance of the wine regions was found. Yet, this relationship is not influenced by a shared place identity. This means that it does not matter whether the individual wineries identify with the overall communicated brand of the region. When reviewing the relationship among the individual wineries and their performance, a shared place identity indeed plays a crucial role by strengthening the relationship. A possible explanation might be that the individual winery brands have such a strong influence on performance because they are very authentic. Authenticity in the wine industry leads to better performing brands and can be achieved through creating a sincere story (Beverland, 2005). Sincerity is accomplished through 'hand crafted techniques, uniqueness and the relationship to the place [...]' (Beverland, 2005, p. 1003). In this case, authentic brands might be the result of the individual winery owner identifying strongly with the place. Such strong identification in return leads to the wish to protect its place by communicating sustainability (Tonge et al., 2014; Ramkissoon et al., 2013). Therefore, based on the authenticity argument the moderating role of place identity for the individual wineries can be explained.

In turn this might also explain why the moderating role can only be supported for the individual winery rather than on a regional level. The individual winemaker does not have as much input into the regional branding. Therefore, the authenticity argument does not hold on a regional basis. The differences among the Australian and German samples will be discussed in greater detail in the next section that looks into variations in the role of sustainability between old and new wine producing countries.

9.3. Differences between the old and new wine world

The history of the wine industry in new and old world producing countries plays an important role when researching sustainability in place branding strategies. Environmental concerns and priorities can differ considerably among countries and socio-economic groups (Buckley, 2002).

This notion can be confirmed for the wine industry since the literature on 'green' wine marketing reflected the variability in consumer preferences among regions let alone countries (Barber et al., 2010). In the wine industry, the most common way of geographic branding are the regions of production (Barham, 2003). One of the interviewees noted that there seem to be regional differences among the degree of acceptance and knowledge about sustainable production methods. This raises the important question of why there are such regional differences which will be discussed with regards to Germany as an old world producing country and Australia as a new world producing country. Both, the qualitative and quantitative data collection took place separately in Germany and Australia and the findings will be discussed in the following section.

Differences (if any) in the meaning and nature of sustainability

The qualitative data analysis revealed comparable sustainability meanings across both samples. Yet, a noticeable difference was observed in the importance of social sustainability. Whereby Australian interviewees hardly highlighted social sustainability at all, almost all of the German wineries mentioned social sustainability to some extent. The importance of a sense of belonging and 'unity' among long-term employees was mentioned numerous times. Satisfied employees were emphasised as a way to maintain motivation which in return would lead to economic sustainability. This can be verified by the literature since motivated employees are seen to be better advocates for the product and better in sales (Patterson, West, Lawthom, & Nickell, 1997). Three of the German interviewees highlighted common meals among employees as one way of achieving a sense of unity with the company. One possible explanation why this social understanding of sustainability might be stronger in Germany could be the fact that eating together has always been a popular way of bonding and creating a sense of belonging in the German culture (Hauschild, 2014) which might not be as strongly anchored in the Australian culture. The quantitative data supports the findings if only marginally. When assessing the construct of sustainability in both samples, recycling had the

biggest effect size in the sustainability practice construct. When comparing the importance of social sustainability it is calculated as having a smaller effect size in the Australian sample than the German sample. The importance of social sustainability has been recognized by scholars in the agricultural sector in the European Union (Bournaris & Manos, 2012; German & Schoneveld, 2012). In fact, research shows that environmental laws implemented by the government can have negative effects on the social sustainability of a place (Bournaris & Manos, 2012). Research in the new world (in this case the Californian agricultural sector) also highlights interest in the concept of social sustainability especially in relation to organic farming methods (Shreck, et al., 2006). It is found that organic agriculture does not nurture social sustainability for most of the famers and farmworkers in the study.

Contrary to extant literature, this study shows that the meaning of sustainability goes beyond the triple bottom line of ecological, environmental and social factors. The generational factor has become apparent as majorly important in the wine industry among German and Australian wineries. Whereas current literature does not offer strong support for the importance of social sustainability in the agriculture industry, the German sample confutes these findings by striving for a sense of belonging and 'unity' among winery workers, therefore placing emphasis on their social well-being.

The impact of such differences on sustainability place branding strategies

The qualitative data analysis establishes a variety of answers regarding place branding strategies based on sustainability. On the individual levels, the answers relate more to conventional product branding than actual place branding. German as well as Australian wineries state displaying the certified organic logo in their promotional material. Yet, merely being certified organic does not seem to be enough anymore. It was noted that besides being certified organic two German interviewees placed emphasis on the fact that they are organic pioneers. Highlighting the fact of pioneering is in keeping with marketing literature as one

route of gaining competitive advantage (Baker & Becker, 1997). Also, literature agrees that European wine regions use historical elements in their place branding strategies (Alonso & Northcote, 2009). Australian respondents on the other hand described additional features that could be labelled under the sustainability umbrella. These additional features were preservative free wine, carbon neutral wine, natural wine and sulphate free wine. This finding might be explained by the lack of historical wine making in new world producing countries and the creation of substitutes to create an image (Alonso & Northcote, 2009). Wineries being perceived as environmentally friendly is one such way of gaining competitive advantage (Sinha & Akoorie, 2010).

Another noticeable difference between Germany and Australia concerned the communication channel strategy. German interviewees state the direct, personal communication and Australia often mentioned the digital communication channel. Australian wineries more frequently referred to their website and also email newsletters as a form of communication with their customers. German wineries on the other hand highlighted the personal manner of communication. Australian wineries have been researched to adopt web technology early on with the first Australian winery website registered in 1995 (Smith, 2004). In addition, computerized marketing database in the Australian wine industry enable cost effective digital direct marketing as suggested by Rowe (1989). In comparison, 60 per cent of Australian and merely 14 per cent of German wineries were reported in 2003 to have winery websites (Stricker et al., 2003). There is no doubt that this figure has changed in the past 12 years but a tendency is apparent that Australian wineries seem to adopt the digital channel more in their branding strategies than the German counterparts. One reason for the difference between the digital and personal channel might be the distances in both countries. Therefore, an online presence might be more important for the Australian wineries as potential clients might get their information preliminary online as opposed to from the cellar door directly as it is often the case in Germany.

The quantitative results of this study show some interesting results when comparing both countries in regards to the effect of sustainability place branding on performance. In order to conclude statistically significant differences, both measurement models need to ensure similarity being indicated by equivalent weights with higher p-values than .10 (Kock, 2014). Such significant differences were found in that German wine regions that communicate sustainability efforts in their branding, show a significantly stronger effect on place performance than Australian wine regions. Interestingly, on the individual winery level opposite findings became apparent. The effect of sustainability place branding on winery level on the individual performance was significantly higher among the Australian respondents in comparison to the German sample. This means that the relationship between sustainability branding and performance is stronger in Germany on the regional level and in Australia on the individual winery level. This is a very interesting finding as it indicates new world wine countries being more successful in employing sustainability efforts on the individual winery level. Old world wine countries on the other hand seem to be stronger when communicating sustainability on the regional level.

This might be explained by the fact of stronger regionalism in old wine countries. The concept of appellation is applied throughout Europe (Barham, 2003) with famous wine regions such as Burgundy, Bordeaux and Champagne having legal regulations on the use of Appellation Origin (Sinha & Akoorie, 2010). Additionally, the concept of 'terroir' is used in the branding of wine regions in old producing countries and entails 'the unique aspect of a place that influences and shapes the wine made from it to describe all aspects that make the wine authentic, such as climate, the soil and the production process' (Sinha & Akoorie, 2010, p. 51). The European wine industry widely emphasises the 'terroir' as indicator for quality of the wine product. It is believed that implementing sustainability practices is linked to wine quality through improving the soil and grape quality of the 'terroir' (Barham, 2003). These strong regional linkages in

combination with sustainability practices seem to be the key for the significant effect of sustainability place branding on regional place performance in old world wine regions. In reverse, this might be the same reason that explains the strength among Australian wineries to portray sustainability and its effect on place performance. Due to the lack of such strong regional bonds and regional history, Australian wineries had to find a different, more innovative way of communicating sustainability. One such example can be seen in research undertaken by Pugh & Fletcher (2002, p.79) who explain the success of a large Australian winery (BRL Hardy) by 'tapping into the values and beliefs of wine buyers'. Building a 'green brand' by donating a proportion of the sale to conservation projects such as Wetland Care Australia is highlighted as an innovative approach to sustainability place branding by doing something good that benefits the place (Pugh & Fletcher, 2002).

The effect of place identities on place performance

Finally, noticeable differences between place identities relating to sustainability among old and new world wine regions were found. The qualitative data analysis did not result in any major differences whereby both samples portray a strong regional identification with the wine region in form of stressing the wine region in place branding material. In regards to profiting from the regional communication, mainly German wineries referred to the regional tourism boards that offer organized tours to wineries and vineyards. Having those additional visitors through a focused communication method of the regional management has been mentioned particularly by wineries in Germany as a reason for enhanced performance. This finding corresponds with existing studies about wine tourism in Germany as purposeful marketing of wine tourism in Germany had been governmentally induced in the past through campaigns such as 'Culinary Germany' by the German National Tourist Board and brochures for all the different wine regions by the German Wine Institute (Cambourne et al., 2000). It is somewhat surprising that Australian wineries were not as enthusiastic about regional tourism bodies' effect on their performance given that Australian acknowledged the need for a strategic way of developing

wine tourism early on (van Westering, 1998). Official wine tourism strategies have been developed in the mid-1990s including vision and mission of the wine tourism development which has been reviewed and renewed in 2009 (Winemakers' Federation of Australia, 2009).

Concerning the quantitative findings, significant differences have been detected among the antecedents of place identity and its effect on individual place performance. The path comparison shows the effect of place identity on individual place performance was significantly higher for the German sample. In other words, place identity had a stronger effect on the winery's performance in Germany than in Australia. A possible explanation might be the close identification between regions and wineries as indicated by Barham (2003) and Sinha & Akoorie (2010) as prevailing in old world wine countries. Place identity in this research is the identification with the regional brand which explains the necessity for the wineries to portray a strong sense of identification with the overall regional brand in order for there to be a positive effect on the performance of the individual winery.

9.4. Summary

This study aimed to explore the role of sustainability in enhancing place performance through an identity-based approach to place branding. This chapter shows the results of a new model for explaining the effect of applying sustainability in place branding on place performance. This research advances place-based marketing in the wine industry by establishing the role of sustainability. In order to do so, first the meaning of sustainability was established as being formed of generation, environmental and economic categories. The role of sustainability in place branding strategies is identified as only playing a marginal importance after the main attribute of portraying high quality wine. Also qualitative results showed that sustainability branding on the individual winery level relates to product branding rather than place branding. Barriers and challenges have been identified as the ambiguity of the term sustainability as well as its initial poor quality perception. Ways of overcoming such barriers were seen in either

omitting or explaining of the term sustainability in branding strategies. When discussing the role of place identity in the relationship of sustainability place branding and place performance, a moderating role of place identity was identified for the Australian sample. Also a positive relationship was tested between place identity and place performance which held true more so for Australia on the individual winery and for Germany on the regional level. The following chapter concludes this study by drawing practical as well as theoretical implication in addition to stating the limitations of this research.

10. CHAPTER: CONCLUSION

This chapter establishes the overall conclusion of the thesis. Main conclusions will be drawn based on the research questions outlined in the theoretical framework. Then, the theoretical as well as practical implications will be stated. The practical implications have been divided into policy and management implications. Lastly, limitations and suggestions for future research will be described in the final part of this chapter.

10.1. Main conclusions

This thesis answers four main research questions. The first question includes the clarification of the concept of sustainability in new (Australia) and old world (Germany) producing wine regions. It was questioned in how far the concept of sustainability is practiced and applied in place brandings strategies in the wine industry and what the potential benefits include. In order to answer this research question, the meaning of sustainability was clarified. Three core areas of sustainability have been identified as sustainability benefitting future generations and providing ecological as well as economic benefits. Antecedents of sustainability have been verified as positive attitudes and norms of the winery managers and owners. Furthermore, wine quality and natural surroundings have been found to play the most important role in place branding in the wine industry. A number of conclusions have been drawn after measuring the benefits of sustainability for place performance of wineries and wine regions. To start, a differentiation between sustainability practices and the communication of such in form of sustainability place branding was made to identify different effects on performance.

It was found that practicing sustainability on the individual winery level results in an enhanced business performance. This positive relationship could not be verified at the regional level. When testing the effect of sustainability place branding on performance measures, this study clearly shows among the Australian respondents that wineries that do communicate

sustainability place brands perform better. Such a positive influence was verified for all four performance constructs. This translates into wineries that communicate sustainability in their place branding have more visitors, observe more revenues, have higher brand equity and are more innovative than comparable wineries. Such a relationship was also found between the individual wineries in Australia and the place performance of the overall wine region.

Therefore, Australian wine regions that consists of a number of wineries that communicate the sustainability angle perform better. Interestingly, this could not be observed on a regional level. Wine regions in Australia or Germany that positioned themselves as sustainable did not have an influence on the performance of individual wineries. Yet, there was a significant effect between communicating sustainability on a regional level and regional place performance. This means that regions communicating sustainability overall performed better than those who do not. This effect was stronger for German than for Australian wine regions. Additionally, it can be noted that the wine industry stresses a generational outlook as the meaning of sustainability in the wine industry. Whereas, sustainability seems to play only a marginal role in the place branding among wineries and wine regions in Australia and Germany (quality assurance playing the most important role), positive effects of branding a place as sustainable in the wine industry is definitely beneficial to place performance. This effect being stronger on an individual level in Australia and on a regional level in Germany.

Barriers and challenges to using sustainability in place branding strategies have been identified and conclusions drawn on how to overcome these in an attempt to answer the second research question. Three main categories of barriers and challenges have been identified as poor quality perception of early sustainability adopters, enhanced competition and ambiguity of the term sustainability. When discussing how those barriers can be overcome a number of suggestions have been made. Some wineries decided to minimize their communication regarding sustainability practices in order not to limit their potential market due to the fact that a number of consumers are put off by the poor quality perception. Others mention clear

labelling and the direct communication with the client as a way of overcoming the poor quality perception as well as overcoming the ambiguity of the term of sustainability. Wineries explain that a lot of customer still do not know what sustainability practices entail in form of additional labour and other costs involved. The way forward is seen in educating the consumer by explaining how much effort is involved in sustainable practices.

Place identity has been identified as a critical success factor in the relationship between sustainability place branding and place performance. Place identity in this research takes a stakeholder approach by being defined as the identification of the individual wineries with the overall communicated brand of the wine region. To start, antecedents of such a shared identity have successfully been identified as place attachment and co-creation of the brand. A positive, direct effect of place identity on place performance could be measured resulting in empirical evidence of an identity-based approach to place branding. This finding lends overall support to the notion that an identification between the regional and individual place brand benefits all players. In relation to the sustainability aspect and its effect on place performance, a moderating role of place identity was theorized. Such a moderating role was verified for the Australian sample on an individual winery level. This is of great importance since it shows how wineries that communicate their sustainability efforts in their place branding strategies perform even better if they identify with the overall regional brand.

The wine industry is commonly divided into the old wine world and the new wine world. Some sources reveal Europe to be very strong when it comes to sustainability whereas other sources claim countries such as Australia and New Zealand to be pioneers. This research identified differences in relation to sustainability place branding strategies between old and new world wine regions. Germany is seen as a representative for an old world wine region and Australia represents new world wine regions. One of the first differences identified, dealt with the importance of social sustainability when researching the meaning of sustainability. German

wineries highlighted the importance of a 'unity' and 'sense of belonging' among employees which motivates and results in long term commitment. This was not observable among the Australian respondents. Regarding sustainability place branding strategies, a noticeable difference has been observed for German wineries. They do not only stress sustainability but often accentuate the fact that they are pioneers in sustainable wine making. This is despite the fact that early adopters created poor quality perceptions for sustainable wine which has been identified as a barrier to sustainability communication. Australian wineries on the other hand put a strong emphasis on a variety of sustainability features such as being carbon neutral, vegan, natural and preservative free wine. Also communication channels differed to some extent. Whereas, German wineries preferred the traditional direct channel of personal selling with the consumer, Australian wineries often emphasised their digital channels as important. When looking at the quantitative results of this study, differences could be observed on the individual and regional level. Australian wineries communicating sustainability in their branding strategies were measured to have a more significant effect on their performance than German wineries. On the regional level on the other hand, German wine regions have a significantly stronger effect on place performance. Especially, the moderating effect of place identity on performance could only have been identified for the Australian sample on an individual level. In conclusion, this means that the relationship between sustainability branding and performance is stronger on the regional level in Germany and on the individual level in Australia.

10.2. Theoretical implications

This research aims to contribute to existing research on the role of sustainability and place identity in enhancing place performance. Whereas extant research supports the notion that an aligned place identity shared by different stakeholders in the place branding process results in more successful brands, there are not many studies that provide empirical evidence. Certainly, there are no studies that measure how sustainability place branding fits into this relationship.

Based on this gap in the literature identified in the first chapter, a number of important implications have been made that aid theoretical understanding. These contributions can be divided into contextual and methodological implications.

10.2.1. Contextual theoretical implications

This research highlights a rigorous approach to investigating the complex relationship between place identity and business practices. The identification of the winery owner with the place brand communicated by the wine region was found to influence the performance of the place on both the individual and regional level. This research was grounded in and is consistent with a number of theories: place identity theory (Proshansky et al., 1983), sense of belonging (Relph, 1976), identity-based brand equity model (Burman et al., 2009), identity-based approach to place branding (Kavaratzis & Hatch, 2013) and stakeholder theory (Freeman, 1984). An identity-based approach to place branding argues for advancing the theory of place branding by achieving a better understanding of the relationship between place identity and place brands (Kavaratzis & Hatch, 2013). Based on stakeholder theory (Freeman, 1984) an interaction and dialogue between stakeholders aims to improve the success of place branding. This research proves how a shared place identity influences the success of place branding on an individual and regional level. In response to Kavaratzis & Hatch (2013), the current research shows that places where stakeholders share a place identity, perform better on the individual firm and the overall regional level. This extends current empirical findings about place identity and entrepreneurial performance by Hallak et al. (2012) who limits the interplay between place identity and performance to the individual entrepreneur's success. This research contributes to identity research set in the wine industry. Zamparini & Lurati (2012) research how wine firms use the regions' collective identity in external communication and combine it with their own identity. In contrast to Zamparini & Lurati (2012) who performed an exploratory content analysis on wineries website, this study provides quantitative data with greater possibility to generalize findings. Furthermore, the tourism literature agrees on the importance

of a more holistic approach to destination branding, taking identities of the individual stakeholder into account. This research specifically responds to calls asking for empirical studies considering stakeholder values in the destination branding process (Wheeler et al., 2011) and extends existing, qualitative case studies by delivering empirical proof that shared sustainability values result in strong place performance.

Among one of the most valuable theoretical contributions of this research is that it reveals the relevance of sustainability place branding to the (wine) tourism literature. Existing literature shows inconclusive findings concerning the relationship between positive social and environmental behaviour and performance (Wahba, 2008). Especially among the tourism literature, confusion prevails as to whether consumers care about sustainability efforts (Font et al., 2001). Existing studies about the impact of sustainability in the general business literature often measure sustainability in form of corporate social responsibility programs and base their data on publically traded companies (Lo & Sheu, 2007; Schnietz & Epstein, 2005; King & Lenox, 2002). Also, numerous research in this field is slightly outdated and stems from the nineties and early noughties (Chen & Metcalf, 1980; Jaggi & Freedman, 1992; Wagner et al., 2002; Blacconiere & Patten, 1994; Klassen & McLaughlin, 1996; Dowell *et al.*, 2000). The tourism and especially the wine (tourism) industry mainly consists of small and medium sized companies. Therefore, this research extends extant literature by providing up to date proof that sustainability actually leads to success among small and medium enterprises active in the (wine) tourism industry. Furthermore, this research clearly demonstrates that practicing and communicating sustainability, significantly influences performance on an individual firm and regional destination level. In a tourism destination sense this means that individual businesses practicing sustainability enhance their own performance as well as the overall destination performance. Often, research about sustainability in the wine and tourism industry focuses on only one aspect of sustainability certification. For example Blackman et al. (2014) find that Blue Flag certification attracts regional investment therefore enhances regional performance. Other

examples include measuring the carbon intensity of the global wine trade (Colman & Paester, 2009; Cholette & Venkat, 2009). This study did not merely test one certification or focused on one impact of wine production but instead aimed to provide evidence that sustainability in all its complexity leads to better performing places on the regional as well as on the individual firm level.

This research contributes a novel approach to place branding theory by introducing the moderating role of place identity in the relationship between sustainability place branding and place performance. The literature shows research that looks at the relationship between place identity and sustainability in varying forms. Guardia & Pol (2002) for example establish that communities need cohesion and similar characteristics to be sustainable. Uzzell et al. (2002) measure that the greater the sense of place-related social identity, the greater the probability of sustainable behaviour. More recent studies also review the relationship between place identity and environmentally friendly behaviour (Ramkissoon et al., 2013). Ramkissoon & Mavondo (2015) get the closest to establishing an indirect relationship between place identity and sustainability by measuring environmental behaviour as a mediator between place identity and place satisfaction. Yet none of the extant studies looks at the moderating role of place identity. Such a moderation is extremely interesting as it shows how the important relationship between sustainability and performance can be strengthened.

As opposed to the majority of extant research, this research draws a clear distinction between practicing sustainability and communicating this in form of place branding including the important role of wine tourism in the wine industry. The wine industry is known for building brands around places on an individual vineyard level as well as on a wine region level (Thode & Maskulka, 1998). The literature implies that the wine industry is front lining the adoption of environmental practices (Pullman et al., 2010). Existing studies such as Forbes et al. (2009) focus merely on consumer preference for wine being produced using 'green' production

methods but do not discuss branding strategies involved. Additionally, current studies about sustainability in the wine industry often focus on single case studies (Barber et al., 2010; Beverland, 2005; Taplin, 2012; Forbes et al., 2009, Blackman et al., 2014). Also extant research about consumer choices for sustainable products is often criticised for an 'attitude – behaviour' gap, measuring consumer intentions, rather than actual behaviour (Forbes et al., 2009). This study contributes to existing literature by showing how the practice and communication of sustainability enhances performance. Instead of measuring the consumer preference for sustainability potential, this research empirically provides evidence from the supply side in form of growing visitor numbers, enhancing profit, raising innovativeness and advancing brand equity. The findings of this study clearly demonstrate enhanced performance not just for a single case but compares both the German and the Australian wine industry.

10.2.2. Methodological theoretical implications

The current study makes contributions relevant to the wider measurement of place performance by measuring performance as a four-dimensional, second-order construct comprising financial, touristic, innovative and brand measures. It responds to calls requesting performance measures based on multiple factors (Bagozzi & Phillips, 1982; Chakravarthy, 1986). This is reasoned to be important as performance being too complex a phenomenon to be measured based on one criterion (Lo, 2010). Particularly in the place branding literature calls are made for comprehensive performance measures (Zenker & Martin, 2011). Whereas, existing research suggests measures such as citizen satisfaction and place brand equity (Zenker & Martin, 2011), this study shows that place performance should be measured using the four constructs simultaneously. This is especially true since the effect sizes (f^2) for the second-order performance measures are roughly the same size indicating not one most influential factor being identified (Hair, 2014). This means that all of the four constructs are equally important when it comes to measuring place performance. Based on the fact that the model presented in this research showed a good level of fit to the data, it could be applied in further studies that

aim to measure place performance. Existing studies on sustainability and performance measures, especially in the tourism literature, although extremely useful, show inconclusive results when considering the long-term effect of sustainability on performance (Judge & Douglas 1998, Alvarez Gil, Jimenez et al. 2001). Unlike previous research, this research applied performance measures establishing a long-term enhancement of performance (for a discussion of this refer to section 5.5 and 9.1.6).

The research design of mixed methods sheds light on the subject of this study. Whereas the quantitative data clarified the relationships between the variables of place identity, sustainability place branding and place performance; the qualitative data enabled the identification of reasons for responses. Existing research about the effect of sustainability on performance in the wine industry exemplifies both qualitative studies based on case studies, interviews and focus groups (Barham, 2003; Warner, 2007; Marshall et al., 2005; Hughey et al., 2005; Poitras, 2006; Cederberg et al., 2009; Desta, 2008) as well as quantitative studies (Ballingall & Winchester, 2009; Brown 2006; Brugarolas et al., 2009; Cholette & Venkat 2009; Colman & Paester, 2009; Delmas & Grant, 2008; Forbes et al., 2009; Marchettini et al., 2003; Remaud et al, 2008). This methodological approach enhances the literature on sustainability in the wine industry by following calls to a more comprehensive approach by combining both methods (Hughey et al., 2005; Barham, 2003; Markley & Davis, 2007; Cholette & Venkat 2009). Methodological, this research equals recent studies by Pullman (2010), Gabzdylowa et al. (2009) and Sinha & Akoorie (2010) who also approached the subject with mixed methods. However, those existing studies follow the sequential exploratory design which starts with qualitative data collection and is followed up by quantitative design. The current research contributes to the current literature by establishing this unique sequential explanatory design. Thus, instead of firstly exploring the topic, this research aimed for explaining the quantitative findings. Finally, with a mixed method approach, the researcher aims to minimize bias since any method on its own could cancel the biases of other methods (Creswell, 2009).

Appendix J shows a table that provides an overview comparing some of the results of this study and the extant theory. It needs to be stated though that this is by no means exhaustive but provides an overview of the current state of the literature in comparison to this study.

10.3. Practical implications

Improving practice in the wine industry regarding the implementation and communication of sustainability is equally important for management as well as policymakers. For this reason, the final research question dealt with the enhancement of practical knowledge and will be discussed in detail.

10.3.1. Policy makers

The literature describes sustainability as a socially constructed and ambiguous term (Warner, 2007) and experts argue that our society is not a sustainable one despite the fact that research concerning sustainability has continuously grown over the past decade (Hay et al., 2014). This research identifies the meaning of sustainability in the wine industry as benefitting future generations, providing environmental and ecological benefits. These findings should be of particular interest to policy makers as they can function as guidelines for introducing industry wide standards of sustainability. This is in response to calls for clearly defined industry related parameters of sustainability as suggested as a step towards a sustainable development (Lindsey, 2010; Hannon & Callaghan, 2011). This research found that ambiguity of the term sustainability and poor quality perception of sustainable wine form barriers to implementing and communicating sustainability practices. Industry wide standards based on the general understanding of sustainability by professionals could overcome the barrier of the ambiguity of the term. In addition, fines in case of none compliance would narrow the competition by weeding out business that 'greenwash' their business practices as well as sustainable branding without following any proper guidelines.

Policy makers for sustainable development such as 'Netzwerk Nachhaltiger Wein Deutschland' and 'Sustainable Winegrowing Australia' should use theoretical knowledge provided by this research that the implementation of sustainability in the wine industry leads to an enhanced performance to realize and communicate the better choice to winery managers. It was noted in the literature that there is no clear evidence for sustainability actually influencing performance (Wahba, 2008). This research aids policy makers in the wine industry by providing empirical evidence that wineries as well as wine regions that do practice but especially communicate sustainability perform better than those who do not. As such delivering an incentive for wineries to participate in sustainability efforts. Figure 10.1 provides a model for how sustainability can be implemented successfully and potential barriers overcome in order for wineries and wine regions to benefit from enhanced places performance.

10.3.2. Management implications

Practical implications for management is divided into the regional (destination) management and individual firm level management.

Regional (destination) level

Investigating factors that influence the performance of wine regions and wineries should be of particular interest to regional (destination) managers. A shared place identity between the individual winery owner and the overall regional brand has a direct positive influence on performance on both levels. Therefore, regional managers who are eager to enhance economic development should be actively involved in developing relationships between the individual wineries and the regional management in order to foster a shared place identity. This research showed that place attachment as well as co-creation of the regional brand are strong predictors of a shared place identity. In order to initiate a strong place identity, regional managers should encourage engagement between winery owners and the local community in order to initiate place attachment. Also an exchange relationship between the individual

wineries and regional marketing management could be initiated in order to develop brands that both parties can identify with.

The findings of this research may benefit regional (destination) manager who aim to achieve both sustainability and increase regional performance. The results suggest that sustainability place branding strategies on the individual firm level (only supported for the Australian sample) is a significant determinant of place performance. Therefore, regions that are formed of a number of wineries that communicate sustainability efforts, perform better. Also positive attitudes towards benefits and norms regarding sustainability have been researched as strong antecedents of implementing sustainability efforts. If regional managers' priority is to increase their regional performance, then it is of major importance to establish positive attitudes towards sustainability among winery owners. This can be done by building confidence and an optimistic outlook for individual winery owners by offering infrastructures for learning and support for sustainability and the opportunity to exchange knowledge with wineries that already successfully implement sustainability measures. Finally, in order to initiate as many wineries to strive for sustainability as possible regional manager should provide access to resources as well as initiating networks that support the choice of becoming sustainable and help putting these choices into action.

A noteworthy observation is that sustainability place branding on the regional level is positively and significantly linked to regional performance. This observation is stronger for the German sample. Thus, regional (destination) manager who wish to focus on sustainability in their place branding strategy have a strong business case for doing so. In order to create a place brand that is supported by the individual stakeholder (as shown as necessary in this research), regional managers should involve individual wineries during the place brand creation process.

The significant role played by the individual winery in their wine regions needs greater recognition and the implications of findings are immensely important for the regional (destination) management. Regional management needs to more actively encourage the relationships between wineries and their wine regions. This research shows that a shared place identity is a strong predictor for place performance on both the individual as well as the regional level. Therefore, management needs to create a culture in their regions where wineries identify with their region which seems to be vital for creating successful wineries as well as wine regions. One way of achieving this could be done by establishing regional events where all wineries participate.

Individual firm level

This research has presented strong evidence that practicing and communicating sustainability efforts has a positive, long-term effect on performance. Therefore, winery management is advised to implement sustainability changes into business practices if not already done and choose to openly promote sustainability efforts. If not supported by regional management, winery management should aim to establish regional information networks among wineries in order to exchange knowledge and information for a sustainable development.

Also, strategies for enhancing place performance on the individual winery level through sustainability place branding should be benchmarked between the new and the old wine world. Differences in marketing communication was found among both samples. German winery management places a high importance on direct communication channels such as personal selling when communicating the sustainability efforts. Australian wineries on the other hand seemed to be stronger on the digital front. Exchanging knowledge not just interregional but also intercontinental is suggested as a way of profiting from the established positive effects of being sustainable as a winery.

The relationship between individual sustainability place branding and individual place performance (at least for the Australian sample) was found to be moderated by place identity. Meaning the relationship was strengthened for wineries that identify strongly with the overall wine region. Winery manager should therefore take initiative to establish good relationships with the regional (destination) management. This can be done by inviting regional representatives to learn about sustainability on the individual firm level. Winery managers should encourage regional (destination) management in sustainability behaviour and educate them about the opportunities and benefits in order to foster the practice and communicating of sustainability efforts on a regional level as well as the individual level. Encouraging engagement between the wineries and the regional (destination) management through establishing networks can create mutual benefits for the region and the winery.

The findings concerning barriers and challenges are extremely interesting to winery managers and have been acknowledged as ambiguity of the term sustainability, poor quality perception of sustainable wine and enhanced competition among sustainable wineries. Wineries that will be able to overcome those barriers will be able to observe enhanced long-term performance. Educating consumers through a variety of marketing channels is a way of overcoming the ambiguity of the concept sustainability. Building trust between the consumer and the winery in form of depicting official certification and communicating clear standards can be one way of overcoming rising competition on the sustainability front. Encouraging visitation to wineries among consumers to actively show what is involved in sustainability efforts including sampling of the produced wine can be a way forward of challenging the notion of poor quality perception. The following figure practically exemplifies how both wineries and wine regions can benefit from sustainability in the place branding process and highlights the role of a shared place identity.

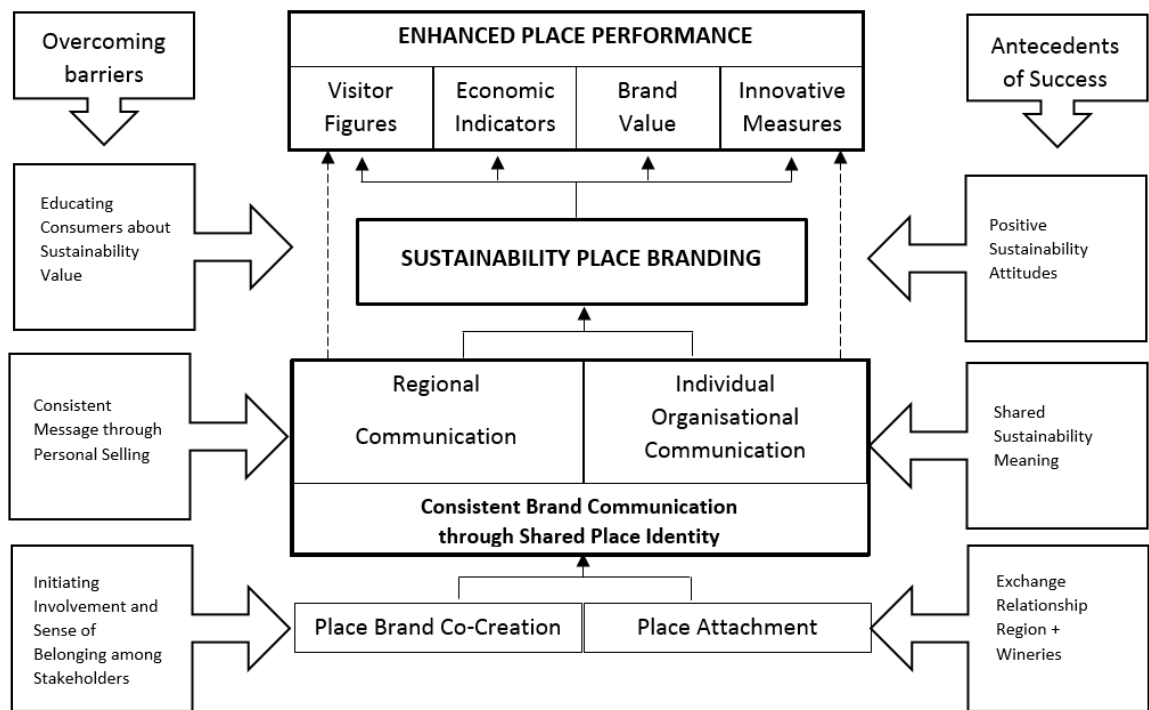


Figure 10-1: Conceptual framework for wineries and wine regions

10.4. Limitations and future research

Despite the number of theoretical and practical contributions, this research has limitations that need to be taking into consideration. In the following those limitations will be discussed and suggestions for future research will be provided.

This study provides an intercultural comparison between the old and the new wine world. Having one country representing the new and one country representing the old wine world might cause problems in the generalizability. The specific characteristics of the German and the Australian wine industry may mean that the results are not applicable and representative of the old and new wine world. Future studies might want to consider similar studies in more countries representing the old as well as the new wine world.

This study was limited to one representatives of wineries judging both the performance on the individual firm as well as on the regional level. This is potential cause for bias in the findings as attitudes towards the wine regions where the wineries are located in might influence the

respondents view on how well the wine region is performing. Future studies should include multiple respondents from the same firm and also data representing the regional management. Furthermore, the respondents are reporting subjective performance measurement rather than performance being measured objectively which should be considered in future studies.

This study used a second order construct to obtain a measure for place identity. It is formed of measures based on brand identification (Blain, 2005) and brand similarity (Bhattacharya & Sen, 2003). Yet, the variable of place identity is a highly complicated construct and scholars disagree on one definition (Aitken & Campelo, 2011; Anholt, 2007; Govers & Go, 2009; Kavaratzis & Hatch, 2013). In this research the variable of place identity is highly simplified and seen as the identification of the local stakeholders with the regional place brand portrayed by the wine region based on the identity-based brand equity model (Burmman et al., 2009). Hence, there may be value for future studies to divide the place identity construct into additional sub-dimensions to be able to cater towards the intricacy of the construct.

Future studies can further test the same theoretical construct in a different setting or test some specific aspects related to new and old world growing areas in other new and old world regions such as South America and South Africa against Italy and France. The wine industry lends itself very well to place branding research since there are the individual places of wineries that use places as narrowly defined as vineyards in place branding strategy (Bruwer & Buller, 2012; Carter, Krissoff & Zwane, 2006). Then there is the wine region that plays an important role in the branding strategy of most wineries (Bruwer & Buller, 2012). Yet, confirming the importance of place identity among communities and individual stakeholders is too important of a topic to reduce its applicability to the wine industry and would benefit from external validity by confirming the results in a different setting such as other food products.

Despite the fact that this study controlled for winery size and experience with sustainability, other features such as export behaviour or channel strategy could also be controlled for in future studies. Other possible control variables include age of the winery, ownership type or certification status.

This study takes a cross-sectional approach which can be disadvantageous as it only provides a snapshot in time rather than detecting developments or changes over a longer period.

Longitudinal studies is a suggestion for future studies given the long-term effect of sustainability. Even though this study aimed for performance measures that take a long-term development into account, studies that are executed over a long stretch of time might bring enhanced insights about the effect of sustainability place branding on place performance.

While this study finds a moderating effect of place identity on the relationship between sustainability place branding and place performance on the individual firm level for the Australian sample, this relationship could not be measured for the German sample or on the regional level. This should further be researched in order to understand why the moderation could only be detected for the Australian sample. Benchmarking policies/management practices between both countries and potentially even in between wine regions could identify and explain potential differences among both countries.

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APPENDIX

Appendix A: Scale development table

Variables	Item measurements	Reliability (α)	Validity	Author	Journal (ranking)
Sustainability branding	The measurement of the green brand image includes five items: (1) the brand is regarded as the best benchmark of environmental commitments; (2) the brand is professional about environmental reputation; (3) the brand is successful about environmental performance; (4) the brand is well established about environmental concern; and (5) the brand is trustworthy about environmental promises.	.907	YES	(Chen, 2010)	Journal of Business Ethics (3*)
Sustainability branding	Green advertising is defined as any ad that meets one or more of the following criteria: (1) Explicitly or implicitly addresses the relationship between a product/service and the biophysical environment. (2) Promotes a green lifestyle with or without highlighting a product/service. (3) Presents a corporate image of environmental responsibility.	n/a	n/a	(Banerjee, Gulas, & Iyer, 1995)	Journal of Advertising (3*)
Sustainability practices	Wildlife habitat protection Protection of water resources (fish habitat, run-off, etc.) Soil protection Reduced herbicide usage Reduced pesticide usage Composite	.915	0.50 to 0.93	(Pullman, Maloni, & Dillard, 2010)	Journal of Wine Research
Sustainability practices	Conservation of energy Conservation of water Composite	.634	0.50 to 0.93	(Pullman et al., 2010)	Journal of Wine Research
Sustainability practices	Recycling, composting, reduced land filling of organic waste Reuse/recycling of other waste including packaging materials Composite	.563	0.50 to 0.93	(Pullman et al., 2010)	Journal of Wine Research
Sustainability practices	Safe working conditions for employees Ensuring worker quality of life Ensuring worker skill development Ensuring worker job satisfaction Fair compensation (living wage) to all employees Employment status verification of all employees Composite	.891	0.50 to 0.93	(Pullman et al., 2010)	Journal of Wine Research
Attitudes – Benefits	(1) Our belief that environmental projects reduce costs. (2) Environmental initiatives lead to increased customer demand. (3) Environmental initiatives lead to enhanced reputation in the community. (4) Environmental initiatives lead to cost savings. (5) Environmental initiatives lead to improved wine quality. (6) Environmental initiatives lead to increased competitiveness in international markets.	.78	0.45 to 0.82	(Cordano et al., 2010)	Journal of Business Ethics (3*)
Attitudes - Norms	(1) At our winery, people feel a personal obligation to do whatever they can to minimize environmental harm. (2) At our winery, people feel a personal obligation to reduce pollution. (3) At our winery, people feel a personal obligation to exceed the requirements of environmental regulations	.79	0.45 to 0.82	(Cordano et al., 2010)	Journal of Business Ethics

Place brand Identity (Congruence)	Supports our destination image. Provides a label that describes us. Differentiates us from other destinations. Creates a consistent image of what guests can expect to experience. For use on merchandise. Supports the overall vision and strategic plan of the organization. Unites all destination firms/organizations under one symbol. Ensures copyright protection.	n/a	n/a	(Blain, 2005)	Journal of Travel Research (4*)
Place brand Identity (Similarity)	Likert-type multi-item scale (e.g., "I recognize myself in Company X"; "My sense of who I am matches my sense of Company X")	n/a	n/a	(Bhattacharya & Sen, 2003)	Journal of Marketing (4*)
Place Identity	We also used four variables to measure place identity. The questions were drawn from an identity scale developed by Williams and Roggenbuck (1989). Respondents indicated their level of agreement with the following items: (a) I think often about coming here, (b) I am very attached to this place, (c) I identify strongly with this park, and (d) I feel like this place is a part of me. All four variables were coded on 5-point Likert-type scales ranging from strongly disagree (1) to strongly agree (5)	.83	0.67 to 0.83	(Vaske & Kobrin, 2001)	Journal of Environmental Education
Place attachment	For what I like to do, I could not imagine anything better than the settings and facilities provided by this national park. For the activities I enjoy the most, the settings and facilities provided by this national park are the best. I enjoy visiting this national park and its environment more than any other parks	.74	0.72 to 0.88	(Ramkissoon, Smith, & Weiler, 2013)	Tourism Management (4*)
Place attachment	I identify strongly with this park. I feel this national park is part of me. Visiting this national park says a lot about who I am.	.86	0.85 to 0.92	(Ramkissoon et al., 2013)	Tourism Management (4*)
Place attachment	I am very attached to this park. I feel a strong sense of belonging to this national park and its settings/facilities. This national park means a lot to me.	.89	0.89 to 0.93	(Ramkissoon et al., 2013)	Tourism Management (4*)
Stakeholder involvement	Stakeholder involvement was thus measured by two items on a 5-point scale: (1) private firms have had considerable influence on the content of city marketing; (2) citizens have had considerable influence on the content of city marketing.	.675		(Klijn, Eshuis, & Braun, 2012)	Public Management Review (3*)
Stakeholder involvement	Co-creation between organizations and stakeholders via dialogue within network relationships.	n/a	n/a	(Hatch & Schultz, 2010)	Brand Management (2*)
Performance Marketing	The collective wine region brand is successful in conveying a fitting image to visitors. The logo provided by the collective wine region brand achieves awareness among prospective and actual visitors. The collective wine region brand conveys a unique selling proposition. The collective wine region brand facilitates destination awareness that consistently provides an assurance of quality while reducing perceived risk. The collective wine region brand evokes an emotional response from visitors. The collective wine brand conveys a promise of a quality.	n/a	n/a	(Blain, 2005)	Journal of Travel Research (4*)
Performance Tourism	Number of foreign visitors ' Growth rate of foreign visitors	n/a	n/a	(Dwyer & Kim, 2003)	Current Issues in Tourism (2*)

	' Market share of destination – world, regional ' Shifts in market share ' Average length of stay ' Rate of revisit				
Performance Tourism	Expenditure of foreign visitors (FX receipts) ' Growth rate of expenditure of foreign visitors ' Share of destination in total tourism expenditure – world, regional ' Shifts in expenditure share ' Foreign exchange earnings from tourism as percentage of total exports	n/a	n/a	(Dwyer & Kim, 2003)	Current Issues in Tourism
Performance Tourism	' Investment in tourism industry from domestic sources ' Foreign direct investment in tourism industry ' Investment in tourism as percentage of total industry investment (and trend)	n/a	n/a	(Dwyer & Kim, 2003)	Current Issues in Tourism
Performance Finance	Relative to our businesses' largest competitor, we are: Less profitable – about equally profitable – more profitable Larger – about the same size – smaller Have a larger market share – about the same market share – have a smaller market share Are growing more slowly – are growing about the same rate – are growing faster	n/a	n/a	(Deshpande, Farley, & Webster, 1993)	Journal of Marketing (4*)
Performance	Avg. quality of wine over prior 3 years Avg. quality of wine over prior 3 years Wine price Grape price (per ton of grapes) Age of winery Size of winery (storage capacity in thousands of gallons) Vineyard acreage Number of brands	n/a	n/a	(Benjamin & Podolny, 1999)	Administrative Science Quarterly (4*)
Performance Finance	To investigate the link between green supply chain management and economic performance a number of manifest variables constitute the construct measuring economic performance: (1) new market opportunities; (2) product price increase; (3) profit margin; (4) sales; and (5) market share.	n/a	n/a	(Rao & Holt, 2005)	International Journal of Operations & Production Management
Performance Innovation	In a new product and service introduction, how often is your company <ul style="list-style-type: none"> • First to market with new products and services • Later entrant in established but still growing markets • Entrant in mature, stable markets • Entrant in declining markets • At the cutting edge of technological innovation 	n/a	n/a	(Deshpande, Farley, & Webster, 1993)	Journal of Marketing (4*)

THE SERVICE AND ENTERPRISE RESEARCH CENTRE (SERC)

Measuring the role of sustainability for wineries and wine regions QUESTIONNAIRE

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Section 1: INFORMATION WINE REGION

The first section of this questionnaire deals with the wine region that your winery (e.g. that you own or work for) is located in. If your wine-making firm consists of more than one winery in different wine regions, please select a region and score your firm's wine making in that particular region.

1. What is the **NAME OF THE WINE REGION** that your winery is located in?

The name of this wine region is: _____

2. Please rate **CHARACTERISTICS** of your **WINE REGION** relative to other wine regions using the following scale.

1= Strongly disagree 2= Disagree 3= Neutral 4= Agree 5 = Strongly agree

This wine region produces high standard quality wine products.	1	2	3	4	5
This wine region has a good reputation.	1	2	3	4	5
This wine region has a very professional regional office.	1	2	3	4	5
This wine region has built good relationships among wineries and tourism organizations	1	2	3	4	5
This wine region is known for tourism.	1	2	3	4	5
This wine region has a clear branding strategy.	1	2	3	4	5
This wine region has a good relationship with the government.	1	2	3	4	5
This wine region has international appeal.	1	2	3	4	5
This wine region is very diverse in terms of its wineries.	1	2	3	4	5
This wine region organizes many events and festivals.	1	2	3	4	5
This wine region is innovative.	1	2	3	4	5
This wine region combines a variety of wine making approaches.	1	2	3	4	5
This wine region is well established for environmental concern.	1	2	3	4	5
This wine region has sufficient branding resources.	1	2	3	4	5
This wine region is well organized.	1	2	3	4	5
This wine region produces some of the best known wine brands in the country.	1	2	3	4	5

This wine region organizes regular meetings among its wineries.	1	2	3	4	5
This wine region has a clear identity.	1	2	3	4	5
This wine region offers a high number of different wine brands.	1	2	3	4	5
This wine regions suffers from many conflicts between wineries.	1	2	3	4	5
This wine region houses wineries with shared goals.	1	2	3	4	5
This wine region has good branding expertise.	1	2	3	4	5
This wine region has wine education facilities for visitors.	1	2	3	4	5
This wine region brings prestige to individual wineries.	1	2	3	4	5
This wine region offers an authentic experience to visitors.	1	2	3	4	5

3. Please indicate the **BRANDING STRATEGY OF THE WINE REGION**. A branding strategy refers to promoting the location and creating meanings of the wine region to potential visitors via different means of communication (brochures, websites, events, etc.).

	Strongly disagree				Strongly agree			
This wine region's branding strategy stresses benefits of sustainability.	1	2	3	4	5			
This wine region brand stresses natural beauty.	1	2	3	4	5			
This wine region brand is linked to the exceptional taste of its wines.	1	2	3	4	5			
This wine region brand portrays a strong connection between Australia and the region.	1	2	3	4	5			
This wine region's branding strategy addresses the relationship between the environment and its wine.	1	2	3	4	5			
This wine region brand is linked to an environmental cause or activity.	1	2	3	4	5			
This wine region brand stresses its good climate for wine making.	1	2	3	4	5			
This wine region's branding strategy stresses traditional wine making approaches.	1	2	3	4	5			
This wine region's branding strategy stresses industries other than the wine industry.	1	2	3	4	5			
This wine region brand stresses its European wine heritage.	1	2	3	4	5			
This wine region's branding strategy is linked to environmentally friendly efforts.	1	2	3	4	5			
This wine region's branding strategy is linked to innovative wine making.	1	2	3	4	5			
This wine region's branding strategy is associated with a green lifestyle.	1	2	3	4	5			
This wine region's branding strategy is associated with an artisanal approach to wine making.	1	2	3	4	5			
This wine region's branding strategy stresses the craftsmanship of its winemakers.	1	2	3	4	5			
This wine region's branding strategy is linked to technological developments in wine making.	1	2	3	4	5			
The wine region's branding strategy emphasises an authentic experience to its visitors.	1	2	3	4	5			

4. Please assess this **WINE REGION PERFORMANCE** in the past 5 years as best as you can by placing this wine region among other similar wine regions on the following scale:

1 = WORST 20%	2 = LOW 21-40%	3 = MID-RANGE 60-39%	4 = HIGH 21-40%	5 = BEST 20%
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1 = among the **WORST** 20% of comparable wine regions 5 = among the **BEST** 20% of comparable wine regions

Growth of domestic visitors to this wine region	1	2	3	4	5
Growth of visitors from Asia	1	2	3	4	5
Growth of visitors from Europe to this wine region	1	2	3	4	5
Growth of visitors from US	1	2	3	4	5
Attracting high income visitors	1	2	3	4	5
Revenue growth of wine producers in the region	1	2	3	4	5
Profitability of the wine producers in the region	1	2	3	4	5
Percentages of wine sold through restaurants	1	2	3	4	5
Generating positive regional news	1	2	3	4	5
Margin growth by wine producers in the region	1	2	3	4	5
Volume growth (litres) in the region	1	2	3	4	5
Rate of revisit by wine tourists (visitor loyalty) to this region	1	2	3	4	5
Expenditure of visitors in this wine region	1	2	3	4	5
Attracting infrastructure investment	1	2	3	4	5
Percentages of wine sold through cellar doors	1	2	3	4	5
Responsiveness of this wine region to consumer trends	1	2	3	4	5
Ability to attract website visitors and social media visitors	1	2	3	4	5
Average wine retail price by wineries in the region	1	2	3	4	5
Wine awards won by wineries in the region	1	2	3	4	5
Innovativeness of wineries in the region	1	2	3	4	5
Using social media to connect to wine consumers	1	2	3	4	5
Brand equity (awareness and positive association) of this wine region	1	2	3	4	5

Section 2: INFORMATION INDIVIDUAL WINERY

The second section of this questionnaire deals with your winery (e.g. that you own or work for). If your wine-making firm consists of more than one winery please select a winery and score your firm's wine making in that particular winery.

5. Please state the **NAME OF YOUR WINERY** (will be kept confidential and informs us on your participation so that you will not be contacted again).

The name of our winery is: _____

Section 2a: WINERY'S CHARACTERISTICS

6. Please rate **general characteristics** of your winery relative to other wineries using the following scale.

1= Strongly disagree 2= Disagree 3= Neutral 4= Agree 5 = Strongly agree

	Strongly disagree				Strongly agree
	1	2	3	4	5
Our winery produces high standard quality wine products.	1	2	3	4	5
Our winery has excellent open cellar doors facilities.	1	2	3	4	5
Our winery creates an outstanding cellar door atmosphere.	1	2	3	4	5
Our winery is innovative.	1	2	3	4	5
Our winery is well established for environmental concern.	1	2	3	4	5
Our winery has excellent tourism facilities.	1	2	3	4	5
Our winery has a clear identity.	1	2	3	4	5
Our winery produces a high number of different wine brands.	1	2	3	4	5
Our winery produces famous wine brands.	1	2	3	4	5
Our winery has a very appealing cellar door entrance that reflects our winery's image.	1	2	3	4	5
Our winery organizes lots of events.	1	2	3	4	5
Our winery has diversified revenue sources.	1	2	3	4	5
Our winery works mainly commercially.	1	2	3	4	5
Our winery puts a lot of effort into the design of our signage on the estate.	1	2	3	4	5
Our winery has good branding expertise.	1	2	3	4	5
Our winery innovates mostly within tradition.	1	2	3	4	5

Our winery believes in product improvement through technology.	1	2	3	4	5
Our winery has a clear branding strategy.	1	2	3	4	5
Our winery has sufficient branding resources.	1	2	3	4	5
Our winery has good wine education facilities.	1	2	3	4	5
Our winery offers an authentic experience to visitors.	1	2	3	4	5
Our winery offers good food at the estate.	1	2	3	4	5
Our winery offers winery tours.	1	2	3	4	5
Our winery is very well designed and lay out for visitors.	1	2	3	4	5
Our winery employed industry experts to design the winery's cellar door entrance.	1	2	3	4	5
Our winery is part of a well-established wine trail.	1	2	3	4	5

7. Please indicate the **WINE MAKING PROCESS** at your winery.

1= Strongly disagree 2= Disagree 3= Neutral 4= Agree 5 = Strongly agree

	Strongly disagree				Strongly agree
At our winery we use only natural ingredients.	1	2	3	4	5
At our winery we use handmade methods.	1	2	3	4	5
At our winery we aim to improve the product every year.	1	2	3	4	5
At our winery we produce on small batches.	1	2	3	4	5
At our winery we use biodynamic agricultural techniques.	1	2	3	4	5
At our winery we harvest grapes from low-yield vines.	1	2	3	4	5
At our winery our winemakers possess high craftsmanship.	1	2	3	4	5
At our winery we use an artisanal (craft) approach for wine making.	1	2	3	4	5
At our winery we do not make trade-offs that lower product quality.	1	2	3	4	5
At our winery our winemakers are artistic.	1	2	3	4	5

8. The statements below list a range of different **BUSINESS NORMS**. Please indicate how well the statements describe the norms at your winery.

	Strongly disagree				Strongly agree
At our winery we compete primarily on unique product differentiation.	1	2	3	4	5
At our winery we are very capable of identifying new opportunities.	1	2	3	4	5
At our winery wine making is in the DNA of this company.	1	2	3	4	5
At our winery we have a good idea of the sales potential for each of our markets.	1	2	3	4	5

At our winery we take risks.	1	2	3	4	5
At our winery our main aim is to produce a very high quality product.	1	2	3	4	5
At our winery our product innovation is based on good market information.	1	2	3	4	5
At our winery we target opportunities based on competitive advantage.	1	2	3	4	5
At our winery we use modern approaches to wine making.	1	2	3	4	5
At our winery we monitor competitive activity.	1	2	3	4	5
At our winery we believe this business exists primarily to serve customers.	1	2	3	4	5

9. Please indicate your winery's **CHANNEL STRATEGY** by rating the following statements.

	Strongly disagree			Strongly agree		
Our winery sells most wine directly online.	1	2	3	4	5	
Our winery sells most wine directly through a cellar door.	1	2	3	4	5	
Our winery sells most wine to retail outlets.	1	2	3	4	5	
Our winery sells most wine to wholesalers.	1	2	3	4	5	
Our winery sells most wine to restaurants.	1	2	3	4	5	
Our winery sells most wine internationally.	1	2	3	4	5	
Our winery sells most wine domestically.	1	2	3	4	5	
Our winery mainly uses grapes from our own vineyard.	1	2	3	4	5	
Our winery carefully selects our channel partners.	1	2	3	4	5	
Our winery's channel partners add significant mark-ups to our wine products.	1	2	3	4	5	
Our winery's channel partners provide cost savings.	1	2	3	4	5	
Our winery communicates effectively with our channel partners.	1	2	3	4	5	
Our winery chooses channel partners that follow sustainable norms.	1	2	3	4	5	

Section 2b: PERFORMANCE OF YOUR WINERY

The third section of this questionnaire deals with your winery's performance. Please be advised that any information given will be treated confidentially and individual identifiers, e.g. names of persons and organisations, will be anonymised and not identifiable in any research output.

10. Please assess this **WINERY'S PERFORMANCE** in the past 5 years by placing your winery among other similar wineries on the following scale:

1 = WORST 20%	2 = LOW 21-40%	3 = MID-RANGE 60-39%	4 = HIGH 21-40%	5 = BEST 20%
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	1 = among the WORST 20% of comparable wineries		5 = among the BEST 20% of comparable wineries		
Revenue growth of this winery	1	2	3	4	5
Sales growth of this winery	1	2	3	4	5
Volume growth (litres)	1	2	3	4	5
Obtaining investment subsidies	1	2	3	4	5
Successful new product introductions	1	2	3	4	5
Growth of domestic visitors to this winery	1	2	3	4	5
Growth of visitors from Asia	1	2	3	4	5
Growth of visitors from Europe to this winery	1	2	3	4	5
Growth of visitors from US	1	2	3	4	5
Attracting high income visitors to this winery	1	2	3	4	5
Rate of revisit (visitor loyalty) to this winery	1	2	3	4	5
Cellar door sales as percentage of total sales	1	2	3	4	5
Expenditure of visitors at this winery	1	2	3	4	5
Overall profitability of this winery	1	2	3	4	5
Generating positive news	1	2	3	4	5
Margin growth of this winery	1	2	3	4	5
Return on investment	1	2	3	4	5
Wine quality produced at this winery	1	2	3	4	5
Creating successful wine brands	1	2	3	4	5
Success of premium brands offered at this winery	1	2	3	4	5
Brand equity (awareness and positive association) of this winery	1	2	3	4	5
Average wine retail price of wines from this winery	1	2	3	4	5
Growth of wine prices at this winery	1	2	3	4	5
Wine awards won by this winery	1	2	3	4	5

Review scores achieved by this winery	1	2	3	4	5
Ability to attract website and social media visitors	1	2	3	4	5
Innovativeness of this winery	1	2	3	4	5
Responsiveness of this winery to consumer trends	1	2	3	4	5
Responsiveness of this winery to policy changes	1	2	3	4	5
Access to distribution channels	1	2	3	4	5

Section 2c: WINERY AND SUSTAINABILITY

The fourth section of this questionnaire deals with your winery and its sustainability efforts. Sustainability refers to its triple bottom line to improve the environment, social welfare and lasting economic benefits. Sustainability includes organic viticulture and biodynamic agriculture unless stated differently.

11. Please indicate your winery's **SUSTAINABILITY PRACTICES**.

1= Strongly disagree 2= Disagree 3= Neutral 4= Agree 5 = Strongly agree

At our winery we ensure worker job satisfaction.	1	2	3	4	5
At our winery we recycle waste materials from wine making.	1	2	3	4	5
Our winery uses renewable energy sources.	1	2	3	4	5
Our winery aims for ecological self-sufficiency.	1	2	3	4	5
At our winery we measure our carbon footprint.	1	2	3	4	5
At our winery we use herbicides/pesticides that are environmentally friendly.	1	2	3	4	5
Our winery uses fertilizers that are environmentally safe.	1	2	3	4	5
Our winery provides funds for projects intended to improve environmental performance.	1	2	3	4	5
Our winery implements measures to preserve water.	1	2	3	4	5
At our winery we monitor our environmental impact.	1	2	3	4	5
At our winery we have implemented wildlife habitat protection practices.	1	2	3	4	5
At our winery we employ ethical considerations.	1	2	3	4	5
At our winery we pay fair compensation (living wage) to all employees	1	2	3	4	5
Our winery does not use artificial preservatives.	1	2	3	4	5
At our winery we farm grapes organically.	1	2	3	4	5
At our winery we treat the farm as one cohesive, interconnected living system.	1	2	3	4	5

12. Please indicate your **ATTITUDE TOWARDS SUSTAINABILITY** in the wine industry.

	Strongly disagree				Strongly agree
At our winery sustainable initiatives are difficult to implement.	1	2	3	4	5

At our winery sustainable initiatives lead to enhanced reputation in the community.	1	2	3	4	5
At our winery people feel a personal obligation to exceed the requirements of sustainability regulations	1	2	3	4	5
At our winery sustainable initiatives present an increased risk of crop failure.	1	2	3	4	5
At our winery sustainable initiatives are much more work than they are worth.	1	2	3	4	5
At our winery sustainable initiatives lead to cost savings.	1	2	3	4	5
At our winery people feel a personal obligation to do whatever they can to minimize environmental harm.	1	2	3	4	5
At our winery sustainable initiatives lead to improved wine quality.	1	2	3	4	5
At our winery we must take stronger measures to conserve our nation's resources.	1	2	3	4	5
At our winery sustainable initiatives lead to increased customer demand.	1	2	3	4	5
At our winery sustainable initiatives are implemented completely voluntarily.	1	2	3	4	5

13. Please assess the following items whether they have been or currently are a **SIGNIFICANT PRESSURE** to increase you winery's sustainability efforts.

'We increase sustainability in our winery because of ...:'	Strongly disagree					Strongly agree				
	1	2	3	4	5	1	2	3	4	5
Health and safety requirements regarding employees	1	2	3	4	5					
Commitment to the environment	1	2	3	4	5					
Corporate reputation	1	2	3	4	5					
Saving costs	1	2	3	4	5					
Maximising profit	1	2	3	4	5					
Market differentiation	1	2	3	4	5					
Improvement or maintenance of product quality	1	2	3	4	5					
Motivating employees	1	2	3	4	5					
Image enhancement	1	2	3	4	5					
Building a strong brand	1	2	3	4	5					
Attraction of potential employees	1	2	3	4	5					
Environmental performance of the competition	1	2	3	4	5					
Environmental requirements of the international markets	1	2	3	4	5					
Complaints of local community groups	1	2	3	4	5					
Complying with environmental regulations	1	2	3	4	5					
Protests by environmental organizations	1	2	3	4	5					
Pressure from special-interest groups	1	2	3	4	5					
Fulfilling suppliers' requests	1	2	3	4	5					
Complying with government/council standards	1	2	3	4	5					

Pressure from the media	1	2	3	4	5
The requirements of our retailers	1	2	3	4	5
Wholesalers persist on sustainability practices	1	2	3	4	5
Customers demand sustainability practices	1	2	3	4	5
Complying with standards from the regional tourist office	1	2	3	4	5
Climate change	1	2	3	4	5
Being part of a sustainability network	1	2	3	4	5
Access to public funding	1	2	3	4	5

Section 2d: WINERY'S BRANDING STRATEGIES

14. Please indicate the **BRANDING STRATEGY OF YOUR WINERY**. A branding strategy refers to promoting the winery and creating meanings to potential visitors and consumers via different means of communication (brochures, websites, events, etc.).

	Strongly disagree			Strongly agree		
Our wine branding strategy stresses the natural beauty of our surroundings.	1	2	3	4	5	
Our wine brands stress a strong connection between the wine region and our wine.	1	2	3	4	5	
Our wine brands are associated with the good climate prevailing in this region.	1	2	3	4	5	
Our wine branding strategy stresses the benefits of sustainability.	1	2	3	4	5	
Our winery has one key brand that represents our winery.	1	2	3	4	5	
Our wine branding strategy is linked to new technologies of wine making.	1	2	3	4	5	
Our wine brands stress our European wine heritage .	1	2	3	4	5	
Our wine branding strategy is very focused.	1	2	3	4	5	
Our wine brands are associated with the exceptional taste of our wines.	1	2	3	4	5	
Our wine branding strategy stresses a strong connection between Australia and our wine.	1	2	3	4	5	
Our wine brands address the relationship between the environment and our wine.	1	2	3	4	5	
Our wine brands are linked to an environmental cause.	1	2	3	4	5	
Our winery tries to reduce the number of brands in our portfolio.	1	2	3	4	5	
Our wine brands are well established for environmental concern.	1	2	3	4	5	
Our wine branding strategy stresses the grape variety on bottles.	1	2	3	4	5	
Our wine brands stress the wine region of origin.	1	2	3	4	5	
Our wine brands are linked to the protected geographical origin of our wine region.	1	2	3	4	5	
Our wine branding strategy stresses the craftsmanship of our winemakers.	1	2	3	4	5	
Our winery has a limited amount of brands in our portfolio.	1	2	3	4	5	
Our winery branding strategy stresses wine education possibilities.	1	2	3	4	5	

Our winery tries to avoid having too many brands in our portfolio.

1 2 3 4 5

Section 2e: RELATIONSHIP BETWEEN YOUR WINERY AND THE WINE REGION

15. Please indicate the **IMPORTANCE OF BEING LOCATED IN THE WINE REGION** that your winery belongs to.

	Strongly disagree				Strongly agree
There is a sense at our winery that we belong in this region.	1	2	3	4	5
Our winery is rooted in this wine region.	1	2	3	4	5
Our winery has a lot of shared goals with other wineries in this wine region.	1	2	3	4	5
It is hard to imagine our winery in another region.	1	2	3	4	5
Our winery's future plans include the wine region we are located in.	1	2	3	4	5
Our winery brings prestige to the region.	1	2	3	4	5
As compared with other wine regions, our wine region provides many advantages.	1	2	3	4	5
There are many things in our wine region that are envied by other wine regions.	1	2	3	4	5
There is room for individual wine identities in this wine region.	1	2	3	4	5
Our winery identifies strongly with the wine region we are located in.	1	2	3	4	5
Our winery feels attached to the wine region we are located in.	1	2	3	4	5
Wineries compete more than they cooperate in this wine region.	1	2	3	4	5
Our winery values the wine region that we are located in.	1	2	3	4	5
There is good communication between wineries in our region.	1	2	3	4	5
Our winery would not perform as well if it was located in a different wine region.	1	2	3	4	5
Our winery feels a strong sense of belonging to this wine region and its setting/facilities.	1	2	3	4	5

16. Please specify your opinion about the **WINE REGION BRAND** portrayed by the regional office. Regional office refers to organizations that aim to promote the location of the wine region to potential visitors. The wine region brand is part of the branding strategy and aims to portray a certain image or meaning to the potential visitor.

	Strongly disagree				Strongly agree
Our winery's image is supported by the wine region brand.	1	2	3	4	5
Our winery's brand stresses the same things as the wine region brand.	1	2	3	4	5
Our winery's brand shares the same identity as the wine region brand.	1	2	3	4	5
Our winery portrays the wine region brand on our wine products and merchandise.	1	2	3	4	5
Our winery's branding strategy is linked to the wine region brand.	1	2	3	4	5
Our winery recognizes itself in the wine region brand.	1	2	3	4	5
Our sense of what our winery stands for matches the sense of the wine region brand.	1	2	3	4	5
Our winery perceives the wine region brand as a differentiating factor from other wine regions.	1	2	3	4	5

Our winery perceives the wine region brand as providing a label that describes us.	1	2	3	4	5
Our winery benefits from branding initiatives of the wine region	1	2	3	4	5
Our winery benefits from the overall branding strategy of Australia.	1	2	3	4	5
Our winery recognizes itself in Australia's branding strategy.	1	2	3	4	5
The branding strategy of Australia brings prestige to our winery.	1	2	3	4	5
Our winery identifies strongly with the brand that Australia stands for.	1	2	3	4	5
The branding strategy of Australia provides many advantages to our winery.	1	2	3	4	5

17. Please indicate the extent to which you have been involved in **CO-CREATING THE WINE REGION BRAND** with the regional office.

	Strongly disagree				Strongly agree
Our winery has good relations with the regional office.	1	2	3	4	5
Our winery co-created the wine region brand with the regional office.	1	2	3	4	5
Our winery communicates well with the regional office.	1	2	3	4	5
Our winery has been involved in creating the wine region brand.	1	2	3	4	5
Our winery and the regional office solve problems as soon as they occur.	1	2	3	4	5
Our winery shares information with the regional office and vice versa.	1	2	3	4	5
Our winery perceives the work of the regional office to be very transparent.	1	2	3	4	5

Section 3: DEMOGRAPHICS

18. When was your winery founded? <input type="text"/>	19. How many employees does your winery have? <input type="text"/>	20. What is the size of your vineyard in Hectares (Ha)? <input type="text"/>				
21. On average how many cases of wine do you sell each year? <input type="text"/>	22. What is the average price for a bottle of wine made by your winery? <input type="text"/>	23. Who manages your firm? <table border="1"> <tr> <td>The Owner</td> <td><input type="text"/></td> </tr> <tr> <td>An appointed manager</td> <td><input type="text"/></td> </tr> </table>	The Owner	<input type="text"/>	An appointed manager	<input type="text"/>
The Owner	<input type="text"/>					
An appointed manager	<input type="text"/>					

<p>24. Who owns your firm?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Sole Proprietorship</td> <td style="width: 30%;"></td> </tr> <tr> <td>Partnership</td> <td></td> </tr> <tr> <td>Family ownership</td> <td></td> </tr> <tr> <td colspan="2">Other</td> </tr> </table>	Sole Proprietorship		Partnership		Family ownership		Other		<p>25. What position do you hold in your firm?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Owner</td> <td style="width: 30%;"></td> </tr> <tr> <td>General Manager</td> <td></td> </tr> <tr> <td>Marketing Manager</td> <td></td> </tr> <tr> <td>Winemaker</td> <td></td> </tr> <tr> <td>Production Manager</td> <td></td> </tr> <tr> <td colspan="2">Other.....</td> </tr> </table>	Owner		General Manager		Marketing Manager		Winemaker		Production Manager		Other.....		<p>26. How many years is your winery involved with sustainability efforts? (If applicable)</p> <div style="border: 1px solid black; height: 40px; width: 100%; margin-top: 10px;"></div>
Sole Proprietorship																						
Partnership																						
Family ownership																						
Other																						
Owner																						
General Manager																						
Marketing Manager																						
Winemaker																						
Production Manager																						
Other.....																						

27. Does your winery have any of the following **CERTIFICATIONS** (mark as many as applicable)?

- | | | |
|---|--|--|
| <input type="checkbox"/> Australian Certified Organic | <input type="checkbox"/> NASAA Certified Organic | <input type="checkbox"/> Sustainable Winegrowing |
| <input type="checkbox"/> Demeter Bio-dynamic | <input type="checkbox"/> ISO 14001 | <input type="checkbox"/> Freshcare Australia |
| <input type="checkbox"/> Entvine Australia | <input type="checkbox"/> Other _____ | <input type="checkbox"/> None |

28. Would you like to be informed about the outcomes of this international study?

- ☐ YES, my **NAME** and **EMAIL ADDRESS** is: _____
- ☐ NO

THANK YOU VERY MUCH FOR TAKING PART IN THIS STUDY.



Plymouth University
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Hanne Kroger
Associate Lecturer in Marketing
Ph.D. Candidate in Marketing
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Interview consent form

Research project: Sustainability in collective place branding strategies and individual place identities

Participating university: Plymouth University – School of Management

Project leader: Professor Phil Megicks

Interviewer: Hanne Kroger

I hereby agree to take part in the aforementioned telephone interview. The interview will be conducted by phone and will last about 30 minutes.

I hereby permit that the interview will be audiotaped and notes will be taken during the interview. The recording is to accurately record the information that are provided, and will be used for transcription purposes by Hanne Kroger only. If I agree to being audiotaped but feel uncomfortable at any time during the interview, the recorder will be turned off at my request. Or if I do not wish to continue, I can stop the interview at any time.

I am aware that my study data will be handled as confidentially as possible. If results of this study are published or presented, individual names and other personally identifiable information will not be used.

I agree that my study data will be saved and may be used for future research.

Name of participant

Date

Signature

INTERVIEW GUIDE

Interviewee (Name and Winery):

Date:

Start:

End:

—

- ➔ DESCRIBE STEPS OF INTERVIEW PROCESS (INFORMED CONSENT, QUESTION AND ANSWER, THEIR QUESTIONS)
- ➔ OBTAIN INFORMED CONSENT
- ➔ TURN ON TAPE RECORDER
- ➔ VERIFY INFORMED CONSENT ORALLY WITH THE TAPE RECORDER ON

Question 1: What does sustainability mean to you and your winery's identity?

- Can you tell me about sustainability practiced at your winery and give examples?
- How does sustainability affect you and your business (benefits)?
- Can you elaborate on how sustainability is part of your winery's identity?

Question 2: How do you portray being sustainable in branding strategy/promotional material?

- Can you give me an example of how you communicate being sustainable (what do you stress)?
- Can you please elaborate on the use of sustainability in your branding strategy?
- Can you tell me more about your overall branding strategy/promotional strategy?
- In how far do you think using portraying sustainability leads to success?

Question 3: Why do you think some wineries/you do not portray sustainability in their/your branding strategy (even though you might practice sustainability)?

- What do you mean when you say ...?
- What are challenges in employing sustainability in branding strategies?
- Can you elaborate on how such challenges might be overcome?

Question 4: In how far does the wine region that you are located in practice/communicate sustainability?

- In how far does the wine region portray being sustainable?
- Can you give me an example of what the wine region stresses in their promotional material?
- Can you elaborate on whether you profit from the branding strategy of the wine region?

Question 5: In how far do you perceive a fit between your identity and the wine regions identity as necessary for affecting your (brand) performance?

- Can you tell me more about shared identities actually leading to success?
- Why do you think that wineries that identify themselves with the wine region brand perform better than wineries that do not?
- Would you say that you have been involved in the wine region brand process?
- In how far is your winery's identity similar/equal to the wine region's identity?
- Do you identify yourself with the wine region?

➔ GIVE THE PARTICIPANT THE OPPORTUNITY TO ASK QUESTIONS

➔ RECONFIRM THE PARTICIPANT'S CONSENT WHILE THE TAPE RECORDER IS STILL ON

➔ THANK THE PARTICIPANT AND TURN OFF TAPE RECORDER

Appendix E: NVivo Nodes

GENERAL DEFINITION SUSTAINABILITY

Australian data

Reference 1

Sustainability means to me ongoing over a longer term than just a few years. Generational, hmm yeah, I am a fifth generation farmer and if something is sustainable my children will be able to be farmers as well.

Reference 2

Hmm, as well as making sure that we are liable for the next year, the next decade and the next century.

Reference 3

I mean we grow organically and do everything we can from, you know, to create, you know a sustainable future. I have got young kids and if you manage everything sustainably then there should be a future for the generations to come

German data

Reference 1

Also das nachhaltige Wirtschaften bedeutet bei uns, dass wir nicht nur heute bzw. nicht nur die aktuelle Generation im Weinberg alle Möglichkeiten hat das Potenzial auszuschöpfen, sondern eben auch die Generationen nach uns im Grunde dieselben Möglichkeiten haben sollen besonders authentische Weine herzustellen und deshalb ist die Nachhaltigkeit ganz wichtig. Wie gesagt der qualitative Gedanke bei uns ist nicht nur auf eine Generation beschränkt, sondern soll auch in Zukunft möglich sein.

Reference 2

Also Nachhaltigkeit heisst letztendlich so zu wirtschaften, dass nachfolgende Generationen auch noch weiter wirtschaften können

Reference 3

Nachhaltigkeit kommt aus der Forstwirtschaft und heißt dass man für die Zukunft, wenn man einen Baum fällt auch einen neuen Baum pflanzen muss, der dann nach einer Menschengeneration wieder gefällt werden kann für die nächste Generation. Sollte man das vielleicht auch sehen. Von daher ist der Begriff erst mal sehr weitläufig, als ich mag den Begriff Nachhaltigkeit eigentlich nicht so arg benutzen.

Reference 4

Hmm, ja Nachhaltigkeit bedeutet natürlich dass ich möglichst wenig Umweltprobleme verursache durch meine Arbeit und den Anbau und im Keller unten und was halt alles damit zusammenhängt.

Reference 5

Nachhaltigkeit ist ein Begriff zurzeit, der oft gebraucht oder auch verschiedene Definitionen davon.

Reference 6

Nachhaltigkeit bedeutet für uns einen ganz normalen Umgang mit unseren Ressourcen, mit Personen, mit unserer Umwelt, mit allen darum herum, sodass wir was unsere westliche Kultur angeht einfach gut miteinander umgehen.

Reference 7

Ja gut, Nachhaltigkeit haben wir in 2013 auf einem Ecovinseminar genauestens definiert und kommt ursprünglich aus dem Waldbau, hat mehrere Säulen, die ökologische, das ist jetzt natürlich beim Biowein die wichtige, als auch die ökonomische, also auch eine persönliche Aufgabe, eine heile Welt zu hinterlassen. Um ein Beispiel zu nennen, ökologisch zu arbeiten hat sehr häufig eine negative Auswirkung auf die ökonomische Seite. Hmm, das heißt in Prinzip, das nicht jedes Verfahren, dass ökologisch ideal ist, ist auch kostentechnisch

Reference 8

Ja, das liegt ja eigentlich schon in dem Begriff des ökologischen Weinbaus mit drin, also sozusagen wir arbeiten mit der Natur und nicht gegen die Natur ohne Chemikalien, möglichst ressourcenschonend, und mit nicht allzu hohem Energieaufwand. Ja, dass es eigentlich schon ganz grob gesagt alles.

Reference 9

Was für mich Nachhaltigkeit bedeutet? Hmm, das ist wahrscheinlich der meist missbrauchte Begriff der Gegenwart. Und hmm, ich wurde einmal aufgeklärt, wo der herkommt und der kommt, glaube ich, aus dem Mittelalter, aus der Holzwirtschaft. Wenn wir dies einmal aus dem Blickwinkel betrachten, dann ist heute eigentlich nichts nachhaltig. Also dann ist auch meine Arbeit nicht nachhaltig.

Reference 10

Ich denke das geht in Richtung Nachhaltigkeit, der biologische Weinbau. Man liest ja sehr sehr viel über Nachhaltigkeit und ich denke mir immer, dass Predigt mein Vater schon seit 30 Jahren, was es viele sagen wir sind auch nachhaltig. Bei uns geht es in die Richtung, sind in der Natur nachhaltig.

Reference 11

das im Prinzip der Boden für die nächste Generation erhalten bleibt, sodass der Weinbau bei uns möglich ist

Reference 12

Ja, also der originale Gedanke dahinter kommt aus der Holzwirtschaft. Also die Fürsten im Mittelalter haben erkannt, dass wenn man immer nur Holz fällt, das Holz irgendwann alle ist und dann hat man immer Holz gepflanzt in dem Bewusstsein, dass genug da sein muss. Das ist in dem Sinne für mich nachhaltig, dass ich jetzt Rebstöcke pflanze, die mein Sohn benutzen können

Reference 13

Wir haben zum Beispiel auch die gleichen Maschinen, die jahrelang schon nutzen. Mein Vater hat kleine Maschinen schon so 20 Jahre. Das sind es nicht die top Newcomer, sondern sind halt kleine und alte Maschinen. Das geht mich auch um Nachhaltigkeit. Oder auch für unseren Keller, die dann auch Ressourcen brauchen und verbrauchen und das ist dann auch für uns in die Richtung, wir leben nicht verschwenderisch sondern ziehen da die Kreise.

AMBIGUITY OF THE TERM SUSTAINABILITY

German data

Reference 1

Von daher ist der Begriff erst mal sehr weitläufig, als ich mag den Begriff Nachhaltigkeit eigentlich nicht so arg benutzen.

Reference 2

Nachhaltigkeit ist ein Begriff zurzeit, der oft gebraucht oder auch verschiedene Definitionen davon.

Reference 3

Was für mich Nachhaltigkeit bedeutet? Hmm, das ist wahrscheinlich der meist missbrauchte Begriff der Gegenwart.

CONSERVATION

German data

Reference 1

Hmm, ja Nachhaltigkeit bedeutet natürlich dass ich möglichst wenig Umweltprobleme verursache durch meine Arbeit und den Anbau und im Keller unten und was halt alles damit zusammenhängt.

Reference 2

Nachhaltigkeit bedeutet für uns einen ganz normalen Umgang mit unseren Ressourcen, mit Personen, mit unserer Umwelt, mit allen darum herum, sodass wir was unsere westliche Kultur angeht einfach gut miteinander umgehen.

Reference 3

Ja, das liegt ja eigentlich schon in dem Begriff des ökologischen Weinbaus mit drin, also sozusagen wir arbeiten mit der Natur und nicht gegen die Natur ohne Chemikalien, möglichst ressourcenschonend, und mit nicht allzu hohem Energieaufwand

Reference 4

Wir haben zum Beispiel auch die gleichen Maschinen, die jahrelang schon nutzen. Mein Vater hat kleine Maschinen schon so 20 Jahre. Das sind es nicht die top Newcomer, sondern sind halt

kleine und alte Maschinen. Das geht mich auch um Nachhaltigkeit. Oder auch für unseren Keller, die dann auch Ressourcen brauchen und verbrauchen und das ist dann auch für uns in die Richtung, wir leben nicht verschwenderisch sondern ziehen da die Kreise.

GENERATIONAL

German data]

Reference 1

Also das nachhaltige Wirtschaften bedeutet bei uns, dass wir nicht nur heute bzw. nicht nur die aktuelle Generation im Weinberg alle Möglichkeiten hat das Potenzial auszuschöpfen, sondern eben auch die Generationen nach uns im Grunde dieselben Möglichkeiten haben sollen besonders authentische Weine herzustellen und deshalb ist die Nachhaltigkeit ganz wichtig. Wie gesagt der qualitative Gedanke bei uns ist nicht nur auf eine Generation beschränkt, sondern soll auch in Zukunft möglich sein.

Reference 2

Also Nachhaltigkeit heisst letztenendes so zu wirtschaften, dass nachfolgende Generationen auch noch weiter wirtschaften können

Reference 3

also auch eine persönliche Aufgabe, eine heile Welt zu hinterlassen.

Reference 4

einfach das den Weinbau so betreibt, dass auch Generation nach uns, die noch so betreiben können. Das so einmal ganz kurz was Nachhaltigkeit bedeutet.

Reference 5

Das ist in dem Sinne für mich nachhaltig, dass ich jetzt Rebstöcke pflanze, die mein Sohn benutzen können

ORIGIN OF THE TERM SUSTAINABILITY

German data

Reference 1

Nachhaltigkeit kommt aus der Forstwirtschaft und heißt dass man für die Zukunft, wenn man einen Baum fällt auch einen neuen Baum pflanzen muss, der dann nach einer Menschengeneration wieder gefällt werden kann für die nächste Generation

Reference 2

Ja gut, Nachhaltigkeit haben wir in 2013 auf einem Ecovinseminar genauestens definiert und kommt ursprünglich aus dem Waldbau, hat mehrere Säulen,

Reference 3

Und hmm, ich wurde einmal aufgeklärt, wo der herkommt und der kommt, glaube ich, aus

dem Mittelalter, aus der Holzwirtschaft. Wenn wir dies einmal aus dem Blickwinkel betrachten, dann ist heute eigentlich nichts nachhaltig.

ECOLOGICAL SUSTAINABILITY

Australian data

Reference 1

is about the ecological side, the soil, working with natural processes, rather than circumventing them with chemicals

Reference 2

Sustainability means to me that the soil is healthy, the plants that are growing in the soil are healthy and the fruits that come off that soil and that ground are of high quality

Reference 3

Probably sustainability for me is that in the vineyard so it means growing the fruit hmm without any synthetic pesticides, fungicides or herbicides. That is the first aspect of sustainability. The next would be in the winemaking so being conscious about how we are going about making the wine hmm to try to preserve what was grown in the vineyard. So not manipulating the wines too much through additions and try to respect where they have come from.

Reference 4

For me it is the soil that is really important and making sure that your soil is not being depleted and destroyed by the practices. You should look after your soil and that is where the organics and biodynamics come in. Australian soil is very of everything and we are trying to replenish and renew those soils by giving mineralisation to improve our soils and return fertility. The structure of soil is fundamental of what gets depleted so that is really important.

Reference 5

We don't do mechanical harvesting, hand pruned, hand picked grapes, the vineyard has a 4.5 KW solar generating system connected. So we are pretty well energy neutral. The vineyard vehicle is a hybrid Toyota Prius. That's about it. We are sustainable, we don't add anything to the vineyard at all.

Reference 6

Sustainability means that you have very low input and that the agricultural ecosystem is in balance. That tends to be one line.

Reference 7

So I guess for us sustainability means doing things that don't harm the environment or the people

Reference 8

Obviously water is a big issue being in the driest state in the driest continent in the world so we do what we can to limit the amount of water we use and hmm yeah make as few passes as we can through the vineyard with machinery and what not to avoid soil compaction and we monitor our soil on an annual basis and make sure they maintain healthy and hmm have land for years to come.

Reference 9

So in the sustainability thing there are probably two things. One, I want to make sure that the land improves. We are not killing the soils and you know being everything to try to get high yields and things like that. But that is because of droughts and hmm I think that sustainability in the land that if you go out into the vineyard you kick down under the grass and you see a very healthy soil, you know a lot of micro flora, everything is growing not just the vines.

Reference 10

it really is just getting back to healthy, strong soil ecology and working with the ecosystem

Reference 11

I think that is what sustainable and organic farming is about. It is about a head change

Reference 12

Well, in terms of sustainability, the vineyard will be here forever. And the reason it will be here is because we take care of it and apply which practices that we can without using herbicides, pesticides and countless fertilizers

German data

Reference 1

Also wir versuchen einfach, die Weinberge und die Böden nicht auszunutzen, sondern versuchen immer wieder Energie und Lebendigkeit zurückzugeben.

Reference 2

Also im Prinzip hier nicht die Umwelt versauen zum einen bzw. auch Erosionsschäden und und also Ressourcenverbrauch minimieren so weit es geht

Reference 3 -

Ich bewirtschafte meinen Betrieb ökologisch seit 20 Jahren nach Richtlinien von Ecovin und Nachhaltigkeit bedeutet für mich, dass der Betrieb ökologisch bewirtschaftet wird wobei nachhaltig ein relativ weitläufiger Begriff ist.

Reference 4

Das man möglichst nach ökologischen Gesichtspunkten arbeitet. Also Ökologie umfasst dann ja praktisch das Ganze.

Reference 5

Hmm, was bei uns zum Beispiel dadrunter schonmal anfängt, ist einfach dass man im Weinberg eben sorgsam mit der Natur umgeht.

Reference 6

Auf den Weinberg bezogen hat es damit zu tun, so umweltschonend wie möglich zu wirtschaften. Wir sind ein Bio Betrieb, also ein Betrieb, den man heute Bio dynamisch nennt. Schon seit den fünfziger Jahren hat mein Großvater, die Beweggründe waren damals natürlich nicht die wie heute, dass der Verbraucher den Nutzen darin sucht, sondern es ging eigentlich darum, besonders schonend und verträglich mit dem Weinbergsboden umzugehen. Meinem Großvater ging es damals vornehmlich um das Grundwasser um auch für die nächsten Generationen das als Produktionsgrundlage zu erhalten

Reference 7

Ich denke mal, für mich zählt dann im Anbau vor allem der Verzicht auf chemische Pflanzenschutzmittel und auch kein mineralischen Dünger. Ja, eigentlich so das, was das Programm vom biologischen Anbau ausmacht. Klar, natürlich auch die Energiesparmaßnahmen, also energiesparende Arbeitsweise, wie zum Beispiel keine unnötigen gerade auch elektrischen Behandlungsverfahren, ja eigentlich ist das so der Grundansatz. Es gibt natürlich viele Feinheiten oder Ausnahmen, wo man dann halt auch mal auch einen höheren Energieaufwand hat, also wenn man andere Voraussetzungen hätte. Aber letztendlich muss man ja immer unter den Bedingungen arbeiten die man selber im Betrieb hat

Reference 8

Und ein weiterer Aspekt der Nachhaltigkeit ist natürlich hmm wo wir es halt für uns in Anspruch nehmen können, das ist das wir halt mit unserem Boden entsprechend umgehen. Dass der sicherlich nicht so behandelt wird, wie das bei unseren Kollegen der Fall ist.

Reference 9

Das ist ein sehr wichtiger Teil, dass wir dann zusätzlich auch noch mit den Präparaten arbeiten. Da gibt es ja das 500 und das 501 und speziell das Präparat 500 ist für den Boden sehr wichtig, weil es lebendige Impulse setzt und Stoffwechselprozesse im Boden auch harmonisiert und anregt

Reference 10

das heisst ich mache mir einfach Gedanken, was ich mache, dass ich also die Ökologie aufrecht erhalte im Weinberg bzw. Fördere

Reference 11

Für mich ist der ökologische Weinbau eigentlich wichtiger, aber dass ist auch nachhaltig. Ich arbeite ressourcenschonend mit der Energie und ich nutze auch keine Schadstoffe, also keine Herbizide, das es einfach mechanisch bearbeitet wird, dass die Bodenstruktur verbessert wird

Reference 12

Also ich würde einmal sagen, wie versuchen einen verantwortungsbewussten Umgang mit Ressourcen und Natur in die Praxis umzusetzen. Also eben die Böden nicht mit chemischen Substanzen zu traktieren, also sowohl die Böden als auch unsere Umwelt. Hmm, also auch

mäßige Erträge zu fahren. Und da würde ich das Hauptaugenmerk bei unserer Anbauweise legen.

SOCIAL SUSTAINABILITY

Australian data

Reference 1

And I would say to them that a bottle of wine that is this good you drink less wine and drink better wine and it is line with our social responsibility. As winemakers and wine marketers we are increasingly under pressure from authorities and the health lobby and politicians to do something about alcohol abuse so we find it fitting with our views.

German data

Reference 1

Da setzen wir auch sehr hohe soziale Standards, was bei uns im Grunde auch zur Kultur dazu gehört, dass auch eine gewisse Geselligkeit herrscht, dass auch ein Miteinander herrscht und die Mitarbeiter, die bei uns angestellt sind, die sind teilweise schon seit über 15-20 Jahren bei uns. Wir machen auch jeden Tag zum Beispiel ein gemeinsames Mittagessen, das gehört ganz normal dazu bei uns.

Reference 2

Sozial ist dann natürlich mein Verhältnis zu meinen Mitarbeitern, wo wir schon seit Jahren im Prinzip zum Beispiel auf Mindestlohniveau sind. Dass Lehrlinge, Praktikanten bei uns in die Familie eingebunden werden, das heisst die kriegen hier Essen bei unserem Mittagstisch mit, bzw. Kurzzeitpraktikanten wohnen dann auch in der Familie. Also das wir uns da drum kümmern.

Reference 3

wobei das jetzt nicht zum Thema Nachhaltigkeit so ganz trifft, sondern eben einfach das Theman, dass man die Mitarbeiter motiviert. Hmm einfach dass man da zwei, dreimal im Jahr was beuwsst für den Mitarbeiter Gutes tut. Wie gesagt, das würde ich jetzt nicht unbedingt dem Begriff Nachhaltigkeit zu ordnen, eher so dir Betriebszugehörigkeit stärkt, die Motivation, was aber dann natürlich im Umkehrschluss, auch eine gewisse Nachhaltigkeit im Verkauf hat. Motivierte Leute, die die Produkte selber gerne in unserem Fall trinken mögen, könnten natürlich auch viel besser verkaufen und in dem Fall, was ich als Motivation beschrieben habe

Reference 4

nach unserem christlichen Selbstverständnis, der Umgang miteinander, mit Kollegen in der Szene, wenn das darauf abzielt, machen wir uns das schon Gedanken. Weltverbesserer sind wir nicht

Reference 5

Aber trotzdem ist das natürlich sehr wichtig. Nach der Ernte zum Beispiel wird immer noch zusammen gegessen, zusammen gegessen und es sie soziale Komponente auf jeden Fall erhalten bleibt. Wir haben noch einen anderen Teil Weinberg man nicht alles machen muss

aber trotzdem alles mit der Hand, weil die Leser auch einfach sein soziale Komponente ist, wo die Leute sich treffen und sich unterhalten wird und natürlich auch gearbeitet wird. Die soziale Komponente uns doch auf jeden Fall sehr wichtig ist.

Reference 6

Es ist natürlich auch dann mein Ding zu erkennen, zu was ein Mitarbeiter fähig ist und was überfordert ihn, aber ich versuch die Mitarbeiter schon dahin zu bringen, dass sie sich hiermit identifizieren, denn das bringt natürlich auch absolute Qualität hier rein.

Reference 7

Fortbildungen, wo sie die Möglichkeit bekommen hinzugehen und auch mal freigestellt werden, hmm das sind aber auch so Sachen, dass man einfach mal neue Ideen vorbringen darf, die auch selber umsetzen darf, auch schlussendlich dann gut läuft, das sit dann unabhängig, aber ja da gibt es zwei, drei Sachen, die mir jetzt spontan einfallen. Aber einen konkreten Plan, was jetzt Nachhaltigkeit bei den Mitarbeitern angeht, der liegt bei uns jetzt nicht vor.

Reference 8

Am Beispiel festmachen kann ich das ein bisschen so, dass wir ganz viele Halbtagskräfte haben, die bei uns als Mitarbeiter, ich sage jetzt mal den Haupterwerb bei uns für ihre Familie darstellen, dadurch dass wir vor Ort sitzen Leute aus dem Ort, ob Frau oder Mann die Möglichkeit bieten, wenn das Kind im Kindergarten Probleme hat, dann wird hier die Arbeit fallen gelassen, das Kind abholen oder zum Arzt fahren. Das spielt hier für uns eine ganz große Rolle, dass das gewährleistet ist und trotzdem der Arbeitsbetrieb aufrechterhalten bleibt

ECONOMIC SUSTAINABILITY

Australian Data

Reference 1

In the next aspect of sustainability would be financial sustainability. Because there is no point in making organic wine if you are going to go broke. That is an important element for me.

Reference 2

There is no point in being environmentally sustainable if you are making no money and the other way around. There is no point in making money if you are ruing the environment. We see it as being environmentally as well as economical liable.

German data

Reference 1

Ökonomisch natürlich, dass ich auch Geld verdienen muss, kein Thema

Reference 2

Wir müssen ja das Geld was wir für die Produktion ausgegeben haben irgendwie wieder reinkriegen. Dann ist es auch ein Thema was die Nachhaltigkeit im Marketing angeht. Wir haben viel weniger Kosten für Werbung, weil alle Kunden, die das schon einmal gesehen haben

und auch die, die uns kennen, kennen auch die Qualität der Produkte die im Zusammenhang mit den Methoden stehen. Die kaufen es gerne wieder auch mit einem geringeren Anteil an Vertriebs und Marketingkosten, wie bei vielen konventionellen Kollegen. Das ist auch ein wichtiger Punkt dieser Säule Nachhaltigkeit

SUSTAINABILITY PRACTICES

Australian data

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And that has been the case so by looking after the soil, I have managed to produce some very fine wine and now I am also growing Dorper sheep and there is a resurgent of the Australian native grasses coming through the weed grow so there is a decrease in weed grow basically.

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It is maybe more labour intensive, we don't have any fertilizers of any kind and of course no other chemicals hmm surprisingly when seasons are bad we always get a good crop and other vineyards that are using chemicals have no or bad crops

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Because we are organically certified we are restricted in our inputs. And we generally make our own inputs on the farm. All the fertilisers that we use are made from materials that we have on our winery in the farm. We are using other materials from other farms from other business that is a surplus to their requirements and then we manufacture it in a way that it complies with the organic certification and processes

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The main aspect is that we are certified organic so we are not using any chemicals, pesticides

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Now, we also have changed our operation from our farm so that we can rely more on native produce, native grasses and native processes so there is no intervention and things are more, I guess, easier to be sustainable.

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I think you can't truly be sustainable by using chemicals in the vineyard, during farming or wherever because even though there are a lot of people that they say are sustainable, I just think when you look at the impact of chemicals on the soil and soil biology and water ways, hmm and the effect that has on people and the atmosphere or the contamination of water or on their food, cancer or other health issues, I guess you know to me there is a cause for all those health issues and you know a lot of it is farming, agricultural and chemicals.

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Das ist jetzt der Einsatz der Mittel, im Weinbau also im Weinberg selbst sowie im Keller und auch dass mach ich jetzt auch noch und das machen nicht mehr viele Betriebe, dass man auch die Flaschen, die halt zurück kommen, dass die gespült werden, dass die wieder verwendet werden und so weiter und da gibt es tausend Beispiele.

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Hmm, das wichtige dabei ist die Kreislaufwirtschaft, also das ich kaum noch Dünger brauche, weil einfach die Wirtschaftsgüter sind zwar doch einfach der Rebschnitt, der liegt auch momentan einfach auf dem Boden, der nette, ältere Herr macht damit gerade schön Feuer und die Wärme geht dann einfach in die Luft. Hmm und raubt dem Boden den Humus, was natürlich nicht sehr nachhaltig ist. Unsere Rückstände dagegen, werden direkt im System gehalten, was natürlich per se schon einmal sehr nachhaltig ist. Weil man eine ganze Menge Dünger, der sonst in der Luft landet, einfach einspart hat man besonders gute Böden, man hat einen enormen Beitrag zum Gewässerschutz geleistet hmm

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Das ist nur ein Bereich. Dann kommen wir zum Pflanzenschutz. Wir verzichten auf chemisch synthetische Mittel bzw. wirklich man kann sagen auch keine Antibiotika.

CERTIFIED ORGANIC

Australian data

Reference 1

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Reference 2

A good example of that would be instead of copper and sulphate which is allowed as original organic input

Reference 3

Because we are organically certified we are restricted in our inputs

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German data

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CIRCULAR ECONOMY

Australian data

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Reference 2

And we generally make our own inputs on the farm. All the fertilisers that we use are made from materials that we have on our winery in the farm. We are using other materials from other farms from other business that is a surplus to their requirements and then we manufacture it in a way that it complies with the organic certification and processes

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Reference 3

Ansonsten bei den Literflaschen haben wir ein Pfandsystem

Reference 4

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Reference 5

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Reference 6

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Australian data

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Reference 2

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Reference 2

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SUSTAINABILITY PRACTICES

Australian data

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THE ROLE OF SUSTAINABILITY IN PLACE BRANDING STRATEGIES

Australian data

Reference 1

Sustainability is a word that we probably don't use a lot hmm as much as others in this industry because it is questionable whether or not being a small organic wine producer is sustainable. Hmm, but how it shapes our identity, I think from a marketing point of view for food here in WA people are still a little funny about organic wine. They are not really sure about it because the thing is there was a lot of bad organic wine on markets so people are still a little funny about it. They love organic food or hopefully that is going to lead the path for happening a bit more in the wine world. There is demand for it but I don't know.

Reference 2

No, we haven't marketed ourselves specifically as organic because we sell our fruit and then we make a bit of wine but I think there is enormous potential just because where this property is located for some of that ecotourism.

Reference 3

In terms of organic it is still a very strong focus for us as a business but we had a bit of a shift towards producing preservative free wine. So in addition to our certified organic they are also preservative free. Probably 8% of our production and that is where we are finding a real market niche. For the past six years it has been rapidly growing much faster than the organic wine sector.

Reference 4

Internationally, it is really highly linked for key words on our website. So that when people search for and punch organic wine into google, well then it is one of the first words that search engines find on our website. We have got now in Australia an organic advice standard which means if you are using those words you shall be certified that you are which is a great step forward for us. It was pretty loose before but yeah we target organic shops and organic marketing. My newsletter is all the communication where I talk about eco work and that sort of thing

Reference 5

[Asked about organic being a major part of the identity] Yes, it is a selling point. We have a strong customer base who drink that kind of wine. That is why we are certified. I don't like being certified because you are paying a lot of money for someone else to tell your customer that you are telling the truth. But anyway in reality we must certify otherwise you are perceived to be a little bit shady.

Reference 6

[Asked whether they identify with being organic] Hmm, to a very large part of it. We need to provide authenticity and we need to differentiate ourselves from I guess the mass producer side of agriculture

Reference 7

Hmm so look I guess from a sales point of view, our customers like the aspect of sustainability.

Reference 8

Our logo states that we are organic but it is certainly not a main up sale when it comes to the product.

Reference 9

I mean we are fairly well known and people that buy of the website and things are quite aware of it. People come out here not all of them but most of them have been here in the last 40 years and they come here and they I haven't been here for 30 years but it is the same as it was before so we are doing everything the same way.

Reference 10

We are very interested in taking the organic ethos into the winery with us and then passing the choice on the consumer. It is about providing choices in the wine industry. We are really into transparency like in the farming and both in the winery.

Reference 11

Well, I think there is a demand for it because people value preservative free wines as an intangible value so it is not necessarily about the way the wine tastes, it is about adding value to someone's worth through the perception of what the wine is.

Reference 12

Yes, it is on the website and it is on the labels on the bottle and of course the customers can see that quite easily.

Reference 13

We certainly promote it on the label and then also on the cases. It has only been in the last six years that I chose labelling the organic certification and there is a reason for that which I will come to in a minute.

Reference 14

We're marketing a premium product and the fact that is organic helps in some occasions.

Reference 15

But yeah, it is definitely the quality of the wine and we are organic. I wouldn't say it is secondary, I would say it is my first priority but to sell the wine it definitely has to be the quality. It is not because it is organic. It is because the wine is good quality.

Reference 16

It is definitely the carbon neutral aspect that is getting us a lot of publicity. Hmm so in terms of identity and PR it is a huge part of Temple Bruer's identity. Because we have been organic for so long, it is engrained in the brand that people look at the Temple Bruer brand and they go oh it is organic. Like it is already in their head. So even if we would make a wine that isn't organic people would still assume that the wine is organic.

Reference 17

The other way is of course on our website and with our social media yet but 50% of our wine is sold at our winery at the cellar door in this country. The cellar door is the principle method of communication. And it is a very strong one and it is very successful. So therefore nobody gets to change the message. It comes from my staff and my own staff here to the public directly and I am delighted by it and they are rewarded by increasingly

Reference 18

Also being leaders and innovators in our regions in this regard and people are aware of that in regards to consumers and I guess fellow industry business hmm so yes, it is important to our

brand but I guess first and foremost people buy our product because it is a good quality product.

Reference 19

Yes, we are trying to sell the wine on its merit not trying to hang it all on the fact that it is organic. There are a lot of sales outlet that have an organic and a non-organic section in the outlet and our wine is kind of placed in both. A lot of sales are actually better through the non-organic section.

Reference 20

Yeah, hmm the majority of our communication goes through actually the rural press, so agricultural press. So in terms of tapping into sort of capital cities with that message I think I suspect people of the land so people with a stronger connection to the land kind of are more receptive to the message of our brand.

Reference 21

So first of all, marketing needs to stress the good quality wine at the correct price point and then it is an added bonus if it is organic, sustainable type of thing. It can't be the other way round, it can't be faulty, poor quality, expensive wine but please buy it because it is sustainable and organic so that's wonderful.

Reference 22

If you ask me I would say that it isn't in the forefront enough. They definitely should yell it out louder on the label. Temple Bruer label is a very traditional label. Hmm, so it is kind of hard to see. I would say it is not highly visible but if you read it, you can see it. Hmm, but yeah it is probably not shouted out enough on the label.

Reference 23

One of them is to market it and I think the industry in Australia and I am only talking about Australia spends a lot of the time and efforts on compliances. This is the authenticity argument to make sure that those people who say and claim to be organic are organic

Reference 24

I guess all of our bottles on the back label which got the organic logo, so everybody knows that we are certified organic which is sustainability to some extent. Yeah and as part of our website and in other promotional material, we do printed hard copy newsletters a couple of times a year and we send it out to our mail order data base. As well as we give it out constantly to our distributors and wholesalers.

Reference 25

I guess other marketing collateral is that we have our organic logo on pretty much everything that we do. Hmm we don't do any TV advertising but every magazine advertising that we do has something about being organic or sustainable

Reference 26

We don't really use the word sustainable so much because everyone says there are being sustainable. We use certified organic because that can't lie being certified by a certain body. I think that has a certain impact than saying a word with no meaning. I think you need to be certified to proof that you are actually serious about it.

German data

Reference 1

Ja, es ist einer unserer Grundpfeiler, also nach innen gerichtet in unserer Produktion. Wir sind im Grunde auch drauf angewiesen, weil wir uns komplett der Qualität verschrieben haben. Und da ist diese Art zu wirtschaften für uns der Schlüssel, denn anders wäre diese Qualität auch gar nicht möglich.

Reference 2

Also das gehört selbstverständlich dazu. Ich sag mal ich komme ursprünglich aus der Umweltschutzbewegung des Anbaus. Das gehört einfach dazu. Wir kommunizieren das auch aber nicht so betont. Im Gegenteil, momentan ist ja das Thema Nachhaltigkeit umheimlich in. Da wird unheimlich viel Werbeblabla gemacht.

Reference 3

Da das schon auch ein Thema ist, dass ich ökologisch bewirtschaftete, aber man ist manchmal auch angefeindet worden. Wenn man irgendwo auf einer Messe oder einer Ausstellung war, gab es auch viele Leute, die das sehr kritisch betrachtet haben. Für mich war's dann insgesamt sehr wichtig, dass die Qualität auch stimmt, vor allem auf den Messen.

Reference 4

Also für mich ist das sehr wichtig, da ich im Endeffekt so produziere. Ob es dem Kunden wichtig ist, das ist jetzt zweitrangig. Für mich ist das wichtig. Da habe ich ja schon lange drüber nachgedacht. Seit dreissig, vierzig Jahren, dass man halt so arbeitet, da es einfach auch mehr Zufriedenheit schafft. Und nicht das Gefühl hat, man schafft eigentlich immer wieder neue Probleme mit den Dingen, die man macht.

Reference 5

Also das wird schon kommuniziert, zwar jetzt nicht ganz so offensiv, wie jetzt hmm, ich glaube Betriebe, die nach biologische Zertifikaten irgendwie wirtschaften, die machen das bestimmt offensiver, als wir, aber als Beispiel, wir haben so eine kleine Imagebroschüre, wo unser Betrieb vorgestellt wird, da wird dann schon hmm in kundenfreundlichen, einfachen, verständlichen Worten schon das erklärt.

Reference 6

Ja, das ist ein komplexes System. Generell wird schon das Bio Logo auf die Flaschen gedruckt hmm das wissen eigentlich schon alle unsere Kunden dass wir biologisch sind und das wird schon auf die Rückseite gedruckt so das Erstkunden die den Wein kaufen das nicht von dem Biologo abhängig ist. Wenn das zum Beispiel im Regal steht, weil ich finde es immer ein bisschen plakativ und auch häufig auch gar nicht so zielführend, weil diese Produkte auch qualitativ meiner Erfahrung nach leider auch nicht so gut abschneiden, wie ein einfach konsequent richtig gut gemachtes Produkt, was auch biologisch produziert ist.

Verbrauchererwartung hängt auch davon ab, weil das einfach einige am Markt sind, die halt eben die Säule der Qualität, jetzt die Qualität vom Wein des Genusses, eventuell weit hinten anstellen und sagen, das ist halt ein Bio Wein und der schmeckt halt so wie er schmeckt. So und damit kann ich nicht so gut leben und deswegen machen wir das so.

Reference 7

Aber natürlich kommuniziere ich das. Wir sind ja hier, wie gesagt, ein Gebiet mit relativ viel Tourismus und hier wird viel ab Hof verkauft, also sogar der größte Teil der Weinmenge und da ist natürlich das direkte Gespräch der Hauptweg um das mitzuteilen

Reference 8

Hmm, also wenn jemand den Begriff Nachhaltigkeit benutzen darf, dann sind das wir. Hmm, ja und ich benutze grundsätzlich diesen Begriff nicht so gerne, weil ich hmm, sag ich mal, wie ich vor 25 Jahren mit dem biologischen Weinbau begonnen habe, war dieser Begriff noch nicht existent. Also ich sag mal existent war er schon aber nicht so in unserer Gesellschaft eingegliedert, wie der jetzt benutzt wird. Damals sprach man einfach von Umweltschutz, das war so die wichtigste Triebfeder damals für uns. Also praktizierter Umwelt und Naturschutz. Ja und die Ziele haben sich ansich nicht geändert. Vielleicht sind die Anforderungen verändert und es ist heute ein Instrument um anspruchsvolle und hochwertige Weine zu produzieren. Und das hat einfach auch so dass die Gesellschaft mitspielt. Es ist ja heute für die Verbraucher wichtig ein gutes Gefühl dahinter zu haben.

Reference 9

Das ist das, was uns ausmacht. Unser Alleinstellungsmerkmal. Zum ersten einmal die Dauer, wie lange wir das machen. Vor 30 Jahren hatte niemand im entferntesten daran gedacht. Und es kommt jetzt immer mehr.

Reference 10

Ja, das ist sehr wichtig ja, also wir sind auch ein Demonstrationsbetrieb für ökologischen Landbau, wo wir praktisch für die Öffentlichkeit zur Verfügung stehen für Führung usw. unterliegt der Hauptaugenmerk natürlich auf diesen ökologischen Nachhaltigkeit.

Reference 11

Nach außen gerichtet ist es für uns auch wichtig in der Kommunikation, wie wir uns darstellen. Sodass wir das auch so richtig in unser Marketing mit einbauen, die Nachhaltigkeit und auch das ökologische Wirtschaften.

Reference 12

Im Prinzip hilft uns im Endeffekt nur ein kritischer Verbraucher. Das sind dann Verbraucher, der bewusst einkauft, auch mal ein bisschen hinterfragt, kann es sein, dass es Schweinefleisch als Hackfleisch für drei Euro im Laden steht? Zum Beispile diese ganze Skymasche hier in Deutschland, die mir immer mehr auf den Senkel geht. Hauptsache das große Auto und damit wird dann zu Lidl oder Ald einkaufen gegangen, weil es da billig ist

Reference 13

Wobei ich es allgemein gar nicht so herausstelle, dass es Ökowein ist. Also man erkennt es

schon, vor allem die Leute, die sich damit auseinandersetzen sehen das, dass es ökologischer Wein ist, aber in Konversationen, also im Gespräch, tue ich das jetzt nicht extrem herausstellen. Ich glaube für mich persönlich, ist das wichtigste, dann wieder der nachhaltige Gedanke, dass man die Natur bewahrt. Also für die Zukunft, dass ist eigentlich das, was mir persönlich am wichtigsten war.

Reference 14

Verkauf und Vertrieb mache ich selbst. Ich fahre selbst viel mit dem eigenen Wagen aus. Und so in regelmäßigen Abständen werden die Kunden auch angeschrieben und da ist natürlich ein sehr persönliches Verhältnis da und eigentlich kriege ich neue Kunden durch die Empfehlung. Ich liefere seit ein paar Jahren nach Dänemark und da haben sich immerschonmal wieder Leute gemeldet, die dann den Wein getrunken haben und dann ja letztens waren auch Leute aus Dänemark hier, also das sind so Multiplikatoren aber ich mache keine Werbung. Weder online noch sonst.

Reference 15

Auf unserer Homepage kann man lesen, da ist das auch nicht ganz offensichtlich erklärt, aber wenn wir zum Beispiel Gruppen für eine Weinprobe da haben, dann versuchen wir das schon ein bisschen zu erklären. Zum Beispiel ist bei uns die Zerromone, die aufgehängt werden, die erklären wir dann immer und ansonsten eben die anfallenden Arbeiten im Weinberg, die versuchen wir den Leuten zu erklären. Und also man versucht das Bewusstsein der Leute schon zu schärfen, aber ich sag offensiv beworben, wird es nicht sondern eher das mündliche, durch das Erklären, ist dann wichtiger.

Reference 16

Der biodynamische Anbau ist absolut Teil unserer Identität, unserer Kommunikation nach außen hin und es wird auch von uns am Markt ganz klar erwartet. Man ist da mittlerweile eine Marke. Sodass es erwartet wird.

Reference 17

Also bei uns ist das wichtig, wir werben damit und wollen das in Zukunft auch noch mehr machen. Wir sind Pionier und der biologische Weinbau ist letztendlich angekommen und jeder Betrieb versucht sich in einer Form abzugrenzen, ich sag mal Alleinstellungsmerkmale herauszuarbeiten und für uns ist es wichtig als Alleinstellungsmerkmal, weil ich natürlich zu den Bio Pionieren gehöre.

Reference 18

Gut ökologisch und Bio dynamisch geht noch irgendwo in eine andere Richtung. Gerade biologisch dynamisch ist doch eher eine Glaubenssache. Man muss daran glauben. Es ist nicht etwas man sagen kann, es ist es eine Nachfrage dahinter, jetzt mach ich das einmal, weil ich ein Markt sehr, und ich diesen Markt bedienen möchte. Bei uns ist das eine Überzeugung, was wir der Natur zurückgeben

Reference 19

Alle Kanäle sind wichtig. Die Kunden, die direkt kommen, die uns nicht kennen ja, das wird einem sofort bewusst. Das ist ausgedacht mit dem Biolandbetrieb auf dem Hofschild es ist sofort erkennbar und es wird danach sofort im Gespräch, bevor die Leuten Wein probieren

oder kaufen wird das immer thematisiert neben der Qualität durch den Terrassen beinahe ein Hauptaugenmerk.

Reference 20

Es steht dahinter und wird ein meinem gesamten Konzept auch herüber gebracht. Letztenendes aber nicht diese Überbetonung, wie sie jetzt momentan absolut in ist.

Reference 21

für mich als Winzer steht im Vordergrund die ökologische Bewirtschaftung, das ist mein Ding. Wenn jemand das Thema interessiert, erzähle ich es gerne, klar bei der Weinprobe, ist es auch immer ein Thema. Wenn Leute jetzt hier im Hof zu Besuch sind und ich mache auch immer Weinproben in den Weinbergen, dann ist es eigentlich immer ein großes Thema. Das zu erklären, das auch zu zeigen. Jetzt auch auf Messen und so, klar, wenn sie meinen es interessiert sie, dann erzähle ich es, aber ich habe auch erfahren, dass Leute gekommen sind, die haben versucht es tot zu reden.

Reference 22

Nö, eigentlich habe ich das nie so in den Vordergrund gestellt. Wie gesagt für mich ist das selbstverständlich. Ob das jetzt dem Käufer wichtig ist, dass ist jetzt eigentlich eine zweitrangige Geschichte. Wenn der natürlich fragt, was heisst jetzt ökologischer Weinbau, dann spricht man natürlich drüber, aber manche fragen auch gar nicht. Die wissen es halt oder es interessiert sie auch gar nicht. Ich meine im Vordergrund ist natürlich und muss ja auch die Qualität des Weins stimmen. Das ist ja nunmal das allerwichtigste. Weil zu sagen, ich habe ökologische angebaute Weine und die wären halt von der Qualität schlecht, das kann ja auch nicht weiterhelfen. Und umgekehrt sind ja halt auch die Bedingungen, wenn man halt ökologisch arbeitet für gute Qualität ist ja eigentlich auch viel besser als konventionell weil man da natürlich nicht diese hohen Erträge hat zwangsläufig und viel schonender mit allem umgeht im Keller und allen diesen Geschichten. Also von daher sind die Voraussetzungen für gute Qualität allemal da. Nur wie gesagt es gibt halt auch viele Probleme.

Reference 23

Auch bei uns im Logo, wir haben dort die Grabkappelle, da ist eben doch das traditionelle, die Herkunft, die wird dann hervorgehoben. Herrkunft hängt dann ja auch schon wieder mit dem Boden zusammen, was ja dann auch schon wieder eng mit der Nachhaltigkeit schon verknüpft ist, aber eben dieses ehm, dieses traditionelle und die Herkunft steht dann halt im Vordergrund. Also das ist praktisch jetzt keine hmm Abwertung des Themas Nachhaltigkeit sondern, es ist eher praktisch der Schwerpunkt, für die Werbemaßnahme einfach auf einen anderes Thema gelegt.

Reference 24

Unser Logo ist relativ simpel gestrickt mit einem Marienkäfer, der aus einer Zeit kam, in der der biologische Anbau nicht deklariert werden durfte. Und damit hat man immer schon die Gesprächsgrundlage, da dies ein relativ atypisches Zeichen ist. Das ist jetzt kein goldenes Wappen oder so, dass das Gespräch in die Richtung geht und in dem Logo steht auch ökologische Weine dabei. Uns ist allerdings sehr wichtig, dass der Geschmack die Kaufentscheidung letztendlich beeinflusst oder gibt. Wenn Sie unsere Flaschenausstattung angucken, wird auf dem Frontetikett gibt es keine Werbung für den ökologischen Weinbau. Dafür muss man die Flasche schon in die Hand

Reference 25

Also so schön wie das ist, dass immer mehr Leute ökologischen Weinbau machen, hmm, so gravierend ist es natürlich auch für uns, da das Alleinstellungsmerkmal für uns verloren geht. Und also deswegen suchen wir im Moment auch ein bisschen mehr also uns als Pionier in dem ökologischen Weinbau heraus zu stellen. Das ist uns schon wichtig.

Reference 26

Also bei uns ist es zum Beispiel, wenn ich zum Beispiel neue Großkunden gewinnen dann sage ich immer komm zu uns aufs Weingut und geht mit uns in die Weinberge. Wir machen in den Weinbergführung und erklären direkt vor Ort, wie wir arbeiten, wir Wirtschaften und zeigen das auch sehr gerne. Weil das so viele im Gespräch nicht nachvollziehbar ist. Weil wenn man das persönlich erlebt, ist einfach erlebbar und man kann das besser nachvollziehen als Konsument.

Reference 27

Ja, es auf der einen Seite sind es die Terrassen, weil wir sie haben. Und zum anderen die ökologische Anbauweise, was auch bisschen ineinander uebergreift.

Reference 28

Ja, also hauptsächlich auf meinem Blog, der sagen wir mal mein eigenes Medium ist. Da wird das unter anderem kommuniziert. Sehr viel natürlich in dem Gespräch mit dem Kunden. Also wenn da Nachfragen kommen. Da kann man dann individueller auf den Kunden eingehen.

Reference 29

Wir sehen uns als rheinhessisches Weingut, was hochwertige, regionale Weine herstellt. Und das eben auf umweltschonende Weise. Und wir verfolgen den Ökogedanken. Der lebt schon seit 50 Jahren und es war seit Jahrzehnten eher negativ betrachtet, jetzt ist es positiv behaftet. Wir sind Sander und nicht Naturland und mal Demeter und so sondern ich denke der Familienname und somit auch der Markenname ist das, auf das wir den größten Wert legen

Reference 30

Hmm, wir sind im Moment, wir haben da so ein bisschen geschlafen, zumindest sehe ich das momentan so und sind im Moment dabei aufzurichten und wollen in Zukunft, auf den Flaschen mit QR Code arbeiten. Gut und dann ganz klassisch mit Infobroschüren sind wir dabei uns zu erarbeiten. Das Internet soll wesentlich mehr genutzt werden. Unsere Internetseite wird überarbeitet und soll einfach moderner werden und jünger vor allem und dass sind auch die Kunden, die das Internet nutzen. Ich sag mal eher zielgruppenorientiert. Und dann gibt es auch Überlegungen hmm also auch mit Facebook zu arbeiten und das wir aktiv versuchen von unseren Kunden die Emailadresse zu besorgen und das wir dann mit allen direkt kommunizieren können.

Reference 31

Dann haben natürlich auch Broschüren, in denen wir uns präsentieren. Wir haben sehr viele Veranstaltung auf dem Weingut. Wir haben zweimal im Jahr ein großes Hoffest, wo besonders wichtig ist das viele Aussteller haben, die biologisch bewirtschaften zum Beispiel ein

biologisches Catering, eine Bio Bäckerei ein Bio Käse und dann auch gerne jemanden von Demeter oder auch Grad irgendwie etwas mit Solaranlagen, Solarautos, Elektroautos, die dann schon aus Wein kommen und sich präsentieren um der einfach dieses Gesamtbild zu schließen und anzuzeigen, wir sind ein Bio Landgut und verkaufen dann ALDI Würste, sondern wollen auch hochwertiges anbieten

Reference 32

Nein! Das interessanterweise nicht. Es wird von den Kunden gerne als Zusatznutzen angenommen. Also das habe ich immer wieder festgestellt, dass sie nicht konkret deswegen kommen, sondern das denen wirklich die Qualität und die Herkunft hier von Klingenberg am Herzen liegt. Und dann, dass der Wein ökologisch ist, ist nur ein Zusatz Bonbon. Und ich würde auch sagen, dass die Leute die ihre Lebensmittel im Ökoladen einkaufen, oft keine Weintrinker sind. Also die Kunden von Bio Weingütern gibt es immer er bei Leuten, die bewusst einkaufen aber jetzt nicht unbedingt im Bioladen.

Reference 33

Also vorerst im Fokus steht, dass ich mich erstmal selbst prostituiere. Dass ich selbst immer da bin für die Kunden. Da bin ich der Ansprechpartner gerade für einen Kleinbetrieb. Bei uns kommt der Riesling aus den Steillagen und das steht absolut im Vordergrund. Und als absolutes Alleinstellungsmerkmal haben wir 100% trockene Weine. Das gibt es soweit ich weiss nicht hier an der Mosel. Dann haben wir nebenbei eine kleine Essigproduktion, Rielsing essig und Rielsing Balsamic Essigproduktion

Reference 34

Ein gewisser roter Faden. Das uns wichtig, dass der sich dadurch zieht. Genau Website, Veranstaltungen, Broschüren, was können wir noch sagen. Auf Messen präsentieren wir uns entsprechend auf der Bio Fach in Nürnberg, das ist eine Weltfachmesse

Reference 35

Das wird kommuniziert, bzw ich habe auch eine ganz ganz tolle Streuung, durch die Homepage, bzw durch den Blog. Der ja mittlerweile, also seit 12 Jahren habe ich den Blog, wo auch ganz viele Bildergeschichten, also ich berichte was hier im Weingut vonstatten geht usw. Man könnte natürlich über vieles andere schreiben, aber ich denke, dass interessiert auch meine Kunden nicht.

Reference 36

Wir machen auch viel mit Demeter, also Veranstaltung mit dem Demeterverband auch mit Ecovin. Also rein und sehr sehr selten in die konventionellen Veranstaltung ein. Weil wir natürlich unter dem Dach von Ecovin oder Demeter uns das schon unter einem gewissen Argument präsentieren, wo wir dann auf die Kunden ansprechen wollen und können, die uns wichtig sind. Denen unsere Identität wichtig ist.

CHANNELS OF COMMUNICATION

Australian data

Reference 1

My newsletter is all the communication where I talk about eco work and that sort of thing

Reference 2 -

Our logo states that we are organic but it is certainly not a main up sale when it comes to the product.

Reference 3 –

I mean we are fairly well known and people that buy of the website and things are quite aware of it

Reference 4

Yes, it is on the website and it is on the labels on the bottle and of course the customers can see that quite easily.

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The other way is of course on our website and with our social media yet but 50% of our wine is sold at our winery at the cellar door in this country. The cellar door is the principle method of communication. And it is a very strong one and it is very successful. So therefore nobody gets to change the message. It comes from my staff and my own staff here to the public directly and I am delighted by it and they are rewarded by increasingly purchasing our wine not just cheap but also quite expensive.

Reference 7

Yeah, hmm the majority of our communication goes through actually the rural press, so agricultural press. So in terms of tapping into sort of capital cities with that message I think I suspect people of the land so people with a stronger connection to the land kind of are more receptive to the message of our brand.

Reference 8

We generally now try to use that when we go to fares or shows or wine parties that we demonstrate that we are organic. It is to make us different from anybody else and we always take someone who has quite knowledge about the organic industry so that we have one to one customer engagement

Reference 9

I guess all of our bottles on the back label which got the organic logo, so everybody knows that we are certified organic

Reference 10 -

Yeah and as part of our website and in other promotional material, we do printed hard copy newsletters a couple of times a year and we send it out to our mail order data base. As well as

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German data

Reference 1

aber als Beispiel, wir haben so eine kleine Imagebroschüre, wo unser Betrieb vorgestellt wird, da wird dann schon hmm in kundenfreundlichen, einfachen, verständlichen Worten schon das erklärt.

Reference 2

Generell wird schon das Bio Logo auf die Flaschen gedruckt hmm das wissen eigentlich schon alle unsere Kunden dass wir biologisch sind und das wird schon auf die Rückseite gedruckt so das Erstkunden die den Wein kaufen das nicht von dem Biologo abhängig ist

Reference 3 - 0.18%

Ja, das ist sehr wichtig ja, also wir sind auch ein Demonstrationsbetrieb für ökologischen Landbau, wo wir praktisch für die Öffentlichkeit zur Verfügung stehen für Führung usw. unterliegt der Hauptaugenmerk natürlich auf diesen ökologischen Nachhaltigkeit.

Reference 4

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Reference 5

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Reference 6

wenn wir zum Beispiel Gruppen für eine Weinprobe da haben, dann versuchen wir das schon ein bisschen zu erklären.

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einem sofort bewusst. Das ist ausgeschildert mit dem Biolandbetrieb auf dem Hofschild es ist sofort erkennbar und es wird danach sofort im Gespräch, bevor die Leuten Wein probieren oder kaufen wird das immer thematisiert neben der Qualität durch den Terrassen beinahe ein Hauptaugenmerk

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Wenn jemand das Thema interessiert, erzähle ich es gerne, klar bei der Weinprobe, ist es auch immer ein Thema. Wenn Leute jetzt hier im Hof zu Besuch sind und ich mache auch immer Weinproben in den Weinbergen, dann ist es eigentlich immer ein großes Thema. Das zu erklären, das auch zu zeigen. Jetzt auch auf Messen und so, klar, wenn sie meinen es interessiert sie, dann erzähle ich es, aber ich habe auch erfahren, dass Leute gekommen sind, die haben versucht es tot zu reden.

Reference 9

Also bei uns ist es zum Beispiel, wenn ich zum Beispiel neue Großkunden gewinnen dann sage ich immer komm zu uns aufs Weingut und geht mit uns in die Weinberge. Wir machen in den Weinbergführung und erklären direkt vor Ort, wie wir arbeiten, wir Wirtschaften und zeigen das auch sehr gerne. Weil das so viele im Gespräch nicht nachvollziehbar ist. Weil wenn man das persönlich erlebt, ist einfach erlebbar und man kann das besser nachvollziehen als Konsument

Reference 10

Ja, also hauptsächlich auf meinem Blog, der sagen wir mal mein eigenes Medium ist. Da wird das unter anderem kommuniziert. Sehr viel natürlich in dem Gespräch mit dem Kunden. Also wenn da Nachfragen kommen. Da kann man dann individueller auf den Kunden eingehen.

Reference 11

Hmm, wir sind im Moment, wir haben da so ein bisschen geschlafen, zumindest sehe ich das momentan so und sind im Moment dabei aufzurichten und wollen in Zukunft, auf den Flaschen mit QR Code arbeiten. Gut und dann ganz klassisch mit Infobroschüren sind wir dabei uns zu erarbeiten. Das Internet soll wesentlich mehr genutzt werden. Unsere Internetseite wird überarbeitet und soll einfach moderner werden und jünger vor allem und dass sind auch die Kunden, die das Internet nutzen. Ich sag mal eher zielgruppenorientiert. Und dann gibt es auch Überlegungen hmm also auch mit Facebook zu arbeiten und das wir aktiv versuchen von unseren Kunden die Emailadresse zu besorgen und das wir dann mit allen direkt kommunizieren können.

Reference 12

Dann haben natürlich auch Broschüren, in denen wir uns präsentieren. Wir haben sehr viele Veranstaltung auf dem Weingut. Wir haben zweimal im Jahr ein großes Hoffest, wo besonders wichtig ist das viele Aussteller haben, die biologisch bewirtschaften

Reference 13

Also vorerst im Fokus steht, dass ich mich erstmal selbst prostituiere. Dass ich selbst immer da bin für die Kunden. Da bin ich der Ansprechpartner gerade für einen Kleinbetrieb

Reference 14

Ein gewisser roter Faden. Das uns wichtig, dass der sich dadurch zieht. Genau Website, Veranstaltungen, Broschüren, was können wir noch sagen. Auf Messen präsentieren wir uns entsprechend auf der Bio Fach in Nürnberg, das ist eine Weltfachmesse

Reference 15

Das wird kommuniziert, bzw ich habe auch eine ganz ganz tolle Streuung, durch die Homepage, bzw durch den Blog. Der ja mittlerweile, also seit 12 Jahren habe ich den Blog, wo auch ganz viele Bildergeschichten, also ich berichte was hier im Weingut vonstatten geht usw. Man könnte natürlich über vieles andere schreiben, aber ich denke, dass interessiert auch meine Kunden nicht.

NEGATIVE ASPECTS OF SUSTAINABILITY IN BRANDING

Australian data

Reference 1

Hmm, but how it shapes our identity, I think from a marketing point of view for food here in WA people are still a little funny about organic wine. They are not really sure about it because the thing is there was a lot of bad organic wine on markets so people are still a little funny about it. They love organic food o hopefully that is going to lead the path for happening a bit more in the wine world. There is demand for it but I don't know.

Reference 2

No, we haven't marketed ourselves specifically as organic because we sell our fruit and then we make a bit of wine but I think there is enormous potential just because where this property is located for some of that ecotourism

Reference 3

Our logo states that we are organic but it is certainly not a main up sale when it comes to the product.

Reference 4

We're marketing a premium product and the fact that is organic helps in some occasions.

Reference 5

But yeah, it is definitely the quality of the wine and we are organic. I wouldn't say it is secondary, I would say it is my first priority but to sell the wine it definitely has to be the quality. It is not because it is organic. It is because the wine is good quality.

Reference 6

it is important to our brand but I guess first and foremost people buy our product because it is a good quality product.

Reference 7

Yes, we are trying to sell the wine on its merit not trying to hang it all on the fact that it is organic. There are a lot of sales outlet that have an organic and a non-organic section in the outlet and our wine is kind of placed in both. A lot of sales are actually better through the non-organic section.

Reference 8

So first of all, marketing needs to stress the good quality wine at the correct price point and then it is an added bonus if it is organic, sustainable type of thing. It can't be the other way round, it can't be faulty, poor quality, expensive wine but please buy it because it is sustainable and organic so that's wonderful.

Reference 9

We do yeah, we were going to put it on the front of the label but here in WA some people are right off the wine just because it is organic. That is why we put it to the back of the label. Hmm, so it is there if the consumer wants to qualify or verify that it is organic but it depends on the context. Sometimes it is found with the organic, sometimes with all the other wines. So it can work for us but it can also work against us. It is a pretty strange thing.

Reference 10

Was it important to them that we were certified organic? No. But it was really important to them that we did not apply anything synthetic or chemical.

Reference 11

So when we made our first wine in 2002, we were certified organic but we chose not to put that on the label hmm so the first couple of years we did not put certified organic or natural on the label. That was simply because a decade or so ago, organic wine was often of inferior quality. And perhaps gave organics a bad name so we didn't want to be associated with that and we also didn't want to be put into the organic category camp from consumers, wine bars and so forth.

Reference 12

There is a bad stigma, especially in Australia around organic wines from a lot of the area that organic wine is out there hmm it is not highly visible on the bottle. It is on the back label.

Reference 13

It is still seen or we are still seen as an outlier or something weird going on since we don't use any chemicals.

Reference 14

I think in Australia in particular, I am not sure about the rest of the world, some of the earlier organic wine that came into the market was not very good

German data

Reference 1

Ich sag mal ich komme ursprünglich aus der Umweltschutzbewegung des Anbaus. Das gehört einfach dazu. Wir kommunizieren das auch aber nicht so betont. Im Gegenteil, momentan ist ja das Thema Nachhaltigkeit umheimlich in. Da wird unheimlich viel Werbeblabla gemacht.

Reference 2

Da das schon auch ein Thema ist, dass ich ökologisch bewirtschaftete, aber man ist manchmal auch angefeindet worden. Wenn man irgendwo auf einer Messe oder einer Ausstellung war, gab es auch viele Leute, die das sehr kritisch betrachtet haben.

Reference 3

Also für mich ist das sehr wichtig, da ich im Endeffekt so produziere. Ob es dem Kunden wichtig ist, das ist jetzt zweitrangig. Für mich ist das wichtig.

Reference 4

Generell wird schon das Bio Logo auf die Flaschen gedruckt hmm das wissen eigentlich schon alle unsere Kunden dass wir biologisch sind und das wird schon auf die Rückseite gedruckt so das Erstkunden die den Wein kaufen das nicht von dem Biologo abhängig ist. Wenn das zum Beispiel im Regal steht, weil ich finde es immer ein bisschen plakativ und auch häufig auch gar nicht so zielführend, weil diese Produkte auch qualitativ meiner Erfahrung nach leider auch nicht so gut abschneiden, wie ein einfach konsequent richtig gut gemachtes Produkt, was auch biologisch produziert ist. Verbrauchererwartung hängt auch davon ab, weil das einfach einige am Markt sind, die halt eben die Säule der Qualität, jetzt die Qualität vom Wein des Genusses, eventuell weit hinten anstellen und sagen, das ist halt ein Bio Wein und der schmeckt halt so wie er schmeckt. So und damit kann ich nicht so gut leben und deswegen machen wir das so.

Reference 5

Hmm, also wenn jemand den Begriff Nachhaltigkeit benutzen darf, dann sind das wir. Hmm, ja und ich benutze grundsätzlich diesen Begriff nicht so gerne, weil ich hmm, sag ich mal, wie ich vor 25 Jahren mit dem biologischen Weinbau begonnen habe, war dieser Begriff noch nicht existent. Also ich sag mal existent war er schon aber nicht so in unserer Gesellschaft eingegliedert, wie der jetzt benutzt wird. Damals sprach man einfach von Umweltschutz, das war so die wichtigste Triebfeder damals für uns. Also praktizierter Umwelt und Naturschutz. Ja und die Ziele haben sich ansich nicht geändert. Vielleicht sind die Anforderungen verändert und es ist heute ein Instrument um anspruchsvolle und hochwertige Weine zu produzieren. Und das hat einfach auch so dass die Gesellschaft mitspielt. Es ist ja heute für die Verbraucher wichtig ein gutes Gefühl dahinter zu haben.

Reference 6

Wobei ich es allgemein gar nicht so herausstelle, dass es Ökowein ist. Also man erkennt es schon, vor allem die Leute, die sich damit auseinandersetzen sehen das, dass es ökologischer Wein ist, aber in Konversationen, also im Gespräch, tue ich das jetzt nicht extrem herausstellen

Reference 7

Auf unserer Homepage kann man lesen, da ist das auch nicht ganz offensichtlich erklärt,

Reference 8

Gerade biologisch dynamisch ist doch eher eine Glaubenssache. Man muss daran glauben. Es ist nicht etwas man sagen kann, es ist es eine Nachfrage dahinter, jetzt mach ich das einmal, weil ich ein Markt sehr, und ich diesen Markt bedienen möchte.

Reference 9

Es steht dahinter und wird ein meinem gesamten Konzept auch herüber gebracht. Letztenendes aber nicht diese Überbetonung, wie sie jetzt momentan absolut in ist

Reference 10

Nö, eigentlich habe ich das nie so in den Vordergrund gestellt. Wie gesagt für mich ist das selbstverständlich. Ob das jetzt dem Käufer wichtig ist, dass ist jetzt eigentlich eine zweitrangige Geschichte. Wenn der natürlich fragt, was heisst jetzt ökologischer Weinbau, dann spricht man natürlich drüber, aber manche fragen auch gar nicht. Die wissen es halt oder es interessiert sie auch gar nicht.

Reference 11

Ja gut, also ich kommuniziere diese Geschichten, wenn ich hier Kundenbesuche habe, teilweise auch über meinen Blog, wie Facebook. Aber man erreicht leider nie alle Verbraucher, oder viele Verbraucher machen auch einfach die Scheuklappen zu. Ich habe ja selbst im Freundeskreis, die auch am liebsten billiges Fleisch fressen im Prinzip und da ist auch teilweise gar kein rankommen. Die machen einfach die Ohren zu.

Reference 12

Den Begriff der Nachhaltigkeit gab es im Weinbau noch gar nicht und deswegen habe ich das auch nicht in den Mund genommen und man ist jetzt erst gezwungen, also in letzten Jahren, sich darüber zu definieren. Für mich war das eigentlich immer eine ganz klare Sache, begründet im biologischen Anbau, dass man da ressourcenschonend mit der Natur umgeht. Da gab es eigentlich gar keinen Grund und es gibt auch heute noch gar keinen Grund, mich da zu definieren. Das liegt für mich einfach in der Sache. Da überlegt man sich, was kann man machen um irgendwie noch ein bisschen ökonomischer zu arbeiten aber letztendlich wenn man irgendwann mal sein Weg gefunden hat, seinen Betrieb auf eine gewisse Weise ausgerichtet hat, da dreht man vielleicht noch einen paar Rädchen, aber insgesamt ist dann doch alles klar in dieser Hinsicht.

Reference 13

Also ich sage mal die klassischen VDP Betriebe, 50% ökologischer Weinbau zertifiziert aber ich sage mal das ist etwas anderes. Jetzt gerade bei mir ohne mich da jetzt so herausstellen zu wollen, die sagen, naja ich mache das ja schon länger. Da scheint es noch unterschiedliche Sichtweisen zu geben, weil man auch sagen muss, dass die Betriebe vor allem VDP Betriebe, die sind sehr zurückhaltend oder werben gar nicht damit.

Reference 14

Es sind finanzielle Fragen. Momentan ist Nachhaltigkeit ein In Thema bei vielen und da werden auch wieder Märkte gesehen. Die werden dann werblich besetzt, also die grosse Werbeblase. Dass die Betriebe Aufmerksamkeit erregen bzw, Alleinstellungsmerkmale mehr oder minder. Also es ist immer die Frage worauf die verschiedenen Betriebe ihren Fokus legen.

Reference 15

In den Vordergrund stelle ich das eigentlich gar nicht so sehr. Klar sage ich das, das steht auf meinem Hofschild und meiner Weinliste und auf der Homepage, das interessiert die Leute ja auch in einigen Fällen, allerdings nicht in allzu vielen. Ich meine es gibt Leute, die das interessiert, aber unterm Strich muss man sagen, wichtig ist eigentlich immer die Weinqualität und der Preis natürlich auch.

OTHER UNIQUE SELLING POINTS

German data

Reference 1

Auch bei uns im Logo, wir haben dort die Grabkappelle, da ist eben doch das traditionelle, die Herkunft, die wird dann hervorgehoben. Herkunft hängt dann ja auch schon wieder mit dem Boden zusammen, was ja dann auch schon wieder eng mit der Nachhaltigkeit schon verknüpft ist, aber eben dieses ehm, dieses traditionelle und die Herkunft steht dann halt im Vordergrund

Reference 2

Also das ist praktisch jetzt keine hmm Abwertung des Themas Nachhaltigkeit sondern, es ist eher praktisch der Schwerpunkt, für die Werbemaßnahme einfach auf einen anderen Thema gelegt

Reference 3

Ja, es auf der einen Seite sind es die Terrassen, weil wir sie haben. Und zum anderen die ökologische Anbauweise, was auch bisschen ineinander uebergreift.

Reference 4

Bei uns kommt der Riesling aus den Steillagen und das steht absolut im Vordergrund. Und als absolutes Alleinstellungsmerkmal haben wir 100% trockene Weine

POSITIVE ASPECTS OF SUSTAINABILITY IN PLACE BRANDING

Australian data

Reference 1

In terms of organic it is still a very strong focus for us as a business but we had a bit of a shift towards producing preservative free wine. So in addition to our certified organic they are also preservative free. Probably 8% of our production and that is where we are finding a real market niche. For the past six years it has been rapidly growing much faster than the organic wine sector.

Reference 2 -

[Asked about organic being a major part of the identity] Yes, it is a selling point. We have a strong customer base who drink that kind of wine. That is why we are certified. I don't like being certified because you are paying a lot of money for someone else to tell your customer

that you are telling the truth. But anyway in reality we must certify otherwise you are perceived to be a little bit shady

Reference 3

Hmm so look I guess from a sales point of view, our customers like the aspect of sustainability

Reference 4

Well, I think there is a demand for it because people value preservative free wines as an intangible value so it is not necessarily about the way the wine tastes, it is about adding value to someone's worth through the perception of what the wine is.

Reference 5

It is definitely the carbon neutral aspect that is getting us a lot of publicity. Hmm so in terms of identity and PR it is a huge part of Temple Bruer's identity. Because we have been organic for so long, it is engrained in the brand that people look at the Temple Bruer brand and they go oh it is organic. Like it is already in their head. So even if we would make a wine that isn't organic people would still assume that the wine

Reference 6

Even though I think there are so many wines on the market that having a point of difference, having a foot in the door that people will actually look at the wine is very useful. So having two points of difference by doing organic farming and having preservative free wine gets that foot in the door and when quality gets noticed by the people then it becomes a positive thing.

Reference 7

It is probably the main reason why people buy our wine is that it is certified organic and that is speaking domestically,

Reference 8

It is pretty much our marketing as a winery it predates before I even had a winery so in many ways it is the framework of our narrative. It is what we are as a winery so yeah it is a point of difference but also a quality point of difference, I believe. And because I am making natural wines, the idea of a starting point for natural wines is with organic grapes and biodynamic grapes as well.

Reference 9

A degree of them comes because they have done their advanced research and they have selected us as one of the places to see. And that is generally because we are organic, we are a farm, we have a number of attractions for the tourism but increasingly we are having people return and have much better knowledge and are now converts to the organic so it is slow along like this but I am convinced it is the right one

Reference 10

Now, for the last 10 years we are definitely putting being organic on the label because now it is a positive thing. You know what people care about even increasingly so which I am happy to

see.

Reference 11

It is more the population that is interested than us but it certainly helped us to attract attention from overseas and hmm you know certain parts of Australia organic status is hmm sought after.

Reference 12

When I got to Botobolar there was this idea of there were all hippies and are growing grapes organically now that how it was. It is really not though today. It is a very mainstream thing. I make a wine that we are bottling at the moment which is sulphate free and it is a 2015 vintage so it was on the vine in February today it had gone into the bottle. And I sell that to larger retailers and they buy it strictly because it is organic

Reference 13

I do think the consumer does appreciate that and I think they do and once the wine is good and the quality up to their standards I do think there is this authentic aspect. I mean especially during production which we really like. I mean we are proud of us.

Reference 14

So I think that there is a much greater following in the organic not just the wine making and wine but general food themselves all the veggies and the farmer markets that are all organic certified so it is becoming quite big and there has been a huge push for wine. I am making this preservative free Shiraz so about 8 years ago I made about 200 -500 cases a year and I sold it wherever I could. Now major retailers take about 1500 cases a year so there is a big demand.

Reference 15

It is great to keep people interested and have a look at the wine in a very crowded market place so our idea is that we carve out a little bit of a blue ocean in a very bloody red ocean.

Reference 16

McLaren Vale is very proactive in promoting sustainability. There is a programme which runs in McLaren Vale which is the only programme of its kind in Australia. It is called sustainable wine grape growing. Any grower around the region can be involved and it basically involves keeping records of what you do within your business and then at the end of the year you submit all of your information into a registered system and so that gives you a grading on your sustainability and it makes you look a bit harder at your processes and how you can improve things.

German data

Reference 1

Also das wird schon kommuniziert, zwar jetzt nicht ganz so offensiv, wie jetzt hmm, ich glaube Betriebe, die nach biologische Zertifikaten irgendwie wirtschaften, die machen das bestimmt offensiver, als wir,

Reference 2

Aber natürlich kommuniziere ich das. Wir sind ja hier, wie gesagt, ein Gebiet mit relativ viel Tourismus und hier wird viel ab Hof verkauft, also sogar der größte Teil der Weinmenge und da ist natürlich das direkte Gespräch der Hauptweg um das mitzuteilen.

Reference 3

Das ist das, was uns ausmacht. Unser Alleinstellungsmerkmal. Zum ersten einmal die Dauer, wie lange wir das machen. Vor 30 Jahren hatte niemand im entferntesten daran gedacht. Und es kommt jetzt immer mehr.

Reference 4

Ja, das ist sehr wichtig ja, also wir sind auch ein Demonstrationsbetrieb für ökologischen Landbau

Reference 5

Nach außen gerichtet ist es für uns auch wichtig in der Kommunikation, wie wir uns darstellen. Sodass wir das auch so richtig in unser Marketing mit einbauen, die Nachhaltigkeit und auch das ökologische Wirtschaften.

Reference 6

Und also man versucht das Bewusstsein der Leute schon zu schärfen, aber ich sag offensiv beworben, wird es nicht sondern eher das mündliche, durch das Erklären, ist dann wichtiger.

Reference 7

Also bei uns ist das wichtig, wir werben damit und wollen das in Zukunft auch noch mehr machen. Wir sind Pionier und der biologische Weinbau ist letztendlich angekommen und jeder Betrieb versucht sich in einer Form abzugrenzen, ich sag mal Alleinstellungsmerkmale herauszuarbeiten und für uns ist es wichtig als Alleinstellungsmerkmal, weil ich natürlich zu den Bio Pionieren gehöre.

Reference 8

Also so schön wie das ist, dass immer mehr Leute ökologischen Weinbau machen, hmm, so gravierend ist es natürlich auch für uns, da das Alleinstellungsmerkmal für uns verloren geht. Und also deswegen suchen wir im Moment auch ein bisschen mehr also uns als Pionier in dem ökologischen Weinbau heraus zu stellen. Das ist uns schon wichtig.

Reference 9

Ja, das schlägt sich auch in Broschüren nieder. Wir haben eine schöne Broschüre, in der das auch drin steht. Die Website ist nur so eine grobe Zusammenfassung dieser Broschüre, aber auch im kompletten Auftreten nach außen, spricht mit Kunden, mit Journalisten und mit Händlern wird es im Grunde auch jedes Mal betont. Das ist so der Aufhänger bei uns.

Reference 10

Also ich kommuniziere es im Prinzip aber ganz normal, so wie es zu meinem Weingut letztendlich gehört. Und wie eben schon erwähnt, es gibt da Gruppierungen, die

kommunizieren Nachhaltigkeit, wobei was steht dahinter? Das fällt dann immer weg. Es gibt da keine Kriterien. Also Marketingbla bla. Das einfach natürlich sehr sehr ärgerlich ist. Wir hatten gestern noch Mitgleiderversammlung von unserem Ökoverband und das sind diese Dauerthemen, die wir auch dauernd auf dem Tisch haben. Das heisst dieses Marketingblabla Nachhaltigkeit, wo nicht viel dahinter steht, das klaut den echten Ökos letztendlich die Show.

Reference 11

Klar, hat man dann auch einen wirtschaftlichen Vorteil, dieser hat sich entwickelt durch den Bioboom. Bei meinem Betrieb ist es so, ich vermarktete über 20 % Wein, den ich produziere und den Rest verkaufe ich als Trauben. Dadurch haben wir seit 2006 eine recht gute Nachfrage und dadurch einen guten wirtschaftlichen Vorteil.

Reference 12

Hmm, ja auf der einen Seite ja, allerdings war das natürlich vor 20 Jahren deutlich einfacher, weil da gab es 0.2% ökologischer Weinbau und da hatte man ein extremes Alleinstellungsmerkmal gehabt. Heute würde ich eher sagen, dass der ökologische Wein von den Konsumenten als Zusatznutzen genommen wird und wobei viele Betriebe, obwohl die zertifizierten ökologischen Weinbau machen von den Konsumenten gar nicht so wahrgenommen werden.

Reference 13

Ja, also wir haben viele Kunden die sagen, sie schmecken auch, dass das Produkt vielfältiger als, als es ist nicht so glatt gebügelt wie bei anderen und denen ist natürlich auch der Hintergrund sehr wichtig.

Reference 14

Das ist für uns auch ein bisschen ein Marketing Effekt bzw. wir stellen uns auch so da und wollen so gesehen werden und insofern hat es diese zwei Auswirkungen. Die Qualität an sich und wie gesagt auch auf die Außendarstellung. Und das ist dann natürlich auch ein Punkt, über den die Leute uns auch suchen. Das ist ganz klar. Dieses nachhaltige, womit sich Leute auch identifizieren und nicht nur allein die Qualität im Glas für die Leute entscheidend ist, sondern auch wie es erzeugt worden ist und sich damit identifizieren

Reference 15

[Frage, ob der biologische Aspekt, die Kunden dazu bringt, den Wein zu kaufen] Ich denke beides. Ich denke die Kunden, die ich habe, sind zum Großteil sehr umweltbewusst. Natürlich haben wir auch Kunden, die in Wein kaufen, nur weil er schmeckt. Diese erwerben dann den Vorteil der ökologischen Landwirtschaft dabei.

Reference 16

Wir hier in Stuttgart haben auch eine grüne Landesregierung, endlich einmal und das natürliche viele Kunden wichtig, die Aussagen o. k. mich interessiert auch was hinter dem Produkt steht. Die Betriebsabläufe, wo kommt es her, wie wird es hergestellt. Das ist vielen vielen unserer Kunden wichtig.

Reference 17

Also da wird uns zum Teil Arbeit abgenommen durch die ganze Organisation und es ist gut, dass die Leute zu uns gebracht werden. So kann man viele Leute erreichen ohne viel Aufwand. Das nimmt uns viel ab. Und die Zusammenarbeit ist dann in dem Fall sehr gut. Und die versuchen natürlich auch, die Zusammenarbeit besteht natürlich nicht nur mit uns sondern mit allen Stuttgartern Weingärtnern und es gibt auch einmal im Jahr eine Präsentation „Stuttgarts beste Weine“, wo wir auch gemeinsam zeigen, was es in der Region Stuttgart für edle Tropfen gibt. Und natürlich stellt jedes Weingut in gewisser Konkurrenz, aber in dem Fall präsentiert man sich dann einfach gemeinsam

Reference 18

Also ich denke, dass vom Grunde her da schon ein Gleichklang vorherrschen sollte, als zum Beispiel, ich kann jetzt nicht in einer Region, die für ihre Rieslinge bekannt ist, kann ich natürlich auch Rotweine anbauen, und werde am Anfang sicherlich eine Aufmerksamkeit auch durch die Medien bekommen. Aber wenn die Region durch Weissweine geprägt ist, das Aushängeschild ist, dann werde ich als einziger der gegen den Strom schwimmt, sicherlich es schwer finden. Also ich denke es sollte schon ein gewisser Gleichklang da sein, die gleiche Richtung verfolgt werden.

QUALITY AS USP

German data

Reference 1

Wir sind im Grunde auch drauf angewiesen, weil wir uns komplett der Qualität verschrieben haben. Und da ist diese Art zu wirtschaften für uns der Schlüssel, denn anders wäre diese Qualität auch gar nicht möglich.

Reference 2

Für mich war's dann insgesamt sehr wichtig, dass die Qualität auch stimmt, vor allem auf den Messen

Reference 3

Wenn der Wein zum Beispiel nicht schmecken würde, dann glaube ich, wären unsere Kunden sehr schnell weg. Die würden sich dann etwas anderes suchen.

Reference 4

Ich meine im Vordergrund ist natürlich und muss ja auch die Qualität des Weins stimmen. Das ist ja nunmal das allerwichtigste. Weil zu sagen, ich habe ökologische angebaute Weine und die wären halt von der Qualität schlecht, das kann ja auch nicht weiterhelfen. Und umgekehrt sind ja halt auch die Bedingungen, wenn man halt ökologisch arbeitet für gute Qualität ist ja eigentlich auch viel besser als konventionell weil man da natürlich nicht diese hohen Erträge hat zwangsläufig und viel schonender mit allem umgeht im Keller und allen diesen Geschichten

Reference 5

Nein! Das interessanterweise nicht. Es wird von den Kunden gerne als Zusatznutzen angenommen. Also das habe ich immer wieder festgestellt, dass sie nicht konkret deswegen kommen, sondern dass denen wirklich die Qualität und die Herkunft hier von Klingenberg am

Herzen liegt. Und dann, dass der Wein ökologisch ist, ist nur ein Zusatz Bonbon.

RELATIONSHIP WITH REGION

German data

Reference 1

wir waren eine kleine Gruppe hier an der Mosel mit sieben Betrieben am Anfang, die sich dafür interessiert haben und da haben wir uns dann regelmäßig getroffen und haben Erfahrungen ausgetauscht. Und waren auch damals die ersten, die halt eh ehh in Deutschland die eh verbindlichen Richtlinien aufgestellt haben, was ökologischer Weinbau heisst und da hatten wir dann auch einen eigenen Verein gegründet. Damit das irgendwie eine rechtliche Basis hat. Und das hat sich dann natürlich weiterentwickelt, weil in es in den anderen Regionen auch so Arbeitskreise gab. Und daraus ist dann der Bundesverband entstanden. Und das ist halt kontinuierlich gewachsen. Und auch die Anzahl der Ökobetriebe.

Reference 2

{Profitieren Sie von den regionalen Vermarktung?} Jein. Ich sehe es so, dass es momentan mehr Leute gibt, die sich für den rheinhessischen Wein interessieren .Im selben Moment haben wir aber auch mehr Betriebe, die hervorragende Qualität herstellen, weil wir alle motiviert sind. Also da hebt es von der Nachfrage wahrscheinlich wieder bisschen auf.

Reference 3

Ich denke, da wird schon viel gemacht aber wir sind jetzt selber in einem Verband angeschlossen dem VDP, das ist ein Verband der Prädikatsweingüter, also Qualitätsweingüter. Wir sind eine Gruppe von 20-35 Betrieben und da kann man einfach viel mittelbarer Dinge kommunizieren und da merken wir schon deutlich dass die Leute auf uns zukommen aufgrund von Kommunikationsmaßnahmen, die über diesen Verband laufen

Reference 4

Nein, da wurden wir nicht mit einbezogen. Da muss ich noch einmal die Brücke schlagen zu dem Message in a Bottle Verein. Da waren wir bei der Gründung 16 Betriebe, später über 20 das hat den Vorteil, dass sie nicht als Werbung für einzelne gesehen worden, sondern so als Stimmung, der jüngeren Generation. Unser damaliger Vorstand, der war damit involviert und wir wurden zumindest auch eingeladen zu solchen Treffen. Man muss halt sehen, wo das Geld herkommt und das kommt von den großen und das ist so ein bisschen die Problematik.

NEGATIVE RELATIONSHIP WITH REGION

Australian data

Reference 1

No, we are the only organic winery and vineyard in Langhorne Creek so the region is very traditional and not hugely innovative or challenging in the way they have done things for years so yeah, it is pretty much just Shiraz and Cabernet. That is mainly grown in Langhorne Creek.

Reference 2

Once there are enough people in the boards and the right places doing what we do then it would be ok but at the moment it is not. And much as I am trying to get on those boards, do that sort of things I am a small player, the big end of the region does not like it. I suppose that is the simple way.

Reference 3

No, I wouldn't say so. I couldn't say that we do from it directly. The region might profit from it. We are only a small producer so we don't have a big cellar door that visitors can come and visit. All we do is direct or wholesale to local and international markets hmm so you know I am the only staff member at JJs so I don't see myself in any direct profits that we might see from them. You know or their efforts.

Reference 4

there was a few of us up here wanted to make a sub region called Smith River because of the difference there is geological and geographical.

Reference 5

[Asked whether they benefit from regional marketing] Hmm, not a huge amount. If anything Langhorne Creek benefits from the fact that Temple Bruer has such momentum with its brand.

Reference 6

I don't think there is anything in particular that denotes us hmm because a couple of the major growers have just gone in to the bulk market hmm so you are not getting those exclusive kind of boutique wines and things happening and neither Salamons Wines who is an Austrian and Salamons has been around for about 400 years hmm he is probably one of the best advocate for this region. But as a region it really struggles to have an uniqueness. Yeah.

Reference 7

For me personally, I don't think it is important to be located in any region. Well, I think that part of being a good winemaker is being able to make quality wines from whatever region.

Reference 8

in fact on our label we don't even mention Currency Creek. Yeah, that is also because back in the 60s there was a fellow down here growing grapes on the sand and it didn't have a huge reputation. But everyone knew about the Currency Creek winery and so it kind of got a hangover from a long time ago. You know we are such a young country in terms of compared to your wine regions from Germany or wherever, you know we just have as long memories but there is shorter time to forget.

German data

Reference 1

Nein also, der Tourismus an der Mosel spielt schon eine wichtige Rolle, aber ich habe relativ wenig davon. Ich bin ja nun auch nicht, also es gibt ja viele Weingüter, die eine Strausswirtschaft haben und ich bin nicht dabei. Das ergibt sich dann für die natürlich wunderbar mit dem Tourismus. Hier kommen Leute mal so aufs Gute wohl heraus uns klingeln,

und fragen nach Wein oder so, aber die hier her kommen, kenne ich meistens schon und das sind relativ wenige.

Reference 2

Ich profitiere von der regionalen Werbung, der regionalen Weinwerbung eigentlich kaum. Die tut für mich relativ wenig. Das sind immer dieselben Betriebe, die da zum Zuge kommen. Gut, ich bin auch ein sehr kleiner Betrieb, habe das Geld nicht um dabei bestimmten Aktion mitzumachen, also ich hab davon eigentlich sehr wenig. Na gut, die Außenwerbung, damit der insgesamt für das ganze Gebiet Werbung gemacht, das will ich jetzt nicht in Abrede stellen, da habe ich natürlich schon etwas von, aber insgesamt speziell als Ökobetrieb, habe ich davon nichts.

Reference 3

Nein, das kann ich jetzt nicht so unterstreichen. Vielleicht liegt es auch an mir, dass ich da nicht so hinterher bin. Ich meine, wir werden schon von den Grünen eingeladen und das ist immer so dass wir für die Wein ausschenken, das machen wir schon seit Jahren. Generell, ich lese immer wieder, dass kleine Betriebe hier gefördert werden sollen Württemberg und gerade biologische Betriebe, weil zum Umsatz her habe ich da nichts gemerkt. Die Region wird nicht deutschlandweit kommuniziert. Zumindest es noch nicht an mich eingetragen worden, diese Vernetzung, dass da die Betriebe unterstützt werden. Leider nicht, das würde ich mir mehr wünschen. Das würde ich auch ein bisschen kritisieren. Ich meine ich weiß, die Jungs haben viel zu tun. Ich meine, ich lese immer mal wieder einen Artikel, dass sie sich damit brüsten, haben wir so viele Bio Betriebe, aber so richtig unterstützt wird das es nicht

Reference 4

Von der Vermarktungsstrategie der Pfalz merke ich nicht allzu viel. Aus meiner Sicht kann ich das sehr schwer messen, wie viele Leute jetzt wirklich direkt auf uns zukommen, weil sie das so wahrnehmen, wie die Pfalz sich positioniert, aber ich selber merke eigentlich wenig davon. Die Pfalz ist ein Verbund von sehr vielen Winzern, sehr vielen Genossenschaften und wie gesagt die muss man erst mal alle unter einen Hut bekommen. Wie gesagt, da merke ich jetzt von der Pfalzseite her, von der Verbundsseite her eher wenig

POSITIVE RELATIONSHIP WITH REGION

Australian data

Reference 1

I have no idea. I have had very little to do with them for quite some time because I wanted to see some innovation. There were someone offering to do a benchmark so we can benchmark ourselves against each other in terms of growing and how much water we are putting in and how much money we are making, what is the price. They weren't interested. They are part of a dinosaur farmers groups as far as I am concerned

Reference 2

Yes, it is an attraction for the region that they are organic and sustainable wineries in the wine region and perhaps in a nearby region there are not so I think it helps, yes.

Reference 3

certainly mention that we are a strong organic area historically and if the audience is receptive to what the region does I mention that we have a large number of organic producers so that differentiates us from other regions

Reference 4

[Asked whether they benefit from regional marketing]. Yeah, we do. I am from the Barossa and we probably do the best out of the situation. There are only two organic, biodynamic vineyards. If people are visiting that are inclined then there is not much competition than in the other regions.

Reference 5

I appreciate what regional differences are and I spend a lot of time about what the region stands for and by the way I am more than just organic as well.

Reference 6

One of them is the most intense collaboration comes from the winemaker to the winemaker and the grape grower to the grape grower. So there is a lot of communication if we have problems or if we have some advice we allow our wineries or vineyards near us to taste the wine or give us advice. And that is freely given and very evenly given and useful. It is not complicated when it comes to marketing collaboration because it comes of course with people's financial interest and some of their marketing as intellectual property. So when we said let's all go to one area and let's all set up our own stall and let the public be the judge. That's where the collaboration is also quite strong.

German data

Reference 1

Es [Nachhaltigkeit in der regionalen Vermarktung] Ist jetzt langsam am wachsen. Es gibt Projekte von der staatlichen Beratung, Weingutsführer usw. Man merkt, dass das ein bisschen mehr jetzt in den Fokus kommt.

Reference 2

Ich weiß nicht, wie das in anderen Weinregion ist, da habe ich nicht so den Einblick. Aber von dem, was die Gebiets Vereine machen, wird auf die Begrifflichkeit Nachhaltigkeit sehr viel Wert gelegt.

Reference 3

Es gibt Wettbewerbe, Nachhaltigkeitswettbewerbe und Schulungen, aber aber ob es jetzt definitiv kommuniziert wird, das kann ich Ihnen nicht sagen. Als Insider, als Winzer kann ich sagen das die Gebietswerbung sich sehr stark einsetzt, diese Begrifflichkeit zu gebrauchen. Aber das ist nicht nur im Weinbau so sondern in allen Bereichen. Seit Kyoto hat der Begriff Nachhaltigkeit diese Wertung bekommen.

Reference 4

[Frage, ob das Weingut von einer regionalen, Nachhaltigkeitskommunikation profitieren

wuerde.] Absolut. Wir würden davon profitieren mit Sicherheit, weil da wäre man noch mal breiter aufgestellt in der Kommunikation, was das angeht. Dann wird man auch noch mal mehr wahrgenommen, die Leute nehmen das bewusster war

Reference 5

Ich würde eher sagen, die ganze Vernetzung an der Mosel. Früher war ja jeder ein Einzelkämpfer und mittlerweile empfiehlt man andere Kollegen auch wenn sie nicht nachhaltig wirtschaften. Man ist nicht mehr so neidisch auf den anderen und reicht auch mal einen Kunden weiter oder wie auch immer.

Reference 6

Ja auch. Ich bin schon ein Lokalpatriot. Mein Betrieb ist eigentlich zur Grenze an der Pfalz, bei allen Dingen ist es so, wenn man irgendwo an einer Grenze wohnt, hat man auch Verbindung zu der Pfalz, wobei das jetzt nicht so stark ist, aber Rheinhessen kommuniziere ich auch.

Reference 7

da gibt es auch einige touristische Werbemaßnahmen, die auf diesen Zug abziehen, also da wird viel versucht zu machen. Und mit Stuttgarts Marketing haben wir als Betrieb ein sehr gutes Verhältnis. Die bieten dann auch immer Weinbergsrundfahrten an, die von denen organisiert werden und dann bei uns Station machen. Viele Gruppen, die kommen, die bekommen dann also so ein Zwischending zwischen Stadtführung und Weinprobe, aber da besteht eine gute Zusammenarbeit, wird von den Leuten auch gerne angenommen

Reference 8

Das entwickelt sich gerade erst. In den sechziger, siebziger, achtziger Jahren wurde genau das Gegenteil erreicht mit der Liebfrauenmilch, ein Einheitsbrei herzustellen, der den England im untersten Regal verkauft wird und davon hat die jüngere Generation der Winzer genug und die wollen sich profilieren. Die stehen gerne hinter ihrem Produkt und freuen sich auch über ihre Region. Da sind wir erst am Anfang, von dem was möglich ist.

Reference 9

Es gibt natürlich Kunden, die von uns hierher kommen, die gucken sich dann schon die Attraktion an. Bei uns ist es zum Beispiel Trier mit der römischen Geschichte und dann kommen sie in das wunderschöne Städtchen und erholen sich. Das ist schon eine Symbiose und es ist sehr sehr wichtig meiner Meinung nach. Und auch, dass die Moselweine die teuersten auf dem Weltmarkt waren. Wenn man international von einem Anbaugebiet in Deutschland spricht, oder Ausländer nach einer Weinregion in Deutschland fragt dann fällt immer die Mosel. Aber bei ganz vielen. Da fällt nicht Rheinhessen, da fällt dann vielleicht noch Baden aber meistens die Mosel. Das ist das Weingebiet, das international den höchsten Stellenwert hat

Reference 10

Also die Südpfalz ist jetzt auch auf die Pfalz bezogen, dass attraktivste Gebiet und hmm wir haben hier wirklich in den letzten 10 Jahren sehr gute Gastronomie bekommen, die nicht nur oder gerade keine Pfälzer Küche machen, sondern anspruchsvolle, gute Küche. Das ist ein Geben und Nehmen, da kommen viele Kunden zu uns. Und dann war es so, vor ungefähr 10 Jahren, das war der August, das war ein toter Monat. Und mittlerweile ist es so, dass wir im

August sehr viel Betrieb haben, weil einfach viel Leute hier Urlaub machen

Reference 11

Die Winzer sind offener geworden, haben vielleicht auch aus der Vergangenheit gelernt, wo sie Einzelkämpfer waren. Und das man auch in einem Netzwerk viel besser wirtschaften kann. Wie als Einzelkämpfer. Also ich schicke Teilweise Kunden zu anderen Winzern, dann trifft man sich abends in der Strauswirtschaft, dann hole ich die Kunden hier mit hin zur Weinprobe, das ist alles kein Problem mehr. Früher war das eine Katastrophe gewesen.

Reference 12

Ja, also nicht von den neu gemachten Kurfranken. Wir haben schon vorher Tourismus gehabt, aber durch Kurfranken wird es ist alles einfach mal gebündelt und nach außen kommuniziert und das merkt man auch schon das sei jetzt schon noch ein bisschen mehr drin ist und diese Kulturlandschaft bei uns wird halt sehr viel genutzt zum Wandern. Wir haben den fränkischen Rotwein Weg hier entlang unter profitieren wir als Winzer auf jeden Fall

Reference 13

Nein das nicht, es ist einfach eine allgemeine Gesellschaftliche Entwicklung. Und dazu trägt natürlich auch bei dass hier diese Moselwerbung, Dachmarke Mose zum Beispiel, das sind auch richtig fitte Leute, die da auch schöne Programme machen. Modernes Marketing zum Beispiel, die Ideen umsetzen und auch natürlich fördern, dass dann an einem Strang gezogen wird. In eine Richtung. Ganz wichtig

Reference 14

Ich denke da ist denn diese Individualität nochmal sehr wichtig, aber ich denke, hmm, es sollte schon zur Region passen und die Grundlagen sollte übereinstimmen und ich denke bei uns ist es der Fall und ehmm ja, sonst würde es wahrscheinlich auch nicht so gut klappen, das Zusammenarbeiten

Reference 15

Ja absolut. Ja, also die Pfalz ist es für uns, wir fühlen uns sehr wohl in der Pfalz, das wir hier leben und arbeiten können. Wir wollen auch die Pfalz, trotz ihrer ganzen Vielfalt, wollen wir die Pfalz auch betonen. Und wollen wir dazu beitragen, dass die Pfalz positiv dar steht und es gibt bei uns auch spezielle Weine, die auf die Pfalz abzielen, sag ich jetzt mal

Appendix F: Tables for non-response Bias Test

Independent Samples Test (Australia)

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	Sig. (2-tailed)	Mean Difference
CBRA_S1	.001	.972	-1.756 -1.759	.082 .082	-.384 -.384
CBRA_S2	.022	.882	-.261 -.261	.794 .795	-.059 -.059
CBRA_S3	.005	.941	-.500 -.501	.618 .618	-.105 -.105
CPRF_FIN1	.563	.455	-.879 -.878	.381 .382	-.177 -.177
CPRF_FIN2	.167	.684	-.110 -.109	.913 .913	-.021 -.021
CPRF_FIN3	.007	.933	-1.992 -2.001	.049 .048	-.364 -.364
IPRF_FIN1	1.100	.297	-.334 -.335	.739 .738	-.073 -.073
IPRF_FIN2	.929	.338	-.002 -.002	.998 .998	.000 .000
IPRF_FIN3	.122	.727	.559 .557	.577 .579	.126 .126
IBRA_S1	1.556	.215	1.212 1.206	.228 .231	.275 .275
IBRA_S2	.001	.974	.718 .720	.475 .473	.163 .163
IBRA_S3	1.184	.279	1.422 1.413	.158 .161	.349 .349
PLAT1	8.654	.004	1.190 1.219	.237 .226	.166 .166
PLAT2	5.347	.023	.783 .796	.436 .428	.183 .183
PLAT3	.170	.681	-.370 -.371	.712 .711	-.071 -.071

Independent Samples Test (Germany)

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	Sig. (2-tailed)	Mean Difference
CBRA_S1	2.140	.147	.439 .438	.662 .663	.090 .090
CBRA_S2	.156	.694	.235 .235	.815 .815	.046 .046
CBRA_S3	.001	.977	.376 .377	.708 .707	.074 .074
CPRF_FIN1	.605	.439	-.126 -.126	.900 .900	-.027 -.027
CPRF_FIN2	.041	.839	.066 .066	.948 .948	.013 .013
CPRF_FIN3	1.353	.248	-1.337 -1.325	.185 .189	-.242 -.242

IPRF_FIN1	1.398	.240	.734	.465	.153
			.747	.457	.153
IPRF_FIN2	2.410	.124	-.526	.600	-.099
			-.535	.594	-.099
IPRF_FIN3	1.807	.182	.585	.560	.122
			.595	.553	.122
IBRA_S1	1.576	.213	-.447	.656	-.101
			-.439	.662	-.101
IBRA_S2	3.858	.053	-1.081	.283	-.230
			-1.063	.291	-.230
IBRA_S3	3.733	.057	-1.169	.245	-.260
			-1.195	.235	-.260
PLAT1	.998	.320	.161	.873	.024
			.164	.870	.024
PLAT2	6.806	.011	.961	.339	.228
			.983	.328	.228
PLAT3	.183	.670	1.174	.244	.194
			1.177	.243	.194

Appendix G: Tables for Common Method Bias
Australian Sample

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	20.140	19.365	19.365	20.140	19.365	19.365
2	10.176	9.784	29.150			
3	7.606	7.313	36.463			
4	5.733	5.513	41.976			
5	3.743	3.599	45.575			
6	3.514	3.379	48.954			
7	2.622	2.521	51.475			
8	2.421	2.328	53.802			
9	2.168	2.084	55.887			
10	1.966	1.891	57.777			
11	1.923	1.849	59.626			
12	1.849	1.778	61.404			
13	1.621	1.559	62.962			
14	1.596	1.535	64.497			
15	1.498	1.441	65.938			
16	1.405	1.351	67.289			
17	1.348	1.296	68.585			
18	1.319	1.268	69.854			
19	1.218	1.171	71.024			
20	1.194	1.148	72.173			
21	1.119	1.076	73.249			
22	1.071	1.030	74.279			
23	1.016	.977	75.256			
24	.949	.913	76.168			
25	.936	.900	77.068			
26	.917	.882	77.950			
27	.873	.839	78.790			
28	.859	.826	79.615			
29	.827	.795	80.411			
30	.807	.776	81.187			
31	.747	.718	81.905			
32	.724	.697	82.602			
33	.699	.673	83.274			
34	.669	.643	83.917			
35	.656	.631	84.548			
36	.614	.590	85.138			
37	.607	.583	85.721			
38	.580	.558	86.279			
39	.571	.549	86.828			
40	.561	.540	87.368			
41	.540	.519	87.887			
42	.511	.492	88.379			
43	.490	.471	88.850			
44	.484	.466	89.316			
45	.472	.454	89.770			
46	.459	.442	90.212			
47	.445	.428	90.640			

48	.430	.414	91.054
49	.417	.401	91.455
50	.407	.392	91.847
51	.382	.368	92.215
52	.374	.359	92.574
53	.356	.343	92.916
54	.341	.328	93.245
55	.322	.310	93.554
56	.309	.297	93.852
57	.304	.292	94.144
58	.286	.275	94.419
59	.283	.272	94.691
60	.273	.262	94.953
61	.262	.252	95.205
62	.257	.247	95.453
63	.248	.238	95.691
64	.242	.233	95.923
65	.236	.227	96.150
66	.226	.218	96.368
67	.214	.206	96.574
68	.209	.201	96.775
69	.205	.197	96.972
70	.191	.183	97.155
71	.185	.177	97.333
72	.173	.166	97.499
73	.171	.165	97.664
74	.166	.160	97.824
75	.160	.154	97.978
76	.156	.150	98.128
77	.147	.142	98.270
78	.136	.131	98.401
79	.134	.129	98.530
80	.121	.116	98.646
81	.116	.112	98.758
82	.112	.107	98.866
83	.104	.100	98.966
84	.093	.090	99.055
85	.090	.087	99.142
86	.088	.085	99.227
87	.079	.076	99.303
88	.076	.073	99.375
89	.069	.066	99.442
90	.065	.063	99.504
91	.056	.054	99.558
92	.054	.052	99.610
93	.051	.049	99.660
94	.051	.049	99.708
95	.046	.044	99.753
96	.044	.042	99.795
97	.040	.038	99.833
98	.036	.035	99.868
99	.029	.028	99.896

100	.028	.027	99.923			
101	.023	.023	99.945			
102	.022	.021	99.966			
103	.021	.020	99.986			
104	.014	.014	100.000			

Extraction Method: Principal Component Analysis.

German Sample

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	17.509	16.836	16.836	17.509	16.836	16.836
2	8.174	7.859	24.695			
3	6.282	6.040	30.735			
4	4.615	4.437	35.173			
5	4.525	4.351	39.524			
6	3.203	3.080	42.604			
7	2.913	2.801	45.405			
8	2.587	2.488	47.892			
9	2.423	2.330	50.222			
10	2.247	2.161	52.383			
11	2.150	2.067	54.450			
12	2.072	1.993	56.443			
13	1.865	1.794	58.237			
14	1.761	1.693	59.929			
15	1.629	1.566	61.495			
16	1.589	1.528	63.023			
17	1.503	1.446	64.469			
18	1.451	1.395	65.864			
19	1.356	1.304	67.168			
20	1.318	1.267	68.435			
21	1.255	1.206	69.641			
22	1.215	1.168	70.810			
23	1.111	1.069	71.878			
24	1.098	1.056	72.934			
25	1.080	1.038	73.973			
26	1.056	1.015	74.988			
27	1.009	.970	75.958			
28	.946	.909	76.868			
29	.927	.891	77.759			
30	.884	.850	78.609			
31	.844	.812	79.420			
32	.829	.797	80.218			
33	.810	.779	80.997			
34	.804	.773	81.770			
35	.742	.714	82.484			
36	.722	.694	83.178			
37	.707	.680	83.857			
38	.683	.657	84.514			
39	.652	.627	85.141			
40	.624	.600	85.741			
41	.603	.580	86.321			
42	.587	.565	86.885			

43	.548	.527	87.412
44	.525	.505	87.917
45	.523	.502	88.420
46	.498	.479	88.899
47	.488	.469	89.368
48	.482	.464	89.832
49	.448	.431	90.262
50	.444	.427	90.689
51	.410	.395	91.084
52	.396	.381	91.465
53	.391	.376	91.841
54	.385	.370	92.211
55	.354	.341	92.552
56	.345	.331	92.883
57	.338	.325	93.208
58	.329	.316	93.524
59	.320	.308	93.832
60	.298	.287	94.118
61	.290	.279	94.398
62	.285	.274	94.672
63	.280	.269	94.942
64	.273	.262	95.204
65	.264	.254	95.457
66	.251	.241	95.699
67	.242	.232	95.931
68	.224	.215	96.146
69	.218	.209	96.356
70	.216	.208	96.564
71	.202	.195	96.758
72	.194	.186	96.944
73	.192	.185	97.129
74	.184	.177	97.306
75	.182	.175	97.481
76	.173	.166	97.647
77	.171	.165	97.812
78	.165	.158	97.970
79	.152	.146	98.116
80	.144	.138	98.254
81	.140	.134	98.389
82	.130	.125	98.513
83	.122	.118	98.631
84	.120	.115	98.746
85	.116	.111	98.858
86	.106	.102	98.960
87	.102	.098	99.058
88	.101	.097	99.156
89	.094	.090	99.246
90	.087	.084	99.330
91	.081	.078	99.407
92	.079	.076	99.484
93	.069	.067	99.550
94	.066	.063	99.614

95	.059	.057	99.671			
96	.054	.052	99.722			
97	.051	.049	99.772			
98	.045	.043	99.815			
99	.044	.042	99.857			
100	.037	.036	99.893			
101	.033	.032	99.924			
102	.029	.028	99.953			
103	.025	.024	99.977			
104	.024	.023	100.000			

Extraction Method: Principal Component Analysis.

Appendix H: Internal consistency reliability

Australian Sample

	INVO	PLAT	NORM	BENEF	CONGRU	SIMIL	CBRA	IBRA	PRASoc	PRARec	PRAEnv	PRAMng	CPRFInn	CPRFMar	CPRFFin	CPRFTou	IPRFInn	IPRFMar	IPRFFin	IPRFTou	P value
INVO1	(0.881)	0.056	-0.004	0.071	0.017	0.04	-0.044	-0.04	0.082	-0.003	0.044	-0.08	0.006	0.055	-0.068	-0.086	-0.031	0.108	0.043	0.027	<0.001
INVO3	(0.914)	-0.06	-0.074	0.131	-0.021	0.17	-0.032	-0.032	0.035	0.085	0.003	-0.098	0.012	0.005	-0.055	-0.062	-0.072	0.047	0.087	-0.014	<0.001
INVO5	(0.851)	0.069	0.098	-0.077	-0.025	-0.041	0.049	0.101	-0.112	-0.065	-0.035	0.06	0.06	-0.114	0.062	0.057	-0.005	-0.104	0.097	-0.062	<0.001
INVO6	(0.897)	-0.008	-0.036	-0.135	0.063	-0.196	-0.005	0.031	-0.008	0.034	-0.021	0.114	-0.088	0.089	0.073	-0.034	0.037	-0.035	-0.105	0.069	<0.001
INVO7	(0.879)	-0.053	0.023	0.005	-0.036	0.023	0.036	-0.056	-0.003	-0.058	0.009	0.008	0.013	-0.041	-0.009	0.13	0.073	-0.02	-0.12	-0.023	<0.001
PLAT1	0.087	(0.804)	-0.14	0.043	-0.029	-0.083	0	0.129	0.014	0.184	0.046	-0.091	0.035	-0.115	0.035	-0.087	-0.035	-0.097	0.038	0.042	<0.001
PLAT3	-0.036	(0.898)	-0.022	0.016	0.218	-0.089	-0.003	-0.092	0.037	-0.088	-0.108	0.159	0.004	0.062	-0.08	0.045	-0.058	0.074	-0.012	-0.009	<0.001
PLAT4	0.009	(0.861)	0.065	-0.007	-0.205	0.197	0.021	-0.095	0.034	-0.175	0.002	0.111	-0.093	0.027	0.108	-0.033	-0.008	0.062	-0.076	-0.008	<0.001
PLAT5	-0.053	(0.860)	0.088	-0.049	0.004	-0.027	-0.018	0.07	-0.085	0.096	0.068	-0.192	0.057	0.016	-0.058	0.067	0.101	-0.049	0.053	-0.022	<0.001
ATT_NOR	-0.003	-0.073	(0.815)	0.321	0.267	-0.165	0.011	0.008	0.082	-0.127	0.033	0.105	-0.021	0.163	-0.111	0.013	0	-0.143	0.073	0.02	<0.001
ATT_NOR	0.03	0.073	(0.847)	-0.086	-0.224	0.184	0.034	0.072	0.077	-0.041	-0.03	-0.03	0.174	-0.204	-0.028	-0.023	-0.103	0.021	-0.011	0.017	<0.001
ATT_NOR	-0.032	-0.003	(0.714)	-0.265	-0.039	-0.029	-0.053	-0.095	-0.185	0.193	-0.003	-0.084	-0.182	0.057	0.16	0.012	0.122	0.138	-0.071	-0.043	<0.001
ATT_BEN	0.089	0.054	0.124	(0.718)	-0.221	0.237	0.003	-0.085	-0.001	-0.082	-0.048	0.14	-0.054	-0.013	-0.151	0.188	0.08	-0.088	0.037	0.041	<0.001
ATT_BEN	0.016	0.019	0.076	(0.771)	0.003	-0.116	0.037	-0.177	-0.065	0.077	-0.069	-0.015	-0.148	0.081	0.198	-0.061	-0.035	0.067	-0.23	0.015	<0.001
ATT_BEN	-0.055	0.006	-0.091	(0.766)	0.315	-0.228	-0.105	0.124	0.124	-0.006	0.185	-0.116	0.248	-0.131	-0.16	-0.015	-0.046	0.012	0.055	-0.084	<0.001
ATT_BEN	-0.042	-0.073	-0.096	(0.808)	-0.105	0.116	0.061	0.127	-0.055	0.004	-0.067	0.001	-0.046	0.058	0.098	-0.094	0.006	0.003	0.135	0.028	<0.001
ID_C1	0.161	-0.17	-0.184	0.018	(0.792)	0.387	0.062	-0.113	-0.029	0.13	-0.037	0.01	-0.136	0.248	-0.072	-0.02	0.139	-0.067	0.015	0.051	<0.001
ID_C2	-0.066	-0.175	0.156	-0.238	(0.733)	0.162	-0.007	0.261	0.048	-0.185	-0.066	0.032	0.016	-0.308	0.017	0.136	-0.008	0.129	0.075	-0.034	<0.001
ID_C3	-0.104	0.226	0.124	0.148	(0.819)	-0.34	-0.054	-0.058	0.008	-0.123	0.081	-0.125	0.025	0.169	-0.15	-0.022	-0.009	-0.007	0.003	-0.029	<0.001
ID_C4	0.007	0.089	-0.081	0.045	(0.863)	-0.17	0	-0.063	-0.022	0.154	0.013	0.083	0.088	-0.127	0.194	-0.077	-0.112	-0.042	-0.08	0.01	<0.001

ID_S1	0.067	-0.136	0.027	-0.092	0.066	(0.884)	0.017	0.014	-0.055	-0.07	-0.033	0.13	-0.103	0.165	-0.043	0.099	0.013	-0.144	0.004	-0.004	<0.001
ID_S2	0.061	-0.121	-0.079	-0.058	-0.04	(0.880)	-0.012	0.115	-0.084	0.028	0.026	-0.032	-0.018	0.057	-0.056	0.004	-0.025	-0.057	0.043	0.082	<0.001
ID_S3	-0.056	0.126	-0.007	0.041	-0.068	(0.835)	-0.052	0.006	0.119	0.126	0.035	-0.126	0.013	-0.163	0.08	-0.085	-0.012	0.084	-0.038	-0.031	<0.001
ID_S4	-0.078	0.143	0.061	0.115	0.039	(0.854)	0.045	-0.14	0.027	-0.079	-0.027	0.021	0.113	-0.07	0.024	-0.024	0.025	0.126	-0.012	-0.049	<0.001
CBRA_S1	0.062	-0.082	-0.066	0.089	-0.339	0.465	(0.757)	-0.206	0.174	-0.021	0.033	0.107	0.136	-0.046	-0.101	0.043	-0.085	0.061	-0.019	-0.127	<0.001
CBRA_S2	0.023	-0.004	0.086	-0.097	-0.153	0.145	(0.830)	-0.072	-0.098	0.05	0.026	-0.059	-0.197	0.22	-0.046	-0.078	-0.116	0.145	0.001	0.081	<0.001
CBRA_S3	0.078	-0.085	0.071	-0.118	0.189	-0.153	(0.784)	0.198	-0.017	-0.155	0.018	-0.021	0.145	-0.213	0.072	0.022	0.008	-0.061	0.103	0.003	<0.001
CBRA_S4	-0.123	0.038	-0.019	0.108	0.127	-0.191	(0.883)	0	0.032	0.051	-0.069	-0.075	-0.004	-0.012	0.029	0.009	0.021	-0.022	-0.044	0.025	<0.001
CBRA_S5	-0.025	0.125	-0.076	0.013	0.156	-0.232	(0.792)	0.075	-0.083	0.064	0.001	0.064	-0.063	0.038	0.041	0.009	0.172	-0.125	-0.037	0.006	<0.001
IBRA_S1	-0.027	0.071	-0.066	0.107	-0.199	0.132	0.05	(0.851)	0.019	0.089	-0.041	0.004	0.035	0.108	-0.189	-0.046	0.05	-0.061	0.057	0.032	<0.001
IBRA_S2	0.109	-0.065	0.117	-0.182	0.066	-0.112	0.015	(0.801)	-0.042	0.185	0.122	-0.297	-0.156	0.218	-0.102	-0.016	0.011	0.049	-0.034	0.005	<0.001
IBRA_S3	0.035	0.014	-0.069	-0.061	0.246	-0.243	-0.12	(0.858)	0.007	-0.138	-0.042	0.227	0.067	-0.113	0.085	0.051	-0.096	-0.062	0.096	-0.033	<0.001
IBRA_S4	-0.111	-0.023	0.026	0.127	-0.113	0.22	0.057	(0.843)	0.013	-0.126	-0.031	0.048	0.044	-0.201	0.202	0.01	0.037	0.079	-0.124	-0.004	<0.001
PRA_SOC	-0.038	-0.175	0.056	-0.238	0.112	-0.069	0.083	0.262	(0.834)	0.203	-0.027	-0.157	-0.129	0.043	0.204	-0.05	0.107	0.043	-0.15	-0.007	<0.001
PRA_SOC	0.038	0.175	-0.056	0.238	-0.112	0.069	-0.083	-0.262	(0.834)	-0.203	0.027	0.157	0.129	-0.043	-0.204	0.05	-0.107	-0.043	0.15	0.007	<0.001
PRA_REC	-0.007	-0.055	-0.085	-0.067	-0.44	0.462	-0.202	0.145	0.081	(0.733)	0.063	-0.09	-0.057	0.109	-0.163	0.111	-0.029	0.085	-0.025	-0.012	<0.001
PRA_REC	-0.088	-0.067	-0.15	-0.002	0.572	-0.426	0.148	-0.173	-0.144	(0.750)	-0.327	0.493	-0.031	0.101	0.069	0.033	0.113	-0.133	0.139	-0.093	<0.001
PRA_REC	0.095	0.12	0.232	0.068	-0.141	-0.026	0.049	0.031	0.064	(0.752)	0.265	-0.404	0.086	-0.207	0.09	-0.141	-0.085	0.049	-0.114	0.104	<0.001
PRA_ENV	0.061	0.042	0.092	-0.032	-0.05	-0.004	0.037	-0.105	-0.001	-0.2	(0.894)	0.326	-0.004	-0.167	0.132	0.05	-0.013	0.113	-0.114	-0.078	<0.001
PRA_ENV	-0.061	-0.042	-0.092	0.032	0.05	0.004	-0.037	0.105	0.001	0.2	(0.894)	-0.326	0.004	0.167	-0.132	-0.05	0.013	-0.113	0.114	0.078	<0.001
PRA_MNG	0.029	0.03	0.1	0.066	-0.044	0.047	-0.04	0.067	-0.069	0.286	-0.009	(0.840)	0.036	0.063	-0.003	-0.095	-0.09	0.065	-0.008	-0.035	<0.001
PRA_MNG	-0.035	-0.018	-0.035	0.011	-0.123	0.114	0.023	-0.113	0.019	-0.111	0.011	(0.897)	0.071	-0.136	0.022	0.147	-0.017	0.013	-0.038	-0.017	<0.001
PRA_MNG	0.008	-0.01	-0.06	-0.073	0.166	-0.16	0.015	0.05	0.047	-0.159	-0.003	(0.888)	-0.106	0.078	-0.02	-0.058	0.103	-0.074	0.046	0.051	<0.001
CPRF_IN	-0.033	-0.077	-0.19	0.088	-0.032	0.053	0.102	-0.033	0.09	0.164	-0.015	-0.101	(0.816)	-0.131	0.224	-0.072	-0.074	-0.06	-0.039	-0.037	<0.001
CPRF_IN	-0.013	0.075	0.173	-0.133	-0.059	-0.008	-0.109	0.039	0.03	-0.112	0.192	0.058	(0.836)	-0.035	0.19	-0.144	0.073	-0.033	-0.09	0.03	<0.001
CPRF_IN	0.046	0	0.013	0.049	0.093	-0.045	0.009	-0.007	-0.122	-0.049	-0.183	0.042	(0.810)	0.168	-0.422	0.221	0	0.094	0.131	0.006	<0.001
CPRF_MA	-0.205	-0.045	-0.03	0.101	-0.256	0.4	-0.25	-0.186	0.06	0.183	0.088	0.082	-0.18	(0.753)	0.296	-0.263	-0.175	-0.132	-0.089	0.134	<0.001
CPRF_MA	0.15	-0.034	0.046	-0.065	-0.084	0.097	0.147	-0.131	0.008	-0.042	-0.063	0.097	-0.162	(0.842)	0.096	-0.138	0.06	-0.123	0.071	0.016	<0.001
CPRF_MA	0.064	0.034	-0.133	-0.007	-0.022	-0.079	0.067	0.102	-0.018	0.12	-0.04	-0.229	0.473	(0.709)	-0.381	0.287	0.008	0.196	0.052	-0.056	<0.001

CPRF_MA	-0.021	0.047	0.096	-0.02	0.339	-0.399	0.02	0.217	-0.048	-0.228	0.019	0.023	-0.078	(0.821)	-0.04	0.135	0.091	0.077	-0.036	-0.092	<0.001
CPRF_FI	0.014	0.022	-0.029	-0.026	-0.042	0.003	0.059	-0.037	-0.109	0.117	-0.008	0	0.042	-0.156	(0.873)	0.246	-0.005	0.146	0.023	-0.133	<0.001
CPRF_FI	-0.096	0.001	0.072	-0.032	-0.154	0.217	-0.106	-0.088	0.036	0.021	0.043	0.027	0.029	-0.08	(0.894)	0.016	-0.07	0.008	0.068	-0.041	<0.001
CPRF_FI	-0.029	-0.024	-0.06	0.155	0.106	-0.092	-0.092	0.058	0.081	-0.056	0.04	-0.065	-0.087	0.339	(0.777)	-0.351	-0.088	-0.052	-0.002	0.089	<0.001
CPRF_FI	0.127	-0.003	0.01	-0.092	0.122	-0.166	0.152	0.088	0	-0.103	-0.084	0.036	0.007	-0.073	(0.753)	0.059	0.18	-0.124	-0.106	0.11	<0.001
CPRF_TO	0.012	-0.083	-0.099	0.027	0.219	-0.231	0.066	0.074	0.014	-0.036	0.127	-0.214	0.073	0.262	-0.12	(0.770)	-0.021	-0.07	0.187	0.005	<0.001
CPRF_TO	-0.05	0.074	0.003	-0.023	-0.233	0.13	-0.027	-0.02	0.065	-0.074	-0.033	0.16	0.036	-0.206	0.156	(0.858)	0.058	0.008	-0.134	0.107	<0.001
CPRF_TO	-0.002	0.007	0.091	0.038	-0.062	0.137	-0.062	-0.045	0.029	-0.092	0	0.125	0.015	-0.108	-0.04	(0.930)	-0.034	-0.033	-0.004	-0.056	<0.001
CPRF_TO	0.04	0.042	0.045	0.06	-0.131	0.126	-0.006	-0.094	-0.065	-0.024	-0.018	0.125	0.012	-0.105	0.006	(0.904)	-0.047	-0.049	-0.016	-0.019	<0.001
CPRF_TO	0	-0.057	-0.068	-0.116	0.268	-0.226	0.044	0.112	-0.045	0.256	-0.07	-0.26	-0.144	0.221	-0.013	(0.772)	0.052	0.158	-0.015	-0.033	<0.001
IPRF_IN	0.051	0.01	0.175	-0.097	-0.199	0.118	-0.07	0.023	-0.126	0.086	0.007	-0.218	-0.121	0.231	-0.07	-0.158	(0.749)	-0.03	0.109	0.183	<0.001
IPRF_IN	0.014	0.067	0.111	-0.061	-0.064	-0.107	-0.024	0.028	0.047	-0.003	0.049	-0.003	0.013	-0.095	0.148	-0.006	(0.865)	0.036	-0.13	-0.013	<0.001
IPRF_IN	0.014	-0.102	-0.133	0.053	0.148	-0.073	0.067	0.021	0.025	-0.013	-0.041	0.069	0.018	-0.068	0.032	0.089	(0.897)	0.014	0.026	-0.079	<0.001
IPRF_IN	-0.075	0.031	-0.128	0.093	0.084	0.083	0.016	-0.072	0.038	-0.06	-0.014	0.124	0.076	-0.035	-0.125	0.051	(0.840)	-0.025	0.009	-0.064	<0.001
IPRF_MA	0.011	-0.103	0.111	-0.117	0.1	-0.1	-0.042	0.105	-0.1	-0.145	-0.046	0.089	0.017	0.129	-0.081	0.096	0.115	(0.861)	0.049	-0.105	<0.001
IPRF_MA	0.043	0.139	-0.093	0.139	-0.236	0.16	-0.034	-0.068	0.055	0.069	0.048	-0.052	0.069	-0.182	0.009	0.082	-0.154	(0.859)	-0.05	-0.082	<0.001
IPRF_MA	-0.054	-0.036	-0.019	-0.022	0.137	-0.06	0.077	-0.037	0.046	0.077	-0.002	-0.038	-0.087	0.053	0.073	-0.179	0.039	(0.853)	0.001	0.188	<0.001
IPRF_FI	0.064	-0.001	-0.036	0.108	0.101	-0.037	-0.062	0.019	-0.041	-0.06	0.129	-0.055	0.037	-0.013	-0.087	0.037	-0.134	0.045	(0.887)	-0.048	<0.001
IPRF_FI	0.063	0.075	0	0.1	-0.015	0.029	-0.158	0.052	-0.116	-0.111	0.159	-0.054	0.081	-0.002	-0.219	0.156	-0.011	-0.022	(0.869)	-0.057	<0.001
IPRF_FI	-0.082	-0.023	0.146	-0.096	-0.058	0.052	-0.087	0.245	0.069	-0.169	0.015	-0.208	-0.007	0.119	-0.307	0.143	0.18	-0.116	(0.738)	-0.073	<0.001
IPRF_FI	-0.061	-0.064	-0.049	-0.056	0.009	0.119	0.063	-0.176	0.002	0.198	-0.065	0.147	-0.106	-0.016	0.259	-0.117	-0.078	0.054	(0.841)	0.042	<0.001
IPRF_FI	-0.014	0.018	-0.073	-0.008	-0.106	-0.062	0.157	0.099	0.054	0.073	-0.001	-0.132	0.04	0.085	0.209	-0.369	0.007	-0.064	(0.806)	0.229	<0.001
IPRF_FI	0.015	-0.011	0.034	-0.079	0.06	-0.111	0.104	-0.237	0.056	0.066	-0.282	0.314	-0.056	-0.174	0.145	0.165	0.074	0.097	(0.740)	-0.099	<0.001
IPRF_TO	0.014	-0.032	-0.131	0.022	0.23	-0.249	0.117	0.035	0.157	0.029	0.004	-0.182	0.05	0.114	-0.157	-0.242	-0.056	-0.044	0.187	(0.784)	<0.001
IPRF_TO	-0.05	0.123	-0.035	0.056	-0.374	0.326	-0.011	-0.012	-0.013	0.088	0.02	-0.049	-0.041	-0.138	0.144	0.107	0.099	-0.1	-0.138	(0.828)	<0.001
IPRF_TO	-0.051	0.052	0.031	0.019	-0.052	0.115	-0.081	-0.05	-0.042	-0.032	-0.022	0.206	0.02	-0.063	0.015	0.195	0.008	-0.136	-0.05	(0.869)	<0.001
IPRF_TO	-0.004	0.046	0.071	0.047	-0.05	0.054	-0.066	-0.057	-0.139	0.005	-0.087	0.147	0.012	-0.013	0.012	0.236	-0.021	-0.029	-0.124	(0.861)	<0.001
IPRF_TO	-0.031	-0.013	0.054	-0.037	0.269	-0.345	-0.018	0.113	-0.028	-0.127	0.061	-0.116	-0.118	0.279	-0.173	-0.083	0.064	0.174	0.104	(0.813)	<0.001
IPRF_TO	0.148	-0.215	0	-0.128	-0.002	0.086	0.084	-0.024	0.095	0.045	0.035	-0.04	0.09	-0.193	0.172	-0.29	-0.11	0.17	0.047	(0.703)	<0.001

German Sample

	INVO	PLAT	NORM	BENEF	ID_CON	ID_SIM	CBRA	IBRA	PRA_Soc	PRA_Rec	PRA_Env	PRA_Mng	IPRF_To	IPRF_Fi	IPRF_Ma	IPRF_In	CPRF_to	CPRF_Fi	CPRF_Ma	CPRF_In	P value
INVO1	(0.848)	0.084	0.183	0.01	0.081	-0.176	0.014	0.042	-0.102	0.088	-0.194	-0.205	0.103	0.025	-0.051	0.066	0.055	-0.019	0.068	-0.028	<0.001
INVO3	(0.879)	0.003	0.101	-0.068	-0.252	0.182	-0.028	0.104	-0.089	0.067	-0.117	-0.136	0.118	0.016	0.01	0.032	-0.003	-0.024	0.071	0.048	<0.001
INVO5	(0.875)	-0.025	0.088	0.027	0.001	0.015	-0.016	-0.087	0.038	0.045	-0.002	0.031	-0.043	0.011	-0.062	-0.076	0.109	-0.007	-0.062	0.027	<0.001
INVO6	(0.887)	-0.059	0.076	0.013	-0.149	0.264	-0.08	-0.124	0.08	0.02	0.075	0.027	0.049	-0.011	-0.044	-0.096	0.048	-0.063	-0.022	-0.021	<0.001
INVO7	(0.822)	0.041	0.137	-0.026	-0.072	0.065	0.013	0.05	0.044	-0.098	0.181	-0.228	0.063	-0.036	-0.143	0	-0.015	0.019	-0.071	0.081	<0.001
INVO2	(0.682)	-0.066	-0.329	0.008	0.216	-0.224	0.006	0.032	0.134	-0.209	0.031	0.386	-0.22	0.01	0.168	0.005	-0.181	0.109	0.043	-0.087	<0.001
INVO4	(0.693)	0.017	-0.401	0.045	0.282	-0.229	0.12	-0.005	-0.096	0.047	0.048	0.24	-0.142	-0.018	0.188	0.093	-0.065	0.014	-0.023	-0.043	<0.001
PLAT1	-0.057	(0.730)	0.161	-0.297	-0.069	0.091	0.027	-0.029	0.02	-0.117	-0.112	0.227	0.035	0.019	-0.083	0.114	0.068	0.03	-0.088	0.012	<0.001
PLAT3	0.016	(0.872)	-0.048	-0.046	-0.023	-0.039	-0.014	0.107	-0.081	0.107	0.007	-0.067	0.008	0.046	-0.102	0.064	-0.024	0.005	0.037	-0.084	<0.001
PLAT4	-0.012	(0.884)	-0.021	0.092	-0.034	-0.044	0.054	-0.003	-0.041	0.054	-0.014	-0.071	0.014	-0.024	0.061	-0.117	-0.069	-0.058	0.14	-0.07	<0.001
PLAT5	0.045	(0.853)	-0.067	0.206	0.118	0.007	-0.065	-0.081	0.108	-0.065	0.103	-0.052	-0.053	-0.038	0.113	-0.042	0.038	0.029	-0.108	0.148	<0.001
ATT_NOR	-0.106	-0.072	(0.783)	0.148	0.098	0.015	-0.141	0.137	0.038	0.007	0.018	-0.047	0.018	-0.099	0.099	0.095	-0.031	-0.068	-0.07	0.2	<0.001
ATT_NOR	0.086	0.065	(0.760)	-0.01	-0.279	0.194	0.07	-0.086	-0.095	-0.043	-0.054	-0.013	-0.114	0.181	-0.036	-0.065	0.115	0.028	0.119	-0.187	<0.001
ATT_NOR	0.02	0.008	(0.872)	-0.124	0.155	-0.183	0.065	-0.048	0.048	0.032	0.031	0.053	0.084	-0.068	-0.057	-0.028	-0.072	0.037	-0.04	-0.017	<0.001
ATT_BEN	0.12	0.036	-0.136	(0.672)	-0.423	0.28	0.055	-0.361	-0.023	0.176	0.131	0.039	-0.09	0.093	-0.023	0.145	0.037	-0.111	0.11	-0.026	<0.001
ATT_BEN	-0.06	0.027	0.145	(0.853)	0.278	-0.189	-0.061	0.042	-0.048	-0.063	0.044	-0.107	0.001	-0.012	-0.05	-0.036	-0.016	-0.015	0.019	-0.048	<0.001
ATT_BEN	-0.036	-0.056	-0.038	(0.844)	0.056	-0.031	0.017	0.246	0.067	-0.076	-0.149	0.077	0.071	-0.062	0.07	-0.079	-0.014	0.103	-0.107	0.07	<0.001
ID_C1	-0.06	0.132	0.243	-0.234	(0.727)	0.542	-0.126	0.152	-0.124	0.046	-0.078	0.011	0.176	-0.028	-0.117	0.257	-0.126	0.04	0.109	-0.15	<0.001
ID_C2	0.035	0	-0.1	0.028	(0.828)	0.07	0.039	0.14	-0.032	0.057	-0.048	-0.039	0.108	0.02	-0.07	-0.032	-0.065	0.015	-0.033	0.051	<0.001
ID_C3	0.011	-0.059	-0.082	0.048	(0.834)	-0.543	0.087	-0.129	0.095	-0.008	0.063	-0.02	-0.096	0.015	0.024	-0.166	0.104	-0.058	-0.001	-0.019	<0.001
ID_C4	0.006	-0.052	-0.029	0.119	(0.901)	0.001	-0.015	-0.132	0.042	-0.083	0.049	0.045	-0.152	-0.01	0.136	-0.025	0.065	0.008	-0.057	0.092	<0.001
ID_S1	-0.047	-0.055	-0.05	-0.193	-0.149	(0.875)	-0.021	0.196	0.004	-0.082	0.062	0.04	0.06	0.102	-0.126	0.015	-0.061	-0.094	0.087	-0.016	<0.001
ID_S2	-0.002	0.031	-0.057	0.025	-0.267	(0.879)	-0.044	0.158	-0.101	-0.035	0.063	-0.035	0.011	0.033	0.046	0.047	-0.083	-0.004	0.061	-0.097	<0.001
ID_S3	-0.058	-0.085	0.155	0.004	0.33	(0.808)	-0.055	-0.112	-0.012	0.099	-0.196	0.097	-0.031	-0.126	0.036	0.004	0.102	0.104	-0.022	-0.085	<0.001
ID_S4	0.12	0.118	-0.042	0.19	0.129	(0.756)	0.135	-0.291	0.127	0.03	0.065	-0.109	-0.05	-0.022	0.055	-0.076	0.058	0.002	-0.148	0.222	<0.001
CBRA_S1	-0.029	0.011	0.121	0.196	-0.024	-0.075	(0.823)	-0.175	-0.009	0.083	-0.078	-0.177	0.013	0.064	-0.053	0.03	0.01	-0.014	-0.006	0.029	<0.001
CBRA_S2	0.057	0.082	-0.048	-0.124	-0.079	0.005	(0.779)	0.273	0.1	-0.018	-0.098	-0.077	0.097	0.021	-0.056	0.069	0.067	-0.069	0.191	-0.15	<0.001

CBRA_S3	-0.03	0.028	-0.107	0	0.274	-0.322	(0.892)	-0.067	-0.048	-0.017	0.034	0.089	-0.154	0.009	0.103	0.008	0.017	-0.001	-0.065	0.038	<0.001
CBRA_S4	0.026	-0.002	-0.063	-0.036	-0.117	0.152	(0.883)	-0.069	-0.032	-0.017	0.031	0.214	0.008	-0.07	0.045	-0.068	-0.068	0.059	-0.109	0.055	<0.001
CBRA_S5	-0.021	-0.113	0.105	-0.039	-0.07	0.25	(0.845)	0.061	0.001	-0.029	0.098	-0.073	0.053	-0.018	-0.053	-0.03	-0.018	0.016	0.011	0.012	<0.001
IBRA_S1	-0.001	0.116	-0.105	0.25	0.301	-0.415	0.206	(0.785)	0.056	0.033	-0.081	0.127	-0.013	0	-0.115	0.005	-0.032	-0.077	0.05	0.05	<0.001
IBRA_S3	0.095	-0.029	0.037	-0.153	-0.171	0.261	-0.244	(0.700)	-0.053	-0.193	-0.062	0.074	-0.039	0.106	0.007	-0.035	-0.043	0.169	-0.01	-0.04	<0.001
IBRA_S4	-0.02	-0.18	-0.088	0.053	-0.264	0.279	-0.028	(0.833)	-0.014	0.188	0.007	0.128	0.057	-0.063	0.032	-0.051	-0.028	0.167	-0.089	0.073	<0.001
IBRA_S2	-0.073	0.117	0.193	-0.197	0.154	-0.134	0.049	(0.672)	0.007	-0.071	0.15	-0.383	-0.016	-0.032	0.088	0.095	0.118	-0.293	0.062	-0.107	<0.001
PRA_SOC	0.004	0.001	-0.133	0.114	-0.049	-0.07	0.1	0.123	(0.866)	0.041	-0.015	-0.122	-0.034	0.084	0.032	-0.146	0.025	-0.092	-0.009	0.077	<0.001
PRA_SOC	-0.004	-0.001	0.133	-0.114	0.049	0.07	-0.1	-0.123	(0.866)	-0.041	0.015	0.122	0.034	-0.084	-0.032	0.146	-0.025	0.092	0.009	-0.077	<0.001
PRA_REC	0.112	0.014	0.003	0.187	-0.159	0.161	-0.031	-0.302	0.143	(0.736)	-0.04	-0.102	-0.008	-0.214	0.041	0.014	0.013	0.124	-0.169	0.118	<0.001
PRA_REC	0.003	0.063	-0.298	-0.005	0.287	-0.341	-0.05	0.094	-0.213	(0.670)	-0.164	0.263	-0.098	0.235	-0.148	0.166	-0.169	-0.069	0.477	-0.313	<0.001
PRA_REC	-0.11	-0.069	0.259	-0.176	-0.098	0.144	0.074	0.209	0.049	(0.764)	0.182	-0.133	0.093	0.001	0.091	-0.159	0.136	-0.059	-0.256	0.161	<0.001
PRA_ENV	0.008	0.019	0.005	-0.061	0.074	0.052	0.091	-0.089	0.041	0.043	(0.793)	-0.267	-0.086	-0.001	-0.001	0.087	-0.002	0.025	0.145	-0.272	<0.001
PRA_ENV	-0.001	-0.077	-0.234	0.055	0.262	-0.328	0.147	-0.174	0.055	0.078	(0.839)	-0.166	-0.007	-0.056	0.086	-0.025	0.092	-0.177	0.037	0.084	<0.001
PRA_ENV	0.077	0.022	0.164	-0.195	-0.277	0.17	0.009	0.017	0.033	-0.21	(0.725)	0.549	-0.033	0	0.011	-0.018	-0.103	0	0.012	0.077	<0.001
PRA_ENV	-0.094	0.051	0.111	0.218	-0.118	0.169	-0.307	0.312	-0.157	0.081	(0.657)	-0.072	0.149	0.073	-0.121	-0.053	-0.003	0.196	-0.235	0.135	<0.001
PRA_MNG	-0.017	-0.072	0.084	-0.295	-0.083	0.062	0.115	-0.001	-0.015	-0.143	0.135	(0.738)	-0.026	-0.026	0.03	-0.042	0.097	-0.085	-0.103	0.155	<0.001
PRA_MNG	-0.017	-0.028	-0.076	0.172	0.093	-0.049	-0.103	0.018	-0.193	0.415	-0.004	(0.706)	0.005	0.057	-0.097	0.076	-0.235	0.001	0.258	-0.182	<0.001
PRA_MNG	0.029	0.072	-0.061	0.145	0.045	0.064	-0.091	-0.049	0.14	-0.269	0.179	(0.774)	-0.034	0.063	-0.129	-0.045	-0.009	0.155	-0.048	-0.028	<0.001
PRA_MNG	0.025	0.181	-0.217	0.253	-0.289	0.112	-0.108	-0.067	-0.351	0.117	-0.346	(0.621)	-0.034	0.047	0.192	0.018	0.067	-0.041	-0.079	0.077	<0.001
PRA_MNG	-0.021	-0.153	0.279	-0.278	0.224	-0.209	0.201	0.109	0.412	-0.085	-0.033	(0.623)	0.101	-0.159	0.043	0.002	0.097	-0.051	-0.031	-0.02	<0.001
IPRF_TO	0.031	0.04	0.107	0.055	-0.005	0.003	-0.068	0.061	-0.077	-0.105	-0.18	0.088	(0.749)	-0.082	0.077	0.022	0.015	0.033	0.173	-0.11	<0.001
IPRF_TO	0.077	0.09	0.079	-0.118	0.104	-0.265	0.036	0.095	-0.043	0.03	-0.147	0.03	(0.634)	0.206	-0.234	0.069	-0.525	0.093	0.267	-0.128	<0.001
IPRF_TO	0.174	0.165	-0.125	0.225	0.043	-0.045	-0.16	-0.001	-0.077	0.159	-0.041	-0.085	(0.621)	0.295	-0.458	-0.05	-0.261	0.123	-0.029	0.114	<0.001
IPRF_TO	-0.118	-0.026	0.002	-0.037	-0.062	0.086	0.049	-0.12	-0.003	0.087	0.152	-0.037	(0.766)	-0.134	0.263	-0.065	0.27	-0.084	-0.093	-0.068	<0.001
IPRF_TO	-0.131	-0.251	-0.081	-0.115	-0.061	0.189	0.132	-0.019	0.199	-0.156	0.202	-0.006	(0.677)	-0.221	0.256	0.03	0.409	-0.141	-0.31	0.214	<0.001
IPRF_FI	0.011	-0.011	-0.014	0.064	0.107	-0.046	-0.059	-0.007	-0.008	-0.043	0.05	0.018	0.065	(0.885)	-0.028	-0.122	0.037	0.01	-0.17	0.109	<0.001
IPRF_FI	0.023	-0.022	-0.055	0.142	0.065	-0.12	-0.024	-0.068	-0.035	-0.153	0.008	0.104	-0.008	(0.815)	-0.072	-0.018	0.04	-0.166	-0.069	0.139	<0.001
IPRF_FI	-0.038	0.008	0.068	-0.124	0.041	-0.011	0.12	-0.04	-0.045	0.165	0.033	-0.086	0.061	(0.811)	0.072	0.023	-0.106	0.114	0.218	-0.259	<0.001

IPRF_FI	0.004	0.146	-0.038	-0.105	0.16	-0.29	0.082	0.149	0.071	-0.072	-0.017	-0.038	0.018	(0.848)	0.02	-0.005	-0.017	0.047	0.017	-0.111	<0.001
IPRF_FI	-0.074	0.015	0.236	-0.166	-0.167	0.249	-0.033	0.124	0.026	0.161	0.009	-0.311	-0.051	(0.783)	0.059	0.032	-0.014	0.146	0.133	-0.148	<0.001
IPRF_FI	0.079	-0.157	-0.207	0.202	-0.255	0.271	-0.095	-0.177	-0.013	-0.047	-0.097	0.336	-0.104	(0.730)	-0.052	0.113	0.062	-0.166	-0.12	0.288	<0.001
IPRF_MA	-0.108	-0.04	0.219	0.021	0.098	0.018	-0.015	0.021	-0.068	-0.094	0.091	-0.206	-0.062	0.02	(0.717)	0.179	0.072	-0.087	0.108	-0.084	<0.001
IPRF_MA	-0.01	0.101	0.135	-0.145	-0.199	0.127	0.033	0.164	0.035	-0.148	-0.043	0.055	0.125	-0.028	(0.813)	-0.019	-0.05	0.1	0.031	-0.084	<0.001
IPRF_MA	0.042	-0.055	-0.031	0.115	0.233	-0.08	-0.007	-0.111	0.096	-0.06	0.014	0.03	0.075	0.058	(0.789)	-0.018	-0.018	-0.042	0.191	-0.232	<0.001
IPRF_MA	0.07	-0.007	-0.212	0.004	-0.156	0.086	-0.066	-0.004	-0.049	0.133	-0.047	0.038	-0.059	-0.012	(0.815)	-0.081	0.019	-0.058	-0.183	0.317	<0.001
IPRF_MA	-0.005	-0.005	-0.081	0.011	0.041	-0.144	0.05	-0.067	-0.018	0.148	-0.004	0.055	-0.079	-0.032	(0.859)	-0.038	-0.014	0.072	-0.122	0.062	<0.001
IPRF_IN	-0.063	0.085	-0.076	-0.028	0.186	-0.22	0.104	-0.019	0.121	0.021	0.141	-0.094	-0.04	0.143	0.031	(0.802)	-0.055	0.066	0.057	-0.216	<0.001
IPRF_IN	0.049	-0.025	-0.1	-0.009	-0.069	0.095	-0.065	0.16	0.027	0.012	-0.033	-0.064	0.08	-0.038	-0.044	(0.896)	-0.002	-0.069	0.094	0.063	<0.001
IPRF_IN	0.008	-0.058	0.19	0.038	-0.111	0.115	-0.032	-0.163	-0.154	-0.036	-0.105	0.168	-0.05	-0.102	0.018	(0.791)	0.059	0.011	-0.164	0.148	<0.001
CPRF_TO	0.038	0.202	-0.026	0.012	0.283	-0.175	0.007	0.132	0.084	-0.038	-0.016	-0.085	-0.056	0.019	-0.145	-0.019	(0.729)	0.109	-0.093	0.058	<0.001
CPRF_TO	-0.007	0.017	0.027	0.005	0.083	-0.075	-0.047	-0.163	-0.118	0.115	-0.114	0.15	-0.121	0.045	0.071	-0.088	(0.819)	-0.167	0.064	-0.145	<0.001
CPRF_TO	-0.104	-0.17	-0.018	-0.028	-0.127	0.127	0.034	0.109	0.227	-0.224	0.201	-0.085	0.092	0.041	0.082	-0.079	(0.693)	-0.177	-0.184	0.188	<0.001
CPRF_TO	0.072	-0.063	0.014	0.009	-0.271	0.147	0.015	-0.056	-0.177	0.128	-0.049	-0.004	0.11	-0.115	-0.015	0.204	(0.687)	0.262	0.207	-0.077	<0.001
CPRF_FI	-0.012	-0.073	0.012	-0.042	0.026	0.015	0.029	0.03	0.03	0.055	0.03	-0.089	0.008	0.001	0.027	0.02	0.086	(0.897)	-0.117	0.063	<0.001
CPRF_FI	0.015	0.054	0.017	0.03	-0.015	0.002	0.032	-0.081	-0.046	0.01	-0.046	0.111	0.011	0.013	-0.015	-0.035	-0.127	(0.897)	0.055	-0.017	<0.001
CPRF_FI	-0.004	0.019	-0.03	0.013	-0.011	-0.017	-0.063	0.052	0.016	-0.066	0.016	-0.022	-0.02	-0.014	-0.012	0.015	0.041	(0.885)	0.062	-0.047	<0.001
CPRF_MA	0.082	0.06	-0.203	-0.024	0.307	-0.385	-0.028	-0.029	-0.097	0.149	-0.03	0.168	-0.046	0.014	0.017	0.018	-0.027	0.036	(0.728)	0.043	<0.001
CPRF_MA	-0.052	-0.029	-0.12	0.106	0	-0.044	-0.043	-0.042	0.08	0.068	0.121	-0.133	-0.153	0.027	0.209	-0.025	0.045	-0.004	(0.711)	-0.115	<0.001
CPRF_MA	-0.152	-0.051	0.219	-0.012	-0.109	0.24	0.072	0.058	0.046	-0.141	-0.081	-0.037	0.043	0.009	0.022	-0.124	0.03	-0.081	(0.718)	-0.444	<0.001
CPRF_MA	0.126	0.019	0.11	-0.072	-0.211	0.202	-0.001	0.013	-0.028	-0.081	-0.009	-0.002	0.163	-0.053	-0.258	0.136	-0.051	0.051	(0.687)	0.538	<0.001
CPRF_IN	0.032	-0.028	0.027	-0.012	0.046	0.005	-0.089	-0.05	-0.153	0.221	-0.149	-0.052	0.074	-0.14	0.003	0.047	0.003	0.236	-0.208	(0.836)	<0.001
CPRF_IN	-0.088	0.021	-0.012	-0.003	0.008	-0.046	-0.029	0.057	0.089	0.038	0.079	-0.202	-0.051	0.147	-0.011	0.047	0.048	-0.044	0.138	(0.850)	<0.001
CPRF_IN	0.059	0.007	-0.014	0.016	-0.056	0.043	0.122	-0.007	0.064	-0.267	0.071	0.264	-0.023	-0.01	0.008	-0.098	-0.053	-0.197	0.07	(0.812)	<0.001

Appendix I: Discriminant Validity: Square root of AVE
Australia

	INVO	PLAT	NORM	BENEF	CONGRU	SIMIL	CBRA	IBRA	PRASoc	PRARec	PRAEnv	PRAMng	CPRFInn	CPRFMar	CPRFFin	CPRFTou	IPRFInn	IPRFMar	IPRFFin	IPRFTou
INVO	(0.885)	0.342	0.036	0.042	0.489	0.486	0.224	0.063	0.235	0.047	0.143	0.139	0.215	0.386	0.264	0.132	0.278	0.249	0.237	0.276
PLAT	0.342	(0.856)	0.019	-0.094	0.611	0.628	0.223	0.052	0.203	0.002	0.176	0.014	0.256	0.432	0.33	0.289	0.114	0.179	0.133	0.188
NORM	0.036	0.019	(0.794)	0.561	0.061	0.013	0.278	0.543	0.362	0.615	0.239	0.571	0.067	0.132	0.06	-0.029	0.347	0.3	0.18	0.127
BENEF	0.042	-0.094	0.561	(0.766)	-0.1	-0.074	0.312	0.624	0.259	0.469	0.088	0.61	0.026	0.138	0.114	0.09	0.398	0.243	0.176	0.263
CONGRU	0.489	0.611	0.061	-0.1	(0.803)	0.847	0.291	0.062	0.136	-0.018	0.276	0.021	0.216	0.279	0.153	0.147	0.075	0.155	-0.014	0.135
SIMIL	0.486	0.628	0.013	-0.074	0.847	(0.864)	0.36	0.14	0.132	-0.039	0.219	0.061	0.304	0.403	0.276	0.229	0.115	0.14	0.035	0.161
CBRA	0.224	0.223	0.278	0.312	0.291	0.36	(0.810)	0.433	0.147	0.291	0.325	0.373	0.355	0.4	0.265	0.213	0.145	0.145	0.093	0.131
IBRA	0.063	0.052	0.543	0.624	0.062	0.14	0.433	(0.838)	0.258	0.541	0.167	0.645	0.262	0.248	0.206	0.153	0.305	0.275	0.106	0.19
PRASoc	0.235	0.203	0.362	0.259	0.136	0.132	0.147	0.258	(0.834)	0.384	0.152	0.321	0.122	0.22	0.21	0.216	0.381	0.355	0.331	0.247
PRARec	0.047	0.002	0.615	0.469	-0.018	-0.039	0.291	0.541	0.384	(0.745)	0.336	0.673	0.144	0.121	0.088	-0.022	0.379	0.283	0.183	0.143
PRAEnv	0.143	0.176	0.239	0.088	0.276	0.219	0.325	0.167	0.152	0.336	(0.894)	0.421	0.086	0.125	0.045	0.078	0.158	0.193	0.046	0.15
PRAMng	0.139	0.014	0.571	0.61	0.021	0.061	0.373	0.645	0.321	0.673	0.421	(0.876)	0.135	0.189	0.165	0.059	0.402	0.294	0.175	0.254
CPRFInn	0.215	0.256	0.067	0.026	0.216	0.304	0.355	0.262	0.122	0.144	0.086	0.135	(0.821)	0.658	0.572	0.442	0.223	0.194	0.159	0.172
CPRFMar	0.386	0.432	0.132	0.138	0.279	0.403	0.4	0.248	0.22	0.121	0.125	0.189	0.658	(0.783)	0.747	0.534	0.281	0.362	0.342	0.355
CPRFFin	0.264	0.33	0.06	0.114	0.153	0.276	0.265	0.206	0.21	0.088	0.045	0.165	0.572	0.747	(0.826)	0.65	0.26	0.329	0.476	0.456
CPRFTou	0.132	0.289	-0.029	0.09	0.147	0.229	0.213	0.153	0.216	-0.022	0.078	0.059	0.442	0.534	0.65	(0.849)	0.112	0.206	0.24	0.532
IPRFInn	0.278	0.114	0.347	0.398	0.075	0.115	0.145	0.305	0.381	0.379	0.158	0.402	0.223	0.281	0.26	0.112	(0.839)	0.494	0.489	0.341
IPRFMar	0.249	0.179	0.3	0.243	0.155	0.14	0.145	0.275	0.355	0.283	0.193	0.294	0.194	0.362	0.329	0.206	0.494	(0.858)	0.48	0.437
IPRFFin	0.237	0.133	0.18	0.176	-0.014	0.035	0.093	0.106	0.331	0.183	0.046	0.175	0.159	0.342	0.476	0.24	0.489	0.48	(0.815)	0.401
IPRFTou	0.276	0.188	0.127	0.263	0.135	0.161	0.131	0.19	0.247	0.143	0.15	0.254	0.172	0.355	0.456	0.532	0.341	0.437	0.401	(0.812)

Germany

	INVO	PLAT	NORM	BENEF	ID_CON	ID_SIM	CBRA	IBRA	PRA_Soc	PRA_Rec	PRA_Env	PRA_Mng	IPRF_To	IPRF_Fi	IPRF_Ma	IPRF_In	CPRF_to	CPRF_Fi	CPRF_Ma	CPRF_In
INVO	(0.817)	0.336	0.114	0.162	0.484	0.482	0.357	0.166	0.062	0.098	0.063	0.129	0.263	0.125	0.273	0.295	0.258	0.096	0.303	0.27
PLAT	0.336	(0.837)	0.11	0.053	0.392	0.459	0.27	0.014	0.208	0.162	0.154	0.099	0.22	0.101	0.298	0.217	0.282	0.117	0.337	0.325
NORM	0.114	0.11	(0.807)	0.579	-0.007	-0.068	0.213	0.588	0.397	0.603	0.607	0.679	0.178	0.109	0.211	0.231	0.011	-0.091	0.116	0.27
BENEF	0.162	0.053	0.579	(0.794)	0.138	0.107	0.332	0.614	0.222	0.404	0.412	0.564	0.26	0.183	0.216	0.251	0.092	0.014	0.107	0.192
ID_CON	0.484	0.392	-0.007	0.138	(0.825)	0.84	0.419	0.131	0.032	0.094	-0.04	0.133	0.184	0.256	0.241	0.317	0.189	0.218	0.349	0.291
ID_SIM	0.482	0.459	-0.068	0.107	0.84	(0.831)	0.452	0.04	0.056	0.036	-0.076	0.061	0.164	0.292	0.248	0.289	0.194	0.177	0.336	0.276
CBRA	0.357	0.27	0.213	0.332	0.419	0.452	(0.845)	0.339	0.141	0.239	0.114	0.244	0.094	0.206	0.096	0.318	0.211	0.307	0.36	0.435
IBRA	0.166	0.014	0.588	0.614	0.131	0.04	0.339	(0.750)	0.188	0.475	0.487	0.693	0.123	0.071	0.155	0.198	0.049	0.045	0.102	0.18
PRA_Soc	0.062	0.208	0.397	0.222	0.032	0.056	0.141	0.188	(0.866)	0.507	0.241	0.317	0.157	0.169	0.164	0.213	0.048	-0.029	0.093	0.153
PRA_Rec	0.098	0.162	0.603	0.404	0.094	0.036	0.239	0.475	0.507	(0.724)	0.5	0.607	0.154	0.17	0.122	0.197	0.031	-0.02	0.151	0.179
PRA_Env	0.063	0.154	0.607	0.412	-0.04	-0.076	0.114	0.487	0.241	0.5	(0.757)	0.598	0.263	0.071	0.237	0.165	0.114	-0.035	0.173	0.196
PRA_Mng	0.129	0.099	0.679	0.564	0.133	0.061	0.244	0.693	0.317	0.607	0.598	(0.695)	0.251	0.206	0.273	0.295	0.072	0.021	0.108	0.18
IPRF_To	0.263	0.22	0.178	0.26	0.184	0.164	0.094	0.123	0.157	0.154	0.263	0.251	(0.692)	0.357	0.561	0.247	0.29	0.013	0.19	0.1
IPRF_Fi	0.125	0.101	0.109	0.183	0.256	0.292	0.206	0.071	0.169	0.17	0.071	0.206	0.357	(0.814)	0.412	0.336	0.137	0.239	0.186	0.206
IPRF_Ma	0.273	0.298	0.211	0.216	0.241	0.248	0.096	0.155	0.164	0.122	0.237	0.273	0.561	0.412	(0.800)	0.407	0.168	0.018	0.22	0.159
IPRF_In	0.295	0.217	0.231	0.251	0.317	0.289	0.318	0.198	0.213	0.197	0.165	0.295	0.247	0.336	0.407	(0.831)	0.118	0.08	0.196	0.258
CPRF_to	0.258	0.282	0.011	0.092	0.189	0.194	0.211	0.049	0.048	0.031	0.114	0.072	0.29	0.137	0.168	0.118	(0.734)	0.394	0.45	0.286
CPRF_Fi	0.096	0.117	-0.091	0.014	0.218	0.177	0.307	0.045	-0.029	-0.02	-0.035	0.021	0.013	0.239	0.018	0.08	0.394	(0.893)	0.479	0.455
CPRF_Ma	0.303	0.337	0.116	0.107	0.349	0.336	0.36	0.102	0.093	0.151	0.173	0.108	0.19	0.186	0.22	0.196	0.45	0.479	(0.711)	0.683
CPRF_In	0.27	0.325	0.27	0.192	0.291	0.276	0.435	0.18	0.153	0.179	0.196	0.18	0.1	0.206	0.159	0.258	0.286	0.455	0.683	(0.833)

Appendix J: Comparison between extant and new research

To determine the meaning of sustainability in the context of the wine industry			
Core study	Findings core study	Similarities to this study	Differences to this study
Hoffman, et al., 2006	Family capital can lead to sustained competitive advantage in family businesses and improved family business performance.	The importance of the next generation being able to live and work on the same land when considering the meaning of sustainability.	
Patterson, 2006	Ecological sustainability contains biodiversity and resilience as well as sustainable agriculture.	Healthy soils and ecosystems clearly relate to the ecological meaning of sustainability and was a major part of the discussion amongst all of the 20 participants	
Walter & Stützel, 2006	Based on a thorough literature review, the authors present the following four main criteria for sustainable agriculture: Soil fertility related issues, Resource related issues, Emission related issues, Complex ecological issues	s.a.	
Gabzdylova, Raffensperger, & Castka, 2009	The authors find that the use of chemicals has dramatically declined in the wine industry. Especially synthetic fertilizers have been replaced by compost. The use of fertilizers is limited as they can reduce grape quality. The author caution about future water shortages in the wine industry and highlight the problem of wastewater from wine production.	Environmental practices that display strong support in the quantitative part of this research are implementing measures to save water as well as the use of environmentally safe fertilizers.	This study finds that saving water is essential among wineries whereas the problem with wastewater is still present in the research by Gabzdylova et al. (2009)
Gabzdylova, Raffensperger, & Castka, 2009	Gabzdylova et al. (2009) find that the majority of wine companies recycle packaging materials, plastics, cartons, papers and wine bottles. It was stressed that a number of participants claimed that	Recycling contributes most strongly (in the German sample) and second most strongly (in the Australian sample) to the overall variable of sustainability practices. This means that the sample in this study	

	chemical containers are sent back to suppliers. On the other hand, some companies said that they put everything into a landfill and do not recycle.	reflects strong support for waste management in the form of recycling as part of their sustainability practices.	
To evaluate the importance of sustainability to the wine industry and its players			
Gabzdylowa, Raffensperger, & Castka, 2009	Authors find that the wine quality is communicated in form of signs, logos and statements on packaging. Also, ecolabels are used for further brand recognition. This is done to create a good reputation and image as well as to gain easy access to domestic and overseas markets.	This research shows that second to improved wine quality is the benefit of an enhanced reputation in the community. So wineries in this research seem to believe that sustainability efforts improve their social status.	
To establish how positive sustainability attitudes effect the implementation of sustainability practices and sustainability place branding strategies.			
Gabzdylowa, Raffensperger, & Castka, 2009; Marshall et al., 2010	Gabzdylowa et al. (2009) find that internal values of the winemaker are the strongest driver for implementing sustainability practices. Marshall et al. (2010) suggest that positive sustainability norms held by others in the organization function as an antecedent of sustainability implementation.	The structural equation modelling analysis shows that there is a strong positive relationship between positive sustainability attitudes and the implementation of sustainability place branding as well as sustainability practices	
To establish the role of sustainability in individual and regional place branding strategies			
Bernabéu, Brugarolas, Martínez-Carrasco, & Díaz, 2008	Bernabéu et al. (2008) suggest that strategies for the wine industry should include both the traditional approach based on origin as well as differentiation based on organic production. With this, organic wine should be stressed as enhanced wine quality and food safety.	Place branding among the wineries shows the strongest support for country-of-origin (COO) branding. Another aspect emphasised in the wineries' place branding strategies is their relationship with the surrounding nature. Natural beauty as well as good climate form important parts of wine branding strategies. Sustainability is stressed but seems to receive less support than the communication of the actual place in the form of COO branding.	It can be seen that origin branding is still highly executed in the wine industry and sustainability plays only a minor role in overall branding. Yet, establishing sustainable wine as the better quality wine might be the way forward.
To measure the benefits of sustainability practices to the wine industry.			
Forbes et al., 2009	The findings of this study indicate that consumers have a strong demand for wine which is produced using "green" production practices. Consumers believe that the quality of sustainable wine will be	This study shows that wineries that practice sustainability indeed perform better in all four contributors (financial, tourism, brand and innovation)	Forbes et al. (2009) based on a single case study and results based on consumer purchase intention only. This study in comparison analysed the results of more

	equal to or better than conventionally produced wine, and they are prepared to pay a higher price for this wine.		than 400 businesses in the wine industry and measures actual past performance behaviour.
To examine the benefits of sustainability to wine place branding strategies.			
		A significant, positive relationship with moderate strength between individual sustainability place branding and individual place performance is measured among the Australian wineries.	As opposed to Blackman et al. (2014), this study researches and finds benefits of sustainability to individual wine business instead of just finding benefits on a regional level.
Blackman et al., 2014	Blackman et al. (2014) find that Blue Flag certification results in significant new hotel investment with a strong focus on luxury hotels. This holds true more so for economically advantaged communities.	The structural equation modelling conducted in this research displays a positive, significant but weak (Australian sample) and moderate (German sample) effect of sustainability place branding and enhanced performance on a regional level.	
To determine the barriers and challenges encountered in the use of sustainability in wine place branding strategies.			
Wolf et al., 2002	Results from Wolf et al. (2002) suggest that Dominica should continue to pursue the possibility of becoming an "Organic Island." This was found from the perspective of domestic consumers	The common denominator when it comes to challenges in the branding of wineries and wine regions in Australia and Germany is the bad reputation that early examples of organic wine caused.	Both findings suggest that organic wine is treated differently to organic food products.
Buckley & Clough, 1997, p.479	Buckley & Clough (1997) reveal that members of the World Congress of Adventure Travel & Ecotourism are examined and it was established that merely half of the eco-tourism and management claims were supported by factual detail.	Another problem that was stated in this context is the number of businesses that exploit the grey area of sustainability based on the ambiguity of the term. A lack of certification and businesses claiming to participate in sustainable practices is therefore seen as a challenge	Similar issues with 'greenwashing' have been identified.
To explore ways in which barriers and challenges (if any) in the use of sustainability in wine place branding strategies might be overcome.			
Buckley, 2002	Where an ecolabel uses a broad term such as sustainability, the practical criteria and processes used to decide whether or not a particular product can use the ecolabel, need to be clear and publicly defined.		Instead of omitting sustainability completely in branding strategies, a number of respondents chose to limit their communication of this aspect. Yet, as opposed to Buckley (2002), such a limitation of communication seemed preferred to clearly defining sustainability.

To explore how co-creation and involvement between wineries and the wine region influences place brand identification.			
Klijn, Eshuis, & Braun, 2012	Klijn et al. (2012) present findings that show how more stakeholder involvement in branding is important and indeed matters. This is based on the fact that in their study stakeholder involvement results in a clearer brand concept as well as to increased effectiveness in terms of attracting target groups such as new inhabitants, visitors and firms.	A strong, significant relationship between co-creation of the place brand and place identity was found (in support of H1). This means that when the individual winery felt that they were involved in the regional brand creation the shared brand identity was stronger.	
To explore how place attachment of wineries with their wine region effects place brand identification.			
Lindstedt, 2011	Lindstedt (2011) conceptualizes that it is essential to recognize people's need to form affective bonds with their environment on the psychological level. She explains that these bonds require people to be able to link certain kinds of meanings with the place. When considering brand construction, the formation of affective bonds is positively reflected in the brand image and brand equity among local people according to Lindstedt (2011).	A very strong, significant, positive relationship was found between place attachment and place identity (in support of H2).	Lindstedt's work is conceptual only and this research provided empirical evidence for the role that place attachment plays in place branding.
To investigate the effect of a shared place identity on place performance			
Kavaratzis & Hatch, 2013	Place branding needs to be a tool for locals to express cultural features that are already part of their place identity.	It was found that place identity has a positive impact on the performance of place brands on an individual as well as a regional level across both samples. This suggests that, there is a positive correlation between the individual winery's identification with the wine region and the success of both, the winery itself and the region (in support of H4a and H4b).	Kavaratzis & Hatch (2013) is conceptual only and this research provided empirical evidence for the role that place identity plays in place branding.
Stokburger-Sauer, 2012	Stokburger-Sauer (2012) find that CBI (Consumer brand identification) results in two important consequences: brand loyalty and brand advocacy.	s.a.	Stokburger-Sauer (2012) focus on general consumer brand identification. In contrast, this study looks at brand identification from a business and regional/destination point of view.
Hallak et al., 2012	Authors suggest that the place identity of tourism entrepreneurs has a positive, indirect effect on entrepreneurial performance. In other words, an	s.a.	Hallak's (2012) findings are extended by adding the regional (destination) aspect to the relationship between place identity and

	entrepreneur's sense of identity with the place in which the business operates, contributes toward entrepreneurial success.		performance.
To test whether a shared place identity moderates the relationship between sustainability place branding and place performance.			
No prior research		The relationship between sustainability place branding and individual winery performance is indeed strengthened by place identity (in partial support of H8d) in the Australian sample.	
To identify differences (if any) in the meaning and nature of sustainability in new and old wine producing regions			
Orth et al., 2005	Orth et al. (2005) finds that wine regions have different region equity that drives consumer preferences for the selected wine origins. They find that some origins are preferred due to a perception as offering social (California, New Zealand) or environmental value (Oregon).	This study finds a noticeable difference in the importance of social sustainability. Whereby Australian interviewees hardly highlighted the aspect of social sustainability at all, almost all of the German wineries mentioned social sustainability to some extent.	There is no doubt that some wine regions portray a stronger link to sustainability than others. Whereas, Orth et al. (2005) review a list of varying region equity factors according to consumer preferences, this study focuses on the supply side understanding of sustainability.
To analyse the impact of such differences (if any) on sustainability place branding strategies in new and old wine producing regions.			
Barham, 2003	Barham (2003) highlights that the European wine industry often refer to the term 'terroir' as indicator for quality of the wine product and wine region. It is believed that implementing sustainability practices is linked to wine quality through improving the soil and grape quality of the 'terroir'.	The effect of sustainability place branding on winery level on the individual performance was significantly higher among the Australian respondents in comparison to the German sample. This means that the relationship between sustainability branding and performance is stronger in Germany on the regional level and in Australia on the individual winery level	
Pugh & Fletcher, 2002	Pugh & Fletcher (2002) discuss that based on the lack of strong regional bonds and history in the Australian wine industry, more innovative way of portraying sustainability had to be found. Building a 'green brand' by donating a proportion of the sale to conservation projects such as Wetland Care Australia is highlighted as an innovative approach to sustainability place branding by doing something good that benefits the place.		Pugh & Fletcher (2002) focus on a single case study only, whereas this study shows industry wide results for two countries.

