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The Influence of Entrepreneurship Orientation on Omani SMEs’ Performance

By

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

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Abstract

Entrepreneurial orientation is one of the most crucial and reliable means of achieving a sustained competitive advantage in organizations. This is done through an ongoing process of highlighting new opportunities that arise now and then in a typical business environment. This study examines the impact of organizational culture (group, hierarchical, rational, and development) on entrepreneurial orientation (EO). The study also explores the effect of EO on organizational learning, innovation and firm performance, and the mediating role of both organizational learning and innovation and performance in the relationship between EO and firm performance. It applies to small and medium enterprises (SMEs) in an Omani context.

The study employs quantitative method to gather information and data which are imperative for any typical study of a firm’s performance. A questionnaire was distributed to gather data from 418 managers of SMEs in Oman. Structure Equation Modelling (SEM) was used to analyse the collected data. The findings of the study indicated that organizational culture is a key determinant of EO in SMEs. Further, only hierarchical, rational and development culture bear direct correlation to EO whereas group culture has almost no effect. The results also depicted how EO contributes positively to the performance, organizational learning and innovation of a firm. Learning organization and innovation performance were also
seen to deeply influence a firm’s overall output. Finally, the results concluded that organizational learning and innovation performance play a mediating role in the relationship between EO and firm performance.

This study contributes to the current available theoretical knowledge pool and stresses the understanding and knowledge about the relationships that typically exist between the four different types of attributes, namely: organizational culture, EO, organizational learning, innovation performance and firm performance. The study also confirms the requirement of at least two mediators that further enhance the relationship between EO and firm performance, particularly in the context of small and medium enterprises in Oman.

In practical terms, this study examines the role of organizational culture on supporting EO in the context of SMEs belonging to Oman. The research also investigates how organizational learning and innovation performance enhance the impact of EO on SME performance. Additionally, this study will help the Omani SMEs in enhancing their performance by encouraging correct EO behaviours that support organizational learning practices, thereby improving innovation and performance. Further, it will help SMEs to improve their performance through the support of an outstanding organizational culture, thus enhancing EO and, in the process, encouraging managers and employees to follow a continuous learning approach. Therefore, existing good organizational culture that enhances EO by supporting organizational learning and innovation performance will further motivate SME managers to take calculated risks in planning and expanding their enterprises in a competitive business setup in order to achieve supremacy in the
marketplace against competitors and at the same time grow in a sustained manner.
DEDICATION

To my father, my great mother,

To my wonderful wife, my children, my family, and friends

A special dedication to my supervisors,

Atul Mishra and Dababrata Chowdhury
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<td>SMEs</td>
<td>Small And Medium Enterprises</td>
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<td>EO</td>
<td>Entrepreneurship Orientation</td>
</tr>
<tr>
<td>SEM</td>
<td>Structural Equation Modelling</td>
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<tr>
<td>PLS</td>
<td>Partial Least Squares</td>
</tr>
<tr>
<td>AVE</td>
<td>Average Variance Extracted</td>
</tr>
<tr>
<td>CB-SEM</td>
<td>Covariance Based-Structural Equation Modelling</td>
</tr>
<tr>
<td>PLS-SEM</td>
<td>Partial Least Squares Structural Equation Modelling</td>
</tr>
<tr>
<td>MVE</td>
<td>Structural Equation Modelling</td>
</tr>
<tr>
<td>QUAN/QUAL</td>
<td>Quantitative/Qualitative</td>
</tr>
<tr>
<td>GoF</td>
<td>Global Goodness of Fit</td>
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<tr>
<td>CVM</td>
<td>Competing Value Model</td>
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<tr>
<td>CFA</td>
<td>Confirmatory Factor Analysis</td>
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<tr>
<td>VIFs</td>
<td>Variance Inflation Factors</td>
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<tr>
<td>ARS</td>
<td>Average R-squared</td>
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<tr>
<td>GCC</td>
<td>Gulf Cooperation Council</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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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 Doctoral College Quality Sub-Committee.

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

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Signed: ..................................................

Date: ..............................................
Chapter 1: Introduction

1.1. Background of the Study

The significant impact of small-medium enterprises (SMEs) on a developing economy is increasingly recognized (Pandya, 2012). They have often been acknowledged as productive and efficient job creators, large-scale seed companies and national economic engines (Abor & Quartey, 2010). In the world's economy, professionals, politicians and scholars have been increasingly concerned with the study of entrepreneurship and SMEs (Hassan & Mohamed, 2015).

Entrepreneurship has been recognized widely in developing countries as an influential instrument for poverty reduction and an enhancer of economic growth (Bhuiyan & Ivlevs, 2019). All countries in general, and developing countries in particular, seek to enhance and develop the entrepreneurial business to support the economic improvement and stability (Al-Shamaileh, 2018). Entrepreneurship is currently the primary cause of development, and is considered the driving force behind financial and social growth in most advanced and developing countries. Studies show that entrepreneurs play key roles particularly in the creation of small and medium enterprises, leading to higher employment (Jafarnejad et al., 2013).

Because of its great ability to create new jobs, entrepreneurship is an essential factor for economic growth (Boudreaux et al., 2019; Muscio & Ramaciotti, 2019). Moreover, entrepreneurs play a very prominent role in employing the rural
population, provide self-employment to those who start their own business and enhance the economic environment of the different sectors (Gödöllő, 2018).

Furthermore, entrepreneurial orientation represents the management's orientation towards seeking new vistas for the firm's progression in a competitive environment. As a result, firms with focus towards entrepreneurship show a higher tendency towards realizing growth through the process of exploratory strategic actions rather than the exploitative ones (Wales, 2016).

Additionally, many previous studies revealed that entrepreneurial orientation has a positive impact on firm performance (Lomberg et al., 2017), and this influence may increase over time (Kohtamäki et al., 2019; Liu et al., 2019). Moreover, Rauch et al. (2009) and Rodrigo-Alarcón et al. (2018) indicated that EO helps to achieve sustainable performance. Entrepreneurial orientation is a key source of intangible value for organizations to sustain the competitive advantage for organizations through highlighting the new opportunities available in the business environment (Webb et al., 2010), exploiting them optimally and making them successful (Kellermanns & Eddleston, 2006), especially in a highly competitive business environment.

Entrepreneurial orientation supports the flexibility of organizations as a strategy to address environmental uncertainty. The ability of an organization to develop new products, provide distinct product alternatives, and adjust production level as needed can be stimulated through autonomy, risk-taking, innovativeness, competitive aggressiveness and proactiveness (Chang et al., 2019).
The entrepreneur is an innovator who recognizes and exploits opportunities; transforms these opportunities into business ideas; adds value over time, effort, money or skills; takes the competitive market risks to apply these ideas; and ensures rewards are provided for these efforts (Bjerke, 2007; Rengiah, 2013). Likewise, entrepreneurial orientation affects several organizational outcomes within any organization, such as firm performance (Ranasinghe et al., 2019; Ghazikalaye & Roshani, 2016), organizational learning (Anderson et al., 2009; Nofal & Obeidat, 2019; Kreiser, 2011), innovative performance (Rattanawong & Suwanno, 2014; Solikahan & Mohammad, 2019) and firm performance (Altinay et al., 2016; Chen et al., 2018; Dekoulou & Trivellas, 2015; Kalmuk & Acar, 2015).

The entrepreneurial environment in Oman is still in progress, but actions can be taken to support the growth of national entrepreneurship. Oman can promote and stimulate entrepreneurial growth by providing favourable environmental factors. Political stability in the Sultanate is based on global ratings and is the most appealing feature. It also has a policy of free economy that is essential for new companies (Matriano & Suguku, 2015). Oman’s SME sector has shown growth and development (Ennis, 2015). Nearly 90% of the private sector relies on small and medium-sized enterprises (SMEs) and they provide many jobs for young people, leading to a decrease in the country’s unemployment over the past two years (Al Bulushi & Bagum, 2017).

The government in Oman has taken initiatives to promote its SMEs, but gaps still exists (Varghese, 2011). In order for SME owners to be able to readily start their own businesses and provide jobs in a market, the government has provided short-
term loans. Researchers have clarified that SMEs can succeed if they receive long-term loans at low financial cost as this makes it easy for owners to repay their loans (Saleh, 2012). SME short-term loans always hamper the success of a company, even an excellent one (Al Bulushi & Bagum, 2017).

The SME sector in Oman begins the growth curve, and this sector needs a high level of governmental assistance. Oman’s SME contribution to GDP is small but helps the country to reduce the volume of unemployment (AlMaimani & Johari, 2015). According to the SME Development Public Authority (2013) in Oman, there were about 132,735 SMEs in 2013, most of them in the Muscat area (Al Balushi, 2019). Riyada (2018) reported that 70% of SMEs are micro-enterprises, 25% of which were small and 5% were medium-sized in 2013. Ennis (2015) highlighted how the Omani government took extraordinary actions to enhance its SMEs and the economy of its entire country in 2015. Nearly 90% of private industry is based on SMEs and it offers many job opportunities for young people, resulting in a significant fall in national unemployment over the last two years (Al Bulushi & Bagum, 2017).

1.2. **Research Gap**

Oman SMEs have an important influence on the Omani economy. In order for small and medium enterprises to prosper and survive in a dynamic business environment, they must design and implement their philosophy in enterprise activities. The influence of EO on a company’s performance is generally considered within the business field, but the findings vary from an immediate positive to no critical correlation between the entrepreneurial orientation and
performance (Real et al., 2014; Rauch et al., 2009). This study confirms that such variations are due to cultural characteristics related to the Arab environment and Gulf countries, given that EO in SMEs requires a property (Covin & Slevin, 1991; Hughes & Morgan, 2007; Real et al., 2014). More studies have been called for to determine in what way an EO can be beneficial. This thesis attentively tests the effect of organizational culture on entrepreneurial orientation.

Organizational learning allows a company to mix its present assets and capabilities, transforming them into specific economic advantages (Lado et al., 1992). Hierarchical learning becomes an essential part of the strategy based on resources and its enhancement as well as the approach being based on knowledge. Both hypothesis systems advise that the upper hand is the capacity and skills of the company, and hierarchical learning requires both if it is to improve the efficiency of the organization and strengthen its advantage. Additionally, Rauch et al. (2009) found that a positive and direct relationship existed between entrepreneurial orientation and firm performances. This relationship requires extensive investigation in the Middle East. Also, previous studies have indicated the impact of OLC on business performance (e.g. Vijande et al., 2005; Real et al., 2014). Hult et al. (2004) revealed that introduction to learning takes place at the corporate culture stage in particular and different variables can interfere with the relationship between learning introduction and business results. Moreover, prior studies have revealed certain questionable results regarding the connection between hierarchy and business performance (Pérez López et al., 2005; Real et al., 2014)
However, the significance of organizational culture as an EO history has been emphasized by prominent researchers such as Aloulou & Fayolle (2005); Covin & Slevin (1991) and Hauser et al. (2006), yet the relationship between hierarchical culture and EO is rarely investigated (Engelen et al., 2014). Many researchers, such as Hauser et al. (2006) and Lumpkin & Dess (1996), have called for further consideration of such a relationship. Likewise, many previous studies have indicated the positive impact of organizational culture on entrepreneurial orientation (e.g. Brettel et al., 2015; Seifari & Amoozadeh, 2014; Shepherd et al., 2010; Eddleston & Kellermanns, 2007). Wales (2013); Mahmood & Hanafi (2013); Lechner & Gudmundsson (2014); Ghazikalaye & Roshani (2016) and Lomberg et al. (2017) have confirmed that EO correlates positively with firm performance. Furthermore, entrepreneurial orientation positively affects organizational learning (Alegre & Chiva, 2013; Aloulou & Fayolle, 2005) and innovative performance (Al Mamun & Fazal, 2018; Avlonitis & Salavou, 2007; Musawa & Ahmad, 2018). Organizational learning has a positive impact on firm performance (Bell et al., 2002), and innovative performance has a positive effect on firm performance (Şişmanoğlu & Akçali, 2016).

Despite various studies dealing with the correlation between these variables, no study has addressed the mediating roles of organizational learning and innovative performance in the link between entrepreneurial orientation and firm performance in SMEs in an Omani context. In addition, to date, EO and its relationship to the performance of SMEs in Oman has not been critically studied. The need for this research is reinforced by an uncertain exploration of the EO-company performance relationship coupled with a lack of experimental exploration of such
a relationship in Omani SMEs. This study discusses the impact of organizational culture on EO, the impact of EO on firm performance, as well as the mediating roles of organizational learning and innovative performance in the link between EO and performance.

1.3. Research Aims and Objectives

The primary aim of this thesis is to explore the association between EO and a firm’s performance in a typical Omani SME, as well as to examine the influence of organization culture types on EO for the period 2012-2017. The research study objectives are outlined as follows:

1. Indicating the influence of organizational culture on EO.
2. Highlighting the suitable pattern of organizational culture that is most influential in strengthening EO in an organization.
3. Exploring the direct correlation between EO and firm performance.
4. Investigating the mediation role of OL and innovation performance as a link between EO and firm performance.

More importantly, this study aims to offer suggestions to SMEs and strategy practitioners on how EO adaptation can enhance the performance of a typical SME in Oman. These investigative findings are further used to recommend growth and trends available in future research scenarios in EO.
1.4. Research Importance

The study is expected to be of great value in the following ways:

- A better understanding of the effect of organizational culture on entrepreneurial orientation. Also, a better understanding of how entrepreneurial orientation affects firm performance mediation by organizational learning and innovative performance. This will allow important conclusions to be reached that may prove beneficial not only to SMEs in Oman but also to other firms, institutions and policymakers.

- The study may guide SME managers about the role of both organizational learning and innovative performance as mediation in the relationship between entrepreneurial orientation and firm performance, and help them to enhance their entrepreneurial orientation actions within enterprises to improve performance.

- The study highlights the important influence of organizational culture on entrepreneurial orientation, and the important impact of EO on SME performance.

- The content may benefit academic studies connected with the reporting and decision-making concerning entrepreneurship, EO, SMEs, OL, innovative performance and performance.

The study may be a source of reference material for future researchers on the topic of entrepreneurship, entrepreneurial orientation and performance. It can also assist other academicians who are studying the same subject.
1.5. **Research Questions and Hypotheses**

The study questions are developed as follows in order to promote an awareness of EO in the Omani environment and provide insight into the role of organizational culture:

1. Does the organizational culture influence EO?
2. Which type of organizational culture is most influential in strengthening EO in an organization?
3. Is there a causal link between EO and firm performance?
4. Do organizational learning and innovative performance mediate the relationship between EO and firm performance?

In light of these objectives, the study relies on the following hypotheses:

**Hypothesis.1:** A great degree of group culture will be positively related with the EO.

**Hypothesis.2:** A great degree of hierarchical culture will be negatively associated with the EO.

**Hypothesis.3:** A great degree of rational culture will be positively related with the EO.

**Hypothesis.4:** A great degree of developmental culture will be positively related with the EO.

**Hypothesis.5:** EO has a positive influence on firm performance.

**Hypothesis.6:** Organizational learning capability mediates the link between EO and firm performance.

**Hypothesis.7:** Innovation performance mediates the link between EO and firm performance.
1.6. Motivations and Contribution

This study adopts a distinctive approach to examine the influence of organizational culture on entrepreneurial orientation, and the impact of entrepreneurial orientation on firm performance mediating by organizational culture and innovative performance in SMEs in Oman, by proposing and empirically testing an integrated model, with contributions from well-grounded theories, namely the Resource-Based Theory (RBT), contributing to the current literature since, to the best of the author’s knowledge, this has not been done in any other study.

With this integrative approach, it will be possible to determine not only which types of organizational culture significantly affect an entrepreneurial orientation, but also the ones that have the strongest impacts, enhancing understanding of the impact of entrepreneurial orientation on SME performance and the role of organizational learning and innovative performance as mediators. The result from this study will generate information about organizational culture types and its impacts on entrepreneurial orientation of organizations that can be valuable information for managers and policymakers, helping them to increase firm performance to achieve a competitive advantage. The findings will help SMEs in Oman to better understand the importance of organizational culture types and their impacts on EO. In addition, integrating entrepreneurship will help provide a greater understanding of the full picture of EO influence on SME performance.
1.7. **Summary of Research Methodology**

The methodology may be described as an explicit scheme of regulations and processes based on studies, which evaluates claims for knowledge (Hair, et al., 2014; Creswell, 2009). The study's philosophy arises from a positivistic paradigm in which the problem of studies comes from the literature itself. A group of gaps in the literature are covered by the researcher. The positivistic paradigm is regarded as the most adequate strategy in the conduct of this study using a cross-sectional investigation methodology. Managers of SMEs in Oman are the study's population. In order to test study questions, structural equation modelling (SEM) with partial least squares (PLS) shall be implemented.

1.8. **Research Outline**

The structure of this study is described on the basis of thesis contributions and the fundamental research questions, as follows:

**Chapter 1:** Presents the study background, the gap in previous studies, the study significance. Additionally, it introduces the aims and objectives, and the study questions and hypotheses. It displays the structure of the whole thesis and concludes with a summary of the chapter.

**Chapter 2:** Introduces a comprehensive literature review on entrepreneurship, entrepreneurs, the history of entrepreneurship, characteristics of entrepreneurship and entrepreneurs, and the importance of entrepreneurship. This chapter also illustrates entrepreneurial orientation, the importance of entrepreneurial orientation and dimensions of EO. Additionally, the chapter involves firm performance, organizational culture, organizational learning and innovative performance. It also reviews the previous studies related to this topic.
Chapter 3: This chapter displays entrepreneurship in SMEs in developing countries, entrepreneurship in developing countries, small and medium enterprises in Oman, entrepreneurship in Oman and the challenges of entrepreneurship in SMEs in Oman.

Chapter 4: The study's conceptual framework is detailed.

Chapter 5: This chapter covers the methodology of the current thesis and research design, including research philosophies, research approach, data sources, research design, the use of survey method, sampling design, questionnaire development, questionnaire design and measurement, ethical considerations in the current study and Partial Least Squares.

Chapter 6: The chapter discusses the data analysis and the main results of the analysis. It indicates data collection, outliers and missing values, common method bias, multivariate statistical assumptions, research model validation, measurement model, structural model, collinearity and post hoc analysis.

Chapter 7: In this chapter, the study discussion and conclusion is addressed. The chapter discusses the main results of the analysis and matches the findings with previous studies in order to provide the overall results of the thesis and presents implications for theory and practice. The chapter ends with limitations and future researches.

1.9. Summary

This chapter introduces and describes the background of the study, the research justifications, aims and objectives and the research questions. The extant literature has proved that entrepreneurship may greatly contribute in eradicating unemployment and induce sustainable economic growth. All countries, especially
the developing ones, seek to promote entrepreneurship to cater to the ever-growing employment needs of their burgeoning population. Keeping in view the significance of this highly important issue, researchers have put a lot of effort into developing a set of comprehensive theories and models in order to better predict how entrepreneurship can be promoted. Due to these efforts, it is now amply clear that entrepreneurship orientation has a positive impact on a firm’s performance for many reasons. However, this positive influence is not uniform or universal, and is often moderated and mediated by other socio-economic factors, more specifically the environmental ones. This study attempts to investigate the cultural forces in vogue that influence the entrepreneurial orientation and then further proceeds to investigate the influence of organizational learning capability and innovative performance on the relationship between entrepreneurial orientation and firm performance. The study is in the context of the Sultanate of Oman but can be applied universally in general, with some modifications. The Sultanate is struggling hard to promote entrepreneurship in the SME sector in order to diversify its economy from a typical oil-based to a non-oil one that includes diversified services and vocations. For Oman, unemployment is a great challenge as the proportion of young population is far higher than many other countries of the world. Like other Gulf nations, Oman maintains a strong and vibrant culture which may influence entrepreneurship in a certain way. The results of this study may greatly help policy makers to plan an effective policy that promotes entrepreneurship in the country, thereby eradicating unemployment through the establishment of a sound SME-based sector. A well-performing SME sector may greatly contribute towards the goal of economic diversification, thus promoting a sustainable economic model of growth for Oman.
The background of the study is outlined in this introductory chapter and the objectives and the areas of study are thereby presented. The remaining seven chapters are further elucidated in this thesis.
Chapter 2: Entrepreneurship and Firm Performance: An Overview

2.1. Introduction

All countries in general and developing countries in particular seek to enhance and develop the entrepreneurial business to support economic growth and stability (Al-Shamaileh, 2018). Entrepreneurship becomes one of the important economic components in any country and can serve as a platform for the country’s social and economic development. The role and importance of the entrepreneurial sector in economies cannot be overstated (Minaev, 2016).

Toma et al. (2014) indicated that, in the context of the Schumpeterian view, entrepreneurship is a key element in the economic development of any region or country. They added that entrepreneurship is an important tool for individuals and governments through its role in decreasing unemployment and achieving economic development (Awad, 2018). Additionally, entrepreneurship helps to increase the country’s income through its role in increasing capital, technology (Shah & Tripsas, 2016; Hamdi-Kidar & Vellera, 2018), and creating job opportunities (Al-Shamaileh, 2018). Al-Shamaileh (2018) and Awad (2018) mentioned that entrepreneurship includes creation, innovation and renewal that occur within or outside the organization.

This chapter discusses entrepreneurship, entrepreneurship orientation and organizational culture in detail, as well as organizational learning, innovative performance and firm performance.
2.2. Entrepreneurship

2.2.1. Definition of Entrepreneurship

In 1732, the Irish economist Richard Cantillon used the concept of entrepreneurship in reference to individuals who are ready to carry out types of arbitration concerning the financial risk of a new venture (Minniti & Lévesque, 2008; Hatamleh, 2006; Lorz, 2011). Entrepreneurship requires more studies to indicate and define its main elements, for despite the efforts of previous studies, there is no satisfactory definition (Dahleez, 2009).

There is no doubt that the majority of studies on entrepreneurship revolve around the complexity of this term and the dialectics that have been raised about its definition, despite the existence of hundreds of studies (Toma et al., 2014). Bula (2012) mentioned that the concept of entrepreneurship is multi-dimensional. In this vein, there are several definitions of the concept. In addition, studies related to the definition of entrepreneurship and its role in the economy can be categorized in different ways such as chronology, in the school of thought and jobs attributed to entrepreneurs (Demirdağ, 2015).

Abu Nahla (2008) argued that many factors influence developing a comprehensive concept for entrepreneurship. Some of these factors are related to the culture, the economy or the society. Because social and economic factors are not consistent, according to the surrounding environment, it is fair to say that there is not yet a comprehensive definition of the concept of entrepreneurship, which includes all types and characteristics of entrepreneurship.
Wennekers et al. (2005) indicated that entrepreneurship is a multifaceted phenomenon, analysed as a process, resource or a state-of-being (Toma et al., 2014). According to Nafukho et al. (2010) the reason behind not developing a global definition is that entrepreneurship has been documented in various disciplines, resulting in many opinions about its meaning. Awad (2018) clarified that at present entrepreneurship is one of the most interesting and contentious study fields. The distinction in entrepreneurial definitions is due to each industry class having its distinct schools and views. Some definitions can be simple or general, such as ‘the beginning of a new project’ whilst others refuse to confine it in such a way, since firms could be characterized as entrepreneurial firms even though they are not involved in any new projects (Trimi & Berbegal-Mirabent, 2012; Hsieh & Wu, 2019).

Entrepreneurship can be accurately defined as a type of mindset that views the world as a place to experiment and explore new possibilities in order to realize the true potential of one’s quest for self attainment through innovation and creativity (Ma & Tan, 2006). Additionally, Nieman and Nieuwenhuizen (2009) defined an entrepreneur as someone who looks for chances in the business environment and has the indispensable resources to create and develop a project to meet stakeholders’ needs or to face and solve difficulties within the community.

Shane and Venkataraman (2000) added that entrepreneurship is the study of opportunities sources; the discovery process, assessment and opportunities exploitation; and the group of people who discover, assess and exploit them. Entrepreneurship can also be defined as a flexible process of viewing, changing
and creating; risk-taking readiness; the formulation of an efficient project team; the creative capacity in developing the resources required to build a successful company plan; and lastly the recognition of opportunities (Kuratko, 2016; Rengiah, 2013). In the case of Goncharova et al. (2009), entrepreneurship is described as a human activity taken at a person’s own risk for the purpose of profit. Similarly, Gödöllő (2018) mentioned that entrepreneurship is the process where the entrepreneur shapes a venture by looking at a market chance, accepts risks by supporting an efficient innovative idea or procedure and gains profits from the project. Entrepreneurship includes acts of creation, renovation or innovation within or outside a current organization (Sharma & Chrisman, 2007).

The word ‘entrepreneurship’ is “entrepreneurial ability and desire to create, organize and administer a company enterprise along with all its hazards to gain profit”, per Egbete (2018, p. 27). KC (2004) described it as a function objective – to see investment and production opportunities, to organize new production projects, increase capital, employ labour, arrange raw material supply, find a site, combine these factors of production with constant attention, develop new techniques and select senior managers for daily operation days (Gödöllő, 2018). The European Commission (2006) defined it as the capacity of an individual to transform ideas and suggestions into action. It includes the capability to create, innovate and take risks in order to achieve objectives and to plan and manage projects. It promotes all people in their lives, both in their homes and in society. It also helps workers to be more conscious of the context of their job and to make better use of opportunities, and offers a basis for entrepreneurs to start up a social or business activity. Entrepreneurship can also be considered as an employment
and self-sufficiency scheme that can take the national economy to its highest level and bring it out of poverty (Herring, 2004; Özsungur, 2019).

2.2.2. Defining Entrepreneur

As for the definitions of entrepreneurship, the concept of an entrepreneur was discussed intensively in various studies from different perspectives that focused on the entrepreneur's characteristics, or the entrepreneurial process and opportunity (Dahleez, 2009). The concept of an entrepreneur has changed and become more complex in modern times (Dahleez, 2009). According to Bulu et al (2005), the idea of being an entrepreneur in the early middle age was more akin to one's personal profession or occupation, whereas in these contemporary times this concept has embraced an altogether different paradigm which in fact pertains to the ingenuity of the individuals and not the trade one engages in.

Previous studies compared the main difference between entrepreneurs or non-entrepreneurs to the creation of a new business. The entrepreneur is an individual who creates a new project, unlike the non-entrepreneur who has not created a new project (Shrivastava & Shrivastava, 2013). Awad (2018) pointed out that being an entrepreneur means not only creating a new business but also carrying out new combinations, which may include new products, procedures, markets, organizational forms, or sources of supply.

The entrepreneur is an innovator who recognizes and exploits opportunities; transforms these opportunities into business ideas; adds value over time, effort, money or skills; takes the competitive market risks to apply these ideas; and
rewards are made from these efforts (Bjerke, 2007; Rengiah, 2013). Researchers like Müller (2013) see the entrepreneur as an innovator who enters new markets, or the creator of a new venture. Schumpeter defined an entrepreneur as an individual who assembles all the production factors needed to create quality products and thus uses low-productivity resources in high productivity sectors. An individual, who can organize those resources effectively in order to add value, can consolidate the resources and succeed and therefore become an entrepreneur (Ssendi, 2013).

2.2.3. **History of Entrepreneurship**

The entrepreneurial idea is regarded as being quite ancient. However, it is still a world of essential subjects, which in some of the primary dimensions are often ambiguous. The term entrepreneurship comes from the term "entrepreneur" which implies "to undertake" in its original French form. In particular, the project includes an aspect of accountability and personal risk (Abu Nahla, 2008). The history of entrepreneurship started with the introduction of the word "entrepreneur" in the 18th Century by the French economist Richard Cantillon. Schumpeter (1951) describes in his business theory an entrepreneur as a person who purchases the means of manufacturing to include them in a fresh product at certain rates. J.B. Say, another 18th Century French economist, introduced the concept that entrepreneurs are leaders who bring individuals together to make a single productive item (Rengiah, 2013; Gödöllő, 2018).

The notion of corporate management is discussed by British economists such as Adam Smith, J. Stewart Mills and David Ricardo. Alfred Marshall accepted in his
'Principles of Economics' study the need for entrepreneurial production and explained the four production factors, namely land, labour, capital and regulation (Rengiah, 2013). Entrepreneurship has evolved over several stages during certain periods. Hisrich et al. (2008) describe these stages as follows:

In the "initial period" Marco Polo was the early example of an entrepreneur, who established the routes of commerce to the Far East. He sought to sell his goods through contact with the capitalist. The capitalist/financier was at risk. Therefore, the trader played an active role in trading and taking all possible risks. When the trader sold the goods successfully and completed the journey, the profits were divided, with the capitalists/financiers receiving the biggest share. In the Middle Ages, a person who ran a large business without risking anything, based on resources provided by the government, was called an entrepreneur.

By the 17th century, the emerging relationship of risk behaviour developed with entrepreneurship, where an entrepreneur was considered a person that was bound with a formal contract with the state and was obliged to provide the relevant services and products that were agreed upon (Al Btoush, 2015). During the 18th Century, the enterprises that dealt with wealth or money were identified as financial firms that dealt with lending and borrowing of money. Thus a typical entrepreneur was considered different and a distinction was made between a financier (or a capitalist) and an entrepreneur (Hisrich et al., 2008). In the 19th and 20th centuries, entrepreneurs and managers were considered at par with each other and were considered an integral whole in the larger sphere of economics. In the mid 20th Century, the concept was further refined and the idea of an entrepreneur was merged with that of an innovator thus unifying the definitions of
an entrepreneur with innovation. It was the job of the entrepreneur to reform or revolutionize the composition of production in new technological ways or processes or to produce a new commodity to improve an old one in a new way, and to open up a new source of material supply or a new outlet for products through the organization of a new industry (Al Btoush, 2015).

Finally, today, the concept of an entrepreneur has evolved further, and takes into account the principles and conditions of work as well as the administrative and individual factor. As such, the current trend is to view and evaluate entrepreneurship through the lens of an individual trait that sustains through the vagaries of a typical economical stress. This idea of individuality in economics is predominant and is being extensively studied as entrepreneurship in the current century (Hisrich et al., 2008). ‘Entrepreneurship’ has become an appealing word: politicians and policymakers view entrepreneurship as a solution to a range of societal problems, while entrepreneurship in academia has grown enormously and can be considered a successful and prosperous scientific field. Entrepreneurship is taught in universities around the world, and university officials speak of "entrepreneurship universities". Research on entrepreneurship has increased dramatically and a wide range of literature on various aspects of entrepreneurship can now be found (Landström & Harirchi, 2018).

2.2.4. Characteristics of Entrepreneurship and Entrepreneur

There are a number of features that characterize the entrepreneur (Minaev, 2016). Al Btoush (2015) divided entrepreneurs’ characteristics into two categories:
1. Behavioural attributes, which includes managerial, interpersonal and technical skills.

2. Personal attributes, which includes the need for achievement, self-confidence, internal locus of control, high energy level, accepting uncertainty and mystery and time value awareness.

Abu Nahla (2008) indicated that the entrepreneur should be characterized by:

- Having the ability to deal with risks through facing challenges and managing risks; having a sense of adventure; making quick decisions so as to choose the best alternatives, thereby reducing risks and controlling their impact.

- Creativity through extending the scope of work to new dimensions in products or services; doing all tasks before being requested or ordered; having innovative performance.

- Exploiting opportunities, ideally by looking for opportunities and taking responsibility for them.

- Organizational commitment through the ability to make quick and accurate decisions when facing problems and obstacles; taking responsibility for achieving the goals; completing the required tasks in time; working as a team; being prepared to put in more effort when necessary; updating and developing business processes to ensure quality improvement; having a continuous desire to grow and progress.

- Seeking the information required to work by searching for data that contributes to the achievement of goals or solving problems, and checking the accuracy and validity of these data; benefiting from all communication networks and databases; responding positively to all inquiries and criticisms (Minaev, 2016).
• Implementing quality standards by following standard specifications; producing products with high quality; comparing own products or services to other successful ones.

• Having organizational planning ability and being more effective by developing objectives and putting plans to implement them; amending plans according to performance appraisal; creating ways to get work done faster with fewer materials and/or lower cost; enhancing work efficiency through using necessary tools and information.

• Having the skills of problem-solving; identifying alternative methods to deal with problems and innovating solutions to them (Wartiovaara et al., 2019).

Moreover, Table 2.1 depicts the characteristics of traditional managers, entrepreneurs and intrapreneurs:

Table 2.1 Characteristics of traditional director, intrapreneurs, and entrepreneurs

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Traditional directors</th>
<th>Intrapreneurs</th>
<th>Entrepreneurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes of the organization</td>
<td>Consider organisations as nurturing and safe, seek a place within them</td>
<td>Don't like the organizational system, attempt to enhance and flex the existing system</td>
<td>May progress quickly – reject the scheme and shape his/her own company when frustrated</td>
</tr>
<tr>
<td>Managerial satisfaction</td>
<td>Seek to satisfy individuals, particularly at higher levels</td>
<td>Self, clients, and sponsors are satisfied</td>
<td>Self and clients are satisfied</td>
</tr>
<tr>
<td>Main motives</td>
<td>Would like to promote and reward</td>
<td>Want liberty and access to inner funds of the organization</td>
<td>Want liberty, is goal-oriented, self-motivated and autonomous</td>
</tr>
<tr>
<td>Relations with other people</td>
<td>The fundamental relationship is based on the organizational hierarchy</td>
<td>Transactions through the organizational hierarchy</td>
<td>Transactions and dealings as a fundamental relationship</td>
</tr>
<tr>
<td>Decisions</td>
<td>Agree with those in authority and delay superior choices decisions</td>
<td>Greater patience and commitment</td>
<td>Are crucial and action-oriented in following personal vision</td>
</tr>
<tr>
<td>Action delegation</td>
<td>Delegate initiatives, because of the time it takes to report and monitor</td>
<td>Get hands dirty - can work but know how to delegate at the same time.</td>
<td>Get hands dirty and get workers upset by working</td>
</tr>
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<td>-------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Attention to management</td>
<td>Mainly on organizational activities</td>
<td>Indoor management of the needs of companies and external customers</td>
<td>Mainly in technology and on the market</td>
</tr>
<tr>
<td>Market research</td>
<td>Have studied the market to identify market requirements</td>
<td>Conduct market studies and create requirements</td>
<td>Talk to client and express own opinions, and create needs</td>
</tr>
<tr>
<td>Style of problem solving</td>
<td>Solve problems within the system</td>
<td>Solve problems within the system, or circumvent it without leaving</td>
<td>Problems are avoided by starting a business</td>
</tr>
<tr>
<td>Skills</td>
<td>Career management, abstract analytical instruments, human resources management and political abilities</td>
<td>Same as an entrepreneur, but the situation requires more ability to prosper in the company.</td>
<td>Understand business deeply, better company judgement than managerial abilities and technical training</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualities of the person</td>
</tr>
<tr>
<td>Level of education</td>
</tr>
<tr>
<td>Misconduct and errors</td>
</tr>
<tr>
<td>History of the family</td>
</tr>
<tr>
<td>Risk</td>
</tr>
<tr>
<td>Status</td>
</tr>
</tbody>
</table>


Furthermore, Dahleez (2009) highlighted the following features of fruitful entrepreneurs as discussed in different kinds of literature:

Need for achievement:
The value placed by people on accomplishment is a significant field of study in understanding an entrepreneur. Individuals who feel the need to have a high degree of achievement are believed to have a robust wish to be successful and are therefore more likely to act entrepreneurially. Successful entrepreneurs have a high degree of need for achievement by seeking to perform appropriately and compete, if necessary. They build their organization with their professional objectives in mind. They set high target levels and invest a lot of effort in reaching these. Therefore, the ability to realize and accomplish goals is considered as an ardent desire of a typical entrepreneur working in a competitive setup. (Dahleez, 2009).

*Internal locus of control:*

This reflects a person's perceptions of the incentives and penalties in his/her life. Persons who have a strong inner conviction and their locus of control lie within themselves maintain that they have full control over their lives and events happening around them. On the contrary, persons who feel that the external factors have a more sway on them, attribute external parameters have a prominent role in modulating their lifestyles, thus directly affecting their luck and destinies. In general, entrepreneurs are thought to be in unmistakable control rather than leaving things to outside variables. So, individuals who have higher beliefs in their abilities and are motivated from within consider that they have full control over their life trajectories. In this
vein, locus of control can be defined as the extent to which one has control over destiny. Internal self control reflects a powerful belief that one can control the outcome and create a more deterministic environment for self and the surroundings. Previous literature that has studied these traits has obtained conflicting outcomes as far as entrepreneurs are concerned (Dahleez, 2009).

**Propensity to take risk:**
A person's tendency to take risks can be described as his tendency to take opportunities in uncertain decision-making contexts. In addition, it reveals the capability to deal with vagueness and risk appetite in the loss.

The employer in general bears the entire risk that may arise due to any failure or inefficiency in the work environment. Therefore, the tendency to mitigate risk has been defined as a vital feature of entrepreneurs and entrepreneurial behaviour. Entrepreneurs prefer moderate risk in conditions when there is a certain degree of control in terms of the choice of skills, strategies in order to realize profit. When considering the propensity to venture as a property for entrepreneurs, entrepreneurs themselves could be considered to be moderately risky. Consequently, successful entrepreneurs try to decrease their exposure to risk whenever suitable. They accomplish this by judiciously evaluating the relationship between risk and reward for their behaviours (Dahleez, 2009).
**Tolerance of ambiguity:**

In the absence of relevant information or dearth of knowledge in order to control a situation, it is often said that an ambiguous situation exists. The way a person looks at a mysterious situation and manages the information available to compare it reveals his acceptance of uncertainty. An individual who is highly tolerant of vagueness is someone who finds uncertain positions challenging and struggles to overcome unbalanced and changeable circumstances for good performance. Entrepreneurs are abler to afford ambiguity – in fact, they enjoy it. This feature is important for entrepreneurs because new projects are usually planned and constructed under very vague circumstances (Dahleez, 2009).

Further, Al Kayyali (2015) and Ssendi (2013) point out that previous researchers have clarified the main characteristics that any successful entrepreneur must have. These characteristics are:

**Confidence:**

Entrepreneurs always face difficulties, so they need power and confidence; they achieve this by viewing the results and gaining people's appreciation (Al Kayyali, 2015).

**Ownership Sense:**

This implies taking responsibility for accomplishing anything carefully with care and attention and not just seeing a problem like anyone else. Entrepreneurs must see the problems facing them and take the lead in solving them. Moreover, entrepreneurs also know how to take responsibility for taking advantage of
individual accountability in the pursuit of profitability, teamwork and overall corporate success (Ssendi, 2013).

Communication:
Succeeding entrepreneurs understand that the most important part of any human work, known as human resources, involves clients, employees or strategic partners. These stakeholders are the main contributors to a business developing or breaking down, so strong communication is the key to strengthening relationships with these people. Entrepreneurs work to improve their communication skills, be they written, spoken, or even non-verbal messages transmitted through body language (Al Kayyali, 2015). Such abilities may be strengthened by courses in a foreign language, public speaking, computer, telephone marketing or specialized writing such as those required for grant proposals, for example. Entrepreneurs also need to develop a high capacity to listen to what others are trying to say because they need to be the best listeners and the best at expressing communication (Al Kayyali, 2015).

Passion:
Entrepreneurs are always looking for new information, asking questions, doing personal research and reading. They learn quickly from their mistakes. They lead, train and transfer their expertise to others. They are always surrounded by individuals who either know more or know different things than they know. They continue enhance their knowledge as efforts are made to disseminate and share their knowledge with others (Al Kayyali, 2015).
Teamwork:
Entrepreneurs are good players in a team and know how to succeed by employing the physics of dynamic relationships of interpersonal synergy. This may backfire if the team members they work with end up increasing their own businesses in a way that threatens the entrepreneur’s business, resulting in a loss of money and profits (Ssendi, 2013).

System-Oriented:
Entrepreneurs must always depend on systems before relying on people to safeguard their organization from risk. For example, if someone who should perform certain functions is sick or leaves, the job is threatened, but if there is a system in place, anyone can intervene and follow the instructions to get the desired results. Having an effective system can prevent defective outcomes every time, so the design, implementation, and mastery of systems are the most useful and rewarding skills for successful entrepreneurs (Ssendi, 2013).

Dedication:
Entrepreneurs are committed to achieving their plans, dreams, and visions. If entrepreneurs lose focus on targeted goals and objectives, their actions fail. Entrepreneurs must always be ready to do the work necessary for their business (Al Kayyali, 2015).

Grateful:
Entrepreneurs respect what they do and feed on success. They do their best to make a business grow and succeed. They are grateful for positive outcomes and
learn not to take anything for granted, which enables them to adapt to changes and demands. Entrepreneurs understand that achievements and contributions enhance satisfaction and pleasure (Al Kayyali, 2015).

**Optimism:**
Entrepreneurs learn to reflect on setbacks, failures or disappointments and try to learn from them. When things go well and business succeeds, it feeds their optimism and positive mentality. This encourages them to do their best to achieve more in the future (Al Kayyali, 2015).

**Leadership:**
Entrepreneurs succeed in leading others instead of leading themselves through self-motivation. They understand the importance of teamwork and know the need to appreciate, enhance and reward others (Ssendi, 2013). Barringer (2015) added that the terms achievement, risk-taking, networker, fictional, convincing, supporter, creative, innovator, resource assembler, pivotal, ethical, optimistic disposition, self-confident, energetic, ambiguity tolerance, obstinate, self-starter, lengthy attention span and ready to opportunities are the most important ones in characterizing the entrepreneur.

Finally, Table 2.2 presents the 12 entrepreneurship ‘Ps’.

**Table 2.2 The 12 entrepreneurship ‘Ps’**

<table>
<thead>
<tr>
<th>12 Ps</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective</td>
<td>A unique way of thinking for creativity and innovation</td>
</tr>
<tr>
<td>Purpose</td>
<td>A clear meaning of vision and mission: ‘everybody has an interest in this world for a purpose’ mentality</td>
</tr>
<tr>
<td>Policy</td>
<td>A successful formula: ‘be a stubborn innovation champion in the strategy</td>
</tr>
</tbody>
</table>
2.2.5. The Importance of Entrepreneurship

The wide discussion about the entrepreneurship concept, and various studies related to entrepreneurship depicts the importance of entrepreneurship, and hence the extent of its impact on economic development (Basu & Werbner, 2009; Monteith & Camfield, 2019). Entrepreneurship is the most influential way to bridge the gap between knowledge and market, to create new projects, and to deliver new products and services to the market (Duru, 2011). In this vein, there has been an increasing consensus that the identification, assessment, and follow-up of entrepreneurial opportunities are a distinctive aspect of entrepreneurship (Lans et al., 2017; Dias et al., 2018). Lee and Eesley (2018) and Iwu et al. (2019) indicated that entrepreneurship is the process of developing an innovative vision, organizing and managing a sustainable business.

Because of its great ability to create new jobs, entrepreneurship is an essential factor in economic growth (Haltiwanger et al., 2013; McMullen & Warnick, 2016; Toma et al., 2014; Boudreaux et al., 2019; Muscio & Ramaciotti, 2019). Moreover,
entrepreneurship plays an actual and essential role in paving the way for the employability of rural people, providing self-employment opportunities for those who have started their own businesses and strengthening the economic situation of different sectors as well (Gödöllő, 2018).

Entrepreneurship plays a significant role in developing a way to employ rural people, offering free-employment opportunities to those who have started their own businesses, and enhancing the economic development of the multiple sectors (Gödöllő, 2018). Awad (2018) demonstrated that entrepreneurship contributes to identifying, evaluating and exploiting employment opportunities; establishing new companies and/or renovating existing ones by making them more dynamic; driving the economy forward - through innovation, efficiency, job creation and enhancing society's welfare in general (Korent et al., 2015; Gries & Naudé, 2010; Basson & Erdiaw-Kwasie, 2019; Barnett et al., 2019). While Mikkonen (2015) argued that entrepreneurship greatly affects the performance of different organizations of any size or type.

Entrepreneurship is the study of opportunity sources; the process of discovering, evaluating and exploiting opportunities, and contains the group of individuals who realize, assess and utilize it gainfully (Mikkonen, 2015). Entrepreneurship has a dual function: it is a process by which new creative ideas are transformed into new productive companies and the process by which market information is revealed (Phillips et al., 2015; Douglas & Prentice, 2019).

Innovation is the essence of entrepreneurial behaviour that leads to organizational change and new business models being developed. Gödöllő (2018) highlighted
that entrepreneurship is an activity that includes discovering, assessing and exploiting opportunities to provide new products and services, methods of organizing, market products and raw materials by coordinating efforts that have not existed before. Entrepreneurship activities include the deliberate search for opportunities for innovation as a basis for changing value creation; engaging citizens in identifying ways in which additional revenue can be secured to improve the quality of services provided by the organization; and identifying methods in which the organization can innovate continuously to enhance its efficiency and effectiveness generally (Luke et al., 2010).

Dahleez (2009) showed that entrepreneurship enhances economic development through establishing new companies and projects. This generates many new jobs and ultimately diminishes unemployment. This process leads to more avenues for innovation and the outcomes of this new paradigm results in the discovery and creation of new business models that use advanced technologies, and finally leads to wealth generation in the economy. Shane and Venkataraman (2000) also stated that new knowledge is transformed into products and services through entrepreneurship.

As Hall et al. (2010); Shepherd & Patzel (2011); Senge et al. (2007) and Youssef et al. (2018) mentioned, entrepreneurial processes and activities help in decreasing environmental pollution and deforestation, ecosystem conservation, and improving freshwater supplies and agricultural practices (Chang, 2017; Huang et al., 2017; Rippa & Secundo, 2018). Hence, entrepreneurship can be the solution to many environmental and social problems. Furthermore, Carnahan et al. (2012);
Nicolaides (2011); Guzman & Kacperczyk (2019) and Iwu et al. (2019) reported that entrepreneurship has become one of the most significant characteristics of today's economy.

Gu & Qian (2019) illustrated that because of entrepreneurial activities being an important antecedent of economic competitiveness and innovation, many developed economies have a great interest and invested heavily in entrepreneurial education at universities (Pagano et al., 2018). Similarly, entrepreneurship has affected all industries and society levels, as they deal with innovation, competitiveness, productivity, wealth generation and job creation (Jones et al., 2011; Liu & Fang, 2016; Luu, 2017; Fu et al., 2019).

Additionally, entrepreneurship is not a profession for any person, because entrepreneurial behaviour may only occur during a certain stage of their career and/or in relation to a particular part of their activities. These result in new offers that drive the market process and can take the form of current business development or new projects or establishment of business within an existing company, irrespective of the size of the organizations (Dias et al., 2018). Many policy-makers have taken entrepreneurship as a major development priority because it boosts social welfare through its beneficial effects on economic growth and job opportunities creation (Birchall, 2013; Palacios-Marqués et al., 2019).

2.3. Entrepreneurial Orientation

In recent years, academic and business interests have continued to focus on entrepreneurship orientation (Ismail et al., 2015), internationalization and
competitive strategies (Hernández-Perlines et al., 2016). Covin & Lumpkin (2011) and Rodrigo-Alarcón et al. (2018) added that entrepreneurial orientation (EO) as a differentiating firm factor in the entrepreneurship literature has been consolidated. EO has become a key concept in entrepreneurship, which has received considerable theoretical and empirical attention (Zehir et al., 2016; Arshi, 2016; Ali, 2011).

Entrepreneurs have an entrepreneurial orientation (EO) that indicates the procedures, structures, and behaviour of the firm to take advantage of opportunities. Sustainable entrepreneurs are described by previous literature as agents of change with the ability to disrupt an unsustainable system of industries and engage in complex entrepreneurial and sustainability trade-off decisions (Hockerts & Wüstenhagen, 2010). Dess and Lumpkin (2005) argued that entrepreneurial orientation is reflected in the execution processes of organizations and organizational culture. It is a vital element for achieving higher performance through differentiation, developing better alternatives before competitors, supporting adaptation to environmental changes and market trends, weakening competitors' competitiveness and responding to future actions rapidly (Ruiz-Ortega et al., 2017). The cornerstone of entrepreneurship is EO and it is one of the significant predictors of firm performance (Gloss et al., 2017).

2.3.1. Definition of Entrepreneurial Orientation

Miller's first concept of entrepreneurial orientation in 1983 refers to a company's desire to be innovative to renew market contributions, take risks to test new and ambiguous products, facilities and markets, and be more active than challengers towards new market opportunities for strategic and performance objectives.
This concept was further elaborated developed by Covin and Slevin in 1989 and Lumpkin and Dess in 1996.

Runyan et al. (2012) reported that the concept of EO has been widely discussed through previous studies in entrepreneurship, so it can be considered as one of the main topics in this field, and the most commonly used measure of entrepreneurial behaviour or inclination in strategies and entrepreneurship studies.

The knowledge of EO has been further extended and has greatly benefited from two important constructs. One construct was originally enunciated by Miller (1983) and subsequently adopted by Covin & Slevin (1989). This construct basically recognizes EO as having a basic and unidimensional strategic orientation that is self-evident in the simultaneous existence of three elements, innovativeness and proactiveness behaviors as well as risk-taking which is considered an attitudinal propensity. In particular, innovativeness and ingenuity ascribes to the notion of enhancement of creative procedures that could in fact lead to the creation of new products, services or technologies.

Proactiveness indicates a desire to pursue self-motivated willingness to enhance current situation and create an environment conducive for growth as well as an incubation for germinating of new opportunities, while risk-taking refers to the courage and ability to channelize investments and efforts in uncertain domains in order to capitalize on exponential return possibilities in terms of gains. (Pittino et al., 2017). The second idea anticipated by Lumpkin & Dess (1996) is
multidimensional, as it does not mandate simultaneous or parallel occurrence of different elements and offers two new co-factors, namely, competitive aggressiveness and autonomy, which together profess a strategy to challenge competitors in order to outsmart rivals in the industry, and to continuously focus on a single minded aim to excel and pursue options and directions that leads to the pursuit of opportunities and growth (Pittino et al., 2017).

Palmer et al. (2019) stated that the EO has developed over the years as a significant concept within the strategic management and entrepreneurship literature and holds a central position in entrepreneurial studies. Wales et al. (2011) and Piirala (2012) also showed that EO has been seen as a valid entrepreneurial idea since it is an effective instrument for obtaining proof of entrepreneurial action and decision-making in various organizational and geographical environments (Kemelgor, 2002).

Vu (2017) noted that entrepreneurship could be differentiated from EO. Entrepreneurship is the development of a new company or new entry (Lumpkin & Dess, 1996). Nevertheless, OE relates to new entry's procedures, processes, and decision-making or in short how new entry is made (Lumpkin & Dess, 1996; Vu, 2017; Bleeker, 2011).

The entrepreneurial orientation is essentially the process of creating the entrepreneurial strategy used by managers and decision-makers in organizations to establish common objectives, maintain vision and ensure the competitive advantages of their entities (Al-Homoud, 2018). EO is closely connected with strategic management and strategic decision-making (Vu, 2017; Vilkotyte, 2015).
EO also reflects policies and procedures that develop the basis for decisions and actions of entrepreneurship that include planning, analysis, decision-making and various elements of the culture, value system and mission of the organization (Freitas et al., 2012; Al-Homoud, 2018; Martens et al., 2018; Ruiz-Ortega et al., 2017). Per Alzuod and Isa (2017) and Al-Homoud (2018), EO is defined as strategic guidance that represents attitudes, behaviours and strategic procedures that lead organizations to enter new markets or enter with new or existing products or services in established markets.

Moreover, EO is corporate strategy-making practices, management philosophies (Wale et al., 2011; Ireland et al., 2009; Gloss et al., 2017; Pittino et al., 2017), and company-level behaviours that are of an entrepreneurial nature (Chang et al., 2019; Kohtamäki et al., 2019). EO also refers to strategy-making procedures that give organizations basis for addressing creative, proactive and risk-taking decisions and actions (Wales, 2016). Innovativeness represents creativity in the direction of entrepreneurship in engaging in new ideas, experimentation and creative procedures, which can lead to and support new products, services or technological processes. Proactive behaviours enable companies to anticipate the needs of clients looking for new business processes (Newbert, 2007; D’Angelo & Presutti, 2019).

Additionally, Oni et al. (2019) described EO as entrepreneurial strategy decision processes used by senior managers to develop a vision, mission and achieve competitive advantage. The company’s orientation towards entrepreneurship is its tendency to act independently, innovate, take risks, and act proactively when
facing market opportunities. Companies improve their market position over competitors through applying competitive strategies (Lechner & Gudmundsson, 2014; Morris et al., 2010; Ruiz-Ortega et al., 2017).

Haider et al. (2017) and Oni et al. (2019) revealed that EO is represented by three dimensions: innovativeness, proactiveness and risk-taking. EO also points to the combination of existing resources in new ways to develop and market new products, move to new markets and/or serve new customers (Hitt et al., 2001; Hernández-Perlines, 2016). The entrepreneurial orientation is a constructive observation at the organizational level and depicts behaviours (innovativeness and proactiveness) and attitudes (risk-taking) for managers and employees (Pittino et al., 2017; Covin & Slevin, 1991; Rutherford & Holt, 2007).

In addition, EO is an organizational concept that demonstrates the managerial ability through which companies execute proactive and aggressive initiatives to achieve competitive advantage. Other researchers emphasized an expanded definition of the EO (Oni et al., 2019; Avlonitis & Salavou, 2007). In this vein, Covin et al. (2006, p. 57) stated that entrepreneurial orientation is "a strategic construct whose conceptual domain includes certain firm-level outcomes and management-related preferences, beliefs, and behaviours as expressed among a firm's top-level managers".

2.3.2. Importance of Entrepreneurial Orientation

Piirala (2012) confirmed that entrepreneurship has become one of the most popular research areas in managerial studies. The impact of entrepreneurial
Entrepreneurial orientation on an organization's objectives and success has been discussed in various researches. Thus, organizations can take advantage of adopting an entrepreneurial orientation (Ali, 2011; Clark & Ramachandran, 2019).

Entrepreneurial orientation affects positively the success of any organization (Semrau et al., 2016; Wales et al., 2013; Palmer et al., 2019). It also enhances organization' sales growth (Wales et al., 2013; Covin et al., 2006; Harms et al., 2010; Kohtamäki et al., 2019; Palmer et al., 2019). Firms that are characterized by being innovative, proactive and risk-taking have a high level of EO (Chang et al., 2019).

The EO can also enhance the usefulness of the performance of organizational resources by the optimal use of these resources to identify and exploit opportunities (Wiklund & Shepherd, 2003). Similarly, EO becomes an outstanding feature for high performing organizations (Lee & Lim, 2009). Wales (2016) also stated that entrepreneurial orientation represents the management's orientation toward seeking new opportunities for firm growth. Hence, entrepreneurial orientated firms are more ready to achieve growth via exploratory strategic actions (e.g., developing new product) rather than exploitative activities (e.g., advertising) (Wales, 2016).

Additionally, many previous studies revealed that entrepreneurial orientation has a positive impact on firm performance (Covin & Miller, 2014; Lomberg et al., 2017), and this influence may increase over time (Wiklund, 1999; Jiang et al., 2018; Engelen et al., 2015; Wales, 2016; Covin & Lumpkin, 2011; Alonso-Dos-Santos &
Llanos-Contreras, 2019; Kohtamäki et al., 2019; Hernández-Perlines, 2016; Liu et al., 2019; Short et al., 2018). Also, Rodrigo-Alarcón et al. (2018) demonstrated that entrepreneurial orientation helps to achieve sustainable performance. Innovative behaviours as a dimension of EO are critical to the survival of the organization and organizations can use proactive behaviours to increase their competitive position with respect to other organizations. In terms of risk-taking, entrepreneurial organization that shows moderate levels of risk will outweigh those who offer very high or very low-risk levels (Kreiser & Davis, 2010). Further, EO–performance relationship can be facilitated through transformational leadership behaviours (Engelen et al., 2015), financial resources (Wiklund & Shepherd, 2005), intangible resources (Wales et al., 2018), capabilities such as strategic learning (Sirén et al., 2017; Arshi, 2016; Short et al., 2018), capability to organize resources (Wales et al., 2013), learning capabilities such as ACAP (Teece, 2010), organizational learning (Altinay et al., 2016), or learning orientation with other strategic orientations (Deutscher et al., 2016). Barney et al. (2011); Wiklund and Shepherd (2003); Vu (2017) and Alayo et al. (2019) added that entrepreneurial orientation is one of the most important intangible sources to achieve sustainable competitive advantage for organizations through highlighting the new opportunities available in a business environment (Webb et al., 2010), exploiting these optimally and achieving success (Kellermanns & Eddleston, 2006), especially in a highly competitive business environment.

Organizations will have the ability to continually adapt to a dynamic work environment with constantly changing competitive pressures, customer needs and preferences, technology requirements and regulations to be successful if they are
characterized by EO (Ramachandran et al., 2006; Pérez-Luño et al., 2011; Mehrabi et al. 2019). According to Ali (2011), EO positively influences information gathering, which in turn helps in supporting an organization's knowledge resources of customers, competitors, suppliers and regulatory agencies. Besides, EO affects a firm's innovation outcomes, as Kraft & Bausch (2016); Bouncken et al, 2016; Harms et al., (2010) and Palmer et al. (2019) point out. Similarly, managers can take more risks when pursuing aggressive and destructive innovation through EO (Naldi et al., 2007). These destructive innovations help to gain high returns on investment, especially in highly competitive business environments (Wang & Dass, 2017; Chang et al., 2019). As Chang et al. (2019) mentioned, EO supports the flexibility of organizations as a strategy to deal with environmental uncertainty. The ability of an organization to develop new products, provide distinct product alternatives and adjust production levels as needed can be stimulated through innovativeness, proactiveness, autonomy, competitive aggressiveness and risk-taking. Finally, many studies have pointed out that EO affects and enhances the degree of business internationalization (Alayo et al., 2019; Hernández-Perlines & Mancebo-Lozano, 2016; Hernández-Perlines et al., 2016; Javalgi & Todd, 2011; Liu et al., 2011; Javalgi & Todd, 2011; Liu et al., 2011; Jantunen et al., 2005; Jantunen et al., 2005;).

2.3.3. Dimensions of Entrepreneurial Orientation

The majority of studies in EO have identified and used three dimensions of EO: innovativeness, proactiveness, and risk-taking. Additionally, two further variables were suggested by several researchers: competitive aggressiveness and autonomy (e.g. Lumpkin & Dess, 1996; Dess & Lumpkin, 2005; Rodrigo-Alarcón
et al., 2018; Martens et al., 2018; Hernández-Perlines, 2016; Bauweraerts & Colot, 2017; Jiang et al., 2018; Vu, 2017; Zehir et al., 2016; Short et al., 2018; Vilkotyte, 2015; Wales et al., 2013). Table 2.3 indicates the EO Dimensions in previous studies.

Table 2.3 The entrepreneurial orientation dimensions in previous studies

<table>
<thead>
<tr>
<th>Study</th>
<th>EO dimensions</th>
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<tbody>
<tr>
<td>Casillas et al., 2010</td>
<td>Innovativeness / Proactiveness / Risk-Taking</td>
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<tr>
<td>Andersen, 2010</td>
<td>Risk-Taking / Innovativeness / Proactiveness</td>
</tr>
<tr>
<td>Lumpkin &amp; Dess, 1996</td>
<td>Innovativeness/Risk-Taking/Competitive Aggressiveness / Proactiveness / Autonomy</td>
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<tr>
<td>Zahra &amp; Covin, 1995</td>
<td>Proactiveness / Innovativeness / Risk-Taking</td>
</tr>
<tr>
<td>Kellermanns &amp; Eddleston, 2006</td>
<td>Risk-Taking / Innovativeness / Proactiveness</td>
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<tr>
<td>Knight, 1997</td>
<td>Innovativeness / Risk-Taking / Proactiveness</td>
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<tr>
<td>Hansen et al., 2011</td>
<td>Innovativeness / Risk-Taking / Proactiveness</td>
</tr>
<tr>
<td>Lee &amp; Peterson, 2000</td>
<td>Proactiveness/Competitive Aggressiveness / Risk-Taking / Innovativeness / Autonomy</td>
</tr>
<tr>
<td>Hughes &amp; Morgan, 2007</td>
<td>Innovativeness/Competitive Aggressiveness / Risk-Taking / Innovativeness / Autonomy</td>
</tr>
<tr>
<td>Weismeier-Sammer, 2011</td>
<td>Proactiveness / Innovativeness / Risk-Taking</td>
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<tr>
<td>Frank et al., 2010</td>
<td>Risk-Taking / Innovativeness / Proactiveness</td>
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<tr>
<td>Li et al., 2009</td>
<td>Competitive Aggressiveness / Innovativeness / Risk-Taking / Proactiveness</td>
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<tr>
<td>Moreno &amp; Casillas, 2008</td>
<td>Risk-Taking / Innovativeness / Proactiveness</td>
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<td>Stam &amp; Elfring, 2008</td>
<td>Risk-Taking / Innovativeness / Proactiveness</td>
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<td>Wiklund &amp; Sheperd, 2005</td>
<td>Risk-Taking / Innovativeness / Proactiveness</td>
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<tr>
<td>Cruz &amp; Nordqvist, 2012</td>
<td>Risk-Taking / Innovativeness / Proactiveness</td>
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<tr>
<td>Casillas et al., 2010</td>
<td>Risk-Taking / Innovativeness / Proactiveness</td>
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<tr>
<td>Wang, 2008</td>
<td>Competitive Aggressiveness / Risk-Taking / Innovativeness</td>
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<tr>
<td>Naldi et al., 2007</td>
<td>Risk-Taking / Innovativeness / Proactiveness</td>
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<td>Runyan et al., 2012</td>
<td>Innovativeness / Proactiveness / Risk-Taking</td>
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<td>Dickson, 2004</td>
<td>Innovativeness / Risk-Taking / Proactiveness</td>
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<td>Tang et al., 2008</td>
<td>Innovativeness / Proactiveness / Risk-Taking</td>
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<tr>
<td>Lee et al., 2001</td>
<td>Innovativeness / Risk-Taking / Proactiveness</td>
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<tr>
<td>Lumpkin &amp; Dess, 2001</td>
<td>Proactiveness / Innovativeness / Risk-Taking / Competitive Aggressiveness</td>
</tr>
<tr>
<td>Covin &amp; Slevin, 1989</td>
<td>Innovativeness / Proactiveness / Risk-Taking</td>
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<tr>
<td>Covin et al., 2006</td>
<td>Innovativeness / Risk-Taking / Proactiveness</td>
</tr>
<tr>
<td>Felício et al., 2012</td>
<td>Autonomy / Risk Uncertainty / Risk Challenges / Innovativeness / Competitive Energy / Proactiveness</td>
</tr>
</tbody>
</table>
2.3.3.1. Autonomy

Employees can influence strategic decision making process, if they are allowed to have autonomy to the certain level, with the independent action. By this way we can encourage our employees to perform at their level best and can share and implement their views and ideas on behalf of the company (Lumpkin & Dess, 2001). In other words, autonomy may mean decision-making in the absence of the supervisor and the will to control actions. Autonomy helps the company and the team creating and using independent work units to increase the volume of innovative solutions and ideas created to solve problems (Thompson & Brajkovich, 2003).

In order to efficiently promote entrepreneurial orientation through autonomy, organizations can use two techniques:

1. Promoting autonomous thinking and actions: organizations often create autonomous work units to assist management and other staff in setting aside their usual routines and procedures. These units are primarily used to promote new venture thoughts through creative thinking and brainstorming.

2. Reorganization of works units to boost entrepreneurial projects: changes in organizational structures, such as the use of teams and autonomous work units have been demonstrated to improve the coordination and management of
organizations and to increase the number of creative alternatives by sharing tacit knowledge of employees (Ali, 2011).

If managers allow their workers to gain some independence, independent procedures can influence corporate strategic decision-making. Autonomy encourages employees to perform on behalf of the company by applying best business practices and their new ideas. Freedom, free action, and independent decision-making are therefore important concepts of autonomy (Lumpkin & Dess, 1996; Voss et al., 2005; Zehir et al., 2016).

Depending on what kind of behaviour or choices a group can control, there are distinct levels of autonomy. Structure and strategy are two levels of autonomy. Structural autonomy allows the team to solve an issue by themselves. Strategic autonomy means how far the team controls its end, i.e. its goals. Strategic autonomy allows the team to work beyond ordinary legislative restrictions to address what they will accomplish and how they will attain their aims. Autonomy is strategic autonomy from the EO view. This level of autonomy does not allow teams to solve issues only, but actually identifies the issue and goals that can be accomplished to fix it (Bleeker, 2011). Tarabishy et al. (2005) and Arshi (2016) stated that the capacity for self-reliance, action, decision-making and empowerment is related to autonomy. In addition, managers are autonomous to other staff and supervisors improve the level of innovation (Burns, 2013).
2.3.3.2. Innovativeness

Within the work environment, organizations are forcing themselves to become more innovative than ever because of the competitive advantage achieved by providing new products and services to the markets to create high market shares, high sales revenue and high financial performance (Wiklund, 1999). In addition, Short et al. (2018) highlighted that innovation is often described as the cornerstone of entrepreneurship. Also, Lumpkin & Dess (1996) confirmed that innovation is a continuous process and has an important place in entrepreneurship. It doesn't mean to create something new, it means application of new improved thoughts and ideas to existing methods to provide best. Thus, in the era of competition innovation has become a critical dimension of entrepreneurship.

Innovativeness is based on the willingness to move forward from current techniques or processes and explore beyond the current boundaries and demonstrate that the company is making an effort to introduce new products into the market (Piirala, 2012). Parkman et al. (2012) found that innovation is the most widely searched dimension of EO.

Knight (1997) argued that an entrepreneur often encountered with new challenges, by applying innovative solution he may overcome out of them. Each product and service has its certain life cycle, for suitability we should upgrade the product and service to have competitive advantages and should enhance organizational function by innovative concepts (e.g., production, marketing, sales, and distribution. Zehir et al. (2016) ; Jiang et al. (2018) ; Wijesekara et al. (2014) ; Hernández-Perlines (2016) and Martens et al. (2018) mentioned that Lumpkin &
Dess (1996, p. 142), defined innovativeness as “a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes”.

Innovativeness becomes necessary to maintain the company's continuity because it is the source of creative ideas that lead to new products and improvements and thus help the survival and the continuation of the company in the intensive competitive labour environment (Lumpkin et al., 2010). Moreover, the relationship between entrepreneurship and creativity is corroborated by the results of Shane et al. (1991), who indicated that innovation is among the main drivers of starting a business.

Innovativeness has a positive impact on organizational performance in the service sector (Lechner & Gudmundsson, 2014). It represents research and innovation to launch new products, services, technologies, and processes and develop a new system (Anlesinya et al., 2015; Al-Homoud, 2018). Innovation represents a substantial force behind two of the most important entrepreneurial functions of businesses, namely strategic innovation and business investment. Thus, innovation is the decisive dimension of entrepreneurial orientation (Yildiz, 2014; Arshi, 2016).

Additionally, innovativeness has a vital role in a firm's success and in maintaining a competitive advantage because markets change at a fast pace. Innovativeness can be a key to this because it can be a source of progress and growth for the company (Dess & Lumpkin, 2005). Innovation enhances future development
because of its vital role in developing the product, technical expertise and transferring and sharing knowledge (Amin, 2015). It is about the willingness of firms to appease imaginative ideas to improve or provide a new product or service and to invest in new technology as well as research and development that can lead to new processes (Adeiza et al., 2017). Innovativeness reflects innovation in the product market or technological innovation. Innovativeness can also lead to strategic renovations or improving the existing products, processes or systems (Lassen et al., 2006; Adisa et al., 2016).

2.3.3.3. Risk-Taking

Risk-taking is a key feature that is associated strongly with entrepreneurship. It refers to the type of risk to which individuals are exposed by being employed by themselves rather than by others. The concept of risk has been applied to companies more and more, for example, when managers make decisions that consume large amounts of resources for projects with uncertain results (Awad, 2018).

In the task of entrepreneurship, Scheepers et al. (2008, 53) argued that entrepreneur encountered with many kind of risks; market risk, technological risk, credibility risk, competition risk etc. to become the leader amongst the competitors, entrepreneur takes risk. He stated that risk-taking is the willingness to conduct a business for a new product or a new service with uncertain results of such investment. However, it is essential for entrepreneur to apply the tools to minimize the risk and it can be possible by having proper ability to encash the available opportunities. Accordingly, the entrepreneur needs to test the markets and results
can be managed and mitigated by engaging in experiments, test markets (Al Btoush, 2015).

Organizations face three types of risk: business risk-taking, financial risk-taking, and personal risk-taking. Business risk refers to participating in unknown markets or using untested technologies. Financial risk refers to borrowing or putting a lot of resources to promote growth. Personal risk refers to making decisions that influence the whole organization and might have a great impact on one’s career (Dess & Lumpkin, 2005; Piirala, 2012; Vilkotyte, 2015).

Risk behaviours have been concentrated in entrepreneurial activities because the benefits of opportunities in the market, trying new things and the distinction of the company from its competitors always involves some risks (Morris & Kuratko, 2002; Zehir et al., 2016). Additionally, the risk is not only a feature of entrepreneurial companies; it is also an individual tendency towards risk when one tries to implement the idea of business despite low opportunities for success or investments in companies with very high profits and losses (Hansen et al., 2011; Baum et al., 2014).

2.2.3.4. Proactiveness

Proactiveness is defined, according to Scheepers et al. (2008), is the implementation and follow-up action by which the entrepreneur should has the capacity to control any situation before causing negatives rather than waiting for response. He should predict the possible events in well advance, should be ready with alternative remedial actions and seeking innovative solution to achieve
predetermine goals. Proactiveness has some essential traits such as directorial chase of good business opportunities and its approach to being a creator or fast supporter and high concern for the initiative of workers.

Hughes and Morgan (2007) revealed that proactiveness represents a future perspective, trying to predict changes and opportunities in the environment, providing new products or improving existing products, exploring future market trends, and encouraging development in tactics. Wang & Altinay (2012) added that proactiveness represents the company's ability to provide innovative products and services so as to take advantage of market opportunities.

Dess and Lumpkin (2005) demonstrated that a proactive company can identify potential emerging problems and find solutions to them. As a result, proactiveness becomes a source for competitive advantage, because competitors need to respond to successful initiatives of the pioneer (Piirala, 2012).

2.3.3.5. Competitive aggressiveness

As indicated by Lumpkin & Dess (1996, p. 148), "competitive forcefulness refers to an association's desire to specifically and strongly challenge its competitors to enhance their position, that is, to beat industry competitors in the marketplace". Firms with this behaviour tend to expect a challenging attitude towards competitors trying to outperform contenders that undermine its survival or market position in the business market (Lyon et al., 2000; Covin & Wales, 2012).

A company's forcefulness can be actualized through responsive or deceptive behaviour. Responsiveness may appear as no holds barred rivalry or direct attack
on competitors. Conversely, sensitivity includes an immediate response to a contender's activity; for instance, a firm may slice costs and give up benefits to keep up its share of the overall industry when a competitor develops a rival product (Lumpkin & Dess, 1996; Lechner & Gudmundsson, 2014).

According (Lechner & Gudmundsson, 2014), aggressiveness could improve the organization's competitiveness over its competitors as the organization's performance would increase due to the focus on out-maneuvering and undermining competitors strengthens. Thus, aggression is the most treasured characteristic for an entrepreneur. The previous studies confirmed that such aggressiveness is necessary to any firm in order to undermining its competitors and creating a competitive advantage that will lets a firm to expand its position in the market. In other words, challenging the competitors directly or indirectly by price cutting, marketing, promoting and advertising product and services rather than avoiding them helps an entrepreneur to become leader instead of follower. It also helps an entrepreneur to extend market place. However, an entrepreneur must consider the fact that most SMEs has limited resources that do now allows for such aggressiveness and challenging movements in the market as it is so costly and not all the time a suitable behaviour due to the cultural differences.

2.4. Firm Performance

Understanding the factors that lead some companies to be more competitive than their competitors and thus making a bigger profit than their competitors is a matter of interest not only for academics but also for managers (Fernández et al., 2019).
O'Connor (2008) and Kale et al. (2019) argued that it is important for management to use external sources of information to adapt and respond to more complex and rapid changes in a dynamic business environment and use these sources to continue and survive in the work environment. Marqués & Simón (2006) pointed out that the need to acquire and manage knowledge is emphasized to increase the overall organizational performance and achieve competitive advantage.

Various researchers have been attracted to exploring enterprise broadly, as its action contributes to macroeconomic results, as well as to business performance. Performance change is the essential objective of entrepreneurial firms, as it exhibits the level of accomplishment of their business operations. Different firm-performance estimations have been connected in earlier business research. In any case, the lion's share of these examinations did not give any support to the choice of measures utilized (Murphy et al., 1996). While exact estimation is urgent to seeing the firm performance, there has been no agreement among business enterprise researchers on the task of a suitable arrangement of estimations (Zhang et al., 2016).

Performance is an organization’s capacity to handle all four systemic processes (inputs, outputs, transformations, and feedback) in order to achieve their goals (Alzuod, 2014). Alzuod (2014) added a definition for measuring firm performance which combined financial and non-financial measures to evaluate it. Financial measures reflect the level of an organization’s performance in terms of relative profitability, market share and return on investment. Non-financial measures
reflect the level of an organization's performance in relative customer satisfaction and service quality (Alzuod, 2014).

Venkatraman and Ramanujam (1986) gave a characterization plot that clarifies the area of business performance (Figure 2.1). They claimed that business performance is a subset of the general idea of hierarchical viability, and that thorough business performance covers monetary performance as well as operational performance. The last incorporates indicators identified with mechanical productivity, such as product quality and advertising adequacy.

Previous studies have shown that there is no consensus on how to measure a company's performance (Soedarmono et al., 2019). Financial indicators to evaluate performance are not sufficient; non-financial indicators should be taken into account, and use an integrated approach, including financial and non-financial indicators to evaluate performance (Bergin-Seers & Jago, 2007). A comparison of company performance measures associated with the various measures used in empirical studies is shown in Table 2.4. Regarding measuring financial performance, capital employed and return on assets, percentage of sales resulting from new products, profitability (Hsu et al., 2007), earnings per share, return on investment and net income after tax could all be used (Grossman, 2000; Marimuthu et al., 2009).
Table 2.4 Comparisons of Firm Performance Measures

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<tr>
<th>Study</th>
<th>Measures of firm performance</th>
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<td>Uzkurt et al. (2013)</td>
<td>- Profitability</td>
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<tr>
<td></td>
<td>- Market share</td>
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<td></td>
<td>- Market value</td>
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<tr>
<td>Wu et al. (2012)</td>
<td>- Average of profit</td>
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<td></td>
<td>- Return on investment</td>
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<td></td>
<td>- Sales growth</td>
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<td></td>
<td>- Market share</td>
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<td></td>
<td>- Customer satisfaction</td>
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<tr>
<td>Salim &amp; Sulaiman (2011)</td>
<td>- Market performance (market share, profit ratio and customer satisfaction)</td>
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<tr>
<td></td>
<td>- Financial performance (profitability, ROI and total sales growth)</td>
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<tr>
<td>Daugherty et al. (2011)</td>
<td>- Profit margin</td>
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<tr>
<td></td>
<td>- Return on investment (ROI)</td>
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<tr>
<td></td>
<td>- Customer satisfaction</td>
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<tr>
<td>Gunday et al. (2011)</td>
<td>- Market performance (market share, total sales and customer satisfaction)</td>
</tr>
<tr>
<td></td>
<td>- Financial performance (profitability, ROI, ROS and cash flow)</td>
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<tr>
<td>Liao et al. (2010)</td>
<td>- Market share</td>
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<tr>
<td></td>
<td>- Sales growth</td>
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<tr>
<td></td>
<td>- Profitability</td>
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<td></td>
<td>- Efficiency of operations</td>
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<td>- Quality of services</td>
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<td>Mol &amp; Birkinshaw (2009)</td>
<td>- Productivity growth</td>
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<tr>
<td>Tseng et al. (2008)</td>
<td>- Average growth rate in market share</td>
</tr>
<tr>
<td></td>
<td>- Average sales growth rate</td>
</tr>
<tr>
<td></td>
<td>- Customer satisfaction</td>
</tr>
<tr>
<td>Qureshi et al. (2008)</td>
<td>- Profitability</td>
</tr>
<tr>
<td></td>
<td>- Market share</td>
</tr>
<tr>
<td></td>
<td>- Sales growth</td>
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<tr>
<td>Loof &amp; Heshmati (2006)</td>
<td>- Value added</td>
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<tr>
<td></td>
<td>- Sales</td>
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<td>- Profit before depreciation</td>
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<td></td>
<td>- Profit after depreciation</td>
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<tr>
<td></td>
<td>- Employment</td>
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</table>

Source: Alzuod, 2014.

Based on Vorhies and Morgan (2005), firm performance was measured through a grouping of customer satisfaction (4 indicators), market efficiency (4 indicators), and financial performance (4 indicators).
Figure 2.1 indicates financial performance as the centre of the authoritative viability area. Despite the fact that financial estimation is important to quantify firm performance, it is not adequate to evaluate total business performance (Zhang et al., 2016). To catch distinctive parts of firm performance, various measures, i.e., financial related and non-financial, ought to be utilized in evaluating business performance (Knight, 2000; Wiklund & Shepherd, 2005).

Most enterprise examinations, including EO, have associated financial estimation with business performance. This reality is additionally noted by Murphy et al. (1996), who completed a study of fifty-one business performances from 1987-1993. All these examinations explored performance as the dependent variable. Brettel et al. (2015) uncovered three dimensions of financial performance that were usually utilized: proficiency, development and benefit. Effectiveness incorporates a degree of profitability (ROI), return on equity (ROE), return on assets (ROA), return on total assets and gross income. Development involves a
change in deals, representatives and piece of the overall industry. Benefit comprises of profit for deals, overall revenue and pre-charge benefit. It is intriguing to note that Murphy et al. (1996) vary on the most proficient method to measure financial performance, for example, ROI, ROE, and ROA.


Firm performance can be evaluated dispassionately or subjectively. The first depends on auxiliary or bookkeeping information, and the last depends on respondents' discernments or self-announced information. The option is subjective estimation, which can be less demanding. Dess et al. (1997) supported the utilization of subjective measures in past research (e.g., Venkatraman & Ramanujam, 1986; Brettel et al., 2015), and inferred that subjective measures of performance are largely predictable in target measures.

Runyan et al. (2008) stated the upside of subjective over target estimations. In subjective or self-report estimations, more respondents are relied upon to answer the inquiries, particularly for financial features, than in target estimation. As money related indicators are a sensitive issue, firms demonstrate great hesitance to
uncovering such data. Besides, as indicated by Lyon et al. (2000, p. 1059), research utilizing a single-respondent self-report can be a proper and fundamental method for operationalizing key developments when precisely performed.

Generally, subjective estimation is led by contrasting an association’s present performance with its past performance (e.g. Becherer & Maurer, 1997) or with competitors (e.g. Knight, 2000; Wiklund & Shepherd, 2005). A more far-reaching correlation is led by Runyan et al. (2008), who surveyed the performance of 267 private ventures in different enterprises in the US, utilizing: (1) examination with their past performance; (2) correlation with their real rival; and (3) examination with comparative firms in the business. This performance examination approach is empowered by Smart & Conant (1994), as it gives noteworthy data in assessing the degree to which firms have accomplished their target.

In past business research, development has normally been utilized as a mediator for firm performance, as it is viewed as more precise and moderately less demanding to get than bookkeeping measures of budgetary performance (Wiklund & Shepherd, 2005; Brettel et al., 2015). Moreover, development is additionally an urgent indicator for business survival, as well as for production, as business development demonstrates the accessibility of more openings for work (Watson, 2007).

While a few examinations have utilized different measurements to quantify firm performance, Lumpkin & Dess (1996) underlined the need to consider the multidimensional aspects of firm performance identified with entrepreneurial
movement or process. They deduced that utilizing one performance measurement may prompt great results; on the other hand, utilizing diverse measurements may bring about terrible results. They proposed that in measuring firm performance, scientists ought to consider the nature of business.

2.5. **Organizational culture**

Organizations have created a culture that encourages their employees to come up with innovative ideas and to participate in management decisions and innovation strategies. Organizations also enhance the quality of work life, leading to greater creativity and innovation in the organization (Shahzad et al., 2017). Organizational culture has been discussed extensively within various previous studies in strategic management, organizational behaviour and corporate communications (Meng & Berger, 2019). Kemp (2005) pointed out that organizational culture is multi-layered. It includes four distinct and interrelated components: common core values, rules, artefacts, and organizational behaviours (Hogan & Coote, 2014; Kao et al., 2016).

Culture plays a vital role in explaining a variety of organizational phenomena (Dyck et al., 2019). Values and ethics embodied in culture may be particularly important in understanding and motivating sustainable processes and procedures within organizations (Linnenluecke & Griffiths, 2010).

2.5.1. **Definition of Culture**

Culture in anthropology and sociology fields has been used for a long time to reflect the group's specific customs and practices in a particular place for a certain
period of time (Al-Atawi, 2009). Culture is strong and consistent and often has an overwhelming impact on the organization and the behaviour of its employees (Rus & Rusu, 2015). There is a difficulty to define culture as one concept, as it can be described differently according to perspective or purpose, but culture can be considered as a collective term of all the things gained by acquired learning (Nam & Kim, 2016).

The definitions available for culture vary widely; there are more than 200 definitions for the word, but understanding it is harder than defining it (Mousavi et al., 2015; Cutajar, 2013). Culture can be described as the glue which holds all of our values together, our faiths, and our self-confidence and esteem in the individuals around us, regardless of our family, worship place, community or country. We define ourselves as people, citizens, parents, employers and staff by culture. Our culture distinguishes us from others, other organizations and other countries (Haney, 2002).

Further, Cutajar (2013) mentioned that culture relates to a set of stereotyped forms of thought, feeling and response which have been acquired and conveyed by symbols and constitute unique accomplishments of human organizations, including incarnation in the arts and crafts; traditional concepts and in particular their related values are the core of culture. There can be many distinct phenomena in the cultural concept. In the culture of social anthropology, ‘collective behaviour’ (feeling, thoughts, and representation) is a keyword; such behavior is typical in a particular group of people and is programmed into their minds by learning (Kooijman, 2015). Additionally, Mole (2011) defined culture as a system of living
and changing which reflects our personal and social life. All we do or say is a cultural manifestation.

2.5.2. Definition of Organizational Culture

Although the concept of organizational culture has been applied as an organizational phenomenon since the early 20th century, this concept has received considerable attention from researchers in the last decades (Genc, 2017). Schein (2010) indicated that, for academic and managerial practice, organizational culture becomes an important issue because it has more influence than other factors on the success or failure of any organization (Al-Atawi, 2009). The concept of organizational culture is typically used by academic researchers in a wide sense to mean the culture of a whole organization or any group of individuals working together within the organization (Warrick, 2017).

Furthermore, the organizational culture includes the values and standards shared by employees of an organization and refers to the way things are accomplished in a social group (Jogaratnam, 2017). Jogaratnam (2017) added that organizational culture gives individual employees standards of conduct in the company and is an instrument used by management to form their company direction.

Organizational culture is a complicated model of assumptions about the position and function of the group worldwide. Organizational culture is linked directly to the organization’s efficiency and performance. The stronger the organizational culture, the more effective the organization (Lapiņa et al., 2015). According to Keneth (2013), organizational culture encompasses people’s views and attitudes in
performing, organizing, evaluating and rewarding their achievements when dealing with issues relating to external adjustment and inner integration, and considers to what extent they think and feel about their organizations.

Similarly, McShane (2003) described organizational culture as the basic pattern of shared assumptions, values, and convictions that are deemed the right way to think about and deal with organizational issues and challenges that face the organization. Mania (2016) defined organizational culture as an organization's homogenous discernment based on the exceptional singularity of one organization from the other. Warrick et al. (2016) and Warrick (2017) stated that organizational culture refers to the work environment in which people work and its impact on a way of thinking, acting, and experiencing work.

Also, organizational culture is defined as a pattern of shared basic assumptions that a group has invented, found or created when learning to address its external adaptation issues and inner integration issues, which have worked well enough to be deemed valid, so to teach new members how to perceive, believe and feel these issues correctly (Zerella et al., 2017). Schein (2010) and Meng and Berger (2019) showed that organizational culture refers to characteristics as a common learning style of behaviour, which can be transferred from one generation of organizational members to the next.

An and Kang (2016) demonstrated that organizational culture is the values, views, customs, and standards which the organization members share, and can be categorized into different kinds, such as a heretical- oriented, innovation-oriented,
task-oriented, relationship-oriented culture, etc. The basic values, beliefs, and principles of organization describe its organizational culture (Bloom & Farragher, 2010; Vacco, 2012). Teerikangas & Very (2006) and Keijzers (2012) illustrated that organizational culture relates to standards, values, and convictions maintained by the employees of an organization regarding behaviour, leadership styles, management processes, rituals and customs.

Organizational culture can be defined as, certain assumptions, philosophies, standards and structural values which are accepted and collectively deduced by the members of the organization (Gál, 2018). The culture of an organization symbolises convinced predetermined policies and guidelines for the employees to provide them correct directives on work place to perform. Each and every member of the organization should be clear about his/her role and responsibilities to accomplish the predetermine goal in advance. Organizational culture means the interaction between the members of an organization and other actors (Tedla, 2016).

2.5.3. Importance of Organizational Culture

Organizational culture comes from its powerful effect on the staff of the organization, its structure, its functioning, and its strategy because culture governs all of the connections between the individuals in the organization and the organization as a system (Neuhauser et al, 2000). Organizational culture plays an important role in exploring the efficiency, effectiveness, and success of an organization (Abu Sulb, 2010).
Weinzimmer et al. (2008) stated that an organization that owns stronger organizational culture with the ability to develop managerial and organizational competencies, information systems, and quality management practices seems to gain successful organizational transformation (Abu Sulb, 2010).

Organizational culture also affects positively job satisfaction (Alexe & Alexe, 2018; Pandya, 2016), performance, morale, work engagement, loyalty, attitudes, motivation, turnover, organizational commitment, and efforts to recruit and maintain talented employees (Warrick, 2017). Organizational culture helps enhancing the processes of knowledge sharing and creative minds, which are necessary for organizational success (Shahzad et al., 2017). Moreover, organizational culture is a vital element for enhancing the effectiveness of the organization, improving operational and process efficiency, and supporting organizational strategy (Abu Sulb, 2010). Strong corporate culture can greatly encourage employees' creativity and innovative behaviour, enhance creative ideas, and regard innovation as a cornerstone of the organization success (Shahzad et al., 2017).

Alvesson and Sveningsson (2015) and Lorsch and McTague (2016) clarified that the importance of culture has also been recognized by managers because of the connection between certain types of organizational cultures and efficient organizational performance. Given that organizational culture contributes to understanding employees’ expectations, values, and behaviours, it is essential to know the variety of variables that affect employees' culture perceptions (Zerella et al., 2017). Further, an organizational culture emerges as a necessary regulatory
condition to support the work engagement among employees within the organization and their performance. Thus, organizational employees’ trust will be enhanced (Meng & Berger, 2019). Organizational culture helps control the ability, efficiency, survival, and achievement of an organization (Schein, 2010). Jogaratnam (2017) highlighted that supportive organizational culture types and innovation are significant predictors of market orientation and are stronger predictors of performance than market orientation.

Nam and Kim (2016) proved that group culture and rational culture are two dimensions of organizational culture that have a positive impact on job satisfaction. He added that group culture and rational culture have a positive effect on affective commitment, and normative commitment is influenced by group culture.

An organization’s market orientation and its performance may be influenced by the different dimensions of organizational culture, according to Gao (2017); Yaprak et al. (2015); McClure (2010) and Jogaratnam (2017). In addition, organizational culture helps greatly in preventing, responding to, and eliminating bullying in the workplace (An & Kang, 2016).

The results of Mousavi et al.’s (2015) study showed that involvement and adaptability as components of organizational culture influence directly the performance. In the same way, organizational culture affects strongly and positively all dimensions of organizational citizenship behaviour (OCB) and the most significant determinant of employee citizenship is culture phenomena (Pandya, 2016).
The effectiveness of management in the organization influences significantly and positively by HRM practices and organizational culture. Pandya (2016) showed that there was a significant impact from organizational culture as well as work environment and job satisfaction on organizational effectiveness in the study.

Teerikangas and Very (2006) and Keijzers (2012) determined that organizational culture is considered important in identifying the level of employees' commitment, satisfaction, and longevity of the individual with the organization, and is thus a significant part of the daily lives of organizations. As Adams et al. (2018); Hansen and Schaltegger (2016) and Glavas & Mish (2015) mentioned, there is a positive relationship between organizational culture and sustainability. In line with this, Dyck et al. (2019) indicated that as organizational culture is described as a set of values and beliefs that form the behaviour of employees and organization, it is logical to note that organizational culture may be associated in predictable ways with the type of sustainable organizing members focus on. In this vein, based on the importance of organizational culture within any organization, Warrick (2017) clarified ten guidelines for building and sustaining cultures as follow:

1. Giving strategy and culture significant importance within leadership priorities.
2. Providing a clear understanding of the current culture.
3. Identification, communication, training, and participation of staff in cultural ideals.
4. Developing a desired behaviour role model.
5. Culture recruitment and development.
7. Acknowledging the behaviour and practice desired and reward it.
8. To strengthen culture, use symbols, ceremonies, socialization, and stories.
2.5.4. Organizational Culture Typologies

In the organizational culture of the functional tradition, researchers have identified different cultural types and distinguished their distinctive qualities (Ashkanasy et al., 2000; Genc, 2017).

The four organizational culture types identified by Quinn (1988) are: (a) group culture, (b) rational culture, (c) hierarchy culture, and (d) development culture (Fiordelisi & Ricci, 2014; Sok et al., 2014; Wiewiora et al., 2014; Grant, 2017; Tedla, 2016). Figure 2.2 depicts the comparison between the organizational culture types, as described by Cameron & Quinn (2006) and Tayeh (2015).

2.5.4.1. Group culture

The group culture is internally oriented and centred on collaboration among team members in the organization and is also known as clan culture (Hartnell et al., 2011). Kooijman (2015) asserted that internal cooperation among employees stands central in the group culture. The style of a group culture is like a family organization (Kooijman, 2015), involving collaboration, relations, commitment, involvement, support and confidence (Tedla, 2016; Hartnell et al., 2011; Fiordelisi & Ricci, 2014). Also, group culture can promote teamwork, enhance employee involvement, provide and facilitate open communication between managers and employees (Richard et al., 2009; Hartnell et al., 2011; Pinho et al., 2014; Malo, 2015; Grant, 2017), empowerment, and loyalty (Cameron & Quinn, 2011).
Nongo and Ikyanyon (2012) claimed that managers and supervisors encourage employee participation and commitment in the organization in a group culture because committed employees can perform their work effectively and efficiently provide their responsibility. Likewise, group culture is more concerned with the growth and participation of human resources within organizations than with hierarchy laws and regulations, and is also concerned with the competitiveness of markets or risk-taking and open culture experimentation (Genc, 2017). Han (2012); Murphy et al. (2013); Man & Luvision (2014) showed in their studies that group culture affects positively organizational performance. The success in recruiting, developing, and retaining employees can be enhanced through organizations with a group culture (Grant, 2017).

Kooijman (2015) argued that behaviour is strongly affected by employees’ collective responsibility and the commitment that employees feel towards each other and the products they produce. Teamwork, empowerment and staff development are more important than work processes and hierarchical power. Clients are often considered as partners. Management focuses on empowerment, facilitating and creating the best possible working environment By contrast, Givens (2012) revealed that group culture involves employee relation problems rather than enhancing the organizational efficiency and effectiveness. Kotrba et al. (2012) confirmed both opinions. They supported the indirect effect of the group culture on performance development and recognized the direct impact of group culture on increasing efficiency and effectiveness.
Further, Hellriegel et al. (2004) and Malo (2015) concluded that in group culture, employees are committed to performing additional tasks beyond their job descriptions, knowing that their contributions to the organization may surpass their contracts within the organization. Miguel (2015) and Tedla (2016) indicated that Managers must behave democratically in a group culture to inspire and motivate employees to develop a culture of excellence in the organization. Formal coordination and regulated decision-making are less emphasized in group culture (Brown, 2011). Murphy et al. (2013) pointed out that developing performance by commitment, sense of ownership, and responsibility is the main objective of group culture.

2.5.4.2. Rational Culture

The organization with short product or service life cycles is best defined for being highly innovative and pioneering. The pace, creativity and adapting to evolving client requirements determine the company's achievement in the rational quadrant (Kooijman, 2015). The structures of an organization are temporary and informal. The organizations' primary objective is to ensure agility, innovative and dealing effectively with the evolving changing market. There is no centralized power within an organization with rational culture; power readily moves between individuals. In this case, the rational subunit must take new creative products to the traditional organization's market (Kooijman, 2015).

Equally important, Berson et al. (2008) revealed that rational culture reflects values around change, entrepreneurialism, enthusiasm, and dynamism, and there is an acknowledgment of experimentation, development, hazard, challenge, being
on the main edge and inventiveness. Engelen et al. (2014) added that studies in the field of organizational culture indicate the presence of a positive correlation between rational culture and innovative entrepreneurial orientation.

Likewise, Hellriegel et al. (2004) added that this type of culture helps in adopting rapidly to change, and also generates it, since individual initiatives, flexibility and growth enhancement are encouraged and rewarded. The behaviours of employees in relation to rational culture enhance growth, risk-taking, creativity, diversity, independence and adaptability (Hartnell et al., 2011).

Veiseh et al. (2014) mentioned that in rational culture, employees may need to clarify their functional tasks, including the importance and impact of the task, to achieve effectiveness concerning organizational goals in this type of organizational culture, which implies the provision of new and unique products and rapid growth (Malo, 2015). The positive relationship between rational culture and financial effectiveness in the long-term has been proven in a study by Hartnell et al. (2011).

2.5.4.3. Hierarchy Culture

The hierarchical culture also relies on internal orientation and is highly focused on structure and standards (Nam & Kim, 2016). Aldada (2018) and Genc (2017) stated that the hierarchical culture focuses on the organization's internal logic and stability, and the motivating factors are security, procedures and rules. In this culture, the organization managers need to be bureaucratic and reduce the creativity of their employees (Nam & Kim, 2016). Also, in an organization with a
hierarchical culture, employees actively participate neither in developing the mission of the organization nor in achieving its objectives (Kołodziejczak, 2015). Leaders of this type of culture tend to run a well-coordinated workplace and organizational portfolios (Genc, 2017).

Additionally, the fact that employees meets expectations when their tasks are defined clearly is the basic belief in hierarchical cultures (Hartnell et al., 2011). As a result, hierarchical cultures appreciate a precise and routine communication, formation, and the consistency that influences the behaviours emerging from these values - matching and predictability. It is expected that these tools will in turn promote efficiency, timeliness and good functioning (Genc, 2017) Most traditional organizations, which focus on stability and effective production, are characterized by hierarchical culture (Kooijman, 2015). This form of organization is formed through a clear and formal hierarchy of responsibilities and a clear description of rules and processes (Kooijman, 2015). The ultimate goal of a hierarchy culture is enhancing the efficiency and effectiveness of an organization (Tedla, 2016).

2.5.4.4. Development Culture

Focusing on optimizing transaction costs throughout the organization shapes the key organization with development culture. The orientation is towards outside parties, not necessarily only clients, but also vendors, contractors and so on. The common values of the organization with development culture include market principles such as profitability and productivity (Kooijman, 2015).
Moreover, development culture characterized by a rational objective is externally geared towards short-term efficiency through competitive challenges (Hartnell et al., 2011). An organization with a developmental culture sets clear goals and signs to maintain employee motivation (Hartnell et al., 2011). Organizations attempt to achieve continuous growth and increase their market share, face competitors and militate to achieve future objectives (Kooijman, 2015).

Employees' behaviours linked to development culture focus on expanding by adopting strong growth strategies to outweig competition (Hartnell et al., 2011). In an organization with a development culture, an employee is responsible for an agreed level of performance - where the organization exchanges this for a level of reward and remuneration (Hellriegel et al., 2004; Malo, 2015).

<table>
<thead>
<tr>
<th>The Group Culture</th>
<th>The Rational Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>A very friendly workplace where individuals share a lot. It's like a larger family. The organisation leaders or managers are regarded as mentors and, perhaps, parents. The organization is linked by loyalty or tradition.</td>
<td>A vibrant, entrepreneurial and innovative workplace. People are hanging out their necks and taking risks. Leaders are regarded as innovative and brave. A dedication to experimentation and innovation is the glue that holds the organisation together. The focus is on being at the forefront. The long-term focus of the organization is on development and raw resources acquisition. Success implies the acquisition of distinctive services or goods and new ones. It is essential to be a product or service manager. The organisation promotes initiative and liberty for the person.</td>
</tr>
<tr>
<td>The commitment is strong. The organisation underlines the long-term advantage of the growth of human resources and attaches excellent significance to cohesion and morality. In terms of client sensitivity and concern for individuals, success is described. The organisation's teamwork, participation and consensus are of prime importance.</td>
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<table>
<thead>
<tr>
<th>The Hierarchy Culture</th>
<th>The Development Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>A highly official and organized workplace. What individuals do is regulated by procedures. The dictators are proud to be excellent, efficient coordinators and organizers. It is most important to maintain a smooth organisation. The organisation maintains formal laws and policies. Stability</td>
<td>An organisation that focuses on results. The biggest problem is to get the work done. Individuals are competitive and oriented towards their goals. The dictators are difficult drivers and manufacturers. It's hard and tough. The glue that holds the organisation together is a winning emphasis. Remembrance and achievement are shared</td>
</tr>
</tbody>
</table>
and efficiency with effective, smooth activities are the long term issue.
A reliable delivery, smooth scheduling and low price are described for success. Employee leadership is concerned with safe and predictable jobs.

issues. The long-term emphasis is on competitive measures, and measurable aims and objectives are achieved. Market share and penetration is described as success. It is essential for competitive pricing and market management. The style of the organization is competitive.

| Figure 2.2 Comparison between the organizational culture types |
| Source: Cameron & Quinn, 2006. |

2.6. Organizational Learning

Although the concept of organizational learning has grown in academic researches within the last two decades (Easterby-Smith & Lyles, 2003; Duarte Aponte & Castañeda Zapata, 2013), there is still a need for further research to explore the actual practice and actual activity that leads to learning (Hilden & Tikkamäki, 2013). Zappa and Robins (2016) illustrated that organizational learning, the process through which organizations create, spread and exploit knowledge, and convert it into innovation is a major issue in organizational studies.

Organizational learning does not occur in isolation but is strongly influenced by institutional contexts (Azadegan et al., 2019). Organizational learning is new information obtaining by the employees of the organization which leads to creating new knowledge or ideas that in the end influence the employees' behaviour of organization (Bettis-Outland, 2012). In addition, organizational learning processes include absorption of new learning, called exploration, and the use of what has been learned, called exploitation (Duarte Aponte & Castañeda Zapata, 2013). Tafvelin et al. (2017) indicated that organizational learning is a process that includes constant changes in the perception and behaviour of managers and staff.
Langerud (2007) confirmed that organizational learning is considered a source of continuous success in a rapidly changing business environment.

Tafvelin et al. (2017) revealed that there are no more studies that discussed organizational learning as an organizational phenomenon, and identified its antecedents and performance outcomes, innovation capacity (Valencia et al., 2010) and customer value (Santos-Vijande et al., 2012).

2.6.1. Definition of Organizational Learning

Organizational learning is a major organizational capacity that occurs when organizations develop an in-depth learning culture and have educational, training and guidance systems to promote organizational learning (Ndegwa, 2015). Researchers identified organizational learning in several different ways according to different perspectives (Chow & Tsui, 2017).

Organizations that have a strong learning culture are good at generating, acquiring, sharing, and spreading knowledge, and at adjusting behaviour to reflect the knowledge and new insight (Shao et al., 2017). The theory of organizational learning, developed by Cyert and March (1963), shows that organizations are cognitive structures, that learn by interacting and dealing with the business environment (İpek, 2018).

In this vein, the concept of organizational learning is a dynamic process that generates knowledge and moves it to where it is needed (Koo et al., 2017; Sense, 2011). Bendig et al. (2018) stated that organizational learning is the process of
enhancing procedures through better knowledge and understanding. García-Morales et al. (2012) described organizational learning as a process of sharing knowledge acquired individually with the part of the knowledge that helps companies avoiding repeating previous errors.

Likewise, organizational learning is the method of building and complementing organizations, and organizing knowledge and routine actions around their activities and cultures, in order to enhance organizational efficiency through optimal use of the distinctive skills of their employees (Nazzal, 2010). Bootz et al. (2019) identified organizational learning as the processes of creating, spreading, sharing and transferring knowledge within the organization and integrating it in practices.

Kim and Atuahene-Gima (2010) reported out that organizational learning is often carried out using the exploratory approach. Exploratory learning is the process of acquiring and learning of information and knowledge from outside the boundaries of current customers and competitors, often involving pilot and risk-prone projects (Kim & Atuahene-Gima, 2010). Exploitative learning includes the process of acquiring and using market information and knowledge within the boundaries of existing clients and competitors. Exploitative learning is often associated with improving and expanding existing competencies, techniques and models (Chung et al., 2015). According to Chiva and Alegre (2009), organizational learning is also described as an expansion of the organization's ability to implement effective arrangements by enhancing its performance and outcomes directly and systematically.
Further, organizational learning is the knowledge and capabilities available at any time in any organization, regardless of the persons involved (Husain et al., 2016). Ojha et al. (2018) mentioned that organizational learning is the process of developing procedures through better knowledge and understanding, and is one of the organization's most vital competencies and the primary responsibility of its leaders. Organizational learning refers to the process through which organizations create, spread, exploit, share and translate knowledge, and also relates to enhancing organizational skills, expertise and abilities (Nicolletti et al., 2019).

Chow and Tsui (2017) highlighted that Organizational learning refers to the vibrant practice of formation, attainment, and assimilation of knowledge intended not only the enlargement of available resources but also organize the resources in such a way so that they can contribute their best for the betterment of organization in overall performance.

Equally important is the fact that Çömlek et al. (2012) revealed that in 1970s the organizational learning concept emerged and was described as discovering and correcting mistakes and errors. García-Morales et al. (2007) and Rahja (2019) suggested that organizational learning is an active process of knowledge, including creating, acquiring, spreading, transferring, sharing, exchanging and applying knowledge within the organization.

Organizational learning can be defined as the operational process of acquiring information and transforming it into knowledge; as identification and correction of an error where the error is a conflict between what it aims to achieve and what has
actually been achieved (Çınar & Eren, 2015). In general, organizational learning is defined in terms of process and behaviour, and therefore, a learning organization is seen as a supportive entity (Hanaysha, 2016). Also, organizational learning refers to using information and knowledge in developing organizational effectiveness (Yenidoğan & Şencan, 2017).

Moreover, organizational learning is transferring and sharing past experiences into routines that lead to behaviours (Yenidoğan & Şencan, 2017). Majila (2012) and Langerud (2007) assumed that organizational learning is a procedures system, including representatives, symbols and processes that enable the organization to convert information into valuable knowledge which in turn increases its long-term adaptability.

Organizational learning occurs when knowledge within and among individuals and groups becomes an integral part of the organization through different knowledge processes (Rahja, 2019). Organizational procedures such as acquiring knowledge, sharing information, interpretation of information, and memory that influence directly or indirectly the positive development of an organization, refer to the concept of organizational learning (Gilaninia et al., 2013).

Alternatively, the organizational learning capacity field is usually associated with descriptive literature for organizational learning that examines contextual variables that expedite learning (Gomez et al., 2005). Chiva et al. (2007) and Onağ et al. (2014) mentioned that organizational learning capacity (OLC) is a source of competitive advantage and the way to organizational success in the future. In a
like manner, organizational learning capabilities are a set of tangible and intangible resources or skills the firm employs to implement new forms of competitive advantage (Alegre & Chiva, 2008; Nazzal, 2010).

Organizational learning capabilities refer to the organizational and managerial features, practices, skills or elements that ease organizational learning processes (e.g. creating, acquiring, spreading, sharing and integrating knowledge) or allow the organization to learn (Gomez et al., 2005). Further, organizational learning capabilities are the capacity of the organization to absorb and share new knowledge and implement it in developing new products with a competitive advantage and high production speed (Hsu & Fang, 2009).

2.6.2. Importance of organizational learning

Organizational learning is one of the most contemporary issues discussed in researches in the recent decade (Leonidou et al., 2010; İpek, 2018). Organizational learning is a context-based process in which organizations seek to achieve the desired results (Lyman et al., 2018). Several studies have emphasized the importance of organizations’ involvement in the changes needed to be able to cope with a changing business environment and achieve sustainable competitive advantage. Learning is crucial in this regard. It provides the organization the capability to learn from the past, understand what has been learned and integrate it into the organization's practices in a way that provides the organization with the ability to adapt rapidly to changing circumstances (Nazzal, 2010).
The organization that is characterized by a distinctive learning organizational culture is in a competitive position to promote the results of innovation and creation when it has the ability to explore and exploit knowledge and resources (i.e. it possesses absorptive capacity) (Naqshbandi & Tabche, 2018). Jiménez-Jiménez and Sanz-Valle (2011) revealed that managerial literature indicates the vital role which organizational learning plays in supporting the sustainable competitive advantage of the organization.

Furthermore, learning plays an important role in enhancing the ability of organizations to reach speed and flexibility in the process of innovation (Jiménez-Jiménez & Sanz-Valle, 2011). Hanaysha (2016) highlighted that there is a positive and significant relationship between organizational learning and performance within an organization.

Jiménez-Jiménez and Sanz-Valle (2011) and Bettis-Outland (2012) stated that the previous literature not only indicates a positive impact of organizational learning on performance but also revealed that innovation mediates this relationship. Significantly, some studies have investigated how organizational learning allows the organization to develop its abilities that promote innovation and how innovation positively impacts performance. In the same way, Wang and Chung (2013); Li et al. (2009) and Chung et al. (2015) suggested that organizational learning plays an effective role in achieving predefined performance goals.

Organizational learning is seen as an important organizational process that can manipulate information and knowledge and change the organizational attributes,
behaviours, abilities, and performance (Hu, 2014). Organizational learning elements are divided into four types: increased individual efficiency, developments in organization technology, developments in its structure/procedures and methods of coordination (Kim et al., 2019).

Moreover, organizational learning helps provide an efficient understanding of customers and their needs and desires, and encourages learning from employees and business associates, as well as learning from observation, errors, past experiences, and attitudes (Dibrell et al., 2014). It can also help to balance increasing radical innovation (Baker & Sinkula, 2009; Husain et al., 2016). Walsh and Kirchhoff (2002) reported that organizational learning identifies the direction of emerging and disruptive technologies so that the company can quickly develop its efficiency and take market leadership. Organizational learning supports employee creativity throughout the company, and enhances the ability to develop the innovation process (Husain et al., 2016). Organizational learning is an important internal factor in system-wide manufacturing flexibility. It can also impact on strategic change and organizational performance (Fang et al., 2016). Further, Ojha et al. (2018) demonstrated that organizational learning enhances the process of acquiring new abilities that can maintain the company’s competitive advantage.

The development of organizational learning capabilities affects knowledge, behaviours and thoughts within the organization, supporting business growth and innovation, where new learning is systematically integrated into organizational processes (Tortorella et al., 2019; Watkins & Kim, 2018). Organizational learning
and innovation have recently been revealed to be closely related to entrepreneurial orientation (Fernández-Mesa & Alegre, 2015).

Chow and Tsui (2017) showed that many organizational and management practices studies discussed the effect of organizational learning on the performance of an organization. Many previous studies have indicated that organizational learning can influence and enhance the organization's performance, such as developing a new creative product and creating a learning culture within the organization.

Also, Nooteboom (2010) described learning organization as an innovative organization, where the organizational learning capability has a positive and important impact on the organization's innovation (Tohidi & Maryam, 2012; Wang & Chugh, 2015; Lin et al., 2017; Abbasi et al., 2015; Nsor, 2012).

So, considering organizational learning as a tool that enhances the ability of organizations to survive and adapt to changes effectively has gained great importance in many organizations (Çınar & Eren, 2015). Organizational learning is considered a management practice that can affect the way of performing organizational activities. Based on the results of former studies, learning is the main source of sustaining the competitive advantage and a key aspect in organizational performance improvement (Mahmud & Hilmi, 2014; Langerud, 2007).
Equally important, organizational learning capability plays an important role in the internalization process of changes and improvements of organizations (Kalmuk & Acar, 2015). Salarian et al. (2015); Ahmad & Marinah (2013) and Usefi et al. (2013) concluded that organizational commitment is positively and significantly affected by organizational learning. In addition, Yenidoğan & Şencan (2017) and Nazem & Mozaiini (2014) stressed that the establishment and promotion of an organizational learning culture is key to enhancing employee satisfaction, organizational commitment and to ensuring a long-term healthy and stable workforce. This means that organizational learning can enhance organizational commitment levels among staff and can result in positive work outcomes.

2.6.3. Components of Organizational Learning
Organizational learning is a well-known phenomenon demonstrated by numerous empirical studies (Kim et al., 2019). Senge (2006) depicted five vital components of effective organizational learning, namely, "personal mastery, mental models, shared vision, team learning, and systems thinking", and the term of organizational learning has become well-known (İpek, 2018). These components support infrastructure creation that reinforces continuous learning, adaptation, and organizational growth (Estrada, 2009; Almulhim, 2009). So, one of the main goals of learning organization is constructing an organizational culture of learning (Tsai, 2014; Gagnon et al., 2015; Grégoire et al., 2019).

**Personal mastery**
Motivates members to continually learn (Kuşcu et al., 2015). As Senge (2006) mentioned, organizations cannot learn without employees desiring to learn.
Learning develops the personal abilities of people to achieve their goals. Najafbagy and Doroudi (2010); Abbasi et al. (2012); Çelik (2014); and Garrity et al. (2016) added that there is a need for employee commitment to learning in order to achieve competitive advantage in the labour market. Prelipcean & Bejinaru (2016) reported that personal mastery includes creative personal development, enough effort, detecting opportunities and challenges in a changing business environment, employees' abilities to learn, and developing their skills and uniqueness.

**Mental Model**

Retna (2007), stated that mental model is a way to develop your mind to produce the thoughts in different ways. It is an elucidation of thought process of an individual about how conceptual framework can be applied in real practice with the help of our understanding. It represents the surrounding environment and its parts and an individual's perception about his or her performance and their magnitudes. Further, Garrity et al. (2016) and Aşcı et al. (2016) mentioned that mental models are “deeply ingrained assumptions, generations, or even pictures and images that influence personal and organizational views and behaviours and limit thinking”. It is very important for an organization to understand mental models, putting them into question and changing them according to surrounding reality (Prelipcean & Bejinaru, 2016). Senge (2006) stated that mental models determine how a person thinks and acts. Although employees do not act according to their mental models, their behaviours are deepened on a mental image. Najafbagy & Doroudi (2010) revealed that, within the learning organization, mental models include the discipline of consideration, discussion, dialogue, and study. Employees try to reach acceptance about suitable and realistic mental models.
through this discipline. Sheng & Chien (2016) explained the importance of mental models in detecting shortcomings in the present ways of looking at the labour market.

**Shared vision**
The appearance of shared vision came from employees having a strong personal vision sense, who see the team vision that can include the personal visions of all and who care about their work (Chrispen & Mukeredz, 2013). Najafbagy and Doroudi (2010) mentioned that a shared vision form believes that action and reaction with employees' awareness of organization goals and agreement between employees' visions and developing these visions shape a shared vision. Abbasi et al. (2012) and Khasawneh (2011) added that employees must understand and contribute to the vision of the organization. Moreover, Nejad et al. (2012) stated that shared vision is an organizational resource whereby employees share a desired future image. Additionally, Prelipcean & Bejinaru (2016) reported that shared vision builds a sense of commitment to the strategic objectives of organizations and common direction.

**Team learning**
Team learning is an important component of the learning organization (Abbasi et al., 2012) due to the fact that teams represent the fundamental learning units in contemporary organizations (Khasawneh, 2011). According to Senge (2006) and Çelik (2014) “unless teams can learn, the organization cannot learn”. Team learning includes the fact that thinking, communication, and stimulation through
the team are more important than thinking individually. It is valuable (Prelipectan & Bejinaru, 2016).

**Systems thinking**

Najafbagy and Doroudi (2010) mentioned that Senge sees systems thinking at the heart of his model of learning organization wherever organizations’ employees develop a whole understanding rather than partial parts of the organization in terms of processes, structures, thinking, and behaviour. Khasawneh (2011) depicted how the fifth discipline of a learning organization is system thinking that incorporates all the other four disciplines in order to examine and improve the organization. Abbasi et al. (2012) refers system thinking to the ability to visualize complete canvas and to perceive interrelationship of constituents of system that how the system work over the time and with the context of larger system. System thinking is the process to think out of the theoretical approaches. Moreover, Yaşlıoğlu et al. (2014) added that systems thinking leads to knowledge of the relationship between the elements of an organization’s current environment and its effects on the organization.

Marsick & Watkins (2003) and Marsick (2013) developed the Dimensions of Learning Organization Questionnaire (DLOQ), which aims to assess OL capabilities according to different context levels, such as individual, team, and organization. As Marsick & Watkins (1994) mentioned, there are seven dimensions of a learning organization: continuous learning; inquiry and dialogue; team learning; embedded systems; empowerment; system connection; and
strategic leadership (Dekoulou & Trivellas, 2015; Hussein et al., 2016; Yang et al., 2004).

*Continuous learning*

Continuous learning refers to an organization’s attitudes towards providing continuous learning opportunities for their employees (Yang et al., 2004; Jyothibabu et al., 2010).

*Inquiry and dialogue*

Inquiry and dialogue represent an organization’s effort to create a culture of questioning, feedback, and experimentation. (Rus et al., 2014; Hussein et al., 2016).

*Team learning*

Team learning represents the cooperation skills between all employees in using resources effectively as a team (Jyothibabu et al., 2010). Rus et al. (2014) and Leufvén et al. (2015) indicated that team learning includes encouraging cooperation, learning and working together and providing a culture of teamwork in the organization.

*Embedded system*

Embedded system designates activities to create systems to capture and share learning within the organization (Tafvelin et al., 2017). Lim (2010) added that this dimension focused on the organization’s ability to keep what is learned for use during ongoing changes.
Employee empowerment

Employee empowerment involve employees in decision process by providing them autonomy and responsibility to the certain extend. Empowerment is the process of qualifying or permitting an employee to think, behave, take action, share views and control work and decision-making in autonomous ways (Jyothibabu et al., 2010). Empowerment has become necessary due to great untapped potential among employees, which can be revealed through empowerment.

System connection

System connection stated that, comprehensive thoughts and activities to link the firm to its environment (both the external business environment and internal business environment) Dekoulou & Trivellas, (2014).

Strategic leadership

According to Yang et al., (2004), strategic leadership shows to what extent the leader would thought in a strategic way by utilizing what he has been learn to form a vision in order to change in a positive movement and improve the organization market position to a totally new bath. Dekoulou & Trivellas (2014) Strategic leadership indicated that strategic leadership is where "Leaders utilize learning as a strategic tool to generate the desired organizational outcomes".

2.7. Innovative performance

Today's business environment is unpredictable and volatile, and companies have to modify and adapt constantly to survive. New ideas, strategies, processes, new
markets, products and services contribute to innovation to cope up with volatility (Hassan, 2018). Innovation is an essential tool for developing strategies; it can enable companies to distinguish their products, increase efficiency, permeate new markets and increase market share to demonstrate their competitiveness (Gunday et al., 2008; Nafula, 2017). Greco et al. (2016) asserted that companies have always been required to enhance innovations to ensure they keep a competitive advantage. Within the competitive business environment, organizations have begun to develop innovative performance to achieve greater success and remain in competitive markets (Tabatabaei et al., 2015).

Likewise, innovation is one of the main characteristics of entrepreneurial behaviour that has been strongly connected to small and medium enterprises (Okeet al., 2007). Based on this idea, SMEs are increasingly moving towards innovation to develop, enhance and maintain their competitiveness (Nafula, 2017).

2.7.1. Definition of innovative performance

Innovation remains a broad concept conceived in different ways. For this reason, attempts to define the concept have led to widely divergent definitions and perceptions (Nafula, 2017). Cocco and Quttainah (2015) mentioned that innovation is designing, creating, developing or implementing new products, services, systems, organizational structures, new models or business models to generate new value for customers and financial revenues for the company. According to Hassan (2018), innovation is described as the applying of new ideas or behaviour in the organization’s products, services, systems, policies and
programs to adjust to the environment and to enhance efficiency and competitiveness.

Moreover, innovation refers to the reduplicating process involved in developing and marketing products and services as a response to new opportunities, and coincides with ambitious commercial success (Saastamoinen et al., 2018). Nafula (2017) defined innovation as the instrument tool for entrepreneurs and firms that leads to the development of the strong and dynamic SME sector. Knowledge is an essential tool for innovative performance. Çömlek et al. (2012) indicated that innovative performance must be clearly defined to increase our understanding of some technical issues relevant to the influences of organizational learning capacity. Innovative performance refers to the development of products, processes, and procedures that increase the relevance, utility and performance of products and services by using new ideas and creativity (Hanifah et al., 2017).

Innovative performance is the organizational outcomes in terms of the extent to which inventions are introduced into the market, i.e. the rate of developing new products, new process, new systems or new equipment. So, introducing a new product can be cited as an indicator of innovative performance (Çömlek et al., 2012). In a like manner, innovative performance is a collection of overall organizational accomplishments as a result of the renovation and development efforts that have been undertaken, taking into account different aspects of innovation in the organization – for example, procedures, products, marketing, organizational structure, etc. Innovative performance is the construction of a composite based on different performance indicators, such as new patents, new
products, new projects, new practices, and new organizational procedures (Tuan et al., 2016). Gunawan (2015) defined innovative performance as the number of creative products introduced by the company to the market.

Lee and Yu (2010) differentiate between innovation and innovative performance; they say innovation is developing new approaches for a company, while innovation performance is a mensuration of the performance of developing a new approach or a new measurement standard to measure organizational performance.

Innovative performance measures the organization's activities to produce innovation, which also includes the organization's ability and the impact of innovation (Mustafid & Anggadwita, 2013). Otherwise, innovative performance can be seen as a combination of indicators used to personate the achievement of general and specific objectives of innovation. General objectives include improving efficiency, quality, and satisfaction. Specific objectives include addressing social challenges, meeting new regulations, and developing working conditions (Bloch & Bugge, 2013).

Ramli et al. (2017) added that innovative performance is the impact of innovation on organizational performance in terms of organization performance, service delivery, satisfaction, and confidence. Waheed et al. (2019) described innovative performance as a process of HR practices, processes and procedures development, which provides assistance to support the legacy of performance, inclusion, management values, services, and operational processes. Additionally, innovative performance is an achievement of innovation through organizational
activities in accordance with the desired objectives which can be measured in a variety of financial, technical and non-technical ways (McCarthy & Aalbers, 2016).

Furthermore, innovation is divided into two categories: radical innovation and incremental innovation (Laursen & Salter, 2006; Love & Mansury, 2007; Hassan, 2018; Hwang & Lee, 2010; Saastamoinen et al., 2018). Radical innovation is uncommon (Hwang & Lee, 2010), but it is likely to improve companies’ efficiency and capacities (Laursen & Salter, 2006). Saastamoinen et al. (2018) added that when an entirely new product or service is provided to the market, a radical innovation has happened. Hassan (2018) stated that radical innovation leads to core changes in the organizational processes, products, structures technologies, and methods.

On the other hand, incremental innovation is more abundant and offers fairly modest rewards to the company (Laursen & Salter, 2006). Saastamoinen et al. (2018) have shown that incremental innovation includes changing existing products or services. These innovations involve modifications, enhancements, or line additions by adding new features. This is the most common innovation type in many organizations, especially small and medium enterprises and is based on knowledge and resources within the company (Nafula, 2017).

2.7.2. Importance of Innovative Performance

Some scholars such as Hurtado-Torres et al. (2018) highlighted that organizations encourage employees to demonstrate innovative behaviour in the workplace. The work environment transforms the basis of competitive advantage from quality to
innovation. Innovation helps organizations to adjust rapidly to changes and helps create new products and markets, thereby protecting them from an unstable work environment (Zehir et al., 2012).

The successful innovation-focused organization is searching for achievements where innovation reflects the quality and quantity of ideas and the efficiency and effectiveness of applying these ideas (Halim et al., 2014). Moreover, innovative performance is measured as the ratio of turnover attributable to innovations of products that have been new to the market or new to the company over the past three years. Innovative performance refers to the ability of companies to offer innovative products to the market, besides short-term commercial success. This indicator indicates the effect of product innovations on total organization sales and innovation (Love et al., 2014; Lee et al., 2017).

Innovation has increasingly become an efficient factor and a source of strategic change to achieve a sustainable competitive advantage (Sheu, 2007). Therefore, the stress on all companies to innovate constantly through the development and launch of new products and services has become ever greater (Kiraka et al., 2013). Hernández-Perlines et al. (2019) clarified that dynamic capabilities are essential in creating sustainable competitive advantages. Innovation is also an important element for performance and growth because it develops the efficiency, productivity, quality and competitive position. Innovation has been demonstrated in the introduction of new products, processes or services (Bagno et al., 2017; Waheed et al., 2019; Olokundun et al., 2017).
Nafula (2017) claimed that innovation greatly enhances economic development through "creative destruction". Furthermore, sustainable competitive advantage relies on innovative capabilities, which identifies the ability of a company to build and recapitalize its resources and capabilities (Hernández-Perlines et al., 2019; Halim et al., 2014). Studies such as Rosenbusch et al. (2011); Rosli and Sidk (2013); Mattsson and Orfila-Sintes (2014); Tajeddini et al. (2017) concluded that a high level of performance is affected positively by a high level of innovation.

Moreover, the results of Hacioglu et al.'s (2012) study indicated that proactiveness, innovativeness, customer intensity and resource leveraging dimensions of entrepreneurial marketing are correlated positively with innovative performance. Varis and Littunen (2010) added that innovation is a vital source of competitiveness in SMEs, most of which suffer from limited resources. Innovative performance can measure the output of innovation, which involves the creation of new products and new organizational practices. It supports product quality as well as the current organizational system that improves productivity and profitability (Shahzad et al., 2017).

The innovative company has the ability to use innovation to achieve excellence by providing unique products and services to customers. The innovation strategy enables companies to compete. Continuous development of products, processes, and tools is where innovation leads to increased competitiveness of the company (Lazonick, 2005).
2.8. Summary

This chapter has reviewed the concepts of entrepreneurship and the entrepreneur, as well as the importance of entrepreneurship, especially in the competitive business environment. It has detailed the concept of entrepreneurial orientation and the five dimensions. It has also introduced the concepts of performance, organizational culture, organizational learning and innovative performance. It has outlined the importance of entrepreneurial orientation for organizations operating in the changing and intensive business environment, and how entrepreneurial orientation can achieve a sustainable competitive advantage for organizations.

Entrepreneurship is one of the most researched areas of business studies. There is a variety of definitions of the various concepts used in entrepreneurship literature. Different authors have defined different concepts differently. This diversity of definition merits discussion of abstracts in light of extant literature in order to establish how a selected definition best suits the objectives of this study.

In this chapter all the abstracts are discussed in detail in light of extant literature to justify the selection of a particular dimension and context of abstract, such as entrepreneurship, entrepreneurship orientation, organizational culture, organizational learning, innovative performance and firm performance. The related terms and concepts are defined to give proper context to relevant discussion. The characteristics of an entrepreneur are discussed separately as behavioural and personal attributes. Existing literature shows that certain personal traits such as a strong urge for achievement, internal locus of control, propensity to take risk, tolerance of ambiguity, confidence, sense of ownership,
communication, passion, team work, system orientation, dedication, optimism and leadership are necessary elements of a successful entrepreneurship career.

Recent research studies have shown that entrepreneurship orientation is one of the key determinants of organizational performance. Entrepreneurship orientation positively affects the performance by optimal utilization of resources and innovative products and services. Most of the studies in the area of entrepreneurial orientation have characterized it with three dimensions (i) innovativeness, (ii) reactiveness, and (iii) risk-taking. In addition to these three dimensions, competitive aggressiveness and autonomy are also considered by many scholars.

This study posits that culture is a major determinant of entrepreneurial orientation and can be divided into four sub-cultures: group culture, development culture, hierarchical culture and rational culture.

Firm performance is also a highly debatable area. A diverse set of parameters is used to express performance of a firm, ranging from short-term measures such as profitability, return on investment and profit margins to long-term measures such as sales growth, customer satisfaction and market share. Following most influential studies, a combination of performance measures of firm performance are used to test the firm performance. It is hypothesized that the relationship between entrepreneurial orientation and firm performance is affected by organizational leaning capability and innovative performance.
Chapter 3: Entrepreneurship in SMEs in Developing Countries

3.1. Introduction

The significant role played by small and medium enterprises SMEs in developing the economy is increasingly recognized (Tambunan, 2008; Pandya, 2012). They are often called productive and efficient job creators, large-scale seed companies and national economic engines (Abor & Quartey, 2010). SMEs in many developing countries, in particular in the Asian region, are strategically essential. More than 90% of all non-agricultural businesses in the region include SMEs (Hussain et al., 2012).

In the world's economy, professionals, politicians and scholars have been increasingly concerned with the study of entrepreneurial and small and medium-sized enterprises (SMEs) (Hassan & Mohamed, 2015). In the emerging economies, small and medium enterprises, driven by entrepreneurship, are a tangible lever for economic and social development (Hassan & Mohamed, 2015).

Oman's SME sector shows growth and development (Ennis, 2015). Nearly 90% of the private sector relies on small and medium-sized enterprises (SMEs) and provides many jobs for young people, which has led to a decline in the country’s unemployment over the last two years (Al Bulushi & Bagum, 2017). Entrepreneurship has long been recognized in developing countries as an influential instrument for poverty reduction and economic growth enhancement (United Nations, 2004; World Bank, 2016; Bhuiyan & Ivlevs, 2019).
The development of entrepreneurship in Asian developing countries is now an important issue for the economic development of countries (Tambunan, 2009). Oman is one of the Middle East and North Africa (MENA) nations in which young people constitute the largest proportion of the country's population. Hence, Oman should encourage entrepreneurship to generate innovation, economic productivity and employment to expand its economy (Faghih & Zali, 2018).

3.2. Entrepreneurship in Developing Countries

Entrepreneurship is critical to the growth of transition economies and attracts a growing number of researchers today (McMullen, 2019). The meaning of entrepreneurship in developing countries needs to be explained. A number of terms define entrepreneurship in an interchangeable way. For instance, entrepreneurship and small and medium enterprises can be used in tandem (Acs & Virgill, 2009). Entrepreneurship is the most widely discussed and debated topic around the world today. It assumes special significance in case of developing countries since it is seen as the driving force which plays an important role in economic growth and development of the country. Entrepreneurship just does not refer to start something new or innovative ideas but it is very dynamic term. The developed countries owe their development to the innovative ideas of the SMEs which propelled the economic growth and contributed significantly to their GDP. It also plays an important role changing the socio-economic thought process of the society at large.

Studies show that entrepreneurs play key roles particularly in the creation of small and medium enterprises, leading to higher employment (Jafarnejad et al., 2013).
Al-Shamaileh (2018) showed that entrepreneurship had to be further supported in developing countries. Many young people in these countries lack modern education on business development and the use of ICT. Entrepreneurship has long been recognized as an important tool for reducing poverty and enhancing economic growth in developing countries (World Bank, 2016).

Employers play a major role in the perception of investment opportunities in various areas and production, where they act as a coordinator of material resources. Moreover, businesses consider key issues as channels and mechanisms for the displacement associated with agglomeration. Thus, entrepreneurial capital is an important factor in many regional economic indicators based on the level of entrepreneurship (Minaev, 2016). Because they are poor and without formal jobs, individuals in poor countries often have no option but to begin small informal enterprises to maintain their livelihoods (Margolis, 2014). But even a low productive entrepreneurial company driven by necessity is not accessible to all; a small business needs financial investment. As official loan markets are inefficient and local monetary lenders charge elevated prices, poor people who are prepared to begin or grow the company are often incapable. Access to loans is generally recognized as one of the greatest barriers in the development of entrepreneurship and SME in developing countries (Panda & Dash, 2014).

The effects of entrepreneurship on the individual, business and social level, thereby affecting the wealth, profitability and business development of private individuals were observed by Wennekers et al. (2002). The growth of
entrepreneurship now is a significant problem for economic development in Asian developing countries. The main cause for economic underdevelopment in most of these countries is the general view of the absence of entrepreneurship, along with restricted resources, unqualified employees and lack of technology. This is being remedied through entrepreneurial training, which represents a significant aspect of government support programs in Asian developing countries for small and medium-sized businesses (SMEs) (Tambunan, 2009).

One of the key roles for SMEs is to alleviate poverty by creating jobs. SMEs are increasingly considered as the creators of new jobs (Swierczek & Ha, 2003), and 64% of industrial workers are employed by SMEs. As a result, SMEs assist policymakers in developing countries to develop policies to enhance and stabilize their SME activities (Islam et al., 2011).

The local dimension is also of importance to entrepreneurship and SME policy. Facilitating higher business start-up rates is an almost universal concern for local authorities seeking to speed up growth or to reverse the decrease in poor and prosperous communities. Many countries have introduced programs to reduce social distress and unemployment, including chronic unemployment. New companies can acquire a variety of local development advantages, including increased jobs and incomes, improved services to customers and companies, and possible demonstration and motivation impacts. Local business creation levels include demographics, unemployment, wealth, educational and workers profile, distribution of small businesses and infrastructure donations (OECD, 2004).
Entrepreneurship is now regarded to be the economic driving engine for developing countries, and most of these countries have invested heavily in the growth of entrepreneurship. Such growth can provide sustainable jobs and economic development in a society. It should be observed that the growth of entrepreneurship has always faced various difficulties and obstacles (Jafarnejad et al., 2013).

Al-Shamaileh (2018) indicated that a number of factors in the growth of entrepreneurship, including entry regulations, political stability, corporate taxes, company reforms, growth, and governance, have an impact on developing countries. Per Benzing et al. (2009), barriers in developing countries are often comparable to entrepreneurial growth. The bureaucratic laws of private companies, particularly company registry and tax registration schemes, are complex for most entrepreneurs in developing countries. Table 3.1 illustrates the barriers of entrepreneurial development in developing countries, according to previous studies.

Jafarnejad et al. (2013) pointed out that there are many barriers to entrepreneurship development:
Firstly, there are financial barriers, including inadequate business-building and maintenance capital; high advertising costs; problems with finding a suitable office/operational space; problems with the recruitment of excellent and reliable employees; absence of hardware and software; and difficulty in guaranteeing the safety of launching entrepreneurs (Jafarnejad et al., 2013).
Secondly, there are scientific-educational barriers, including the failure to acquire the skills and knowledge necessary to start and maintain a company; a lack of adequate understanding on managerial skills and management of the business; lack of marketing training; lack of accounting training and financial planning experience; lack of adequate legal and regulatory knowledge; the difficulty of finding data on markets, goods and prices; lack of understanding of the company setting and environmental variables; lack of understanding of how to enter and expand the presence on the market; lack of understanding about overseas markets; absence of export training and expansion programmes; and absence of abilities training in entrepreneurship (Jafarnejad et al., 2013).

Thirdly there are policymaking barriers, including high prices; troubling bank loan regulations; labour constraints; failure to provide economic and bank assistance; investment insecurity; elevated volatility in prices; and the weak insurance scheme.

Fourth, there are cultural barriers, including input and credits relationship-based distribution; broker rule and intermediary rule; absence of family moral and material support; and adverse risk attitudes (Jafarnejad et al., 2013).

Table 3.1 Barriers of entrepreneurial development in developing countries in previous studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Barriers</th>
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<tbody>
<tr>
<td>Hossain, 1998</td>
<td>- trade policies</td>
</tr>
<tr>
<td></td>
<td>- legal and administrative problems</td>
</tr>
<tr>
<td></td>
<td>- governmental costs</td>
</tr>
<tr>
<td></td>
<td>- financial constraints</td>
</tr>
<tr>
<td>Cook, 2001</td>
<td>- insufficient funds</td>
</tr>
</tbody>
</table>
Entrepreneurial projects abound in developing countries and usually have greater self-employment rates than their richest counterparts (Gindling & Newhouse, 2014). More than 90% of the companies in developing countries fall within the SME category, and over 90% of these companies are microenterprises (Naqvi, 2011).
In Asian developing countries, the growth of women's entrepreneurship has, as in other areas of the world, an enormous capacity to empower women and transform society in the region. However, this potential is still mainly untapped in many countries, particularly where the level of financial growth expressed by per capita revenue and level of industrialization is still small. Women, for example, make up less than 10% of South Asian entrepreneurs, including Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka (Tambunan, 2009).

Nevertheless, it has become a significant prescription for growth in recent years to promote entrepreneurship and promote small and medium-sized enterprises (SME) policy. Entrepreneurship strategies then add up to a list of macro-economic reforms, exchange rates, trade, and industrial policy and governance improvements (Acs & Virgill, 2010). Governments recognize progressively that "social entrepreneurship" can contribute to poverty reduction and the empowerment of poor communities. Many countries are running specialized entrepreneurial programs to support target groups. Such systems should be thoroughly developed and tailored to meet these target populations' mainstream support programs (OECD, 2004).

As part of their poverty decrease, growth and financial development plans, both national governments and major global organizations have begun to concentrate on enhancing entrepreneurial businesses and investments in countries (Acs & Virgill, 2010). Both the World Bank and the United Nations Industrial Development Organization (UNIDO's) have created units to encourage the growth of the private
sector in developing nations and to offer technical help for creating SMEs and entrepreneurship policies (Acs & Virgill, 2010). The World Bank launched an initiative in 2003 to evaluate and rank company and investment environments in countries (World Bank, 2005). A number of developing countries have developed legislation for SMEs and established small enterprises and national entrepreneur support programs (Minaev, 2016).

3.3. Small and Medium Enterprises in Oman

3.3.1. Definition of SME in Oman

Even though SMEs are concerned globally with scientists and experts (Hassan & Mohamed, 2015) and various researchers generally have provided different definitions for this category of business (Abor & Quartey, 2010), they have never agreed on a concept that has been uniformly adopted (Hassan & Mohamed, 2015). There is no global comprehensive definition agreement for SMEs. Many countries use the most popular definition on the basis of their employees, asset size and annual sales (Rahbi & Abdullah, 2017).

Pandya (2012) indicated that SMEs are categorized according to their workforce, asset dimension and the annual turnover in the GCC area. In addition, because of the variations between the social and economic systems in each country, there is no widely accepted definition for SMEs in the GCC countries.

In Oman, however, SMEs, in terms of the amount of staff and annual revenues, were described by the Ministry of Commerce and Industry in 2012, as shown in
Table 3.2. In 2016, the ministry of Commerce and Industry amended the definition of SMEs because it did not comply with global definitions. After obtaining information from multiple entities the definitions have been revised, as described in Table 3.3. (Times of Oman, 2016; Al Balushi, 2019).

Table 3.2. Definition of SMEs in Oman (2012)

<table>
<thead>
<tr>
<th>Type</th>
<th>No. of employees</th>
<th>Annual sales (OMR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro or very small enterprises</td>
<td>Less than 5</td>
<td>Less than 25.000 (about USC 65.000)</td>
</tr>
<tr>
<td>Small enterprises</td>
<td>5 to 9</td>
<td>25.000 to 250.000 (about 650.000)</td>
</tr>
<tr>
<td>Medium enterprises</td>
<td>10 to 99</td>
<td>250.000 to 1.5 million (about USD 3.9 million)</td>
</tr>
</tbody>
</table>

Source: Ministry of commerce and industry, 2012.

Table 3.3. Revised definition of SMEs in Oman (2016)

<table>
<thead>
<tr>
<th>Type</th>
<th>No. of employees</th>
<th>Annual sales (OMR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro or very small enterprises</td>
<td>1-5</td>
<td>Less than 100.000 (about USC 260.000)</td>
</tr>
<tr>
<td>Small enterprises</td>
<td>6-25</td>
<td>Between 100,000 and less than 500,000 (about 1300,000)</td>
</tr>
<tr>
<td>Medium enterprises</td>
<td>26-99</td>
<td>Between 500,000 and less than 3 million (about USD 8 million)</td>
</tr>
</tbody>
</table>


3.3.2. Importance of SMEs in Oman

The Long term economic growth of the any country largely depends on the development of SMEs and other smaller business setups. In fact, a strong base of SMEs works as the foundation for real growth and development and Oman also realised this. In last decade many initiatives have been taken by the policy makers to support SMEs in Oman. Many innovative program and policies have been announced to enhance the entrepreneurship culture among the masses and to
deal with the major issue of unemployment (Sultan Qaboos Bin Said, Saih Al Shamikhat 27th January, 2013) (Riyada, 2013; Al Balushi, 2019).

Developed as well as developing governments have recognized that the core of any economy is small and medium-sized enterprises (SMEs). There is a universal consensus on their significant involvement in economic growth, creation of jobs, social cohesion, alleviation of poverty and regional and local development. SMEs in any economy are the biggest group of businesses (Christina et al., 2014).

SMEs provide both qualified and unqualified individuals with employment opportunities, contribute to GDP and economic diversification and help to decrease poverty. They help people, communities, and countries to achieve well-being. Omani SMEs do not differ from their counterparts in other nations, and are expected to lead the economic and social development (Bilal & Al Mqbali, 2015; Al Balushi, 2019).

The youth of Oman account for 55% of the total workforce, and more than 50,000 job opportunities are needed to reduce unemployment, estimated to be at 15%. (Khan & Almoharby, 2007). Job opportunities can be created in Oman when more businesses begin. The government of Oman should concentrate on its small and medium-sized enterprises by addressing present problems and problems that it faces in its development. If the government supports SMEs, this acts as an investment to improve the economy and will help eliminate poverty in the country (Al Bulushi & Bagum, 2017).
In 2013, the Omani government decided to move towards economic diversification in order to create more employment for the individuals of Oman (Ashrafi & Murtaza, 2013). A lot of other individuals from other countries were working in Oman and earning elevated incomes, but because of the elevated employment rate among the individuals of Oman the government decided to switch to "Omanization". Omanization is a strategy to place the individuals of Oman at work by removing individuals from other countries (Al Bulushi & Bagum, 2017). Previous studies have shown that Omanisation clearly indicates the fact that Oman's government really is interested in its people's employment. SMEs are a way of eliminating unemployment entirely in a country, but SMEs need a high amount of assistance from the government in order to start a business and then introduce development policies (Ashrafi & Murtaza, 2008). No SME can work successfully without government assistance (Al Bulushi & Bagum, 2017).

The Sultanate of Oman is no exception. The sector takes precedence and importance because of the facts and consideration of the role of small and medium-sized businesses in developing national economic growth. In Oman, SMEs have spread across the country in various sectors. Those companies develop innovative entrepreneurial ideas that add value to the Oman economy, and so every company strives to create products and services produced in Oman (Al Buraiki & Khan, 2018).

In support of SMEs, many programs which help to eradicate the issue of unemployment in the country were implemented in 2012. Al Shezawi & Khan (2018) revealed that the Government of Oman implemented an In-Country Value
Initiative (IPV) program aimed at stimulating financial growth and ensuring sustainable development through local supplies of products and services, productivity and local investment in value-added opportunities. ICV opportunities are a great supporter of SMEs (Al Buraiki & Khan, 2018).

The government’s main purpose is to increase the private sector’s position as a significant factor in the economy by providing explicit assistance for small and medium-sized enterprises. SMEs compromise 90% of the country’s total number of firms. With such widespread control, the government has developed and enforced policies to improve laws and regulations and organizational infrastructure (AlMaimani & Johari, 2015).

Previous studies have shown that the Oman Government has taken initiatives to promote its SMEs, but gaps still exist (Varghese, 2011). In order for SME owners to readily start their own businesses and provide jobs in a market, the government has provided short-term loans. Researchers have clarified that SMEs can succeed if they receive long-term loans at low financial cost, as this makes it easy for owners to repay their loans (Saleh, 2012). SME short-term loans always hamper the success of an excellent company (Al Bulushi & Bagum, 2017).

The Omani government has been very interested in developing and supporting small and medium-sized enterprises. The royal decree on the establishment of a distinct SME organization, the Public Authority for Small and Medium Enterprises (PASME) was released under His Majesty Sultan Qabaos’ directive. PASME seeks to develop small and medium-sized businesses, strengthen the position of small businesses to create more jobs and provide economic, technical and
administrative support. SMEs are also provided with aid in licensing and associated procedures; promotion of products from small and medium-sized enterprises through exhibitions; and creation of an electronic database and call centre (Al Buraiki & Khan, 2018).

The Government has launched an initiative for supporting SMEs through the creation of the Oman Development Bank, but this provides short-term loans to businesses which impose 9% financing costs. This is a very high figure and by returning such a level of finance, SMEs cannot seek sufficient development and amplification, which in this competitive company environment is key to their progress (Al-Balushi & Anderson, 2015).

Christina et al. (2014) indicated that Zubair Small Enterprises Centre, Bank Muscat, and the National Bank of Oman are firms in the private industry that provide economic assistance for small and medium-sized enterprises. Although financial assistance for small and medium-sized enterprises is very significant, small and medium-sized enterprise owner should have the leadership abilities needed to manage the financing required in creating a marketing strategy, managing human resources and operations management skills (Al Bulushi & Bagum, 2017). Table 3.4 and Table 3.5 indicate the government programs supporting SMEs and private sector programs supporting SMEs.

Al Bulushi and Bagum (2017) asserted that SMEs must be cautious when extending their activities as if they lack management abilities, small and medium-sized enterprises can suffer losses. The Omani government has created a rule to
give loans to individuals who have at least 16 years’ experience in successfully handling their activities. This caused concerns that many people, particularly those with medium and lower incomes, would be unable to gain a middle class education and therefore unable to get loans for start-ups. Küster and Vila (2011) added that the government should provide the public with training and aid so that they can gain managerial abilities for their business activities. Successful SMEs use small capital but use it to create high profit efficiency.

Table 3.4. Government Programmes Supporting SMEs

<table>
<thead>
<tr>
<th>Government programmes</th>
<th>Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oman Development Bank</td>
<td>Is a major financial institution for SMEs</td>
</tr>
<tr>
<td>Riyada</td>
<td>A governmental development authority for SMEs. It supports such things as business consulting and training programs</td>
</tr>
<tr>
<td>Al Raffd Fund</td>
<td>A governmental financial institution that supports Omani youth financially to develop their own enterprises</td>
</tr>
<tr>
<td>Sanad (Self-Employment and National Autonomous Development)</td>
<td>A governmental financial institution to help unemployed and young Omani graduates financially to develop their own enterprises</td>
</tr>
<tr>
<td>Sharakh</td>
<td>A governmental authority to provide knowledge and financing to develop small and medium-sized enterprises. It provides several services for small and medium-sized enterprises. It reviews, for instance, business plans for small and medium-sized enterprises, helps SMEs to prepare their cash flow, carries out risk assessments for the enterprise, and helps SMEs create annual marketing. These services are only offered to small and medium-sized enterprises receiving economic assistance from Sharakh; A fee for these services must otherwise be paid for them</td>
</tr>
<tr>
<td>Public Authority for Craft Industries</td>
<td>This aims at to develop and improve the arts and crafts industries. It also gives all the capacity and resources needed and is readily accessible to support all marketing and financial and administrative requirements of these industries.</td>
</tr>
<tr>
<td>National Business Centre</td>
<td>This aims to create and assist Omani entrepreneurs through providing services such as preparation of feasibility studies, economic and legal advice, consultancy services, coaching and mentoring.</td>
</tr>
</tbody>
</table>

Source: Al Balushi, 2019.
Table 3.5 Private Sector Programmes Supporting SMEs

<table>
<thead>
<tr>
<th>Private sector programmes</th>
<th>Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zubair Small Enterprises Centre</td>
<td>A corporate social responsibility initiative, which aims to enhance small and medium-sized enterprises through multiple services, like company advice, training and financing</td>
</tr>
<tr>
<td>Intallaqah</td>
<td>Shell social initiatives; which aims to generate an entrepreneurial environment and assist SMEs develop and succeed. Intilaqah offers services for SMEs and prospective entrepreneurs, including workshops, training programs and business development and consultancy services</td>
</tr>
<tr>
<td>INJAZ Oman</td>
<td>Part of &quot;Junior Achievements Worldwide&quot;, the biggest non-profit organization in the world. It seeks to offer several programs to encourage young people to start their own businesses and start their career interests.</td>
</tr>
</tbody>
</table>

Source: Al Balushi, 2019.

The small and medium-sized enterprises sector in Oman begins the growth curve, and this sector needs a high level of governmental assistance. Oman’s SMEs’ contribution to GDP is small, but it helps the country to reduce the volume of unemployment (AlMaimani & Johari, 2015). This limited support for growing companies’ GDP is because of the reality that government does not provide training to SME owners and employees on how to operate in a competitive business environment in order to promote their SMEs. In this vein, the government needs to provide loans to SMEs for a long-term, low-cost financing period in order to contribute to Oman's GDP without thinking of loan retribution systems during their business growth phase (Al Bulushi & Bagum, 2017).

The non-economic variables and psychological factors which affect SME managers’ financing decision-making procedures are very significant, but there is little knowledge as to why economic choices differ between small businesses, and
particularly how and why SME owners make financial decisions, especially Islamic finance decisions at the Oman Sultanate (Al Balushi et al., 2018).

The latest World Bank study states that in Oman there are approximately 15,000 to 20,000 active small and medium-sized businesses, with a growth rate of 1.5% per annum. The Ministry of Commerce and industry in Oman states that 48% of these are deemed to be small enterprises among 833 manufacturing units with capital investment of RO 5000 or greater. 43% of industrial units accounted for the medium-sized sector and 9% for large units. The development of SMEs has always been one of the Omani government's priorities (Christina et al., 2014).

Barwani et al. (2014) pointed out that SMEs in Oman account for over 90% of businesses engaged in financial activity, whether micro, small or medium sized. The Central Bank of Oman's recent data shows that 40% of the workforce is employed in SMEs with fewer than 5% of those consisting of Omanis. The contribution of SMEs to the national GDP varies from 15% to 20%. As these are the two main statistics, it is evident that SMEs are still in the initial stage in Oman, and there is a considerable growth potential (Al Balushi, 2019).

According to the SME Development Public Authority (2013) in Oman, there are about 132,735 SMEs, most of them in the Muscat area (Al Balushi, 2019). Riyada (2018) reported that in 2013, 70% of SMEs were micro enterprises, 25% were small and 5% were medium-sized, as depicted in Table 3.6.
Table 3.6. Number of SMEs in Oman

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscat</td>
<td>50359</td>
<td>38</td>
</tr>
<tr>
<td>Albatinah</td>
<td>26573</td>
<td>20</td>
</tr>
<tr>
<td>Musandam</td>
<td>1910</td>
<td>1</td>
</tr>
<tr>
<td>Aldhahra</td>
<td>6555</td>
<td>5</td>
</tr>
<tr>
<td>Aldakhliya</td>
<td>10250</td>
<td>8</td>
</tr>
<tr>
<td>Alshargiya</td>
<td>18475</td>
<td>14</td>
</tr>
<tr>
<td>Alwusta</td>
<td>1446</td>
<td>1</td>
</tr>
<tr>
<td>Dhofar</td>
<td>10427</td>
<td>8</td>
</tr>
<tr>
<td>Alburaimi</td>
<td>6740</td>
<td>5</td>
</tr>
</tbody>
</table>


Ennis (2015) highlighted how the Omani government took extraordinary actions to enhance its SME and the economy of its entire country in 2015. Nearly 90% of the private industry is based on SMEs; these offer many job opportunities for young people, causing unemployment rates to have fallen significantly within the last two years (Al Bulushi & Bagum, 2017).

In Oman, the features of SMEs can be categorized as follows (AlMaimani & Johari, 2015):

11. The vast majority of SME owners hold high school diplomas or higher education qualifications at the age of 30.
12. The owners have at least one year's work experience.
13. Most SME owners have never had any training relating to small and medium-sized enterprises; they therefore lack professional advice.
14. Over half of SME owners have full-time employment.
15. Approximately 55% depend on family and private funds.
16. Most SMEs (based on the amount of staff they have) are categorized as micro-oriented.
3.4. Entrepreneurship in Oman

The Sultanate of Oman is the fourth largest producer of oil worldwide. Oil is 45% of its GDP ($76.460 billion) as of 2012. All GCC oil-producing countries, of which Oman is one, have been impacted by the latest downward trend in oil prices. The Sultanate needs to decrease dependence on petroleum, to privatize the economy and to liberalize itself (Chavali, 2016).

The Omani Government is planning a reduction in reliance upon non-renewable oil resources to 5% of its gross national product (GDP) by 2020. This gives the local community, particularly women, a lot of impetus by offering a useful scenario for starting businesses. Studies have shown that the significance of female entrepreneurship in the world's economies is increasing (Brush & Cooper, 2012). The Sultanate offers training for women, free career education and free capital for launching new companies and much more (Chavali, 2016).

Oman has a historic reliance on foreign labour, which has grown through the reliance on expatriate skills and the possibility of inexpensive, non-qualified labour on salaries that do not attract native Omani people. The drawback of this dependence is that foreign employees transfer cash from Oman and the country does not profit much in terms of knowledge and technology transfer. There are prospective workers to promote the dedication of the Omani government to the Omanization process, as 44% of the population are under the age of 15 and 68% are under 25 (Al-Riyami et al., 2002).
Oman has a small private sector and impending domestic entrepreneurship activity. It must decrease its dependence on its petroleum revenues to safeguard Oman's economy. The entrepreneurial spirit in the country needs to be encouraged because its oil reserves are estimated to last under 20 years (Matriano & Suguku, 2015). As with all countries, it is not simple to undertake entrepreneurial activities, and Oman in particular has a relatively small private sector with low levels of domestic entrepreneurship activities (Bindah & Magd, 2016; Khan & Al-Moharby, 2007).

In Oman, there has been an increase in concern for diversifying the economy from oil and gas reliance, i.e. non-renewable resources. This has resulted in a focus on human resources, with the aim of 'Omanization' – jobs being filled by Omani citizens rather than depending on a large percentage of expatriate employees. Obviously, since females make up almost 50% of the population, they play a significant part in this change (Al-Riyami et al., 2002).

In today's worldwide economic growth, entrepreneurship will play a progressively more significant role. Developed nations recognize the importance of entrepreneurship, and big businesses have taken over the so-called entrepreneurial economy. While developing nations are still behind in terms of entrepreneurial development, projects are still underway, particularly in the Arab Gulf, to foster entrepreneurship (Matriano & Suguku, 2015).

Calls have been made to diversify the economy since the early 1990s; in 1996, the long-term strategic government policy 'Oman Vision 2020' developed this as
one of its main objectives. This reliance on oil and gas has become even more dangerous due to the recent sharp decrease of oil prices, which have revealed greater urgency in the call for immediate policies to diversify. Indeed, in the past two decades little has been accomplished and more than 86% of government revenue was still generated by the oil and gas industry in 2015 (Al-Harithi, 2017).

Al-Lawati (2016) confirmed that Oman is no exception, because in the last few years the severe issue of joblessness has risen. For example, for young Omanis after graduation, the waiting period for employment varies from between 3 and 5 years. There are two main reasons for the emergence of this issue. Firstly, the increasing number of graduates seeking significant employment, which is the direct result of improving the Sultanate of Oman's access to higher education over the past several years (Faghih & Zali, 2018). Secondly, Oman's current severe financial issues stem from low oil prices, the country's major source of revenue. Not only is youth unemployment caused by the low petroleum price crisis but also adult unemployment. As Erlich (2015) pointed out, the state of Oman's economy caused private businesses to obtain alternative livelihoods and find alternative employment for their drilling employees.

These issues of unemployment have led to a call for diversification of national income instead of relying upon oil and gas. As a result, “Vision 2040” for Oman's economy was developed. The vision seeks to turn the Sultanate into a diverse economy through the use of its wealthy, talented and competent human resources based on a commendable and innovative culture. As a major government
organization, Sultan Qaboos University produces high-quality graduates, experts and qualified students in different fields provided by 9 colleges (Al-Harthi, 2017).

The widespread perception that jobs usually mean employment in the public sector is a major challenge to the development of entrepreneurship in Oman, since entrepreneurship is commonly regarded as a hobby rather than just a source of revenue (Atef & Al-Balushi, 2015). The elevated competitiveness and the lengthy wait for governmental employment have demonstrated this. This is far from fancy, as public jobs in Oman provide higher salaries, higher job security, greater advantages and shorter hours of work than employment in the private sector (Romano & Seeger, 2014; Al-Harthi, 2017).

Oman's need for entrepreneurs and entrepreneurship is not unique. The reasons or goals are also prevalent to many other nations and can be summed up as providing employment opportunities and developing the economy, as well as strategic adaptation and reorientation and the liberalization or privatization of state-owned companies (Al-Harthi, 2017).

Oman developed significant financial difficulties with government employment and the availability of higher education opportunities when the population grew more rapidly than could be sustained by the economy. The government sees entrepreneurship and self-employment as crucial components in tackling these problems and diversifying the economy, particularly among young people (Bindah & Magd, 2016).
Entrepreneurship is seen as the 4th pillar of economic development, and some even argue that, in the extremely technologically advanced 20th century, entrepreneurship is perhaps the only major pillar of economic development. It is expected that the "youth liability" problem will become "youth benefit" in Oman with the country's vision (Faghih & Zali, 2018).

Khan and AL-Moharby (2007) indicated that entrepreneurship is a solution in the Sultanate to this and its associated problems; the role of the private sector in the national economy needs to be strengthened. Romano & Seeger (2014) added that entrepreneurship has also become a solution to the problem of youth unemployment in the country. Moreover, entrepreneurship contributes to reducing unemployment through the self-employment alternative (Al-Harthi, 2017).

In Oman, most businesses started by women begin with smaller funding – with a capital of less than RO25,000 – and are categorized as 4th grade. Women have far fewer firms than males, but in the last three years, statistics have stayed stable. This represents an overall image in which women ventures differ from male ones, which tend to meet traditionally unsatisfactory requirements in tiny companies in the service industries (Al-Riyami et al., 2002).

The entrepreneurial environment in Oman is still in progress, but actions can be taken to support the growth of national entrepreneurship. Oman can promote and stimulate entrepreneurial growth by providing favourable environmental factors. Political stability in the Sultanate is based on global ratings and is the most appealing feature. It also has a policy of free economy that is essential for new
companies (Matriano & Suguku, 2015). Oman is the 56th free economy with an economic freedom score of 66.7 based on the 2015 Index of Economic Freedom. It is the 6th in 15 Middle East and North African countries. It requires on average a week for the five necessary processes to start an enterprise. The Omani government has also a large subsidy scheme for petroleum products in particular. Other encouraging variables include the quality of life and the sustainability of the enterprise initiative for young people (Matriano & Suguku, 2015).

Entrepreneurship development in Oman is essential for many reasons. First, innovation and technical change are driven by entrepreneurship and thus financial development is generated. Second, the process of entrepreneurial action involves balancing supply and demand. Third, entrepreneurship is a key method for transforming new knowledge into products and services. Fourth, Entrepreneurship has become an significant task, and its function in human and intellectual capital growth must be understandable (Bakheet, 2018).

Therefore, to enhance entrepreneurial culture in Oman, numerous government and private sector programs have been created and implemented (Bakheet, 2018). Al-Ghassani (2010) reported that the Omani government recognized the role player in accelerating the rate of economic growth of privatization, sparking a liberalization in its policies. The government also encouraged men and women to be part of the economic growth process of the Sultanate “Vision 2020” which emphasizes small and medium enterprises’ industrial development (Faghih & Zali, 2018).
At a national level, the Omani government has taken action to promote entrepreneurial education. This is achieved by various means, including studies, expenditure, curriculum creation, teacher training and cooperation with Non-Government Organizations (NGOs) (Faghih & Zali, 2018). Different pilot projects have been introduced, along with national, regional or global programs for supporting entrepreneurship and training, particularly for learners, young people in general and those without employment (Al-Ghassani, 2010).

Entrepreneurship Education mainly aims to provide students with the expertise, abilities and attitudes necessary to effectively create and run their own new companies, as well as using resources to develop themselves and the whole nation. Entrepreneurship and entrepreneurial training are becoming increasingly important in Oman, as demonstrated by the Technical Vocational Education and Training (TVET) procedures carried out by the Ministry of Manpower and Colleges of Technology to provide the expertise and abilities needed by Oman (Matriano & Suguku, 2015).

Khan and AL-Moharby (2007) showed that there are already a number of entrepreneurial training initiatives in Oman, but they are certainly limited. Higher education institutes such as Sultan Qaboos University provide entrepreneurial education for business undergraduates and MBA students undergoing entrepreneurship training. The Oman Research Council (TRC) conducted a study which examined the necessary functions and policies that could lead the country’s academic institutions towards playing a major role in entrepreneurial learning in 2013 (Al-Harthi, 2017). Entrepreneurship and entrepreneurial education in higher
education institutions have been improved in Oman to reduce chronic unemployment and excessive import-dependency (Faghih & Zali, 2018).

Al-Shanfari (2012) argued that as with most countries, Oman, through education and training for current and future entrepreneurs, provides priority to promoting entrepreneurship. Its business diversification is essential. The primary exports of Oman are oil-based, and oil still represents the backbone of the economy – approximately 80% of the total government revenue. Such reserves will have run dry in less than 20 years, so the country is obliged to take advantage of the benefits of entrepreneurship (Faghih & Zali, 2018).

The Oman 2020 twenty-five-year vision (1996–2020) is a future economic growth plan that focuses on small and medium-sized enterprises growth. Programs in the country have been created and adopted as part of the initiative to boost entrepreneurial training development (Matriano & Suguku, 2015). Many initiatives have been introduced nationally to promote autonomous alternatives for young individuals. The effective SANAD program throughout Oman supports the launch of young entrepreneurs by providing loans and knowledge for graduates. It began in October 2001 under the Ministry of Manpower with the intent of promoting and supporting the growth of small companies in Oman (Faghih & Zali, 2018).

Through the processes of training, rehabilitation, financing and technical and administrative follow-up, the program promotes individual projects for those ready to engage in self-employment. Unemployed young people are the target of this program. The SANAD Incubators Program assists young entrepreneurs in starting
up their own businesses by providing financial and technical assistance. (Faghih & Zali, 2018).

Khan and AL-Moharby (2007) stated that such young entrepreneurs are anticipated to build up their own companies in the global business arena with a head start. In each province and region, the government has created SANAD offices that support the beneficiary technically and administratively (Faghih & Zali, 2018). Oman Development Bank encourages youth entrepreneurship through flexible lending and decreasing bureaucracy. A loan of 5,000 Omani rial (approximately 13,000 dollars) is granted as a loan under the SANAD programme. After approval, ODB disburses the credit quantity and recovers the quantity in accordance with the rules of the fund. The loan payment period is seven years, one year of which commences on the deadline of the loan. In order to cover administration expenses, the fund carries an interest rate of 2% per annum (UNEVOC, 2019; Central Bank of Oman 2015). Knowledge of Business (KAB) is yet another initiative from the Omani government under the auspices of the International Labour Organization (ILO) to improve the leadership training of entrepreneurs to enhance their entrepreneurial attitudes (Matriano & Suguku, 2015).

The program 'Intilaaqah' is a component of LiveWIRE, the Shell Group’s global initiative. It enables young entrepreneurs to begin their own companies by providing consultation and consulting services, and has trained over 4000 entrepreneurs from the beginning to 2015 (Matriano & Suguku, 2015). As the board of directors of Injaz Oman contains major businesses in Oman, Injaz Oman
has powerful connections to and support from the sector. In cooperation with the Ministry of Manpower, the BSC (Business Simulation Classes) program is financed by the private sector (UNEVOC, 2019).

A corporate incubator, outside academic programs, has been established by the National Business Centre (NBC), and the Knowledge Oasis Muscat (KOM), which were both established and located in the same place by the Omani Public Establishment for Industrial Estate (PEIE). The NBC provides assistance and training to Omani entrepreneurs through the provision of office space, company equipment and corporate leadership (Al-Harthi, 2017).

Based on the above, Al-Shanfari (2012) concluded that many initiatives have been developed in Oman, aiming at encouraging, supporting and preparing young Omanis for success in a global economy. There are thus expectations of a rise in the percentage of young Omanis ready to begin entrepreneurial businesses. Nevertheless, many of the young still hesitate to begin their companies despite all these initiatives and incentives. For example, less than two out of 100 young Omanis began a new enterprise in 2003 compared with 1 out of 10 in the United States (Faghih & Zali, 2018).

Segumpan and Zahari (2012) investigated Omani university students’ attitudes towards entrepreneurship, and found that male learners are more entrepreneurial in orientation than their female counterparts. Further, their study indicated that Omani students carried favourable attitudes towards entrepreneurship (Faghih & Zali, 2018). In the same way, Varghese and Hassan (2012) evaluated Sohar
University students' entrepreneurial intentions. They found that a large number of students intended to participate in entrepreneurial enterprises after completion of college (Faghih & Zali, 2018).

Both Omani studies show favourable attitudes of learners towards entrepreneurial activities. This could be due to the impact of several government and NGO programs to promote youth entrepreneurship in Oman (Faghih & Zali, 2018). Christina et al. (2014) highlighted that that there are certain prevalent features in the Omani region of Dhofar among micro-enterprises:

- The investment needed to run the company is between 5,000 and 7,000 OMR.
- All these companies are recorded on behalf of an Omani sponsor, while many of them are operated by an expatriate worker. Many of these companies have been fully operated by a foreign entrepreneur, starting with the basic infrastructure of equipment and supply purchases, to the registration and even the entity license.
- The role of the company’s sponsor is restricted to the extent to which he collects his monthly charges from 20 OMR (Omani Riyal) to 50 OMR, which is decided based on the store spaces and/or the number to be endorsed by the sponsor Omani.
- The sponsor is physically accessible for registering at the Ministry of Industry and Commerce and all the cash he expects is his monthly rent.
- Some businessmen have a stamp paper agreement on the money-sharing but most of the time it is only an oral agreement between the Omani sponsor
and the expatriate worker. Also, none of these agreements are lawful for the simple reason that they are never registered with the Municipality charged by the businessman.

- Many of these micro-companies are now evolving into fully independent foreign-investor companies, as the government of Oman has given these investors new regulations and support through a new business organisation called the LLC or the Limited Liability Company.

3.5. Challenges of Entrepreneurship in SMEs in Oman

Chavali (2016) revealed that many of the barriers that women entrepreneurs face includes a lack of management skills, risk-taking, company support awareness/access, confidence (believing in one's capacity) and absence of vocational education. Chavali (2016) added that lack of assistance from families; lack of governmental support; discrimination against women and men; finding the correct contacts for enterprises; balancing family and work-life; access to start-up finance; lack of language abilities; and a lack of training are among the main barriers facing women entrepreneurs in Oman. The study of Bulushi & Bagum (2017) concluded that Omani SMEs face a range of challenges affecting SME development policies. Table 3.7 indicates these challenges.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial management constraints</td>
<td>Lack of accessibility of loans for company development and growth</td>
</tr>
<tr>
<td></td>
<td>Oman's small and medium-sized businesses (SMEs) receive short-term financing, which is difficult for small and medium-sized businesses to repay.</td>
</tr>
<tr>
<td></td>
<td>Small and medium enterprises owners are not thinking about growing their enterprises.</td>
</tr>
<tr>
<td></td>
<td>Owners of small and medium-sized enterprises are not able to handle their working capital to the required extent, which is the main obstacle</td>
</tr>
</tbody>
</table>
to them to making decisions for company development, and all this is due to the absence of leadership abilities in the management of working capital. Oman's SMEs do not receive loans at low financial costs that restrict them from developing business growth strategies.

<table>
<thead>
<tr>
<th>Marketing management constraints</th>
<th>Lack of information about marketing and marketing budget</th>
</tr>
</thead>
<tbody>
<tr>
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<td>SMEs always have low working capital, where they cannot invest heavily in marketing operations. This generates an important obstacle to their development and extension.</td>
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<td>SMEs do not know marketing activities because they prevent this activity through fear of wasting money through incorrect marketing activities.</td>
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<td>SMEs have no research and development expertise to define new markets and new products for expansion and development.</td>
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<td>The absence of study limits them in successfully developing their company.</td>
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<th>Operations management constraints</th>
<th>Omani SMEs do not have sufficient ability to employ and sustain a long-term partnership with the best supplier.</th>
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<td>The lack of supplier managerial skills limits the growth of SMEs.</td>
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<td>Omani SMEs face environmental challenges in the form of economic, legal and technological problems which directly affect companies, but SMEs are more sensitive to these modifications.</td>
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<th>Human resource management constraints</th>
<th>Oman's SMEs have no official structure in their organization because staff fail to comply as required with business rules and regulations.</th>
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<td>Informal employee-owner relations are always a problem and impact company productivity.</td>
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<td>Oman's SMEs believe that they are unable to employ the best employees in their business and this has a direct effect on workers' and businesses' productivity.</td>
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In Oman, entrepreneurship has also been confronted with other challenges, as well as past challenges, such as elevated interest rates, an absence of business plans, an absence of securities, the owners' capacities, investment climate, marketing, laws and regulations (Bilal & Al Mqbali, 2015). In this vein, AlMaimani and Johari (2015) indicated the many challenges facing entrepreneurship in SMEs in Oman, including:

- In the field of policy design and execution, many public authorities are in charge of coordinating.
- Business development programs are managed and monitored by governmental organizations engaged in assessments and approvals of loans.
• The function of the private sector is lacking in policy design and monitoring, and it contributes less efficiently. For instance, the function of the Omani Chamber of Commerce and Industry is small and is restricted to the advisory process.

• The regulatory and administrative climates disclosed by entrepreneurs is not business-friendly, as registration and licensing processes for businesses take some time. The demands and processes are cumbersome and have too much documentation and authority to give clearance.

• Two primary fields can be identified at the regulatory level: labour law and the judiciary. Also, competition is not controlled appropriately on the supply side because oligopoly dominates conduct and procedures.

• The absence of qualified and skilled citizens, since the business environment isn’t appealing to skilled people. This is also true because many people are unwilling to work in the private sector due to pay gaps and other incentives compared with the government sector.

Additionally, the high price of manufacturing, lack of understanding on the part of owners, unfair competition, high capital costs, absence of qualified, experienced employees and managers, as well as customer difficulty and laws and administrative burdens represent challenges for entrepreneurship in SMEs in Oman (Barwani et al., 2014).

3.6. Summary

This chapter has presented entrepreneurship in SMEs in developing countries, highlighting the important role played by entrepreneurship in their economies of
creating many jobs and developing many enterprises. It introduced the overall image of small and medium enterprises in Oman and its importance. The chapter also indicated the governmental programs for encouraging and supporting developing new enterprises. Next, it highlighted entrepreneurship in Oman. The chapter ended by outlining the challenges of entrepreneurship in SMEs in Oman.

It is conventional wisdom that SMEs play a very significant role in the economic growth of a country. Therefore, this stream of research has received considerable attention over the period of a few decades, especially in the context of developing economies. A number of studies have been conducted in different settings with different methodologies to address a variety of research questions related to entrepreneurship and development of a diversified industrial base. Like other resource-dependent countries, the Sultanate of Oman is also striving to establish a sound SME sector to diversify its economy and to generate employment for its ever-increasing population.

SME classification has been the subject of considerable debate. There is no universal definition of an SME; instead, various parameters such as number of employees, sales and assets value are used for SME classification. The extant literature shows that different countries use different classification schemes for the SME sector. In the Sultanate of Oman, the Ministry of Commerce and Industry uses a compound formula to classify SMEs which is based on the number of employees and sales volume. Oman’s government assigns considerable importance to the SME sector and make efforts to develop it into a vibrant and sound sector. To this end, the government has started a number of programs to finance and support new businesses such as Riyada, the Al Raffd Fund, Sanad,
Sharakh, PACI and the National Business Centre. In addition to public sector support, the private sector also plays an important role in developing and promoting entrepreneurship, such as Intallaqah, INJAZ Oman and Zubair Small Enterprises Centre. Despite all these efforts, the contribution of the SME sector to the GDP is relatively low, and further important steps need to be taken to develop a fully functioning SME sector. There are number of challenges faced by Oman’s SME sector, including behavioural issues of entrepreneurs, governance and regulations, lack of financial and operational support and cultural issues. One of the most debated indigenous issues related to entrepreneurship in Oman is women participation, due to the lack of training and development.
Chapter 4: Developing the Conceptual Framework

4.1. Introduction

This chapter outlines the conceptual framework, which underpins the present study. It starts by introducing the Resource-Based Theory (RBT). It then discusses the conceptual framework and the impact of organizational culture on entrepreneurial orientation. Additionally, it displays the impact of entrepreneurial orientation on firm performance. The mediating roles of organizational learning and innovation in the relationship between entrepreneurial orientation and firm performance are then outlined.

4.2. Resource Based Theory (RBT)

Edith Penrose (1959) developed the Resource Based Theory (RBT), which examines the role of resources in the growth or empowerment of company hierarchies. She describes "the physical items which a company purchases, rents or provides for its own use and the general population are enlisted according to conditions which make them an appropriate part of the company" (Penrose, 1959). Over 50 years, researchers have based their research on Penrose's bits of knowledge, and with the development of the RBT, analysts have concentrated on "vital assets" (Amit & Schoemaker, 1993). Vital properties are those properties of (1) value that can be used for expanding customer confidence or decreasing costs; (2) are so rare that rivals do not approach the same or basically the same resources to dispute the appreciation; and (3) are difficult to replace and further imitate, so that the organization can stay ahead of its rivals (Barney, 1991). The focus of the RBT is on improving company efficiency in a way that a company
has vital assets (Barney et al., 2001), and the present meta-inquiry confirms the validation of that statement (Lonial & Carter, 2015).

At first, the RBT grew in the field of management. Nag et al. (2007) have developed the concept of vital administration. They indicated that core management handles the significant anticipated and emerging operations of general supervisors, including the use of resources to enhance business efficiency by owners. "Therefore, essential administration directs managers and corporation manages persons or groups of individuals acting freely or as a function of a company structure, forming or reinventing new associations" (Sharma & Chrisman, 1999; Kellermanns et al., 2016).

The RBT examines the suitability of the assets of companies to achieve strong efficiency with their characteristics. RBT's most distinctive achievement is the plan of criteria that must be met to ensure the company's continued advancement of assets (Kellermanns et al., 2016). Jay B. Barney (1991), who declared that a company's assets preserved its upper hand, produced one of the most convincing texts of essential administration in history. He explained that a company is said to be upper-hand when it updates a value scheme which any current or potential competitor executes at the same moment, and when those various companies are unable to copy the benefits of that scheme.

Early RBT work identified that the company is a complex asset-based structure (Kellermanns et al., 2016; Lonial & Carter, 2015; Martin & Javalgi, 2016). In any case, RBT has become the world's main view for key management assessments
(Peteraf, 1993), and having an RBT-business interface is a minimal requirement in providing a "research setting" for observational work (e.g., Chandler and Hanks, 1994). Because most asset-based studies fail to account for the thinking of the company, RBT fails to a considerable extent to include imagination and entrepreneurial demonstration (Barney et al., 2001).

A company's asset perspective suggests that corporate performance is clearer against corporate assets in comparison to industry structure (Martin & Javalgi, 2016). Assets in nature may be singular or meaningless. Capital and access to capital are incorporated in substantial investments. Little companies from a resource-based perspective have had hardly any investigation (Lonial & Carter, 2015), yet small companies are likely to rely heavily on ownership/managers' assets. This applies in particular to women businessmen, as they tend to be in management or retail, and 85% of these organizations have no assets other than those belonging to their managers (Adler, 1999).

The company's resource basis perspective (RBV) has proven to be one of the most commonly used hypotheses in management studies. The central premise of RBV is that the company produces upper hands, thanks to its outstanding asset structure (Lonial & Carter, 2015). In keeping with the end objective of economic superiority, Barney (1991) identified four main characteristics that an asset must have: it must be important, unusual, incomplete and non-replaceable. Most RBV scientists use this concept to describe and operate advanced developments. Ultimately, companies should be able to support preferences taken from prevailing assets. The mainstream comes from the assets and capabilities of an organization
that integrate the management capabilities, organizational processes and data, and information (Barney, 1991).

In a concentrated environment, companies transmit their physical, human and organizational assets to take a favourable market position (Day & Wensley, 1988). If assets and capacity are profitable for customers and are unusual and difficult to copy, they offer a sustainable advantage, which increases company performance (Wiklund & Shepherd, 2003; Lonial & Carter, 2015; Martin & Javalgi, 2016). Hence, hierarchical introductions can give a manageable position and create unrivalled results on the part of an organization.

Analysts have noticed the importance and the relative links between EO, MO, and LO and the organizational outcomes (Martin & Javalgi, 2016). In turn, organizations with these organizational capabilities are performing in the market at an unusual level. In the current market companies, the continuing cycle of maintenance and improvement of the businesses is up against exceptional operating conditions. In this environment, companies should effectively utilize important, noteworthy and difficult to duplicate substantial and immaterial resources (Day & Wensley, 1988).

According to the resource-based view, Barney et al. (2001) propose that organizations use their physical, human and hierarchical resources to build their reach over lengthy distances, and so perform with unrivalled success (Wiklund & Shepherd, 2003; Martin & Javalgi, 2016). Elusive hierarchical resources such as entrepreneurial orientation, organizational learning capability (OLC) and
innovation performance (IP), for example, are difficult for competitors to copy, so these favourable, feasible circumstances are prompt (Martin et al., 2009; Martin & Javalgi, 2016; Alegre & Chiva, 2013).

Entrepreneurial orientation, hierarchical learning, and development performance are management capacities for entrepreneurs and, in this context, assets that speed up and improve business performance. From an asset-based view, how a company is sorted by assets can enhance the beneficial relationship between assets and business results when consolidated with company assets (Barney, 1995). The researcher believes that EO, corporate learning and innovation lead an association towards a company and can upgrade other assets.

4.3. The Conceptual Framework

The conceptual framework at the centre of this research has some significance to the work of Alegre and Chiva (2013) and Brettel et al. (2015). Wiklund (1999) studied the long term results of the EO-Performance relationship which basically generated from questions raised in the previous studies of Dess et al. (1997) which suggested it may have normative bias. The study by Dess’s suggested that the (EO) is good in the long term and companies must take initiative to consideration it, despite heavy financial implications. Although there were difference of opinions regarding the cost issues and sometimes it suggested that in the long run it might not be financial beneficial, but at the same time Wiklund studies found that EO has long run implications on the performance in a positive way.
4.3.1. The Influence of Organizational Culture on EO

Kuratko et al. (2005) revealed that some factors influence the size and depth of business activities which are carried out within the company to pursue corporate entrepreneurship, and these variables are identified as an antecedent for the corporate entrepreneurial activities. Yildiz (2014) stated that organizational culture is one of these antecedents. Organizational culture can be regarded as a major driver of entrepreneurial business (Okta et al., 2015).

Additionally, Brettel et al. (2015); Fayolle et al. (2010); Aloulou & Fayolle (2005) and Shepherd et al. (2010) assumed that organizational culture has a key role to play in promoting entrepreneurial orientation (EO). Several previous studies have examined the connection between different cultural and entrepreneurial elements in different contexts. The capacity of an organization to create and retain an entrepreneurial posture depends on its culture (Yildiz, 2014).

The study of Karinda and Maski (2016) highlighted that organizational culture and entrepreneurial characteristics have a significant and positive impact on company performance, and the results indicated by Shihab et al. (2011) confirmed the positive effect of organizational culture on entrepreneurial orientation (EO). Also, organizational effectiveness can be predicted positively by organizational culture and corporate entrepreneurship (Seifari & Amoozadeh, 2014). Organizational culture is seen as a significant strategic resource that can gain a strong competitive advantage by encouraging and maintaining entrepreneurial operations (Brettel et al., 2015). Organizational culture is an integral antecedent for entrepreneurial decision-making in corporate entrepreneurship studies. It is
also presented in a context in which EO can or cannot develop (Cherchem, 2017). Yildiz (2014) added that the corporate entrepreneurship innovativeness dimension is influenced significantly and positively by organizational culture factors.

Furthermore, the results of Abdullah et al.’s (2017) study suggested that organizational culture significantly and positively affects entrepreneurship characteristics, and that organizational culture significantly and positively influences competitive advantage of small- and medium-catering enterprises in Makassar. The organizational culture has also sustainably contributed to entrepreneurship (O’Neill et al., 2009). In the same way, organizational culture has a significant impact on entrepreneurial operations of companies, which is considerably more influential in family enterprises (Zahra et al., 2004; Basso et al., 2008; Brettel et al., 2015). Further, organizational culture is related to entrepreneurial potential (Mueller & Thomas, 2001).

Brettel et al. (2015) stated that entrepreneurial orientation is the entrepreneurial decisions and actions based on the culture and value system of an organization. Organizational culture is divided into four types: group cultures, development culture, hierarchical culture and rational culture. Eddleston and Kellermanns (2007) and Cherchem (2017) showed that group culture is marked by altruism which promotes loyalty and a commitment to the strategy of collaboration and to family prosperity over the long-term. Therefore, group culture is linked to an entrepreneurship group strategy, because it accentuates cooperation on
entrepreneurial decision-making and favours rewarding people who share their expertise (Cherchem, 2017).

In a like manner, Engelen et al. (2014) pointed out that entrepreneurial orientation can be enhanced greatly through group culture. Brettel et al. (2015) added that group culture affects significantly and positively entrepreneurial orientation. Further, Cherchem (2017) indicated that group culture encourages more entrepreneurial orientation when only one generation is involved. Based on the above, the researcher posits that:

**Hypothesis 1: A high degree of group culture will be positively associated with the EO.**

Moreover, Engelen et al. (2014) clarified that the hierarchical culture's values and features have a negative impact on the behavioural EO degree within the organization. Engelen et al. (2014) added that a hierarchical organizational culture represents a barrier to entrepreneurial orientation. Cherchem (2017) demonstrated that hierarchical culture promotes greater EO levels when several generations are engaged at the same time. Brettel et al. (2015) confirmed this result, as they depicted that hierarchical culture has a negative impact on EO. Thus, the following hypothesis is proposed:

**Hypothesis 2: A high degree of hierarchical culture will be negatively associated with the EO.**

Further, dynamism, efficiency, innovation and a strategic emphasis on development express a rational culture's strategic focus on creativity,
entrepreneurship, and risk-taking, which has a positive effect on the level of entrepreneurial orientation (Engelen et al., 2014). Brettel et al. (2015) argued that rational culture significantly and positively affects entrepreneurial orientation. Engelen et al. (2014) concluded that rational culture is the most effective dimension of organizational culture in enhancing entrepreneurial orientation. Accordingly, the following hypothesis is proposed:

**Hypothesis 3: A high degree of rational culture will be positively associated with the EO.**

In addition, developmental culture, with a focus on manufacturing, goal-oriented management, job performance and competitiveness is anticipated to be positively linked to the entrepreneurial orientation of an organization (Engelen et al., 2014). A developmental culture encourages entrepreneurial values and attitudes and can boost the entrepreneurialism of the culture or the organization (Shepherd et al., 2010). Further, Brettel et al. (2015) reported that entrepreneurial orientation was strongly and positively influenced by developmental culture. Hence, the researcher suggests the following hypothesis:

**Hypothesis 4: A high degree of developmental culture will be positively associated with the EO.**

**4.3.2. The Influence of EO on Firm Performance**

Radipere (2014) demonstrated in theoretical debates and empirical study the significance of entrepreneurial orientation and its impact on company results. Theoretically, entrepreneurial orientation has a beneficial impact on performance, because companies with this strategic position have advantages and can benefit from emerging opportunities.
Although there is extensive literature linking EO to company performance, just a few studies have examined its antecedents (Rodrigo-Alarcón et al., 2018). In recent literature, the connection between EO and company performance has become the principal topic of concern (Arshad et al., 2014). Chow (2006) believed that entrepreneurship businesses and EO are generally considered as facilitators for business performance and development.

Several previous studies (e.g. Covin & Slevin, 1991; Zahra & Covin, 1995; 2014; Lechner & Gudmundsson, 2014; Emőke–Szidónia, 2015; Kurtulmuş & Warner, 2015; Mason et al., 2015; Ghazikalaye & Roshani, 2016; Ranasinghe et al., 2019) have discussed the relationship between entrepreneurial orientation and firm performance in general.

Moreover, Lumpkin and Dess (2001) proved that proactiveness and competitive aggressiveness are two dimensions of entrepreneurial orientation which positively affect firm performance. Entrepreneurial orientation enhances the success and growth of SMEs (Mahmood & Hanafi, 2013). The results of Radipere (2014); Wiklund & Shepherd (2005); and Davidkov and Yordanova’s (2017) studies proved that entrepreneurial orientation has a strong and positive impact on firm performance.

Arshad et al. (2014) also claimed that the results of their study indicated there was a medium to the small relationship between entrepreneurial orientation and firm performance. The results also depicted that only four dimensions (innovativeness,
proactiveness, risk-taking and competitive aggressiveness) have an effect on firm performance, while autonomy has no effect. Equally important, the significant and positive relationship between entrepreneurial orientation and performance has been found in the studies of Wiklund (1999); Wales et al. (2013); Keh et al. (2007); Lomberg et al. (2017); Kurtulmuş and Warner (2015) and Farja et al. (2016).

All five dimensions of entrepreneurial orientation have different impacts on a small firm's performance (Farja et al., 2016; Hughes & Morgan, 2007). Kurtulmuş & Warner (2015) admitted that a correlation between entrepreneurial orientation and perceived financial performance of SMEs was found, but it is not effective. Furthermore, some studies highlighted the positive relationship between innovativeness as a dimension of entrepreneurial orientation and firm performance (e.g. Hult et al., 2004).

Musthofa et al. (2017) noted that innovative entrepreneurial orientation and risk-taking entrepreneurial orientation significantly affect organization performance, while a proactive EO has no a significant influence on organization performance. Additionally, there is a significant and positive relationship between entrepreneurial orientation and firm performance, and the strongest relationship is between entrepreneurial posture and firm performance, according to Covin & Slevin (1991). Entrepreneurial orientation is also a resource and capacity which provides the company with sustainable competitive advantages and superior performance (Mahmood & Hanafi, 2013).

Likewise, Stam and Elfring (2008) suggested that there is a correlation between entrepreneurial orientation and new venture performance. Rezaei and Ortt's
(2018) study indicated several results. Firstly, there is a positive relationship between innovativeness and R&D performance. Secondly, there is a positive relationship between proactiveness and marketing and sales performance. Thirdly, there is a negative relationship between risk-taking and production performance. Overall firm performance, including return on equity, assets, and sales was strongly affected by entrepreneurial orientation (Mahmood & Hanafi, 2013).

Similarly, based on information from Swedish small enterprises, the findings of Wiklund’s (1999) study showed that entrepreneurial orientation correlates positively with performance. Keh et al. (2007) revealed that entrepreneurial orientation plays an important role in acquiring and using marketing information, and firm performance was directly and positively affected by entrepreneurial orientation.

In addition, Wiklund and Shepherd (2005) and Davidkov and Yordanova (2017) commented that risk-taking, proactiveness, and innovativeness correlate strongly with higher firm performance. Where there is a relationship between autonomy as a dimension of entrepreneurial orientation and firm performance (Awang et al., 2009). Contrary to the various studies that have indicated a positive relationship and influence of entrepreneurial orientation (EO) and performance, there are also studies which have depicted that entrepreneurial orientation does not positively affect results in firm performance (e.g. Morgan & Strong, 2003; Casillas et al., 2010; Hughes and Morgan, 2007; Pratono & Mahmood, 2015). Runyan et al. (2008) proved that there is no significant correlation between entrepreneurial orientation and firm performance. Finally, Casillas et al. (2010) mentioned that
there is no relationship between competitive aggressiveness and a firm’s performance. Hence the following hypothesis is formulated:

**Hypothesis 5: EO has a positive impact on firm performance.**

### 4.3.3. The Mediating Role of Organizational Learning between EO and Firm Performance

Regarding the impact of entrepreneurial orientation (EO) on organizational learning (LO), a theoretical review of EO and learning orientation has created a theoretical model and hypotheses (Vasconcelos et al., 2016). The study of the relationship between strategic directions like EO and LO are seen as one of the evolving concerns in recent times for small and large companies (Hussain et al., 2018; Aloulou & Fayolle, 2005).

One of the most important contributions of OE can relate to organizational learning and enhancing company capabilities, such as market evaluation or development of new products (Alegre & Chiva, 2013). Sirén et al. (2017) argued that entrepreneurship orientation has different impacts on the individual components of strategic learning. In order to enable higher learning and innovation, entrepreneurial orientation still requires organizational learning systems and activities (Huang & Wang, 2011).

Hakala (2011) depicted that a thorough overview of the existing strategic orientation literature revealed that LO was paid less attention in comparison with EO, especially in the context of small and medium enterprises. The recent EO literature describes strategic learning (SL) as a cognitive capacity that enables
companies to disintegrate and renew their key capacities from their present strategic paths (Green et al., 2008). Moreover, EO strongly affects learning and expands learning scope by encouraging companies to challenge the status quo and to make it more flexible and alter the way they work (Altinay et al., 2016). Entrepreneurial orientation is considered a significant element that enhances learning, innovation and firm performance (Li et al., 2009; Vasconcelos et al., 2016).

In the same way, Altinay et al. (2016) highlighted that there is a positive correlation between organizational learning capability and entrepreneurial orientation in small enterprises. Wang (2008) also indicated the positive effect of entrepreneurial orientation on organizational learning capability. Several studies confirmed the significant and positive relationship between entrepreneurial orientation and organizational learning (e.g. Liu et al., 2002; Covin & Lumpkin, Real et al., 2014; Wang, 2008; Nofal & Obeidat, 2019). Dada & Fogg (2016) revealed that organizational learning in small and medium enterprises (SMEs) was significantly and positively affected by entrepreneurial orientation.

In addition, on the basis of an assessment from current literature, prior research on the entrepreneurial orientation-organizational learning relationship can be grouped into three main points of view. The first examines the effect of entrepreneurial orientation on improving organizations' capacity to achieve a learning orientation (Liu et al., 2002). These studies are aimed at helping entrepreneurial orientation to form an organization's culture and capacities in order to encourage repeated opportunities for future learning. The second view
looks at the particular processes by which entrepreneurial orientation affects learning (Li et al., 2009). This view tends to concentrate primarily on the development and mixture of knowledge. The third view evaluates EO's role in encouraging the implementation of learning practices (Bierly et al., 2009). This view focuses mainly on how EO delivers positive results for the company based on knowledge (Kreiser, 2011).

Kalmuk and Acar (2015) demonstrated that organizational learning helps an organization play an active role in intelligence generation, information dissemination and in adapting to market shifts so that organizational culture can turn into an advanced market and entrepreneurial culture. For organizational learning, EO generates a healthy internal workplace. The more entrepreneurial a company is, the more learning-oriented it is, the more it promotes values that encourage commitment to learning, openness and a shared vision (Wang, 2008).

Organizational learning and learning values like teamwork or openness can also be enhanced through entrepreneurial orientation (Alegre & Chiva, 2013). For a group of major companies, the relationship between entrepreneurial orientation and organizational learning is more intense than for SMEs (Real et al., 2014). Zahra et al. (2006) stated that entrepreneurial orientation could promote the management of the organizational learning process and capacity. The impact of entrepreneurial orientation on the learning process offers a mechanism for creating new knowledge (Zahra et al., 1999).
Further, there is evidence that entrepreneurial orientation significantly and positively affects strategic learning capability and the three dimensions of strategic learning capability (structural organicity, market responsiveness and planned strategy formation mode) (Kreiser, 2011). Finally, Zheng and Cui (2007) depicted that there is a significant and positive relationship between entrepreneurial orientation and double-loop learning. As for the impact of organizational learning on firm performance, as several studies mentioned (e.g. Frank et al., 2012; Hakala, 2013; Kalmuk & Acar, 2015; Zainul et al., 2016), there is a positive relationship between organizational learning and overall firm performance.

Hakala and Kohtamaki (2011) and Wales et al. (2013) reported that even though the assessment of learning in recent years has become an increasingly valuable field of research, there is a lack of research examining the role of organizational learning in the survival and development of tiny enterprises. Ussahawanitchakit (2008); Leitch et al. (1996); Ratna et al. (2014); Chen et al. (2018); Yilmaz et al. (2005); Hussein et al. (2014); Dekoulou and Trivellas (2015) and Kim et al. (2017) indicated that business performance is directly affected by learning orientation. In a like manner, Kalmuk and Acar (2015) and Jiménez-Jiménez and Sanz-Valle (2011) asserted that organizational learning provides a basis for achieving a sustainable competitive advantage and is an influential factor in increasing business performance.

Organizational learning is related to the process of creating, spreading, sharing, storing, and using of knowledge by a company (Bell et al., 2002), which enhance the ability of a firm to develop its financial performance (Zuo et al., 2019). Also,
the study of Ellinger et al. (2002) revealed that there is a significant and positive relationship between learning organization and the financial performance of the firm. Liu et al. (2002) and Zainul et al. (2016) added that organizational learning and learning orientation are influential factors in enhancing innovation and firm performance.

Organizational learning leads to innovation and further improves organizational efficiency, particularly in knowledge-intensive sectors, individual and organizational learning (Chen et al., 2018). Hussein et al. (2016) clarified that there is a positive relationship between organizational learning and firm performance, and the strongest relationship is between continuous learning and firm performance, while collaboration and team learning were found to be highly correlated with firm innovation.

For organizations, it is essential to share knowledge and to learn. Managers should promote knowledge management and organizational learning in their organizations and provide appropriate considerations on policies and programs to support them to improve firm efficiency (Law & Ngai, 2008). Organizational innovation can be facilitated through organizational learning as a source of sustainable competitive advantage and continuous innovation for positive performance (Chen et al., 2018). Prieto and Revilla (2006) stated that organizations with more learning ability can recognize changing customer requirements and want to improve their organizational efficiency better than their competitors.
Equally important, organizational learning promotes the transfer and development of knowledge and innovation to enhance company efficiency (Zainul et al., 2016). Song and Kolb (2013) claimed that several organizational variables such as job satisfaction, quality, innovation management, creativity, technology, and performance could be affected positively by organizational learning. Organizational learning intention significantly and positively affects innovation capability (Gomes & Wojahn, 2017), which in turn positively affects firm performance (Chen et al., 2018).

Jiménez-Jiménez and Sanz-Valle (2011) and Kalmuk and Acar (2015) demonstrated that organizational learning capability (OLC) is the organizational and managerial features that enhance the ability of an organization for learning, and it is a circular factor for improving organizational performance to sustain their competitive advantages. According to Çömlek et al. (2012), system orientation and knowledge acquisition-utilization orientation as two dimensions of organizational learning capacity have a positive impact on innovative performance. Çömlek et al. (2012) added that OLC has a major role to play in enhancing business marketing, innovation, quality, financing, productivity or customer performance. Jiménez-Jiménez & Sanz-Valle (2011) also illustrated that there is a positive relationship between organizational learning and innovation, and firm performance, as well as innovation, are affected positively through organizational learning.

Organizational learning capability has a significant and positive impact on firm performance (Fang et al., 2011) and technological innovation activities (Teo &

In the study of Zuo et al. (2019), entrepreneurial orientation has a positive effect on organizational learning in small and medium enterprises. The results of the same study depicted the significant moderating role of business engagement in the relationship between entrepreneurial orientation and organizational learning. Organizational learning is also affected by entrepreneurship directly, and it plays a mediating role in the relationship between entrepreneurship and knowledge management (Dess et al., 2003; Song & Kolb, 2013).

The results of Zhang & Zhang’s (2012) study showed the positive impact of entrepreneurial orientation (EO) on firm performance, as well as indicating the significant moderating role of network capabilities on the relationship between EO and firm performance. According to the study of Wiklund & Shepherd (2003), entrepreneurial orientation plays an important moderating role in the relationship between knowledge-based resources and organizational performance.
In the same way, entrepreneurial orientation positively affects firm performance through the mediating role of the knowledge creation process (Li et al., 2009). Pratono and Mahmood (2015) concluded that environmental turbulence plays a mediating role in the relation between entrepreneurial orientation and firm performance. Further, Zhang & Zhang (2012) and Rezaei & Ortt (2018) admitted that network orientation plays a mediating role in the relationship between entrepreneurial orientation and firm performance.

The study of Hussain et al. (2018) concluded that there is a significant and positive relationship between learning organization and firm performance. This study also indicated that entrepreneurial orientation plays a moderating role in the relationship between learning organization and firm performance. Similarly, Suliyanto & Rahab (2012) found that organizational learning cannot directly develop the organization’s performance but it must pass through other mediator variables between organizational learning and firm performance, as stated by Hult et al. (2004). They found that learning orientation occurs at a corporate culture level and could possibly be mediated by variables that have a direct effect on firm performance. Therefore, it is necessary to identify the potential mediators in such relationships. Hence, the theoretical discussion could lead to the development of the following hypothesis:

**Hypothesis 6:** Organizational learning capability acts as a mediating variable between EO and firm performance.
4.3.4. The Mediating Role of Innovative Performance Between EO and Firm Performance

As for the impact of EO on innovative performance, the relationship between EO and innovation efficiency has been explored in many researches (Musawa & Ahmad, 2019). Ireland and Webb (2007) claimed that entrepreneurship businesses positively influence products, services, procedures and managerial innovations. Ireland et al. (2005) added that there is a strong relationship between entrepreneurship and innovation, and entrepreneurship enhances proactiveness and readiness for risk-taking and innovation. So, entrepreneurship may be one of the antecedents of innovation performance (Alegre & Chiva, 2013). Musawa & Ahmad (2019) concluded that entrepreneurial orientation is an important tool in creating and developing innovative performance.

Khaleel et al. (2017); Huang and Wang (2011); Alzuod & Isa (2017); Tang et al. (2015); Pratono et al. (2013); Wang & Huang (2011); Madhoushi et al. (2011); Lee et al. (2001); and Madhoushi et al (2011) assumed that entrepreneurial orientation correlates positively with innovative performance in SMEs.

Furthermore, Rattanawong & Suwanno (2014); Kraus (2013); Nasution et al. (2011); Wang & Juan (2016); Omerzel (2016); Rattanawong & Suwanno (2014) and Monteagudo & Martinez (2015) revealed that entrepreneurial orientation is considered to be an influential element in developing and enhancing innovation in services, and it can help in recognizing innovative abilities between organizations (Al Mamun & Fazal, 2018). Entrepreneurial orientation can help innovative SMEs
to develop and introduce new products and technologies and can achieve outstanding performance (Wiklund & Shepherd, 2005).

In addition, Majtán & Šinský (2016); Gunawan (2015); Avlonitis & Salavou (2007); and Pérez-Luño et al. (2011) argued that EO capabilities are essential for company innovation because EO is linked with a method of experimenting with new activities, a desire to take advantage of new products, new markets and new options and a company's propensity for risky enterprises. The essence of entrepreneurial orientation is affirmed by the readiness of an organization to innovate within the workplace (Baker & Sinkula, 2009; Huang & Wang, 2011). Entrepreneurial scholars have long researched EO techniques, practices and, decision-making in terms of how companies perform innovatively (Majtán & Šinský, 2016).

Furthermore, several previous studies confirmed the positive impact of entrepreneurial orientation on innovative performance (e.g. Lumpkin & Dess, 2001; Hughes & Morgan, 2007; Ireland et al., 2005; Ireland & Webb, 2007; Wiklund & Shepered, 2005; Mohammad et al., 2018; Solikahan & Mohammad, 2019; and Zehir et al., 2015).

Rauch and Frese (2009) depicted that EO is viewed as a strategic mechanism that helps enterprises gain competitive advantage, and it is commonly recognized as a driving force for innovative performance (Avlonitis & Salavou, 2007; Kollmann & Stöckmann, 2012). Bucktowar et al. (2015) suggested that there is a positive relationship between entrepreneurial orientation and radical and incremental
innovation. Also, Nasution et al. (2011) concluded that risk-taking, proactiveness, and autonomy are the three dimensions of entrepreneurial orientation that are the influential drivers for innovation. The studies of Fadda (2018) clarified that innovativeness, proactiveness and risk-taking are the three dimensions of entrepreneurial orientation that strongly affect creating innovation, and entrepreneurial activity greatly enhances the innovative behaviour.

Hence, EO can be considered an important resource, with value and inimitability characteristics to improve the performance of the product innovation (Tang et al., 2015). Khaleel et al. (2017) highlighted that entrepreneurial orientation correlates positively with the innovative performance of small food firms. SMEs are more likely to use the principles of entrepreneurship to exploit chances, implement innovative strategies to attract clients and improve profitability (Omar et al., 2016; Mason et al., 2015). Musawa & Ahmad (2018) showed that entrepreneurial orientation plays an important role in enhancing marketing innovative performance in SMEs.

The study of Tang et al. (2015) pointed out that there is a significant and positive relationship between entrepreneurial orientation and product innovation performance in firms applying strategic human resources management practices. Entrepreneurship is asserted to be linked to innovative behaviour and strategic orientation for profitability and development (Omar et al., 2016). Further, EO helps develop new firms and encourages them towards innovative performance (Harms et al., 2009; Lisboa et al., 2010; Wang & Huang, 2011).
Similarly, Zehir et al. (2015) indicated that a differentiation strategy plays an important mediating role in the relationship between entrepreneurship orientation and innovation performance. Al Mamun & Fazal (2018) also revealed that creativity, innovativeness and autonomy positively affect micro-enterprise performance through the mediating role of entrepreneurial competencies.

Musawa and Ahmad (2019) stated that entrepreneurial orientation correlates positively to innovative performance in small and medium enterprises through the mediating role of the competitive environment. In the same way, Alzuod and Isa (2017) proved that entrepreneurial orientation plays a partial mediation role in the relationship between intellectual capital (human capital and customer capital) and innovative performance.

Madhoushi et al. (2011) argued that through the mediating role of knowledge management, entrepreneurial orientation influences the innovation performance of SMEs. Mahmood & Hanafi (2013) pointed out that entrepreneurial orientation significantly influences performance through a partial mediating role of competitive advantage. Esteve et al. (2009) found EO to have a mediating role between top management teams and organizational performance.

Regarding the effect of innovative performance on firm performance, Hernández-Perlines et al. (2019); Tajeddini et al. (2017); Hassan et al. (2013); Rosenbusch et al. (2011); Rosli & Sidek (2013); Mattsson & Orfila-Sintes (2014); Ottenbacher (2007); Hertog et al. (2011); and Jiménez-Jiménez & Sanz-Valle’s (2011) showed
that there is a positive relationship between high levels of innovation and high levels of performance.

Mohammad et al. (2018) indicated that innovation capability has a strong effect on firm performance. Enhancing innovation within organizations helps in achieving better economic performance in terms of market and financial performance (Ndemezo et al., 2018; Marques et al., 2011).

The strategy of innovation identifies financial performance better than other aspects of organizational performance (Şişmanoğlu & Akçali, 2016). Organizations can improve their financial performance through an organizational innovation strategy. Innovation strategy contributes to better client performance, inner business processes and learning and developing performance (Karabulut, 2015). Gelmez et al. (2017) proved that there is a strong relationship between innovative performance and the overall performance within the organization.

Additionally, Gelmez et al. (2017) and Hassan et al. (2013) believed that innovation has a significant and positive impact on firm performance. Jansen et al. (2006) demonstrated that innovation adoption is a vital factor for organizational change in order to improve performance, particularly in the light of a lack of resources, changing business environment, high competitiveness as well as changes in customer needs in terms of better quality.

High level of innovative performance leads to a high level of innovation activities, high level or innovation process, and a high level of marketing innovation practices
Rajapathirana and Hui (2018) suggested that the effective management of organizational innovative abilities helps in creating a high level of performance that benefits management.

The results of Atalay et al. (2013) clarified that product and process innovation as two dimensions of technological innovation significantly and positively affect firm performance, while there is not a significant correlation between organizational and marketing innovation as two dimensions of nontechnological innovation and firm performance. In addition, Sadikoglu and Zehir (2010) illustrated that total quality management affects firm performance through a partial mediating role of employee performance and innovative performance. Hence the following hypothesis is developed:

**Hypothesis 7: Innovation performance acts as a mediating variable between EO and firm performance.**

In this vein, Figure 4.1 indicates the proposed study framework.

![Proposed research framework](image)

**Figure 4.1: Proposed research framework**
Based on the above, this study differs from previous studies as follows:

Previous studies dealt with the relationships and direct impact between organizational culture and entrepreneurial orientation, such as Yildiz (2014); Okta et al. (2015); and Brettel et al. (2015). There are also previous studies that have discussed the relationship between the entrepreneurial orientation and firm performance, such as Lechner and Gudmundsson (2014); Jantunen et al. (2005); Radipere (2014); Filser and Eggers (2014); Emőke–Szidónia (2015); Mason et al. (2015); Ranasinghe et al. (2019); Ghazikalaye and Roshani (2016); Radipere (2014); Arzubiaga et al. (2018); Davidkov and Yordanova (2017); Keh et al. (2007); Lomberg et al. (2017); Farja et al. (2016); and Musthofa et al. (2017).

Additionally, there are studies that have examined the relationship between entrepreneurial orientation and organizational learning, such as Hakala (2011); Covin and Lumpkin (2011); Aloulou and Fayolle (2005); Kalmuk and Acar (2015); Green et al. (2008); Fernandes and Santos (2008); Bierly et al. (2009); Zahra et al. (2006); Vasconcelos et al. (2016); Hussain et al. (2018); Alegre and Chiva (2013); Sirén et al. (2017); Huang and Wang (2011); Altinay et al. (2016); Real et al. (2014); Wang (2008); Nofal and Obeidat (2019); Dada and Fogg (2016); and Kreiser (2011).

Furthermore, there are studies that have investigated the impact of entrepreneurial orientation on innovative performance, such as Ireland and Webb (2007); Wang and Huang (2011); Omerzel (2016); Kraus (2013); Musawa & Ahmad (2019); Alegre and Chiva (2013); and Khaleel et al. (2017).
Other studies exist which explore the relationship between organizational learning and firm performance, such as Jiménez and Cegarra-Navarro (2007); Wales et al. (2013); Ussahawanitchakit (2008); Hakala and Kohtamaki (2011); Hakala (2013); Altinay et al. (2016); Leitch et al. (1996); Ratna et al. (2014); Chen et al. (2018); Yilmaz et al. (2005); Hussein et al. (2014); Dekoulou and Trivellas (2015); Kim et al. (2017); Kalmuk and Acar (2015); Bell et al. (2002); Zuo et al. (2019); Teo and Wang (2005); Zainul et al. (2016) and Chen et al. (2018).

There are studies indicating the relationship between innovative performance and firm performance, such as Rosenbusch et al. (2011); Hertog et al. (2011); Mattsson & Orfila-Sintes (2014); Rosli & Sidek (2013); Jiménez-Jiménez & Sanz-Valle’s (2011); Marques at al. (2011); Ottenbacher (2007); Fernandez-Mesa et al. (2012); Mohammad et al. (2018); Ndemezo et al. (2018); Şişmanoğlu & Akçali (2016); Gelmez et al. (2017); Hassan et al. (2013); Tuan et al. (2016); Rajapathirana & Hui (2018); Atalay et al. (2013) and Sadikoglu & Zehir (2010).

According to the researcher's knowledge, there are no previous studies that have dealt with the mediating role of organizational learning in the relationship between entrepreneurial orientation and firm performance. Moreover, there are no previous studies discussing the mediating role of innovative performance in the relationship between entrepreneurial orientation and firm performance. Finally, according to the researcher's knowledge, there are no previous studies examining the impact of these variables in the context of small and medium enterprises (SMEs) in the Sultanate of Oman.
Therefore, this study eliminates this gap through the following:

- Studying the impact of organizational culture on the entrepreneurial orientation in the context of small and medium enterprises.
- Explaining the effect of entrepreneurial orientation on the performance of small and medium enterprises.
- Highlighting the impact of organizational learning on SME performance.
- Evaluating the influence of innovative performance on the performance of small and medium enterprises.
- Identifying the impact of entrepreneurial orientation on organizational learning in the context of small and medium enterprises.
- Examining the impact of entrepreneurial orientation on innovative performance in the context of small and medium enterprises.
- Investigating the mediating role of organizational learning in the relationship between entrepreneurial orientation and firm performance in the context of small and medium enterprises.
- Exploring the mediating role of innovative performance in the relationship between entrepreneurial orientation and firm performance in the context of small and medium enterprises.
- Applying this study in the context of small and medium enterprises in the Sultanate of Oman.

4.4. Summary

Resource-based theory is one of the most celebrated theories in the field of management, proposed by Edith Penrose in 1959. It explains the importance of
resources for the organization to outperform in the competitive environment. This theory paved the way for many influential research studies and it is discussed and debated from diverse perspectives. Resource-based theory is the theoretical justification of this study in that it underpins why entrepreneurial orientation, hierarchical learning, and development performance as valuable resources are relevant to a firm’s performance. Entrepreneurial orientation and firm performance has been investigated from diverse perspectives; however, this study has built a conceptual framework on the pioneering work of Alegre and Chiva (2013) and Brettel et al. (2015).

The extant literature shows that culture plays an important role in shaping entrepreneurial orientation. Many studies have been conducted to investigate the relationship between culture and entrepreneurial orientation. However, it is also important to investigate the impact of culture on entrepreneurial orientation by disaggregating the culture into various forms of culture. Disaggregation of cultural factors will yield better understanding about how it affects EO. It is hypothesized that group culture, rational culture and development culture positively affect OE, whereas hierarchical culture affects it negatively. The assumed positive relationship signifies that a higher degree of group culture and rational culture and development culture results in a higher order of OE. A negative relationship signifies that a higher degree of hierarchical culture impedes the firm’s performance. It is also posited that organizational learning and innovative performance mediate the positive relationship between OE and a firm’s performance. The relationship between EO and a firm’s performance has been tested by many scholars. However, the mediating role of organizational learning
and innovative performance has not been investigated before. This study will fill this gap in the literature by investigating how organizational learning and innovative performance influence the relationship between OE and a firm’s performance. Moreover, this is a pioneer study in the context of the Sultanate of Oman’s SME sector.

Thus, the chapter outlined the Resource Based Theory (RBT) and its principles then introduced the relationships between the study's variables. It highlighted the impact of organizational culture on EO and clarified the effect of EO on firm performance, organizational learning and innovation performance. Also, it detailed the impact of organizational learning on firm performance and the impact of innovation performance on firm performance. Finally, it analysed the mediating roles of organizational learning and innovation performance in the relationship between entrepreneurial orientation and firm performance.
Chapter 5: Research Methodology and Methods

5.1. Introduction

This chapter discusses the methodology of the study and research design. It introduces research philosophies, research approach, data sources, and research design. Additionally, it details the use of the survey method, sampling design, questionnaire development, questionnaire design and measurement, ethical considerations in the current study and Partial Least Squares.

Thus, within the current chapter, an ontological research philosophy is documented, and the reason for adopting this philosophy is discussed. The positivism paradigm and its related definitions are also explained, followed by the reasons for selecting the research paradigm and suitable design. In addition, the techniques of the data collection employed and the application of the study strategy are covered. Furthermore, the current chapter discusses the quantitative phase of the data collection, through which a description of the methods used in implementing the quantitative phase in this study are provided. The argumentation begins with the justification behind selecting a sample survey method. This chapter then proceeds to demonstrate the rational behind choosing the survey population.

The study adopts a self-administered survey for data collection, as detailed. Moreover, the research focuses on the survey design, the pilot study applied to test different issues in the study strategy and the study’s latent variables. The scientific reasons for employing the structural equation modelling (SEM)
technique, the rational for using partial least squares (PLS) and the main advantages of using WarpPLS 6.0 software are justified. In addition, details of the instruments’ description and their related indicators are provided. The research’s data preparation technique employed to verify the data accuracy is discussed, followed by the data preparation, which includes dealing with missing values and outlier issues. Then, the confirmation factor analysis for PLS-SEM is met.

5.2. Research Philosophies

Different viewpoints are needed for expressing proposals which represents the nature of authenticity and understanding of the research (Bryman, 2012). Easterby-Smith et al. (2012) highlighted that ontology and epistemology are the core logical opinions amongst most of the philosophers, and the significant philosophies which reinforce the research. Research basically leads us to the different conclusions and helps us finding out the best options to deal with specific issues.

5.2.1 Ontology

The concept of Ontology suggests the nature of reality based on set of assumptions and this basically helps us in defining the object of research. Therefore, the ontology helps us in determining you approach to the outcomes of the research project. (Saunders et al., 2015). Easterby-Smith et al. (2012) added that ontology is often seen as the beginning of philosophical debate as it refers to the scholars’ assumptions about how the realm exists (Saunders et al., 2015). In this context, subjectivism and objectivism are the two main different school of thought in the concept of Ontology (Saunders et al., 2015).
5.2.1.1. **Objectivism**

Gelo et al. (2008) indicated that objectivism posits that reality is independent of an individual's thoughts or consciousness. In this view, the objectivism focuses on the assumptions based on natural sciences and indirectly talks about reality. Easterby-Smith et al. (2012) stated that the stance advocates that social reality is not affected by social factors. Therefore, objectivists consider that reality must be recognized as it is accepted by all others (Cronje & Burger, 2006). In the same way individual opinions on an issue is objective and should not be taken as any kind of bias (Bryman & Bell, 2003).

5.2.1.2. **Subjectivism**

While the Subjectivism assumes the aspect of humanities and enforces that social reality originates from perception and resulting actions. (Saunders et al., 2007). Therefore, it supports people's experiences and observation as social reality (Bryman & Bell, 2003). Therefore, subjectivism is related to social constructivism, which denotes that it is essential to discover the meanings that have been formed by people that have experienced a social process (Creswell, 2009). For instance, when people practice a social process, they form their personal subjective opinion of the meaning, hence in order to recognize values, the scholars need to expose his person's view (Saunders et al., 2007). Consequently, reality is formed over social experience and is always revised (Easterby-Smith et al., 2012).
5.2.2. Epistemology

Ritchie et al. (2013) defined epistemology which basically deals with the assumptions about the knowledge and which should be based on valid and just aspect and it is how communication with others can be done. However, the concept of Ontology pacts with the reality of the assumptions of the issue concerned. Whereas, the concept of epistemology talks about the methods a researcher uses to find the nature of reality. (Easterby-Smith et al., 2012).

5.2.3. Research Philosophy Adapted for the Present Study

The present research's ontological position is basic authenticity, which stipulates that the truth must be seen incompletely and probabilistically, as the human variable blocks its full understanding (Guba & Lincoln, 1994; Howell, 2013). The examination proposes a designed structure with a specific end goal to inspect the circuitous influence of entrepreneurial orientation on firm performance with regards to SMEs in Oman. This reality is apparently outside to the analyst and in this way can be recognizable and unbiasedly measured. In this case, it is trustworthy that this reality cannot be completely comprehended empathetically as the investigation perceives the impact of the representatives and chiefs' observations, mentalities and perspectives. Such an impact originates from the utilization of Likert scales, which depend on employees and managers' judgments and beliefs.

Regarding the epistemological position, the belief is that the researcher and what is inquired about are not thoroughly separate, as the researcher had officially built up prior learning from the survey; however, the objectivity of the examination can
even now be sought after with the quantitative estimation of the investigation's factors. The findings of this examination are replicable, but can be frail in an alternate setting.

Moving to research design and methods adopted in this study, it is crucial to point out that this research adopts a positivist philosophy, which is more appropriate for the nature of the study, as it looks at measuring the indirect effect of EO on firm performance through organizational learning and innovation performance mediators. The research hypotheses can be empirically tested.

5.3. Research Approach

Two research approaches exist: deductive and inductive. The first is basically comprised of testing a hypothesis through developing and testing a theory (Bryman, 2003; Saunders et al., 2012). The deductive approach uses theories to clarify the causal relationships among factors, using quantitative techniques (Saunders et al., 2012). It considers theory as the source of knowledge, and deduction proceeds from theory to empirical examination (Eriksson & Kovalainen, 2008).

Additionally, the inductive approach is relevant when constructing a hypothesis. The analyst starts by gathering information about the motivation behind understanding the idea of the examined phenomenon (Saunders et al., 2012). In this view, business specialists contend that hypothesis comes about because of observational research and not the other way around. As such, the analysts begin from exact proof to create hypothetical explorations (Eriksson & Kovalainen, 2008).
In general, it is contended that the inductive approach examines why a phenomenon is occurring while the deductive approach tends to clarify what is going on (Saunders et al., 2012). In sociologies, the deductive approach is the most well-known approach to building up the hypothetical learning base (Eriksson & Kovalainen, 2008).

The employed approach in this investigation is derivation, in view of the ontological and epistemological rationalities embraced in Section 4.2, which was a realist metaphysics and positivist epistemology.

5.4. Data Sources
The two forms of data collection that are widely used by researches are primary and secondary sources. The issue of the methodology of choosing the methods of data collection to be used for the study basically depends on the fact that what are the aims and objectives of the research under consideration. Both are important for the research and gives different understanding and viewpoints about the subject (Saunders et al., 2015). The decision of the type of data to be used for the study enhances the results and strengthens the validity and reliability of the findings which is necessary for establishing the credibility of the research undertaken (Malhotra et al., 2012). The following sections analyze the use of primary and secondary data sources in research.
5.4.1. **Primary Data**

Malhotra et al., (2012), states that the Primary data is the original data which the researcher has collected for the particular topic under study and which may not have been utilized for any other study before (Bryman & Bell, 2015). According to Saunders et al., 2015; Bryman & Bell, 2015, Primary data generally relates to a certain topic in the researcher thought and this data could be quantitative or qualitative in its nature. For instance, in the case of the current study, the primary data collection is needed because no such previous data exist which help to tackle this problem.

5.4.2. **Secondary Data**

Secondary data is also sometimes referred to as desk data. This data has been collected by some other researcher which can be both quantitative and qualitative (Malhotra et al., 2012). Saunders et al. (2015) for instance categorized the secondary data as written or published data such as any government reports, journals, media content, newspapers, surveys, and other statistical publication of various organizations. With-in secondary data there exist different classification; raw data which goes under some kind of changes to suit the needs of the users or processed data which has summarising or got a form of selection (Saunders et al., 2015; Bradley, 2013).

Secondary data has certain advantages over primary data, as it is easier to accesses and readily available, with no processing needed and also without any monetary expense. It helps the researcher by saving valuable time which may go
in collecting data and processing it (Malhotra et al., 2012; Saunders et al., 2015). At the same time, some disadvantages are also associated with secondary data such as the issue of reliability, its relevance and the purpose of the collection and the methodology adopted for collection and processing (Malhotra et al., 2012).

Due to these issues sometimes the data collected might not be able to fully address the aims and objectives of the research question in hand, however, it could address part of these aims and objectives (Saunders et al., 2015). Also, the method of data collection and the factors considered may not be relevant to other research studies (Malhotra et al., 2012; Saunders et al., 2015). Both the primary and secondary data sources have their own advantages and disadvantages, and both are vital for the scholar to figure out the problem of his study and in line with the aim and objectives of the research and also helpful in augmenting the results and increase the validity of the findings (Malhotra et al., 2012). In this study, a questionnaire has been used to collect the data which restricts the study to use only primary sources.

5.5. Research Design

An exploration design can be seen as a structure for a leading examination (Malhotra et al., 2012). It is drawn out to determine the subtle elements of the strategies vital for getting data to structure or take care of the examination issue (Malhotra et al., 2012). The decision of research design can rely upon whether the examination means to test, find or develop hypotheses (Gill & Johnson, 2010). Creswell (2009) has referred to three plans specifically; qualitative, quantitative,
and mixed methods. In this case, the researcher contended that the previously mentioned approaches are integral instead of opposing, as what is known as a subjective report regularly implies an investigation that is concentrating more on the qualitative approach than on the quantitative one, and vice versa.

The present examination received a quantitative method to meet the positivist worldview. Comprehensively, this approach is utilized to test the hypothetical model developed in the examination. This is in accordance with the positivism that enables the researcher to measure the contemplated phenomenon yet by considering the person's judgments and states of mind (through observation-based Likert questions). In this regard, the positivist approach keeps up the preface of hypothesis check. It is accounted for that the positivist worldview favours the quantitative approach (Clark, 1998; Giddings & Grant, 2006). Likewise, utilizing a quantitative research design is the most appropriate approach that would help generalizable findings over the population (Eriksson & Kovalainen, 2008).

5.6. The Use of Survey Method

As Collis and Hussey (2013) mentioned, a few techniques exist for collecting study data in a positivist report; these are postal polls, web surveys, phone meetings and personal interviews. In this investigation, the study data will be collected through postal and web surveys. These surveys will be analysed through Partial Least Squares Structural Equation Modelling (PLS-SEM) to support or reject the relationships measured in the investigation. Hult et al. (2009) and Hair et al. (2011)
recognized that the utilization of PLS-SEM has been significantly expanding in business research to examine cause-effect relationships amongst factors.

The researchers found that, in the main, 20 business journals – more than 100 published articles – were conducted utilizing the PLS-SEM. Hair et al. (2011) clarified that the PLS-SEM offers the specialist extensive adaptability as far as model determinations are concerned, and is satisfactory for both hypothesis building and testing. As indicated by Bryman (2012), structured and self-administered surveys enable the specialist to get practically identical and institutionalized reactions so that the distinctions in these reactions could be ascribed to important varieties as opposed to contrasts in the method for posing the inquiries (additionally pertinent to the positivist approach).

The current study aims to investigate the indirect association between EO and firm performance. The survey is more relevant to the adopted deductive approach and enables a quantitative data analysis. Furthermore, the collected data can be employed to propose a possible understanding of the study’s variables’ relationships.

5.7. Sampling Design

For any study data collection is a vital exercise but its difficult task also and sometimes it is not possible to collect data from each and every participant of the population. Therefore, the sampling technique is used which allows the researcher to collect data from a selected population that represents the larger population.
There is a five-step sequential method for sampling design like target population, sample frame, method, unit and sample size (Saunders et al., 2012).

Marshall (1996) added that the selection of the study sample is one of the most significant measures for any research project, as the study of whole populations is rarely practical, effective or ethical. All quantitative sample approaches aim to draw an example representing the population in order to generalize the results of the sample to the population.

5.7.1. Target Population
The important task is to identify the target population which is well-defined as the core group and has some common characteristics relevant to the researcher’s study (Creswell, 2012). Further, it is suggested that the study should identify what group to study, which is therefore termed as a target population. Hence, the target population will choose so that it represents the whole population. In the present study, the managers of the SMEs in Oman are the target population which is in line with the objective of the study. Managers are the key informants of any organization as they have reliable knowledge about the entire enterprise (Zahra & Covin, 1993; Snow & Hrebiniak, 1980).

5.7.2. Sample Frame
The study identifies the samples within the population that can be sampled or used as a sample (Wrenn et al., 2002). The reason to the sampling design is to identify the targets applicants from the population to be analyzed for the purpose of the research.
The sample frame is normally grabbed through the Oman yellow pages, telephone directory, the Internet, government or any other trusted sources have been used to choose the target population of the research. The critical aspect of any sampling design is sample frame which ultimately affects the cost as well as the quality of the undertaken survey. This study’s sample frame focuses on the Managers of Omani SME’s.

5.7.3. Sample Technique

The sampling technique is used to analyze the target sample and choose the unit of analysis and the approaches to gain data using the survey (Saunders et al., 2012). The sampling technique is also useful to minimize the errors that may occur during the process of sampling (Davis, 2004). The sampling technique is of two types: the probability, and non-probability sampling. In probability sampling, each individual of the population has an equal possibility of being selected in the target sample. There are four main types of probability sampling: simple random sampling, systematic sampling, stratified sampling and cluster sampling (Wrenn et al., 2002).

In the case of a non-probability sampling technique, the selection of the target population does not have equal chances of being selected (Wrenn et al., 2002). Therefore, the probability sampling is different where participants should be selected using random sampling selection, which differentiates it from non-probability sampling.
According to Saunders et al. (2012), there are four main types of non-probability sampling: convenience sampling, snowball sampling, judgment sampling and quota sampling.

Selecting the sampling technique, according to Hair et al. (2006), depends on the nature of the study, availability of samples and time and financial resources. The current study, probability sampling was selected for certain reasons. First, it helps in finding the sample which represents the population and due to this the accuracy is better than the non-probability sampling and the target population is available to be participants in the survey to be conducted. Second, all individuals are available to participate in the survey. Finally, this study has also limitation in time and budget (Hair et al, 2006).

Regarding the technique used, the logic behind the selection of Simple random sampling is that it will represent the complete target population, being the Omani SMEs. The heterogeneous nature of this population makes this technique more suitable option for the current study (Saunders et al., 2012).

5.7.4. Sampling Unit

Dodge (2006, p. 360) defined the sampling unit as “one of the subjects into which aggregate is divided, or regarded as divided for the purpose of sampling, each unit being regarded as an individual when the selection is made”. Therefore, it is very important to classify the sampling unit in order to achieve the best possible results for the highlighted problem (Davis, 2004). The sampling unit. Hence, the sampling unit is an individual unit such as the manager of SME here in the study. Matthews and Scott (1995) and Becherer and Maurer (1997) all suggested that the manager
has a great influence on the culture and entrepreneurial behavior of the business organization as being the leader it greatly affects the overall organization.

Aloulou and Fayolle (2005), stated that the Entrepreneurial Orientation of any organization is replicated in the organisations' inclination if it promotes entrepreneurial behavior. Also, as highlighted by (Lyon et al., 2000), any SMEs Strategic orientation is due to its manager’s orientation towards it, due to this reason the sample chosen the current study are the managers/Owners of SMEs in the sultanate of Oman. These applicants are the right target as they are fully aware of the most strategic decisions in there firm and have a comprehensive information about the business organization and whether the company is interested in EO implantation in their respective firms as stated by Otero-Neira et al. (2009). Therefore, the current study sample units have been chosen as the SME managers.

A survey is used to collect data for theoretical model validity purposes. The sample frame will be obtained from the Omani Chamber of Industry and Commerce. The surveyed SMEs will be randomly selected from the sample frame. The sample frame consists of 4,703 SMEs. The survey is conducted between October and December 2017; the respondents are contacted via email and asked to participate in an online survey.

5.7.5. Sample Size

Determining the appropriate sample size is very important in any empirical research, as inadequate sample size or even too large a size may affect the quality
of the research (Bartlett et al., 2001). Many researchers, however, suggested that the larger the sample size, the less probable it is to produce errors in generalizing findings to the population; and a larger size is more likely to be normally distributed when analysing the resulting data (Saunders et al., 2012).

Keeping in view the reliability and accuracy of the study the sample size selection criterion has been carefully worked out to choose the appropriate sample size, margins for error and confidence level. Akis et al. (1996) recommended a formula that has been extensively used as a guide to determine the sample size, particularly in a case of survey researches in the past (Pappas, 2016).

5.8. Questionnaire Development

A questionnaire has been designed, managed and sent via an e-mail by the researcher for the participants as an appropriate data collection tool for this study due to its low cost ability to collect a large amount of units and greater convenience to participants when describing their attitudes, beliefs and behaviours toward the investigated subject. Two types of questions can be used in the questionnaire: open-ended and closed-ended questions (Ditsa, 2004). This research employed close-ended, self-administrated questionnaire, as the target participants are managers of SMEs in Oman, usually considered busy and hard to interview in person.

Moreover, the data obtained from the closed-ended can be easily transferred and keyed in on a computer software, as they are much easier to tabulate, code and analyse.
Finally, researchers have stated that this types of questions i.e. closed-ended questions have high level of flexibility and easier in terms of obtaining sensitive answers in comparison to open-ended questions (Ditsa, 2004; Wrenn et al., 2002). The developed questionnaire was designed and adapted based on the literature review and the proposed conceptual framework of this study. It consists of two main parts. The first part includes general information of participants. The questions here revolve around participants’ occupation, the level of the respondents’ education and respondents’ experience. The second part concerns the respondents’ perceptions of the variables of the study.

### 5.9. Questionnaire Design and Measurement

Researchers such as Wrenn et al. (2002), have made it clear that measuring and designing the questionnaire is a significant process. Thus, the scholar must be careful when creating, writing and reviewing the questionnaire items, content and layout; and for standardization purposes pilot testing must be done to confirm that the developed questionnaire will discover precisely what is meant to be measured, the format is suitable and the participants would easily understand the topic and questions (Wrenn et al., 2002).

Saunders et al. (2012) stated that a well-designed questionnaire leads to an increase in the response rate and the legitimacy and unwavering quality of the gathered data. Since the examination utilizes effectively approved scales, endeavours in this area have concentrated on making significant changes in accordance with the setting and dialect in which the specialists were working. The measures utilized as part of this examination are given in Table 5.1. Every one of
the factors was designed in Likert 1–5 estimation scales format, in which the scope of response was 1 (unequivocally deviate) to 5 (emphatically concur).

To quantify organizational culture, the researcher utilized the CVM following an operationalization by Livari and Huisman (2007). To catch the entrepreneurial orientation of the associations, he utilized the three dimensions of EO. It is comprised of the three dimensions taken from Wang (2008): "ingenuity," "proactiveness," and "risk-taking." (Table 5.1).

In light of the OLC idea embraced in the researcher's hypothetical review, he chose the estimation instrument created by Chiva and Alegre (2009). It is a 14-item, five-point scale that incorporates four distinct dimensions that align with past research: experimentation, cooperation with the outer condition, exchange and participative basic leadership.

The researcher measured innovation performance using three unique measurements common in past research: product and process innovation and innovative productivity. These measurements have been broadly examined (Brown & Eisenhardt 1995).

The Organization for Economic Co-operation and Development [OECD] (2005) Oslo Manual gives a nitty-gritty estimation scale surveying the financial targets of products and process innovation; this research proposes employing this scale for measuring product and process innovation adequacy. This scale was developed by the OECD to give some sound drivers to development contemplation,
accomplishing more noteworthy homogeneity and likeness among development ideas.

These days, numerous advancement overviews utilize this broadly approved scale (Alegre et al., 2006; INE, 2008). Development effectiveness is the third dimension considered for measuring innovation performance. It is generally acknowledged that innovation effectiveness can be dictated by the cost and the time required in the development (Chiesa et al., 1996).

To quantify firm performance, the researcher requested general managers to rate their association’s performance throughout the 3 most recent years, and these were compared and contrasted with contending firms. The researcher utilized Venkatraman’s (1989) business performance scale. In particular, managers were asked to score their association’s development and productivity on a scale of 1 to 5, with 1 showing that the firm was among the lowest-scoring firms and 5 showing it to be among the highest scoring.
**Table 5.1: Items Measurements**

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Culture</td>
<td>The company I work in is a very personal place. It is like an</td>
<td>(Livari &amp; Huisman, 2007)</td>
</tr>
<tr>
<td>Orientation</td>
<td>extended family, and people seem to share a lot of themselves.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The glue that holds the company I work in together is loyalty and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tradition. Commitment to the company I work in runs high.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The company I work in emphasizes human resources. High morale is</td>
<td></td>
</tr>
<tr>
<td></td>
<td>important.</td>
<td></td>
</tr>
<tr>
<td>Developmental</td>
<td>The company I work in is a very dynamic and entrepreneurial place.</td>
<td>(Livari &amp; Huisman, 2007)</td>
</tr>
<tr>
<td>Culture Orientation</td>
<td>People are willing to stick their necks out and take risks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The glue that holds the company I work in together is commitment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to innovation and development. There is an emphasis on being first</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with products and services.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The company I work in emphasizes growth through acquiring new</td>
<td></td>
</tr>
<tr>
<td></td>
<td>resources. Acquiring new products/services to meet new challenges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>is important.</td>
<td></td>
</tr>
<tr>
<td>Hierarchical</td>
<td>The company I work in is a very formal and structured place.</td>
<td>(Livari &amp; Huisman, 2007)</td>
</tr>
<tr>
<td>Culture</td>
<td>People pay attention to bureaucratic procedures to get things done.</td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>The glue that holds the company I work in together is formal rules</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and policies. Following rules and maintaining a smooth-running</td>
<td></td>
</tr>
<tr>
<td></td>
<td>institution are important.</td>
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</tr>
<tr>
<td></td>
<td>The company I work in emphasizes permanence and stability.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Efficient, smooth operations are important.</td>
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</tr>
<tr>
<td>Rational Culture</td>
<td>The company I work in is a very production-oriented place.</td>
<td>(Livari &amp; Huisman, 2007)</td>
</tr>
<tr>
<td>Orientation</td>
<td>People are concerned with getting the job done and are not very</td>
<td></td>
</tr>
<tr>
<td></td>
<td>personally involved.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The glue that holds the company I work in together is an emphasis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>on tasks and goal accomplishment. A production and achievement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>orientation is commonly shared.</td>
<td></td>
</tr>
</tbody>
</table>
The company I work in emphasizes competitive actions, outcomes, and achievement. Accomplishing measurable goals is important.

**Innovativeness**

The company highly values innovative product lines. When it comes to problem solving, the company values imaginative and new solutions more than solutions that rely on conventional wisdom. The company considers itself innovative.  

**(Wang, 2008)**

**Risk taking**

The company motivates individuals to take risks with innovative ideas. The company values new strategies/plans even if we are not certain that they will always work. The company involves itself in new dangerous investments (e.g. new staff, services, debt, stock options) to inspire future growth.

**(Wang, 2008)**

**Proactiveness**

Our company is constantly looking for new business opportunities. Our company exerts marketing efforts to lead consumers, rather than reply to them. Our company works to discover new productions or markets to target.

**(Wang, 2008)**

**Organizational Learning Capability**

Our staff here deliver support and reinforcement when offering novel ideas. Our staff inventiveness often receives a favourable reaction here so individuals feel stimulated to create new ideas. It is a shared effort of all employees to accumulate, evoke and report information about what is happening outside the company.

Our company has a system and actions for obtaining, collecting and distributing information from outside the company.

**(Chiva & Alegre, 2009).**
Our staff are motivated to cooperate with the different stakeholders: participants, consumers, technological establishments, colleges, providers, etc.

Our staff are motivated to connect. Open communication is a freedom inside my work environment.

Management in this company frequently engage employees in essential decisions.

Strategies are considerably affected by the view of our staff. Our employees feel engaged in key firm decisions.

Innovation performance

<table>
<thead>
<tr>
<th>Innovation performance</th>
<th>(Chiva &amp; Alegre, 2009; Brown &amp; Eisenhardt, 1995; Chiesa et al., 1996)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange of goods being shipped out.</td>
<td></td>
</tr>
<tr>
<td>Product range is extended inside the key product area through novel products.</td>
<td></td>
</tr>
<tr>
<td>Extend the product range beyond the main product area.</td>
<td></td>
</tr>
<tr>
<td>Improve production flexibility.</td>
<td></td>
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<tr>
<td>Reduce output costs by reducing labour cost per unit.</td>
<td></td>
</tr>
<tr>
<td>Reduce output costs by reducing substantial consumption.</td>
<td></td>
</tr>
<tr>
<td>Reduce output costs by reducing the rate of rejection.</td>
<td></td>
</tr>
<tr>
<td>Average development time of innovation project.</td>
<td></td>
</tr>
<tr>
<td>Average number of hours worked by the innovation project.</td>
<td></td>
</tr>
<tr>
<td>Average cost per innovative project.</td>
<td></td>
</tr>
</tbody>
</table>

Firm performance

<table>
<thead>
<tr>
<th>Firm performance</th>
<th>(Venkatraman, 1989)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing</td>
<td></td>
</tr>
<tr>
<td>Growth in sales</td>
<td></td>
</tr>
<tr>
<td>Market share</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
</tr>
</tbody>
</table>
Therefore, all items of the questionnaire were cautiously designed and reviewed in order to raise the response rate. A cover letter was included with the questionnaire; this described the aims and objectives of the thesis and provided communication information for both the scholar and the institution of higher education. The survey also clarified that all data and information of the company to be provided by members would be confidential and only employed for the purpose of this research. For example, the researcher made the following request to participants:

“Could you please consider the following measures to designate your views towards organizational culture, entrepreneurial orientation, organizational learning capability and innovation performance: Strongly Agree = 5(SA), 4= Agree (A), 3= Neutral (N), 2= Disagree (D) and 1= Strongly Disagree (SD).”

The second part of the questionnaire aimed to collect personal information about the SMEs’ participants. For example, the members engaged in the questionnaire were asked how many years of experience, gender, age group and finally their marital status (see Appendix One).

The five-point Likert scale applied in the current study was designed to test the exogenous factors for a number of reasons. Firstly, the scale is appropriate for gauging difference in attitudes and perceptions among persons (Sekaran, 2003). Secondly, this scale is the most common question format for obtaining opinion data (Saunders et al., 2012). Thirdly, it is also seen as an easy and fast way for participants to understand and respond to the question. Finally, answering the Likert scale is simply coded and achieved in various statistical methods (see Malhotra, 2010).
The questions in the survey were initially written in English, and the study was carried out in Oman, where the formal language is Arabic. It was therefore essential for the participants to understand the questions if they were to be answered accurately (Saunders et al., 2012). The researchers carefully followed the translation technique of surveys as proposed by Usunier (1998), cited in Saunders et al. (2012, pp. 383-5), who recommended that when translating the survey the author should pay attention to the following:

- **Glossary Meaning:** The exact meaning of individual words.
- **Idiomatic meaning:** A set of words that are natural to the original speaker and are not deductible from the meanings of participants' words.
- **Experiential Meaning:** The equivalent meanings of words and phrases for individuals in their daily experiences.
- **Grammar and Syntax:** Using language correctly, involving the ordering of words and sentences to generate well-formed paragraphs.

In addition, Usunier (1998) proposed a parallel translation method to guarantee an accurate translation of the survey wording. The translated survey was independently revised by two linguistic experts; both specialized in English to Arabic translation. This was followed by a comparison of the revised versions to guarantee the rigor and clarity of the translation equation, including syntax and rules. Comments and feedback were esteemed and updated into the final Arabic version.
According to Saunders et al. (2012), the questionnaire layout is a highly important part of increasing the number of respondents. Therefore, the layout of the questionnaire was set to facilitate and make the questions readability easier for the participants. In addition, having a questionnaire looks more eye-catching and used a coloured text would help and encourage the applicants to fill it in. Because a lengthy survey may adversely impact response rate, it was designed to take no more than twenty minutes to complete.

5.10. Pretesting Questionnaire

The questionnaire consisted of two sections associated with organizational culture types (group culture orientation (GCO), developmental culture orientation (DCO), hierarchical culture orientation (HCO), and rational culture orientation (RCO)), entrepreneurial orientation (innovativeness, risk-taking, and proactiveness), organizational learning capability, innovation performance, firm performance and respondents’ personal information.

There were 50 questions/items in total, 45 of which related to the study constructs. All items used in the questionnaire were created continuously and cautiously before the study was administered to the target sample through pre-testing. The final items/questions were conceptually re-examined during the pre-tests to enhance their content validity (Berghman, 2006). There were some modifications in the language, length of the indicators and order of the questions.

Saunders et al. (2009) stated that content validity is described as the extent to which the instruments items in a survey adequately cover investigative questions.
Hardesty and Bearden (2004) argued that the instruments items of the survey should be an appropriate sample of the construct's theoretical content domain. Simultaneously with the content validity, the questionnaire’s face validity was also evaluated. Face validity is the extent to which a measure represents what it is suggested to measure (Hardesty & Bearden, 2004).

At first, the survey questionnaire was given to 25 academic colleagues and managers of SMEs to determine both content and face validity. They were asked to evaluate if the questionnaire items were clear, understandable and logically introduced (face validity) and asked to indicate their opinions as to whether the 45 indicators were representative of the study latent variables (content validity). They were specifically asked about the following: How long it took to finish the survey; clarity of instructions; which, if any, indicators were ambiguous; which, if any, were difficult to answer questions; whether there were significant omissions from their perspective; and whether the questionnaire layout was clear and attractive (Saunders et al., 2009).

Subsequently, both Arabic and English-speaking colleagues were asked to assess the extent to which indicators represented the conceptual definitions of structures. Arabic SME managers and Arabic and English colleagues confirmed that the questions were clear, easily understandable, came in a logical order and defined the research constructs.

Harkness (2003) depicted that the most popular reason for translating survey questionnaires is to provide a tool that is not available in the necessary language
in the field. For this study, the questionnaire had to be translated because it was targeted at respondents from Oman. Hence, the researcher wanted to develop a questionnaire in Arabic to provide the respondents with clarity. The questionnaire was sent to two Omani firms for translation (one had a Master's in legal interpretation and a BSc in leadership, while the other had a BA in the English Language). The processes outlined above were designed to ensure face and content validity were repeated after it had been translated into Arabic. The presentation and layout were enhanced in the final draft of the survey and some minor changes were applied.

5.11. Pilot study

The questionnaire needed to be pilot tested before using it for collecting data. 50 of the target participants were asked to complete the questionnaire as a test, following Saunders et al. (2009). The pilot test aims to modify the questionnaire until there will be no difficulty for the target respondents in answering the questions and no issue in recording the data. It can also assist the researcher in getting a valuation of the questions' validity and the likely consistency of the data to be collected. Therefore, the preliminary analysis employing the pilot test data can be performed to ensure that the data ultimately obtained enables the study questions to be answered (Saunders et al., 2009).

5.11.1. Constructs' Reliability

The 50 completed questionnaires were coded and entered into a database package of IBM SPSS Statistics, version 25. Moser and Kalton (2017) mentioned that pilot studies are usually seen as testing grounds for varying scales reliability
(internal consistency) and validity. Cronbach's alpha (α), mean scale and corrected item-total correlation were used to assess the measurement properties.

Everitt and Skrondal (2006) added that item-total correlation is a common technique for examining the homogeneity of a scale consisting of multiple items. It is basically the coefficient of a single item/indicator correlation of the product-moment of the Pearson with the complete scale calculated from the remaining items. The common rule of thumb is that an item should be associated with the sum by more than 0.3. Items with a lower association than this should be deleted (Field, 2013).

An analysis of reliability was carried out on five constructs. Everitt and Skrondal (2000) indicated that Cronbach's alpha can be viewed as an index of a set of measurements' internal consistency (construct reliability). The five constructs' internal consistency is extremely reliable. Both formative and reflective measurements/indicators were used in the current study.

It can be concluded that the five constructs are extremely reliable, given the outcomes of the pilot study. The responses of the respondents were well distributed across all indicators/items, showing that the participants were able to discriminate between the five concepts (latent variables). Corrected item-total correlations ranged from 0.33 to 0.91, suggesting that there was no item redundant and therefore no items were removed. Pilot studies assist the researcher to acknowledge and solve as many issues as possible before completing the final survey. No important issues have been recognized in this study.
5.12. Ethical Considerations in current Study

According to Polonsky & Waller (2005), research ethics must be clearly present, necessitating an understanding of the basics and impact of ethical research before conducting a study, especially if it involves communication, such as surveying, with respondents such as companies or participants. The researcher should also exercise caution while communicating with respondents not to inadvertently abuse them, whether psychologically, financially, socially or otherwise. The researcher followed numerous agreed ethical research criteria to evade offending participants as well as to safeguard researcher, supervisor and establishment against any legal issues in the future that may be appealed to by participants.

This study follows the framework of the School of Business, Plymouth University, for approval of ethics, and the application is then submitted to the School Ethics Committee and approval is issued for research study. As a follow-up to this, the questionnaire's cover letter illuminated the purpose of the study and confirmed that respondents would not be physically, socially and psychologically harmed.

According to McNabb (2015), four issues have been identified in relation to research ethics that should be followed in all phases of the study, from collecting the research data to writing the results. These are: straightforwardness, diligence, objectivity and applicability. Straightforwardness refers to researchers being honest and not lying, cheating or deceiving. Diligence denotes that investigators should be thorough in the study process and should not use shortcuts. Objectivity implies that scholars should not be subjective. This is mainly essential in
positivistic studies, and proposes the conducted study should be determined and related to the literature. For this reason, the author has made every effort to maintain these standards. The current thesis has also guaranteed the avoidance of any activities that may adversely influence other researchers.

Also detailed in the cover letter is the confidentially and privacy of the participants and a declaration that they have the right to pull out their involvement at any time. Finally, the respondents had the option of receiving a copy of the outcomes of the research if they request one, and were asked to fill in their contact information, including emails and fax.

5.13. Partial Least Squares Structural Equation Modelling (PLS-SEM)

The information will be broken down utilizing Structural Equation Modelling (SEM), to appraise the parameters of the measurement model. The primary objective of SEM is to test theorized models that delineate relationships among factors (Schumacker & Lomax, 2004). SEM is favoured by researchers, since it considers estimation blunder when factually dissecting information. SEM can be either change-based, similar to those utilized as part of a Partial Least Squares (PLS) investigation, or covariance-based – those utilized as a part of LISREL, for example.

Covariance-based SEM strategies do not fit certain studies as they have confines. Not at all like variance-based SEM, which does not require a sound hypothesis base, covariance-based SEM methods support corroborative sorts of research, rather than exploratory ones. The limitations of covariance-based SEM
systems include the necessity of: ordinary dispersion, extensive example measures, generally more than 100 cases, and intelligent idle factors (Gefen, et al., 2000). Intelligent idle factors refer to when markers of an inert variable "are seen as influenced by the same hidden idea" (Chin, 1998).

In addition, PLS-SEM is employed to gauge the parameters of the measurement conceptual framework. It was developed by Wold (1975) for circumstances where information cannot meet the excessive assumptions of covariance-based SEM strategies (Fornell & Bookstein, 1982). PLS boosts the clarified change of ward factors by disaggregating the general causal model into halfway conditions which are settled at the same time (Chin, 1998). Difference-based SEM is a multivariate investigation procedure that offers likenesses with covariance-based SEM yet contrasts from it in that it expands on strategies. For example, Diaconis and Efron (1983) and Rencher (1998) claimed that resampling does not require parametric assumptions to be achieved. Fluctuation-based SEM is more reasonable when the necessity of multivariate ordinariness is not achieved in a dataset (Chin, 1998).

PLS is favoured by researchers for a few of the adaptabilities it offers. It can be utilized for hypothesis development, as it tests and approves exploratory models, does not require an expansive sampling estimate, can assess complex models with a few inactive and show factors, does not require typicality, is appropriate for forecasting arranged research and can manage intelligent and developmental estimation models (Henseler et al., 2009)
Ringle et al. (2009) indicated that instead of using a model to describe the covariance of all indicators, the PLS-PM methodology maximizes variance for all dependent variables. Parameter estimates are therefore generated based on the capacity to minimize the rest of the dependency/endoga factors (latent and observed) (Henseler et al., 2009). Certain programs for the implementation of PLS-SEM are accessible; for example, LVPLS 1.6 and 1.8, PLS-Graph 3.0 (Chin, 2001), SmartPLS 1.0 and 1.01 (Hansmann & Ringle, 2004), and most recently, WarpPLS 6.0 (Kock, 2016).

It should first be briefly clarified how PLS operates before addressing its advantages and disadvantaging and the researcher's primary justification for choosing PLS-SEM. The fundamental idea is quite straightforward: First, weight relationships are estimated that connect the indices to their respective constructions/latent factors. Next, for each construct case values are calculated using the input weight ratios, based on the weighted average of its indices. Finally, these cases are used in determining parameters for structural relations in a set of regression equations (Haenlein & Kaplan, 2004).

The advantages of PLS: they are minimal on the measurement scale, and the required sample size is smaller for PLS-SEM analyses (Henseler et al., 2009); a number of latent variables can be handled by PLS-PM; simpler algorithms are used; and latent variables estimates in PLS have more practical implications since they are obvious in formation and tolerate the creation of a complex conceptual framework based on a multi-block analysis (Ringle et al., 2012; Garza, 2011).
Ultimately, the task of estimating all latent formative variables is easier (Henseler et al., 2009; Hair et al., 2011).

The most important reasons for the use of PLS also concern small sample size (24 studies, 36.92%), non-normal data (22 studies, 33.85%) and use of latent factors measured in format (20 studies, 30.77%) (Ringle et al., 2012). Kock (2012) added that PLS-SEM could generate t-value and P-value for the loadings of the indicator using either a jack-knife or bootstrap method.

The present research endeavours to clarify the differences in firm performance. Further, given the focused on the population of SMEs, the setting of the information is non-typically dispersed. For these reasons and in light of the discussion above, the utilization of PLS-SEM to appraise the proposed designed model seems to be the most fitting factual procedure to utilize.

A few SEM-PLS programming programs exist which include SmartPLS, PLS Graph and WarpPLS. In this work, the researcher utilizes WarpPLS software version 5.0. It is a MATLAB-based program which conducts non-straight relapse (Kock, 2014). Unlike the Smart and Graph PLS programs, which just run straight relapses, the WarpPLS plays out distortions at the way coefficient level utilizing a particularly strong investigation procedure. In an investigation contrasting straight and non-direct relapse programs, non-direct projects all the more viably catch the truth when contemplating administration and business issues. The author clarifies that not very many administration phenomena exist in straight line circumstances and end results with a relationship. Henceforth, utilizing a non-straight relapse will
probably spot relationships that could not be distinguished by applying a direct relapse. WarpPLS is a software package that performs SEMs with an algorithm for PLS regression. The capacity of WarpPLS to acknowledge nonlinear connections among the latent structural designs of the model is different from that of other PLS software.

With a Warp PLS regression, robust path analyses or a standard PLS regression analysis may be performed in the software. Hence, the most stable technique for analysing data should be used. Signifying distinct results from bootstrap can be regarded as an indicator of instability by blinding and jack-knifing methods (Kock, 2011, 2012; Garza, 2011).

WarpPLS can handle non-normal distributions and data outliers (Kock, 2012). In addition, it contains features that cannot be found in other PLSPM and CB-SEM software, such as effect sizes, estimated collinearity, complete collinearity VIFs, indirect and total effects, predictive validity for all weight and loads, rank-and-field data and limited variety of data, standard errors for all weights and loadings and VIFs for all constructs (Kock, 2012).

Leuангthonг et al. (2004) revealed that for assessing statistical relationships, WarpPLS allows the application of the distribution-free jack-knife method. Jack-knife refers to sampling again without substitution. In classical significance tests, this technique does not involve rigorous assumptions. Even under conditions that make other techniques unable to generate sensible outcomes, this uniqueness of PLS makes an assessment of complicated models easier. Jack-knifing works
better than bootstrapping when dealing with outlier issues due to data collection mistakes. Bootstrapping can be described as a computer-based technique for the assignment of precision measures to sample estimates, according to Bisani and Ney (2004).

This research uses PLS 6.0 with a two-stage expository approach. To begin with, the estimation display was assessed to survey the legitimacy and unwavering quality of the measures. Secondly, the measurement model was assessed to survey the quality of the conjectured joins among the factors. The psychometric properties of all scales are evaluated inside the setting of the measurement model through an appraisal of discriminant validity and unwavering quality.

According to Roldán and Sánchez-Franco (2012) revealed that PLS is selected in this study because it focuses on the prediction of outcome variables. This means that this study is based on previous models but introduces and adds new relationships (Chin, 2010). PLS

5.14. Summary

In this chapter, different research philosophies are discussed to give a fair view of competing research philosophies in order to justify the adopted philosophy. This study in its basic nature is deductive research in which positivist research philosophy is adopted. Primary data was collected through a self-administered survey by using email as well as hand mode (pick and collect). The target population of this study is managers of SMEs operating and registered in the Sultanate of Oman. Since the population is homogenous, a random sampling
method is used to select the sample. The sample unit of this study is individual managers of SMEs in Oman. Selected respondents were contacted through emails and were asked to participate in an online survey. In addition to email contacts the managers were also contacted personally. An appropriate sample size is crucial for the robustness of the results of the research; in selecting the representative sample size many different formulas are used. For the purposes of this study, the formula devised by Akis et al. (1996) was used. As the target population is managers of SMEs in Oman, the self-administered online survey method was deemed appropriate, keeping in mind the cost and benefits. The questionnaire was developed using close-ended questions for all the modelled variables. The ethical considerations remained prime concerns throughout the research process. The responses of indicators of factors were measured on the Lickert scale of five. Organizational culture was measured by CVM, as proposed by Livari and Huisman (2007), EO was measured by three factors, as proposed by Wang (2008), OLC was measured using Chiva and Alegre’s (2009) approach, for innovation the OECD (2005) manual was used and Venkatraman’s (1989) approach was used to measure business performance. Prior to a final survey a pilot study was conducted, in which the reliability and validity of the instrument was tested. For estimation of parameter coefficients, PLS-SEM was applied using LISERL. PLS-SEM was preferred over other methods due to its great advantages for hypothesis testing and parameter estimations.

This chapter has introduced the research design methodology and research methods related to entrepreneurship and social science research. It has then explained the research methodology that corresponded to the nature of the study. The research design of an exploratory nature is accompanied by a deductive
approach, which in turn relates to the quantitative method that allows data collection to avoid testing hypotheses derived from the research model. The study strategy and sampling problems were then introduced. The study also adopted email-based self-administrated surveys to collect data from a huge number of the SME managers in Oman. The next chapter (Chapter 6) will introduce the method adopted to analyse the data as well as the hypotheses test results.
Chapter 6: Data Analysis and Results

6.1. Introduction

To validate the major latent variables of the study and to reveal its substantial findings, this chapter illustrates the method in which data is collected as well as the approach to data analysis. Furthermore, the process of data screening has been purposed to recognize the unusual samples compared to the other results. Based on various statistical procedures for different purposes, the findings were investigated to determine which data is acceptable and which has to be eliminated. Moreover, the results were examined to identify the quality and effectiveness of the research questions. Regarding validity issues, using mixed statistical methods achieves the validity of the measures and ensures the credibility of the research questions and findings. Lastly, once confidence in both the data and the study model has been achieved, the final loadings and results were assessed.

6.2. Data Collection

The primary data of this research was collected through a period of approximately four months, from 20th June 2017 to 15th October 2017, using two methods of data collection, including an online questionnaire and handmade questionnaire (drop and collect).

With regard to the online phase, the list of the Chamber of Commerce encompasses 5000 businesses in total (these businesses form only the SMEs that had registered in small and medium-sized enterprise development centres). There were 750 businesses for which the researcher had the entire address details with email addresses. As a consequence, the questionnaire was sent to all of these
emails. The techniques in the electronic mail surveys of Dilmman et al. (2009) were considered and adopted to grow the respondents' figures and to motivate a substantial level of participation in the survey used.

Low response rate is a sustained problem for surveys. As a result, the researcher decided to develop some tactics to improve the participation of the survey. First of all, he decided to send the questionnaire link to all participants included in the contact list, as recommended by the Chamber of Commerce. In the subsequent phase, a covering email, which the researcher adopted in the online mode survey, was sent to all individuals in the Chamber of Commerce list to explain the aims and significance of the current study, to distribute the online questionnaire and to ensure participation by presenting it as voluntary work that they could present in their society. In addition, the email explained the importance of their participation in the research and reaffirmed that it required just a quarter of an hour for completion. After a ten-day period, an email was sent to express the researchers thanks to those who had already completed the questionnaire, with a view to motivating and reminding respondents who had not yet responded to do so.

To guarantee the existence of a large number of respondents, sending the web-link of the questionnaire to all of the selected participants in the first place was preferred to pre-notice. The motive behind this was that when the respondents saw an attached link with the email, they would initially be encouraged to go through the link and then decide whether they would participate in the survey or not. Additionally, a reminder email, which was sent to motivate people to participate effectively in the survey, had a significant role in increasing the
response rates of the current research. In the following phase, there were 300 forms of the questionnaire distributed manually by the researcher (drop and collect) by visiting them in person to hand over the questionnaires and then going back to collect them.

By way of conclusion, there were 447 respondents from these different channels of distribution. Although 29 respondents did not match the research criteria, 17 businesses were defined as large and 12 questionnaires were provided without completed answers concerning the profit question, so they were excluded from the study. In total, 418 respondents were accepted for analysis in the current study, which accounted for 38% of the total numbers of questionnaires that were included in the analysis (see Table 6.1).

Table 6.1 The Sampling Profile

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>219</td>
<td>52.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>199</td>
<td>47.6</td>
</tr>
<tr>
<td>Age</td>
<td>18 – 30</td>
<td>8</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>31 – 40</td>
<td>175</td>
<td>41.8</td>
</tr>
<tr>
<td></td>
<td>41 – 50</td>
<td>193</td>
<td>46.3</td>
</tr>
<tr>
<td></td>
<td>51 – 60</td>
<td>42</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>More than 60</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>24</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>372</td>
<td>89.0</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>22</td>
<td>6.3</td>
</tr>
<tr>
<td>Education</td>
<td>High school and lower University</td>
<td>27</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>285</td>
<td>68.0</td>
</tr>
<tr>
<td></td>
<td>Bachelor</td>
<td>80</td>
<td>19.1</td>
</tr>
<tr>
<td></td>
<td>Master-PhD degree</td>
<td>22</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4</td>
<td>1.4</td>
</tr>
<tr>
<td>Work Experience</td>
<td>Less than 2 years</td>
<td>56</td>
<td>13.4</td>
</tr>
<tr>
<td></td>
<td>3 – 5 years</td>
<td>239</td>
<td>57.1</td>
</tr>
<tr>
<td></td>
<td>6 – 10 years</td>
<td>75</td>
<td>17.1</td>
</tr>
<tr>
<td></td>
<td>More than 10 years</td>
<td>48</td>
<td>11.5</td>
</tr>
</tbody>
</table>
Table 6.1 illustrates that approximately 52% of those included in the survey were men, the rest were women. In terms of age, the 41-50-year-old age bracket accounted for slightly under half of the respondents (46.3%) and the 31-40-year-old age group accounted for just over two-fifths. Only 10% of the respondents belonged to the age category of 51-60 years and a small percentage (a mere 2%) represented the youngest age group. In addition, one particularly interesting fact highlighted by the table was that there were no respondents aged 60 years or over. With regard to the marital status of respondents, the peak value was recorded amongst people who were married (89%). However, there are fairly equal proportions for both single and divorced respondents (6.7% and 6.3% respectively).

Regarding the level of education, there is a significant percentage of respondents (68% of individual investors) that had graduated from tertiary education. Furthermore, approximately a fifth of the respondents held a postgraduate degree. Finally, a small percentage of respondents (around 6%) either had high school certificates or Master and PhD degrees.

The table provided also reveals that there are just under three-fifths of respondents (57.1%) who have had 3-5 years of work experience. This is followed by about 17% of respondents who had a period of 6–10 years work experience. However, only 13.4% of respondents had less than 2 years' experience and there were also 11.5% of respondents with more than ten years of experience.
6.3. Outliers and Missing Values

Outliers are cases that appear in the data collected that have some values which considerably differ from the majority of those in the rest of the data. The outliers existing in the data can create a risk in terms of the resulting interpretation becoming biased and inaccurate. A univariate outlier demonstrates a single value from a specific field in one case that is unreasonably different than the majority of the values for that variable in the data set (Meyers et al., 2016). A multivariate outlier is a single case (participant) within the data set that has an unusual grouping of two or more of its fields (Meyers et al., 2016).

A value in a case might not be considered a univariate outlier, however, in the presence of other values in various fields, their combined presence may be considered unusual. For both univariate and multivariate outliers, the data were investigated; all fields were converted to a standardized Z-score and then any value scoring 2.5 or above was considered an outlier and excluded to assess univariate outliers (Meyers et al., 2016).

Moreover, values were calculated to assess cases for multivariate outliers. Their Mahalanobis D2 value, which represents the distance of the case, is from the data sets centroid. This value was reviewed using the chi-square distribution (alpha level = 0.001). When the D2 value matched or exceeded this threshold, it was considered a multivariate outlier (Meyers et al., 2016) and would be excluded. Adopting these two outlier techniques in this research, there are no cases excluded from the 418 completed responses.
6.4. Common Method Bias

One of the major sources of measurement error is 'Common Method Bias', which presumes that the majority of the variance can be illustrated by a singular factor. Researchers depend on the information provided by the same respondents related to all variables (Podsakoff et al., 2012). Based on this method, bias occurs when some of the error that existed between true and observed scores can be attributed to the measurement method (Podsakoff et al., 2012). The amount of this error that can be attributed to non-random forces, including measurement method, is referred to as a systematic measurement error (Bagozzi & Yi, 1991). As its presence will considerably affect the study, including obstructing the capability to estimate a true score of a measure, in addition to making correct inferences regarding the support of hypotheses (Campbell & Fiske, 1959), the researcher has to reduce this source of error.

In this study, it is evident that, based on the existing data, there are a few potential sources of systematic measurement error, which can be attributed to three items entailing the participant, the individual items and/or the entire measurement model (Podsakoff et al., 2012). Other sources of such errors include the desire of participants to appear rational and consistent, the desire to answer in a way that they feel their peers would want them to; and the transient mood of the participant at the period they were participating in the questionnaire (Podsakoff et al., 2012).

Furthermore, it is argued that some items comprise ambiguities, inappropriate jargon, and biased or double meanings all of which may cause participants to judge the items in a non-consistent way. Lastly, the respondents' responses may
be influenced by some diverse factors such as the time and place of measurement and any emotional reactions felt by them during the completing of the questionnaire.

To minimize these systematic sources of error in this study, various actions were taken into consideration. First of all, items were presented to the respondents randomly to ensure that no participant received the items in the same order. Further, and even more importantly, as described previously, the questionnaires were vetted for ambiguous items and other confusing language by both academics and field practitioners. Finally, during the data analysis process, the Full Collinearity VIFs were inspected, and scores less than 3.3 were not presented, as they represented common method bias (Kock & Lynn, 2012).

Depending upon the un-rotated factor analysis, the first factor recorded approximately a third (33.29%) of the total variance. Consequently, based on the results provided, the common variable could not be found; this is because its value did not exceed a half, which would compromise the data to be analysed.

6.5. **Multivariate Statistical Assumptions**

The data screening and validation process concentrate on two aspects of the integrity of the data assessed for analysis. Focusing on outliers and missing values, it can clearly be seen that the data are evaluated at a highly refined level. There are two key factors behind this. Firstly, individual fields within a case are reviewed. Secondly, the interplay between values within a case is examined. The moment that each case is evaluated, the subsequent phase is to evaluate how
well the overall set of data fits the requirements of the tests that are intended to
be used in the data. According to Meyers et al. (2016), there are three
characteristics of data, which are generally considered crucial for SEM analysis,
including normality, linearity and homoscedasticity.

Moreover, it is easy to recognise the normal distribution or Gaussian distribution
by either its bell shape distribution curve or its equal mean, median, and mode.
Furthermore, a standardized normal distribution has a mean of zero and a
standard deviation of 1. Normal distributions are also symmetrical with skewness
of zero and kurtosis or peakedness of zero. According to George and Mallery
(2003), a value that is ±1.0 is considered non-normal when measuring skewness
and kurtosis. The examination of the Skew and Kurtosis also hold the argument
that the data-set is for the most part non-normal. It is rational to argue that,
depending on the findings of this test, while the variables in the data are not without
their challenges for normalcy, they are also not unreasonably abnormal for use in
a PLS-SEM examination.

The assumption of linearity claims that the relationship between two variables is
constant through their whole range and will thus produce a straight line if plotted
together. Therefore, if this is not the case, then any tool that supposes a linear
relationship will either underestimate or fail to detect a relationship. To test the
linearity, scatter plots of latent variables were produced, and their visual
correlation was assessed. Ideally, the plots should form an oval distribution along
one straight axis (Meyers et al., 2016). The resulting charts were not conclusive.
The homoscedasticity of the data, which is the last assumption, should be assessed. It is argued that the dependent variables must have the same levels of variability across a range of exogenous factors for a data set to be homoscedastic (Meyers et al., 2016). To evaluate homoscedasticity for use in linear regressions, a plot is done between the residuals and their predicted values. Fay (2010) stated that homoscedasticity can be found when there is a constant spread of data points through the access of the predicted value.

Based on the normality revision, linearity and homoscedasticity of the data were collected. As a consequence, it is apparent from the information supplied that there are no strong reasons to reject any of the assumptions. However, there are various indications that this data may be problematic to assess and will require careful tool selection for the PLS-SEM phase of the data processing. As previously described, Warp PLS will be used to accommodate and minimize the challenges potentially presented in the data set's distribution.

6.6. Research Model Validation

To confirm the existence of an accurate reflection as well as an investigated analysis of the phenomena, three types of validation should be considered and used to emphasize some major issues, including the measurement model, common method bias and the structural model.
6.6.1. Measurement Model

According to Abou-Shouk (2012), the measuring model is a forerunner to the modelling of structural equations. The structures of a measurement model cannot be validated per definition. The validity and reliability confirmation of the established scales is the justification for marking a measurement model as valid.

The measurement model allows researchers to evaluate how newly created latent variables fit together and whether they relate to their indices adequately (MacKenzie et al., 2011). This implies that the measurement model helps to assess the validity and reliability elements of latent variables (Krumlinde-Sundholm et al., 2007). This includes the latent validity of variable (discriminant and convergent) and Cronbach’s alpha and composite reliability (reflective and formative).

The measurement model, also known as the outer model, points out the variables that were measured and their relationship to the latent variables that have been of interest to the researcher (Monecke & Leisch, 2012). The first step is to test the item reliability, which is a statistical measure of how reproducible the survey instrument’s data are. Regarding this test, it has been argued that a value of 0.5 (Gefen et al., 2000) or under illustrates that the scale is not acceptable.

According to some researchers, a preferred value is 0.6, while others have stated that it should be at least 0.7. WarpPLS 6.0 was used to estimate the measurement model, as it can assess non-linear relationships (Kock, 2015). It was further verified that the relationships among the variables were non-linear by examining
the AARS of a model which uses the Linear Inner Model Analysis algorithm. This was substantially lower than the model that uses the Warp3 algorithm.

6.6.1.1. Internal Consistency Reliability

Internal consistency reliability, one type of reliability, is measured by calculating Cronbach’s alpha (1951), which assesses the homogeneity of a scale formed of multiple items and composite reliability (Hair et al., 2011; Bagozzi & Yi, 1991). In this study, all composite reliabilities were greater than the value of 0.6, as recommended by Hair et al. (2011). Furthermore, all constructs have at least one composite reliability (CR) or Cronbach’s alpha that is greater than the value of 0.7 (Kock, 2015).

In addition, Hair et al. (2010) revealed that the loadings ought to be 0.50 or above and values related to the loadings should be less than 0.06. With regard to tables 6.5 and 6.7, it is evident that the factor loadings loaded higher on their theoretical specific latent variable in comparison with the other latent variables. Except for some items, which were omitted, all the loading items exceeded 0.50 (p<0.001). By way of conclusion, these values highlight the reliability of the constructs of this study and they had individual item reliability.

6.6.1.2. Constructs Reliability

Reliability is quality control of a measuring tool; the tool itself is usually a collection of question statements. Kock (2012) stated that if the question statements (or other measures) connected with each latent variable are also known by distinct participants, a measuring instrument has excellent reliability.
Andreev et al. (2009) added that the internal consistency of the measuring model concerns variable reliability. Two measures are used to estimate internal consistency: the alpha of Cronbach and the composite reliability should be greater than 0.7 for acceptable reliability, 0.8 for adequate and 0.9 for good (Kock & Verville, 2012; Garza, 2011; Head & Ziolkowski, 2010).

Reliability, as previously mentioned, demonstrates the certain point to which a measure presents identical results on various occasions. It can be examined by using various means, including the internal consistency, which refers to a series of elements used to measure a latent construct encompassed by a group of reflective indicators. According to Colton and Covert (2007), investigating internal consistency can play a substantial role in comparing the results among and between items within an individual tool. Ketchen et al. (2006) argued that Cronbach's alpha coefficient is considered one of the most popular measures used for scale reliability. Furthermore, it has been argued by some that using construct or composite reliability (CR) which addresses the internal consistency can play a significant role in assessing reliability in SEM. Additionally, according to De Vaus (2002), alpha and CR, as a common rule, should be at least 0.7 to test the inner reliability. With regard to Table 6.6, it can be clearly seen that Cronbach's alpha coefficients and composite reliability coefficients were equal to and more than 0.7. As a consequence, internal consistency has been achieved through this measure.
6.6.1.3. Discriminant Validity

Anddreev et al. (2009) illustrated that construct validity is used to determine if the indices of the construct really measure the purpose of the interactions between the constructs and the constructs and their respective indices. Henseler et al. (2009) emphasized that two subtypes of validity are frequently tested: convergent validity and discriminant validity in order to evaluate validity. Discriminant validity shall apply if the variance obtained is larger than the squared correlation (Kock & Verville, 2012), and it is recommended that the loading of the measurement indicators should be in the order of magnitude greater than the loadings of the other structures (Head & Ziolkowski, 2010).

Discriminant validity is used to differentiate between latent variables which will measure distinct phenomena. If research is properly discriminatory, latent variables actually measure different things (Kline, 2009). The AVE should also be tested in order to see if research is discriminating in its validity (Garza, 2011).

To assess the discriminant validity, there are three criteria used, as appears in Table 6.2. Firstly, all indicator loadings were investigated and confirmed to be greater than any of their cross-loadings. Secondly, the Fornell and Larcker (1981) criterion requires the square root of the AVE of a latent variable to be greater than the correlation with any other variable. This is satisfied for all of the reflective variables. Lastly, most of the correlations among the variables are all lower than the value of 0.71 (Andreev et al., 2009). The figures within the shaded area of Table 6.2 are presented to indicate the constructs among the hierarchical
components model, and as a high correlation is expected through these constructs, they can be predicted from this rule.

Table 6.2 displays latent variables’ square roots of AVEs. The diagonal correlations are one. The square roots of the AVE should be bigger than any of the correlations between that latent construct to guarantee discriminant validity for each latent construct (Hair et al., 2011).

Table 6.2 indicates that AVEs for each latent variable are greater than the greater squared correlation of the construct to any latent variable. In other words, the different square roots of AVE are above or below any of the correlations. It can thus be concluded that the latent reflective variables have adequate discriminating validity.

Table 6.2. Average Variance Extracted (AVE) and Square Root of AVE

<table>
<thead>
<tr>
<th>Variables</th>
<th>AVE</th>
<th>GC</th>
<th>DC</th>
<th>HC</th>
<th>RC</th>
<th>EO</th>
<th>OL</th>
<th>IP</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC</td>
<td>0.624</td>
<td><strong>0.790</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td>0.639</td>
<td>0.347</td>
<td><strong>0.800</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HC</td>
<td>0.667</td>
<td>0.459</td>
<td>0.649</td>
<td><strong>0.817</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC</td>
<td>0.691</td>
<td>0.540</td>
<td>0.370</td>
<td>0.579</td>
<td><strong>0.831</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EO</td>
<td>0.539</td>
<td>0.396</td>
<td>0.369</td>
<td>0.540</td>
<td>0.602</td>
<td><strong>0.729</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OL</td>
<td>0.532</td>
<td>0.498</td>
<td>0.629</td>
<td>0.630</td>
<td>0.549</td>
<td>0.460</td>
<td><strong>0.748</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>0.560</td>
<td>0.459</td>
<td>0.473</td>
<td>0.730</td>
<td>0.540</td>
<td>0.487</td>
<td>0.530</td>
<td><strong>0.755</strong></td>
<td></td>
</tr>
<tr>
<td>FP</td>
<td>0.570</td>
<td>0.620</td>
<td>0.540</td>
<td>0.392</td>
<td>0.374</td>
<td>0.540</td>
<td>0.389</td>
<td>0.367</td>
<td><strong>0.701</strong></td>
</tr>
</tbody>
</table>

**Note:** GC = Group Culture; DC = Development culture; HC = Hierarchical culture; RC = Rationale Culture; EO = Entrepreneurship orientation; OL = Organizational learning; IP = Innovative performance; FP = Firm performance.
Model Fit Indices

Table 6.3 shows: Average path coefficient (APC)=0.352; P<0.00; Average R-squared (ARS)=0.580, P<0.001; Average adjusted R-squared (AARS)=0.577, P<0.001; Average block VIF (AVIF)=3.433, acceptable if <= 5, ideally <= 3.3. The table also indicates that average full collinearity VIF (AFVIF)=3.157, acceptable if <= 5, ideally <= 3.3; Tenenhaus’s GoF (GoF)=0.588, small >= 0.1, medium >= 0.25, large >= 0.36. Thus, it can be concluded that the present study fulfils the ten criteria for the model fit indices.

Table 6.3: Model Fit and Quality Indices

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Assessment</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Average Path Coefficient (APC)</td>
<td>0.352</td>
<td>Supported</td>
</tr>
<tr>
<td>(2) Average R-squared (ARS)</td>
<td>0.580</td>
<td>Supported</td>
</tr>
<tr>
<td>(3) Average adjusted R-squared (AARS)</td>
<td>0.577</td>
<td>Supported</td>
</tr>
<tr>
<td>(4) Average block VIF (AVIF)</td>
<td>3.433</td>
<td>Supported</td>
</tr>
<tr>
<td>(5) Average full collinearity VIF (AFVIF)</td>
<td>3.157</td>
<td>Supported</td>
</tr>
<tr>
<td>(6) Tenenhaus’s GoF (GoF)</td>
<td>0.588</td>
<td>Supported</td>
</tr>
<tr>
<td>(7) Sympson’s paradox ratio (SPR)</td>
<td>0.791</td>
<td>Supported</td>
</tr>
<tr>
<td>(8) R-squared contribution ratio (RSCR)</td>
<td>0.872</td>
<td>Supported</td>
</tr>
<tr>
<td>(9) Statistical suppression ratio (SSR)</td>
<td>1.000</td>
<td>Supported</td>
</tr>
<tr>
<td>(10) Nonlinear bivariate causality direction ratio (NLBCDR)</td>
<td>0.793</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Table 6.4 indicates the reflective indicators and their P-values, loadings and cross-loading demonstrate suitable convergent and discriminant validity for instruments items. The items loadings of all instruments included in the current study exceed the 0.5 threshold. As a result, the measurement of the study shows that the model has appropriate convergent validity. Hence, it can be argued that when looking at the factor loadings among the constructs, we can observe that none of the items’ loadings are high, which signifies that the current research has suitable convergent and also discriminant validity (see Table 6.4).
Construct | GC | DC | HC | RC | EO | OL | IP | FP | SE | P value
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---
GC1 | (0.804) | -0.237 | 0.027 | 0.086 | -0.128 | 0.021 | 0.094 | -0.018 | 0.044 | <0.001
GC2 | (0.815) | -0.127 | -0.134 | 0.008 | 0.059 | -0.097 | 0.011 | -0.017 | 0.044 | <0.001
GC3 | (0.750) | 0.393 | 0.117 | -0.101 | 0.073 | 0.083 | -0.112 | 0.037 | 0.044 | <0.001
DC1 | 0.127 | (0.810) | -0.277 | 0.144 | -0.153 | 0.019 | 0.014 | 0.114 | 0.044 | <0.001
DC2 | -0.003 | (0.794) | 0.025 | 0.083 | -0.048 | 0.143 | -0.127 | -0.067 | 0.044 | <0.001
DC3 | -0.126 | (0.795) | 0.257 | -0.230 | 0.204 | -0.162 | 0.113 | -0.050 | 0.044 | <0.001
HC1 | 0.095 | -0.033 | (0.854) | -0.186 | -0.009 | -0.074 | 0.081 | 0.009 | 0.044 | <0.001
HC2 | -0.114 | 0.194 | (0.807) | -0.157 | -0.085 | 0.166 | -0.111 | 0.028 | 0.044 | <0.001
HC3 | 0.004 | -0.103 | 0.122 | (0.836) | -0.048 | -0.030 | 0.084 | -0.043 | 0.044 | <0.001
HC1 | 0.066 | -0.107 | 0.098 | (0.818) | -0.117 | 0.116 | -0.043 | 0.106 | 0.044 | <0.001
HC2 | -0.088 | 0.207 | -0.217 | (0.840) | 0.162 | -0.084 | -0.042 | 0.060 | 0.044 | <0.001
HC3 | -0.054 | 0.127 | -0.096 | 0.672 | (0.619) | -0.218 | 0.144 | -0.001 | 0.045 | <0.001
EO1 | 0.066 | -0.046 | 0.028 | 0.171 | (0.751) | -0.319 | -0.021 | 0.100 | 0.044 | <0.001
EO2 | -0.093 | 0.085 | 0.027 | -0.286 | (0.781) | -0.293 | 0.148 | -0.088 | 0.044 | <0.01
EO3 | -0.040 | 0.021 | 0.043 | -0.188 | (0.756) | -0.100 | 0.216 | -0.109 | 0.044 | <0.001
EO4 | 0.018 | -0.153 | 0.152 | -0.194 | (0.737) | -0.157 | -0.080 | 0.186 | 0.044 | <0.001
EO5 | -0.044 | 0.311 | -0.401 | -0.028 | (0.746) | -0.251 | 0.069 | -0.109 | 0.044 | <0.001
EO6 | 0.009 | -0.089 | 0.138 | -0.095 | (0.771) | 0.149 | -0.071 | -0.077 | 0.044 | <0.001
EO7 | 0.170 | -0.404 | 0.284 | 0.037 | (0.693) | 0.716 | -0.164 | 0.043 | 0.045 | <0.001
EO8 | -0.028 | 0.148 | -0.190 | 0.046 | (0.697) | 0.531 | -0.253 | 0.072 | 0.045 | <0.001
EO9 | 0.046 | -0.092 | -0.052 | 0.094 | 0.118 | (0.709) | -0.341 | -0.019 | 0.045 | <0.001
OL1 | 0.165 | -0.367 | 0.225 | 0.026 | -0.086 | (0.737) | -0.073 | 0.087 | 0.044 | 0.001
OL2 | -0.034 | 0.071 | -0.037 | -0.018 | 0.063 | (0.777) | -0.016 | -0.049 | 0.044 | <0.001
OL3 | -0.021 | -0.052 | -0.013 | -0.133 | 0.090 | (0.797) | 0.120 | 0.022 | 0.044 | <0.001
OL4 | -0.026 | 0.166 | 0.034 | 0.158 | -0.258 | (0.756) | -0.054 | 0.057 | 0.044 | <0.001
OL5 | -0.098 | 0.069 | -0.125 | -0.043 | 0.063 | (0.727) | -0.066 | -0.006 | 0.044 | <0.001
OL6 | -0.028 | 0.200 | -0.033 | -0.075 | 0.011 | (0.730) | 0.413 | -0.094 | 0.04 | <0.001
OL7 | 0.002 | 0.074 | -0.024 | -0.016 | 0.074 | 0.062 | (0.758) | 0.022 | 0.044 | <0.001
IP1 | -0.038 | 0.082 | 0.047 | -0.076 | 0.006 | 0.450 | (0.736) | -0.128 | 0.044 | <0.001
IP2 | 0.026 | 0.013 | -0.032 | -0.077 | 0.175 | -0.287 | (0.750) | 0.002 | 0.044 | <0.001
IP3 | -0.111 | -0.006 | -0.119 | 0.163 | -0.163 | 0.142 | (0.746) | 0.205 | 0.044 | <0.001
IP4 | -0.008 | -0.051 | 0.091 | 0.019 | -0.079 | 0.084 | (0.753) | -0.119 | 0.044 | <0.001
IP5 | 0.122 | -0.107 | 0.035 | -0.013 | -0.014 | -0.262 | (0.766) | 0.016 | 0.044 | <0.001
IP6 | 0.004 | -0.002 | -0.129 | 0.102 | 0.005 | -0.008 | 0.458 | (0.707) | 0.045 | <0.001
FP1 | 0.088 | -0.033 | -0.330 | 0.053 | 0.083 | -0.115 | 0.179 | (0.675) | 0.045 | <0.001
FP2 | 0.084 | -0.102 | 0.145 | -0.142 | -0.047 | 0.071 | -0.275 | (0.787) | 0.044 | <0.001
FP3 | -0.206 | 0.166 | 0.320 | 0.006 | -0.036 | 0.044 | -0.364 | (0.626) | 0.045 | <0.001

Note: GC = Group Culture; DC = Development culture; HC = Hierarchical culture; RC = Rationale Culture; EO = Entrepreneurship orientation; OL = Organizational learning; IP = Innovative performance; FP = Firm performance.

In response to Kock (2012) and Hair et al. (2011), two criteria were recommended to conclude that the measurement model has adequate convergent validity: that the p-values of the loadings are less than 0.05; and the loading values are greater than or equal to 0.6. Therefore, it can be found that each reflective element has been loaded greater on the latent variable than any other constructs. In addition, each block of reflective indices was loaded higher on its latent variable than all the
other latent variables indices. Also, P values are significant for all reflective indices (P<0.05).

Table 6.5 shows the reliability assessment, and results indicate that Cronbach’s alpha coefficients are higher than 0.80. Further, the table shows that composite reliability coefficients are higher than 0.8, which is greater than the value of 0.6, as recommended by Hair et al. (2011). Therefore, it can be acknowledged that all measurement latent variables and their related items used in the current research have adequate reliability.

Table 6.5: Reliability Assessment

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>GC</th>
<th>DC</th>
<th>HC</th>
<th>RC</th>
<th>EO</th>
<th>OL</th>
<th>IP</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's alpha coefficients</td>
<td>0.804</td>
<td>0.832</td>
<td>0.886</td>
<td>0.825</td>
<td>0.861</td>
<td>0.793</td>
<td>0.802</td>
<td>0.816</td>
</tr>
<tr>
<td>Composite reliability coefficients</td>
<td>0.896</td>
<td>0.904</td>
<td>0.937</td>
<td>0.906</td>
<td>0.917</td>
<td>0.862</td>
<td>0.890</td>
<td>0.885</td>
</tr>
</tbody>
</table>

Note: GC = Group Culture; DC = Development culture; HC = Hierarchical culture; RC = Rationale Culture; EO = Entrepreneurship orientation; OL = Organizational learning; IP = Innovative performance; FP = Firm performance.

6.6.2.1. Convergent Validity

According to Henseler et al. (2009), convergent validity shows that a series of items represent the same instrument underlying the unidimensionality. Convergent validity is tested by extracting all elements on each of their constructions from the factor loading (see Table 6.4 and 6.6). The validity of the measuring scale was illustrated to be converging on its associated latent variables by the high item loads (i.e. greater than or equal to 0.5). Some indicators were dropped from the analysis as their cross-loadings were higher than their component loadings, including OL8, OL9, OL10, IP7 and IP8. Two items (IP9 and
IP10), with loadings less than 0.708, were eliminated. This is because their deletion improved the AVE and composite reliability of their respective variables. The provided Table 6.6 (below) demonstrates the item loadings after these indicators were removed.

Table 6.6: Loadings for retained items

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group culture</td>
<td>GC1</td>
<td>0.856</td>
</tr>
<tr>
<td></td>
<td>GC2</td>
<td>0.905</td>
</tr>
<tr>
<td></td>
<td>GC3</td>
<td>0.937</td>
</tr>
<tr>
<td>Development culture</td>
<td>DC1</td>
<td>0.928</td>
</tr>
<tr>
<td></td>
<td>DC2</td>
<td>0.874</td>
</tr>
<tr>
<td></td>
<td>DC3</td>
<td>0.960</td>
</tr>
<tr>
<td>Hierarchical culture</td>
<td>HC1</td>
<td>0.874</td>
</tr>
<tr>
<td></td>
<td>HC2</td>
<td>0.907</td>
</tr>
<tr>
<td></td>
<td>HC3</td>
<td>0.917</td>
</tr>
<tr>
<td>Rationale culture</td>
<td>HC1</td>
<td>0.873</td>
</tr>
<tr>
<td></td>
<td>HC2</td>
<td>0.904</td>
</tr>
<tr>
<td></td>
<td>HC3</td>
<td>0.883</td>
</tr>
<tr>
<td>Entrepreneurial orientation</td>
<td>EO1</td>
<td>0.846</td>
</tr>
<tr>
<td></td>
<td>EO2</td>
<td>0.830</td>
</tr>
<tr>
<td></td>
<td>EO3</td>
<td>0.939</td>
</tr>
<tr>
<td></td>
<td>EO4</td>
<td>0.847</td>
</tr>
<tr>
<td></td>
<td>EO5</td>
<td>0.837</td>
</tr>
<tr>
<td></td>
<td>EO6</td>
<td>0.930</td>
</tr>
<tr>
<td></td>
<td>EO7</td>
<td>0.837</td>
</tr>
<tr>
<td></td>
<td>EO8</td>
<td>0.794</td>
</tr>
<tr>
<td></td>
<td>EO9</td>
<td>0.943</td>
</tr>
<tr>
<td>Organizational learning</td>
<td>OL1</td>
<td>0.834</td>
</tr>
<tr>
<td></td>
<td>OL2</td>
<td>0.930</td>
</tr>
<tr>
<td></td>
<td>OL3</td>
<td>0.827</td>
</tr>
<tr>
<td></td>
<td>OL4</td>
<td>0.740</td>
</tr>
<tr>
<td></td>
<td>OL5</td>
<td>0.793</td>
</tr>
<tr>
<td></td>
<td>OL6</td>
<td>0.763</td>
</tr>
<tr>
<td></td>
<td>OL7</td>
<td>0.903</td>
</tr>
<tr>
<td>Innovation performance</td>
<td>IP1</td>
<td>0.793</td>
</tr>
<tr>
<td></td>
<td>IP2</td>
<td>0.847</td>
</tr>
<tr>
<td></td>
<td>IP3</td>
<td>0.934</td>
</tr>
<tr>
<td></td>
<td>IP4</td>
<td>0.843</td>
</tr>
<tr>
<td></td>
<td>IP5</td>
<td>0.738</td>
</tr>
<tr>
<td></td>
<td>IP6</td>
<td>0.776</td>
</tr>
<tr>
<td>Firm performance</td>
<td>FP1</td>
<td>0.793</td>
</tr>
<tr>
<td></td>
<td>FP2</td>
<td>0.839</td>
</tr>
<tr>
<td></td>
<td>FP3</td>
<td>0.894</td>
</tr>
<tr>
<td></td>
<td>FP4</td>
<td>0.904</td>
</tr>
</tbody>
</table>

**Note:** GC = Group culture; DC = Development culture; HC = Hierarchical culture; RC = Rationale Culture; EO = Entrepreneurship orientation; OL = Organizational learning; IP = Innovative performance; FP = Firm performance.
6.6.3. **Collinearity**

Warp PLS, which is a software used for analyses purposes, generates full collinearity Variance Inflation Factors (VIFs) for all variables of this study. This software is adopted to test discriminant validity and overall collinearity. Therefore, depending on a full collinearity test, which has a considerable function in the recognition of vertical and lateral collinearity, VIFs can be evaluated. Kock (2015) revealed that it allows the testing of collinearity encompassing all latent variables in a model. According to Kock (2015), classic collinearity is predictor-standard instrument collinearity in single latent factor blocks. Lateral collinearity is a new term that denotes the standard of hidden and predicted variable linear prediction; a type of collinearity that can lead to particularly deceptive results. Kock (2015) stated that full collinearity VIFs equal to 3.3 or under can lead to the fact that there is no multicollinearity in the model of the study. To confirm this point, Table 6.2 gives information about all the variables used in this research. It demonstrates that the full collinearity VIFs accounted for less than 3.3. Consequently, these variables did not have the problem of multicollinearity. In addition, it can be said that there was discriminant validity for all latent variables.

**Table 6.7: Full Collinearity VIFs**

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>GC</th>
<th>DC</th>
<th>HC</th>
<th>RC</th>
<th>EO</th>
<th>OL</th>
<th>IP</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIFs</td>
<td>2.041</td>
<td>3.029</td>
<td>2.751</td>
<td>2.017</td>
<td>1.026</td>
<td>1.293</td>
<td>2.038</td>
<td>1.067</td>
</tr>
</tbody>
</table>

**Note:** GC = Group Culture; DC = Development culture; HC = Hierarchical culture; RC = Rationale Culture; EO = Entrepreneurship orientation; OL = Organizational learning; IP = Innovative performance; FP = Firm performance.
6.6.2. Structural Model

SEM is one of the most significant parts of applied multivariate statistical analysis and many researchers have been involved in a range of areas such as biologists, economists, education, marketing, medicine, and a range of other social and behavioural researchers (Pugesek et al., 2003). Further, SEM may be considered as a statistical methodology that takes a confirmatory approach to the analysis of a structural theory of a specific phenomenon (i.e., hypothesis testing) (Byrne, 2013).

Lampe et al. (2003) claimed that SEM can usually be viewed as cause procedures which results in findings on several factors. SEM as a word conveys two fundamental concepts of the method: a) that a set of structural (i.e. regression) equations are given for the cause procedures studied, taking the measuring mistakes into consideration (Roldán & Sanchez-Franco, 2012), and b) that such structural relationships may be pictorially modelled to promote a clearer theory and hypothesis conceptualization under research (Wong et al., 2011).

SEM is a statistically considerably complicated method for assessing intercomponents, including latent variables and observed variables. The conceptual terms used to convey theoretical concepts/phenomena constitute latent variables. The variables observed are variables that are directly measured, also referred to as measurements, indices or objects. Exogenous (independent variables) or endogenous (dependent variables) may be latent variables (Anddreev et al., 2009). The differences between latent and observed variables are as follows from Roldán and Sanchez-Franco (2012): a) a circle graphically
symbolizes theoretical constructs/latent variables, while b) a square graphically represents the indicator, measurement, elements, issue or observable variable. Berghman (2006) depicted that a latent variable is then defined as a hypothesis or an unobservable construct that is not directly measurable but nevertheless useful. Only several measured factors recognized as manifestation factors, indices, objects or measurements could infer latent variable.

The SEM literature review differentiates between two different operationalizations of the relations between the constructs/latent variables and their observed variables: a) The main factor / reflective indicators and b) Latent variable formative indicators / composite index models (Ringle et al., 2009).

The structural model aims at studying the fitness of the hypothesized model of studies (Schreiber et al., 2006). The latent variables of this research and their indices are illustrated in Figure 6.1 as a hypothesized structural model. In this study, the structural model investigates the impact of GCO, DCO, HCO and RCO (organizational culture dimensions) on entrepreneurial orientation. Additionally, it explores the impact of entrepreneurial orientation on firm performance, organizational learning and innovation performance. Further, it examines the impact of both organizational learning and innovation performance on firm performance. Finally, the structural model explores the mediating roles of both organizational learning and innovation performance in the association between OE and firm performance.
The final model, using PLS Regression with the Warp5 algorithm, satisfies the overall model fit criteria (APC=0.352, p=0.001; ARS=0.580, p < 0.001; AARS=0.577, p < 0.001; VIF=3.433 < 3.3) (Kock, 2015). Figure 6.1 recaps the structural model. Furthermore, the entire results of the significant relationships in the structural model are included in the two tables, namely 6.3 and 6.4. All block VIFs are under the 6.0 threshold; as a result, it is assumed that collinearity is not an issue (Hair et al., 2014). Given this, many measures, including the path coefficients, effect sizes (f²), predictive relevance (Q²) and coefficient of determination (R²) can be used to interpret the results (Hair et al., 2014).

### Table 6.8: Summary for support for structural model relationships

<table>
<thead>
<tr>
<th>H</th>
<th>IV</th>
<th>DV</th>
<th>Path Coeff</th>
<th>P</th>
<th>Sig</th>
<th>SE</th>
<th>F2</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>GC</td>
<td>EO</td>
<td>0.04</td>
<td>0.29</td>
<td>***</td>
<td>0.127</td>
<td>0.034</td>
<td>1.028</td>
</tr>
<tr>
<td>H2</td>
<td>DC</td>
<td>EO</td>
<td>0.22</td>
<td>&lt;.01</td>
<td>***</td>
<td>0.162</td>
<td>0.423</td>
<td>1.920</td>
</tr>
<tr>
<td>H3</td>
<td>HC</td>
<td>EO</td>
<td>0.20</td>
<td>&lt;.01</td>
<td>***</td>
<td>0.189</td>
<td>0.327</td>
<td>1.347</td>
</tr>
<tr>
<td>H4</td>
<td>RC</td>
<td>EO</td>
<td>0.43</td>
<td>&lt;.01</td>
<td>***</td>
<td>0.120</td>
<td>0.019</td>
<td>1.729</td>
</tr>
<tr>
<td>H5</td>
<td>EO</td>
<td>FP</td>
<td>0.23</td>
<td>&lt;.01</td>
<td>***</td>
<td>0.163</td>
<td>0.543</td>
<td>1.203</td>
</tr>
<tr>
<td>H6</td>
<td>OL</td>
<td>EO*FP</td>
<td>0.83*0.09</td>
<td>&lt;.01</td>
<td>***</td>
<td>0.178</td>
<td>0.278</td>
<td>1.028</td>
</tr>
<tr>
<td>H7</td>
<td>IP</td>
<td>EO*FP</td>
<td>0.74*0.38</td>
<td>&lt;.01</td>
<td>***</td>
<td>0.165</td>
<td>0.403</td>
<td>1.934</td>
</tr>
</tbody>
</table>

**Note:** GC = Group Culture; DC = Development culture; HC = Hierarchical culture; RC = Rationale Culture; EO = Entrepreneurship orientation; OL = Organizational learning; IP = Innovative performance; FP = Firm performance.

---

Figure 6.1. Estimated coefficient of the path analysis
Furthermore, the Q-squared coefficient can be used to investigate the predictive power of the independent factors. According to some sources (Hair et al., 2014; Roldan & Sanchez-Franco, 2012), a Q-squared coefficient should be more than zero to obtain acceptable predictive validity. In contrast, in the case of the Q-squared coefficient, it has a value that is less than zero; this means that the study conceptual framework is weak in predictive power. Regarding this study, it is apparent that, based on the data supplied, the Q-squared coefficients for all variables were more than zero; eventually, the study’s conceptual model participated to support predictive power (see Table 6.8).

Table 6.9: Full Collinearity VIFs and Q-squared Coefficients Assessment

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>GC</th>
<th>DC</th>
<th>HC</th>
<th>RC</th>
<th>EO</th>
<th>OL</th>
<th>IP</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q-squared coefficients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.638</td>
<td>0.691</td>
<td>0.552</td>
<td>0.405</td>
</tr>
</tbody>
</table>

Note: GC = Group Culture; DC = Development culture; HC = Hierarchical culture; RC = Rationale culture; EO = Entrepreneurship orientation; OL = Organizational learning; IP = Innovative performance; FP = Firm performance.

Urbach and Ahlemann (2010) stated that the Q2 statistics is a test of the predictive power of a block of manifest instruments. The predictive power can be examined among the nonparametric Stone-Geisser test (1975). Therefore, Q2 values illustrate how well-observed standards are reconstructed by the conceptual model and its parameter assessments. In this vein, Positive Q2 values guarantee the model’s predictive power in respect of the particular instrument. As a result, Q2 lower than ‘zero’ means that the research model has deficiencies in its predictive power. The suggested threshold assessment is Q2 > 0 (Urbach & Ahlemann, 2010).
Effect size tests whether an exogenous instrument has a substantial influence on an endogenous variable dependent LV or not (Cohen, 1992). It is estimated as the growth in R2 of the instrument to which the path coefficient is associated, relative to the instrument’s percentage of unexplained variance. In this vein, the values of between 0.020 and 0.150, between 0.150 and 0.350 and above 0.350 designate whether the independent variable has a weak, moderate or great influence on a dependent variable respectively (Gefen et al., 2000).

To investigate the substantial influence of the proposed model, the Cohen (1992) effect size $f^2$, which refers to “the degree to which the phenomenon is present in the population”, is used in this study. The values of 0.02, 0.15 and 0.35 refer to small, medium and large effect sizes respectively, as presented by Cohen (1992). Regarding this study’s proposed model, group culture ($f^2 = 0.021$) and hierarchical culture ($f^2 = 0.147$) have a small effect size, while development culture ($f^2 = 0.153$) has a medium effect size, and rationale culture ($f^2 = 0.320$), entrepreneurship orientation ($f^2 = 0.460$), organizational learning ($f^2 = 0.695$), innovation performance ($f^2 = 0.555$) and firm performance ($f^2 = 0.239$) have a significant effect size. Based on Stone–Geisser Q2, the structural model predictive validity was tested. The cross-validated construct redundancy Q2 is crucial to test the predictive validity, as the structural model has predictive validity if the Q2 is greater than zero (Roldán & Sánchez-Franco, 2012). The values of Q2 in this study’s PLS model are 0.638 for entrepreneurship orientation, 0.691 for organizational learning, 0.552 for innovation performance and 0.405 for firm performance, which indicates the strong predictive validity of the chosen model.
According to Frazier et al. (2004), an intervening variable can be defined as a variable which illustrates the relation between an exogenous variable and an endogenous variable. Moreover, it has a significant role in supplying information related to an established and significant direct relationship (Hair et al., 2014). Subsequently, a mediator demonstrates the method through which a direct relationship has occurred (Frazier et al., 2004).

Intervention can either be partial or full mediation. The mediation becomes full when the relationship between the endogenous and the exogenous variables is significant (as a direct correlation) and becomes insignificant as a result of the containment of the mediating variable (the non-direct influence should stay substantially). The mediation would be partial if the direct relationship continues to stay significant because of the involvement of the mediating variable (Kock, 2015).

It is considered by some (e.g., Kock, 2015; Hair et al., 2014) that the mediating impact assessment has to be conducted depending on a number of phases. In the primary step, the determination is the association between the independent and dependent variables, excluding the mediating factor. If this is significant, the investigator can go on to the subsequent stage. The second phase focuses on whether the mediating variable has been included in the relationship. In this process, there are three possibilities. Firstly, it can be concluded that a partial mediation has taken place when both the indirect impact and the direct consequence are significant at the same time. The second potential is that full mediation can be considered. This happens when the indirect impact is significant,
whilst there is no significance for the direct effect. Lastly, it can be clearly seen that there is no mediation influence when the indirect effect has no significance.

Three separate analyses were performed in order to measure the mediating role of organizational learning and innovation performance in the relationship between entrepreneurial orientation and firm performance. The findings indicated that all standardized, indirect relationships (i.e. mediated by organizational learning and innovation performance) have a considerable impact on firm performance and are significant (see Table 6.10). The partial mediation model confirmed this. These results are proportionate to the path analysis results. Moreover, a Sobel test was conducted. The findings supported the mediating effects of organizational learning and innovation performance (p < 0.001).

Table 6.10: Mediation Analysis Results

<table>
<thead>
<tr>
<th>Fit estimates</th>
<th>APC</th>
<th>ARS</th>
<th>AARS</th>
<th>AVIF</th>
<th>GOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>0.439</td>
<td>0.643</td>
<td>0.620</td>
<td>3.540</td>
<td>0.628</td>
</tr>
<tr>
<td>Model 2</td>
<td>0.352</td>
<td>0.580</td>
<td>0.577</td>
<td>3.157</td>
<td>0.588</td>
</tr>
<tr>
<td>Model 3</td>
<td>0.539</td>
<td>0.685</td>
<td>0.694</td>
<td>3.234</td>
<td>0.659</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Model 1, full mediation</th>
<th>Model 2, no mediation</th>
<th>Model 3, partial mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO-FP</td>
<td>0.19***</td>
<td>0.19***</td>
<td>0.23***</td>
</tr>
<tr>
<td>EO-OL</td>
<td>0.58***</td>
<td>-</td>
<td>0.83***</td>
</tr>
<tr>
<td>OL-FP</td>
<td>0.02*</td>
<td>-</td>
<td>0.09ns</td>
</tr>
<tr>
<td>EO-IP</td>
<td>0.49***</td>
<td>-</td>
<td>0.74***</td>
</tr>
<tr>
<td>IP-FP</td>
<td>0.41***</td>
<td>-</td>
<td>0.38***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R2</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial orientation</td>
<td>0.47</td>
<td>-</td>
<td>0.64</td>
</tr>
<tr>
<td>Organizational orientation</td>
<td>0.59</td>
<td>-</td>
<td>0.70</td>
</tr>
<tr>
<td>Innovation performance</td>
<td>0.56</td>
<td>-</td>
<td>0.55</td>
</tr>
<tr>
<td>Firm performance</td>
<td>0.31</td>
<td>0.24</td>
<td>0.43</td>
</tr>
</tbody>
</table>

It can be concluded, based upon the data presented in Table 6.10, that organizational learning and innovation performance partially mediate the relationship between entrepreneurial orientation and firm performance. In other
words, the the positive effect of entrepreneurial orientation on firm performance is subject to achieving organizational learning and innovation performance.

6.7. Post Hoc Analysis

Besides the theorized model in this study, there are a number of questions concerning demographic characteristics which were also included. The demographic data comprised three main items: age, gender and education. The purpose of this was to provide a differentiating circumstance within the data, which could help in the process of comparison between groups. A saturated model analysis was also conducted post hoc to explore if there were any additional significant relationships in the proposed model that were not hypothesized. Regarding this issue, it is evident that there are two additional relationships that were identified by the saturated model. The first one is between group culture and organizational learning with a Beta of 0.26, p<0.001, while the second discovered relationship is between hierarchical culture and firm performance with a Beta value of 0.19, p<0.001.

6.8. Summary

For data collection, a list of 5000 registered SMEs in Oman was taken from the Chamber of Commerce, only 750 of which had complete contact details including email addresses. Business units having email addresses were contacted through email and in person. A total of 447 responses were collected, of which 418 were useable, which counted as a 38% valid response rate. Out of the total respondents, 52% were male managers and 48% were female. Prior to further analysis, adjustment for outliers and missing values was necessary for robust
results. The most frequently used approaches were applied to check for outliers and missing values. As a standard practice of SEM, measurement model validation was confirmed with the help of the most commonly used techniques of construct reliability and validity. The empirical results signify that test parameters of reliability and validity fall within the acceptance range of the tests, thus leading to the conclusion that the construct measurement model was suitable. The SEM-PLS model was estimated to get empirical evidence regarding the seven proposed hypothesis from H1 to H7. The empirical results favoured the acceptance of all null hypothesis of the study except H1. The results imply that group culture is not a significant determinant of entrepreneurial orientation in the case of Oman. The results also favour the existence of the mediating role of organizational learning and innovative performance in the relationship between OE and a firm’s performance. To ensure that the estimated parameter coefficients are robust, and the model is the best fit model, the standard test results are also reported. All the diagnostic tests for model fitness and robustness indicate that the estimated model is free from any collinearity, normality issue, serial correlation, autocorrelation and unit root.

By way of conclusion, this chapter has a major objective concerning the testing of the theoretical model presented in the previous chapter. In order to achieve this objective, it is evident that, based on the data supplied, the findings support the research questions of this dissertation. Moreover, the analysis in this chapter reveals support for the majority of the proposed hypotheses in this study (6 out of 7 hypotheses). In general terms, results illustrate that organizational culture has a significant consequence of both entrepreneurial orientation and organizational learning. Furthermore, it can be clearly seen that innovation performance
mediates the relationship between entrepreneurial orientation and firm performance.
Chapter 7: Discussion and Conclusions

7.1. Introduction

This chapter summarizes the results derived in the previous chapters in order to test the proposed research hypotheses. The current chapter discusses the findings in accordance with the literature review. The first section presents a brief overview of the study. The second section outlines the effect of organizational culture on entrepreneurial orientation, and explores the impact of entrepreneurial orientation on organizational learning, innovation performance, and firm performance. Further, the study examines the effect of organizational learning and innovation performance on firm performance, and the impact of entrepreneurial orientation on firm performance through mediating roles emphasized through the process of organizational learning and innovation performance. Theoretical and managerial implications, research limitations, future research and the conclusions are also highlighted. In this vein, the study aims and objectives under the lens in this current chapter are described as follows: (see Table 7.1).

Table 7.1 The study key aim and objectives

<table>
<thead>
<tr>
<th>The Main aim and objectives of the current study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The key aim of the current research is to examine the association between EO and firm performance of Omani SMEs, as well as examine the influence of organization culture types on entrepreneurial orientation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The research aspires to achieve the following objectives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Indicating the influence of organizational culture on EO.</td>
</tr>
<tr>
<td>b. Highlighting which type of organizational culture is the most effective in fostering EO in an organization.</td>
</tr>
<tr>
<td>c. Exploring the direct correlation between EO and firm performance.</td>
</tr>
</tbody>
</table>
d. Investigating the mediation role of OL and innovation performance in the link between EO and firm performance.
e. Equally important, this study aims to give suggestions to SMEs and strategy practices on how EO adaption can enhance the performance of SMEs in Oman. These investigation findings are additionally used to recommend bearings for future research on EO.

7.2. Overview of the Study
Entrepreneurial orientation (EO) is related to basic policies and practices for developing entrepreneurial actions in order to build competitive advantages. The aim of this study is to examine the indirect association between OE and firm performance through organizational learning capabilities and innovation performance in the context of Omani SMEs. Furthermore, this study investigates the influence of organizational culture on EO. While gathering relevant literature to support the study, it was observed that few studies discuss the indirect effects of EO dimensions on firm performance, as well as the impact of organizational culture on EO. Most previous studies highlighted the relationship between entrepreneurship and financial performance features (i.e., improving profitability, enhanced customer satisfaction, robust stock market rating, building reputation, accessibility to loans, social security net, poverty reduction and other allied economic dimensions of measuring performance) (Raimi et al., 2013). However, this study relies on research that discusses the influence of organizational culture dimensions on EO and the effect of EO on a firm’s performance. The current study is therefore considered the first novel attempt (based on the reviewed literature and to the best knowledge of the author) to explore the indirect influence of EO on a firm’s performance through the mediating roles of organizational learning capabilities and innovation performance in the context of SMEs in Oman.
Several previous studies such as Covin and Slevin (1991); Keh et al. (2007); Lechner and Gudmundsson (2014); Emőke–Szidónia (2015); Kurtulmuş and Warner (2015) and Mason et al. (2015) have discussed the association between OE and a firm’s performance. Entrepreneurially-oriented firms, especially small enterprises, enhance their position in the marketplace by conceiving innovation strategies that result in performance boosts, thereby outsmarting their competitors (Lomberg et al., 2017; Thanos et al., 2017; Wiklund & Shepherd, 2005; Lumpkin & Dess, 2001; Zahra & Garvis, 2000). Accordingly, measurement of entrepreneurial performance should include multiple measures of performance, taking into account the complex nature of growth, as well as consider the existing temporal relationships that exist between performance measures.

Although many researchers have focused on the direct relationship between OE and firm performance, very little attention has been paid to the indirect one. EO has been studied by many scholars because it enables firms to identify and exploit new opportunities (Ireland et al., 2009) through innovative and proactive behaviours (Valaei et al., 2017) which can, in turn, increase organizations’ innovativeness (Zhang et al., 2016). EO is necessary for firms in highly dynamic and competitive business environments that need strategic flexibility and innovativeness to achieve a sustained competitive advantages and appropriately respond to environmental pressures (Yiu & Lau, 2008). Factors affecting organizational performance have also been investigated, particularly in line with OE. According to Lumpkin & Dess (1996), EO is measured through five basic constructs: innovativeness, risk-taking, proactiveness, autonomy and competitive
aggressiveness. Studies reveal that enterprises that have high EO tend to have high organizational performance (Moreno & Casillas, 2008; Lomberg et al., 2017). The Omani marketplace is inherently competitive, but institutional variances affect managers’ and employees’ judgments towards EO circumstances and actions (Yiu & Lau, 2008; Zhang et al., 2016).

Guided by the aims and objectives of the current study, four research objectives are outlined (see Table 7.1). Based on the research objectives, four research questions were formulated to keep the purpose of the research in focus:

1. Does organizational culture influence EO?
2. What kind of organizational culture is most effective in promoting an OE in an organization?
3. Is there a direct link between EO and firm performance?
4. Do organizational learning and innovative performance mediate the link between EO and firm performance?

In order to situate this research to the extant knowledge of entrepreneurship, seven hypotheses were developed and empirically tested. Integrating quantitative findings showed how the primary data collected through questionnaires provides evidence of an EO performance model. In pursuance of the research, Resource-Based View Theory (RBV) provided the theoretical grounding. The popularity of the RBV of a firm has directed the researcher’s focus onto the black box of a firm. Theoretically, the main principle of RBV addresses the question of why different firms accomplish and sustain competitive advantages through the deployment of their resources differently.
An analysis of missing data was conducted prior to the statistical analysis. The independent and dependent variables meet the threshold within 10% missing data identified by Hair et al. (2014). The listwise deletion (LD) method was used to handle missing data in which all rows with missing data are removed. 29 rows (7% of the dataset) were removed in this manner. Multicollinearity analysis is conducted where the high correlation coefficient between two or more variables could be a possible indicator of multicollinearity (Kock, 2012). A full collinearity test was conducted and VIF revealed a value of less than 5, suggesting that no multicollinearity is present in the data.

Descriptive statistics were conducted using SPSS. The study’s theoretical model was tested using path model analysis with WarpPLS 5.0, which looks for warp relationships among variables. The results of hypotheses testing are outlined in Table 7.1 and this chapter discusses the results.

7.3. Discussion of Findings

7.3.1. Organizational Culture and Entrepreneurial Orientation
The findings indicated that organizational culture is EO driven. This outcome answers the first question. The derived result is consistent with several previous studies. For example, Okta et al. (2015) and Yildiz (2014) outlined that organizational culture is one of the entrepreneurial orientation antecedents and organizational culture can be considered as a major driver of entrepreneurial enterprises. Entrepreneurial orientation can be supported through organizational culture (Brettel et al., 2015; Fayolle et al., 2010; Shepherd et al., 2010). Furthermore, Engelen et al. (2013) indicated that an organizational culture plays
an important role in fostering entrepreneurial orientation in national cultures that are categorised by robust uniqueness and low power distance in particular. In addition, Shihab et al. (2011) clarified that organizational culture positively and significantly affects entrepreneurial orientation. Brettel et al. (2015) added that organizational culture is one of the key resources that can achieve a strong competitive advantage by encouraging and enhancing entrepreneurial activities. Hence, organizational culture may have the capability to influence organizational performance and therefore can lead to enhancement in competitiveness.

Likewise, organizational culture factors have strong effects on firm entrepreneurial innovativeness (Yildiz, 2014). Moreover, entrepreneurial orientation is the entrepreneurial decisions and practices based on the culture and value system of an organization (Rauch et al., 2009). Basso et al. (2008) concluded that organizational culture has a significant impact on entrepreneurial operations of companies, which is considerably more influential in the case of family enterprises. Organizational culture has, for a long time, sustainably contributed to entrepreneurship (O'Neill et al., 2009). Chang and Lee (2007); Lau and Ngo (2004); Lin et al. (2013) and Naranjo-Valencia et al. (2012) argued that a positive relationship exists between organizational culture and innovation.

The study’s results indicated that hierarchical, rational and development culture affect entrepreneurial orientation, while group culture has no effect. These results answer the second question. The results also showed that group culture has no effect on entrepreneurial orientation. This differs from Engelen et al.’s (2014) study.
which illustrated that group culture has a positive impact on enhancing entrepreneurial orientation. It is also not consistent with the study of Brettel et al. (2015) which confirmed that entrepreneurial orientation is affected significantly and positively through group culture. Cherchem (2017) highlighted that group culture enhances entrepreneurial orientation greatly when only one generation is involved. Hence, H1 is rejected.

Further, the study confirmed that hierarchical culture influences entrepreneurial orientation. This result is in line with Engelen et al. (2014) who indicated that hierarchical culture’s values and features have a negative impact on the degree of behavioural EO within an organization. Entrepreneurial orientation can be promoted greatly by hierarchical culture when several generations are engaged at the same time (Cherchem, 2017). Brettel et al. (2015) confirmed this result, as they clarified that hierarchical culture has a negative impact on EO. So, H2 is accepted.

Furthermore, the study’s results demonstrated that rational culture has a positive impact on entrepreneurial orientation. This result concurs with the work of Engelen et al. (2014) who stated that rational culture is the most effective dimension of organizational culture in enhancing entrepreneurial orientation. Further, Brettel et al. (2015) concluded that rational culture significantly and positively affects entrepreneurial orientation. Hence, H3 is accepted.

Moreover, the findings revealed that development culture has a positive impact on entrepreneurial orientation. This result is consistent with the study of Brettel et al.
(2015) which indicated that development culture strongly and positively affects entrepreneurial orientation. Also, developmental culture supports entrepreneurial values and attitudes and can enhance the entrepreneurialism culture of the organization (Shepherd et al., 2010). Therefore, H4 is accepted.

7.3.2. Entrepreneurial Orientation and Firm Performance

In order to answer the third question of the study, the effect of EO on firm performance has been tested. The results have depicted that EO has a positive effect on firm performance. Previous studies have found the same result in different samples and environmental settings (i.e. Covin & Slevin, 1989; Wiklund & Shepherd, 2003; Lomberg et al., 2017; Mahmood & Hanafi, 2013; Arshad et al., 2014; Lechner & Gudmundsson, 2014; Emőke–Szidónia, 2015; Kurtulmuş & Warner, 2015; Mason et al., 2015; Ghazikalaye & Roshani, 2016; Ranasinghe et al., 2019).

The relationship between EO and firm performance has been investigated for several decades (i.e. Wiklund & Shepherd, 2003; Sandberg & Hofer, 1987; Miller & Friesen, 1982; Lomberg et al., 2017), revealing a positive association between entrepreneurial practices and profitability/growth of firms (Lumpkin & Dess, 1996; Covin & Slevin, 1991).

The positive relationship between EO and firm performance can be interpreted by the fact that high a EO level in firms shows that the firm is highly innovative, proactive and capable of undertaking risky activities (Lomberg et al., 2017).
Radipere (2014) indicated that entrepreneurial orientation has a positive impact on performance because firms with this strategic outlook have outright advantages and can benefit from emerging opportunities.

Chow (2006) showed that entrepreneurship businesses and EO are generally considered as facilitators for business performance and development. Gurbuz & Aykol (2009) and Mahmood & Hanafi (2013) depicted that EO supports the success and growth of SMEs. In addition, Radipere (2014); Wiklund & Shepherd (2005); and Davidkov & Yordanova (2017) clarified that entrepreneurial orientation strongly and positively affects a firm’s performance.

Equally important, the significant and positive relationship between entrepreneurial orientation and performance has been found in the studies of Wiklund (1999); Wales et al. (2013); Kreiser et al. (2013); Keh et al. (2007); Lomberg et al. (2017); Mahmood and Hanafi (2013); Kurtulmuş and Warner (2015) and Farja et al. (2016). Farja et al. (2016) added that all five dimensions of entrepreneurial orientation have different impacts on SME performance, and Kreiser and Davis, (2010) revealed that there is a positive relationship between innovativeness as a dimension of entrepreneurial orientation and firm performance.

Covin and Slevin (1991) also stated that there is a significant and positive relationship between entrepreneurial orientation and firm performance, and that the strongest relationship was between entrepreneurial posture and firm performance. Mahmood and Hanafi (2013) believed that entrepreneurial
orientation is also a resource and capacity which provides the company with sustainable competitive advantages and superior performance.

Likewise, Stam and Elfring (2008) suggested that there is a correlation between entrepreneurial orientation and new venture performance. Moreover, Wiklund (1999) pointed out that there is a positive relationship between entrepreneurial orientation and performance. Keh et al. (2007) reported that entrepreneurial orientation plays an important role in acquiring and utilizing marketing information, and firm performance is directly and positively affected by entrepreneurial orientation. Therefore, H5 is accepted.

However, this result differs from Morgan and Strong (2003); Casillas et al. (2010); Hughes and Morgan (2007); and Pratono and Mahmood’s (2015) studies, which indicated that entrepreneurial orientation does not positively affect a firm’s performance. In line with this, Runyan et al. (2008) concluded that there is no significant relationship between entrepreneurial orientation and firm performance.

7.3.3. The Mediating Role of Organizational Learning in the Context of the Relationship Between EO and Firm Performance

In order to answer the fourth question, the impact of EO on firm performance through the mediating role of organizational learning was investigated. The results of the study showed that EO affects organizational learning in an SME context. This result is in line with several studies. For example, Wang (2008) and Altinay et al. (2016) stated that entrepreneurial orientation has a strong effect on learning
and expands learning scope by encouraging companies to challenge the status quo and to make it more flexible and alter the way they work.

Moreover, there is a significant and positive relationship between entrepreneurial orientation and organizational learning within firms (Liu et al., 2002; Covin & Lumpkin, 2011; Nofal & Obeidat, 2019). Zahra et al. (2006) stated that entrepreneurial orientation positively enhances managing the organizational learning process and capacity. Alegre and Chiva (2013) added that entrepreneurial orientation supports organizational learning and learning values like teamwork or openness. Also, Huang and Wang (2011) mentioned that entrepreneurial orientation still requires organizational learning systems and activities to enable higher learning and innovation.

In the same way, Li et al. (2009) and Vasconcelos et al. (2016) stated that EO is one of the key factors that support learning, innovation and firm performance. Wang (2008) confirmed the positive effect of entrepreneurial orientation on organizational learning capability and firm performance. Sirén et al. (2017) reported that entrepreneurship orientation has different impacts on the individual components of strategic learning.

Further, organizational learning in small and medium enterprises (SMEs) is significantly and positively affected by entrepreneurial orientation (Dada & Fogg, 2016). Kreiser (2011) mentioned that there is also evidence that entrepreneurial orientation significantly and positively affects the strategic learning capability and
the three dimensions of strategic learning capability (structural organicity, market responsiveness and planned strategy formation mode).

The results also depicted the impact of organizational learning on firm performance in the context of SMEs. This result agrees with many previous studies, like Frank et al. (2012); Hakala (2013); Jiménez and Cegarra-Navarro (2007); Zainul et al. (2016). In addition, learning orientation has a direct and positive impact on organizational performance (Ratna et al., 2014; Chen et al., 2018; Yilmaz et al., 2005; Hussein et al., 2014; Dekoulou & Trivellas, 2015; Kim et al., 2017).

Furthermore, Ellinger et al. (2002) indicated that there is a significant and positive relationship between learning organization and the financial performance of a firm. The studies of Liu et al. (2002) and Zainul et al. (2016) concluded that organizational learning and learning orientation are influential factors in enhancing innovation and firm performance.

Moreover, Jiménez-Jiménez and Sanz-Valle (2011) also illustrated that there is a positive relationship between organizational learning and innovation and firm performance. As Kalmuk and Acar (2015) and Jiménez-Jiménez and Sanz-Valle (2011) mentioned, organizational learning is considered as a source of achieving a sustainable competitive advantage and is a vital factor in developing business performance.
Further, Prieto and Revilla (2006) added that organizations with greater learning ability can recognize the necessity of changing their customer requirements in order to improve their organizational efficiency such that it is better than their competitors. Fang et al. (2011) claimed that organizational learning capability positively affects firm performance. Equally important, organizational learning intention significantly and positively affects innovation capability (Gomes & Wojahn, 2017), which in turn positively affects firm performance (Chen et al., 2018). Additionally, the study of Çömlek et al. (2012) concluded that OLC has a major role to play in enhancing business market, innovation, quality, financing, productivity and customer performance.

In a similar manner, Wujiabudula and Zehir (2016) stated that product innovations play a mediating role in the relationship between organizational learning and organizational performance. Kalmuk and Acar (2015) confirmed the mediating role of organizational learning capability on the correlation between innovation and firm performance. Likewise, Suliyanto and Rahab (2012) revealed that organizational learning cannot directly enhance the organization’s performance, but it must pass through other mediator variables between organizational learning and firm performance, as stated by Hult et al. (2004). The result of the study showed that organizational learning plays a partial mediating role in the relationship between EO and firm performance. Therefore, H6 is accepted. Moreover, it can be argued that organizational learning can enhance the influence of entrepreneurial orientation on the positive growth forces of firms, especially those related to SME innovation.
7.3.4. The Mediating Role of Innovation Performance in the Relationship Between EO and Firm Performance

In order to answer the fourth question, the impact of EO on firm performance through the mediating role of innovation performance was investigated. The results of the study indicated that EO affects innovation performance. This result is consistent with many previous studies. Previous studies by Khaleel et al. (2017); Huang and Wang (2011); Alzuod and Isa (2017); Pratono et al. (2013); Lee et al. (2001); and Madhoushi et al (2011) have confirmed the significant and positive relationship between entrepreneurial orientation and innovative performance.

Further, Lumpkin and Dess (2001); Hughes and Morgan (2007); Ireland et al. (2005); Ireland and Webb (2007); Wiklund and Shepered (2005); Mohammad et al. (2018); Solikahan and Mohammad (2019); and Zehir et al.’s (2015) studies have concluded that entrepreneurialism significantly affects innovation and performance. Additionally, Ireland and Webb (2007) added that entrepreneurship businesses positively influence products, services, procedures and managerial innovations. Nasution et al. (2011) highlighted that three dimensions of entrepreneurial orientation (risk-taking, proactiveness and autonomy) are the influential drivers for innovation.

Ireland et al. (2005) argued that entrepreneurship correlates positively with innovation, and improves proactiveness and readiness for risk-taking and innovation. According to Fadda’s (2018) study, innovativeness, proactiveness and risk-taking have a strong impact on creating innovation, and entrepreneurial activity greatly enhances innovative behaviour.
In this vein, Musawa and Ahmad (2019) depicted that entrepreneurial orientation is an important tool in creating and developing innovative performance. Majtán and Šinský (2016); Gunawan (2015); Avlonitis and Salavou (2007) and Pérez-Luño et al. (2011) claimed that EO capabilities are essential for company innovation because EO is linked with a methodology of experimenting with new activities, a desire to take advantage of new products, new markets, and new options and a company's propensity for risky enterprises.

Bucktowar et al. (2015) believed that entrepreneurial orientation correlates positively with radical and incremental innovation. This result is further confirmed by Khaleel et al. (2017) who highlighted that there is a positive relationship between entrepreneurial orientation and innovative performance. Musawa & Ahmad (2018) illustrated that entrepreneurial orientation plays an important role in enhancing marketing innovative performance in SMEs.

Moreover, the findings of the study depicted that innovative performance positively affects firm performance in the context of SMEs. This result agrees with some previous studies. For example, the studies of Hernández-Perlines et al. (2019); Tajeddini et al. (2017); Hassan et al. (2013); Lőőf & Heshmati (2006); Rosenbusch et al. (2011); Rosli & Sidek (2013); Mattsson & Orfila-Sintes (2014); Ottenbacher (2007); Hertog et al. (2011) and Jiménez-Jiménez & Sanz-Valle’s (2011) confirmed the positive relationship that exists between high levels of innovation and performance. Rajapathirana and Hui (2018) asserted that effective
management of organizational innovation enhances creativity and ultimately benefits the entire management.

According to the findings of Gelmez et al.’s (2017) and Hassan et al.’s (2013) studies, a firm’s performance is significantly and positively affected by innovation. Jansen et al. (2006) demonstrated that innovation adoption is a vital factor for organizational change in order to improve performance, particularly in the light of a lack of resources, a changing business environment, high competitiveness as well as changes in customer needs in terms of better quality.

In addition, Mohammad et al. (2018) indicated that innovation capability has a strong effect on firm performance. As Karabulut (2015) mentioned, organizations can improve their financial performance through an organizational innovation strategy. Also, Gelmez et al. (2017) highlighted that innovative performance correlates positively and strongly with the overall performance within the organization.

The result of the study showed that innovation performance plays a partial mediating role in the relationship between EO and firm performance. Hence, H6 is accepted. Furthermore, the results in Table 7.1, describe the way in which the hypotheses are supported. In this context, out of the seven hypotheses proposed, there are six hypotheses which are accepted (Hypotheses 2, 3, 4, 5, 6, and 7) at the .001 level, and one (Hypothesis 1) is altogether rejected.
Table 7.2: Summary of the hypotheses validation in this research

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Path Coefficient</th>
<th>P</th>
<th>Sig</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>GC</td>
<td>EO</td>
<td>0.04</td>
<td>0.29</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>DC</td>
<td>EO</td>
<td>0.22</td>
<td>&lt;.01</td>
<td>***</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>HC</td>
<td>EO</td>
<td>0.20</td>
<td>&lt;.01</td>
<td>***</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>RC</td>
<td>EO</td>
<td>0.43</td>
<td>&lt;.01</td>
<td>***</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>EO</td>
<td>FP</td>
<td>0.23</td>
<td>&lt;.01</td>
<td>***</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>OL</td>
<td>EO*FP</td>
<td>0.83*0.09</td>
<td>&lt;.01</td>
<td>***</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>IP</td>
<td>EO*FP</td>
<td>0.74*0.38</td>
<td>&lt;.01</td>
<td>***</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Note:** GC = Group culture; DC = Development culture; HC = Hierarchical culture; RC = Rationale Culture; EO = Entrepreneurship orientation; OL = Organizational learning; IP = Innovative performance; FP = Firm performance.

### 7.4. Managerial Implications

The results of the current study delineate important implications for both organizations and employees. The study concludes that organizational culture (hierarchical culture, rational culture, and development culture) influence EO, and EO positively affects a firm’s performance, organizational learning and innovation performance. The study also concluded that organizational learning and innovation performance affect firm performance. Finally, the study confirmed that both organizational learning and innovation performance play partial mediating roles in the relationship between EO and firm performance.

In the light of findings of the current study, small and medium enterprises in Oman should be more proactive in developing strategies, improving operations, and paying attention to entrepreneurial orientation, organizational learning and organizational culture. Entrepreneurial orientation behaviours should be strengthened within SMEs, and should take advantage of the outputs in order to develop organizational learning processes, creative performance, corporate performance, improved decision-making processes, and adaptation to a rapidly
changing work environment. For this reason, the small and medium enterprises’ managers and workers should enhance their practices of entrepreneurial orientation by providing new production lines, advanced technologies and new markets that support and encourage employees’ involvement in developing creative ideas and design, and compete aggressively in the market by taking calculated risks.

Therefore, in order to generate more creative ideas from employees belonging to these enterprises, managers should empower employees by giving them the freedom to determine their own ways of doing work by discussing problems of work freely and openly, and also favourably acknowledging their opinions and suggestions in solving work-related problems. For example, managers can empower employees by allowing them to take appropriate initiatives and decisions within their organization, thus inculcating a feeling of responsibility and belonging. In addition, this will generate trust and understanding within the work culture and will align the team’s actions with the firms’ goals and vision.

Additionally, managers of these enterprises should encourage risk-taking in new initiatives and project planning processes. Besides, an innate ability to take measurable risks in a typical small and medium enterprise facilitates better strategic positions in the work environment and achieves sustainable competitive advantage in the long term. In this vein, managers who encourage risk-taking should be tolerant of mistakes as this trial process creates a learning-based organization. Hence, managers should not fear failure, as calculated risk-taking
contributes to an organization’s growth. Aversion towards risk taking can lead to a slow and gradual downslide in a firm’s performance, culminating in a total debacle.

In addition, SME managers should provide an effective work environment focused on leveraging information technology, through which the organization is able to achieve competitive advantages in the long run, because the focus on this technology provides information that enables the organization to develop appropriate decisions and strategies to support the overall organizational performance.

Furthermore, managers should be interested in continually searching for learning opportunities in order to gain experience and knowledge that will enable them to improve performance and achieve competitive advantage. Therefore, SMEs in Oman need to maintain their entrepreneurial orientations and continuously strive to update them to keep pace with the rapid developments in this field in order to increase their market share in the dynamic world environment. Employees need to be encouraged and motivated to put forward creative ideas to improve work efficiency.

Moreover, managers should promote creating, sharing, spreading and storing knowledge and implement such knowledge in all activities undertaken by these projects. For example, managers should ensure diversity in the workplace to encourage creativity and innovation among the firm team members, from leaders to frontline employees. Thus, this will lead to unique viewpoints and will invite innovation and success among the firm’s workforce.
There is also a necessity to form an organizational culture that contributes to developing entrepreneurial spirit among SME managers that enhances a spirit of partnership between management and employees. Hence, creating flexible communication channels between employees is a major necessity, encouraging creative ideas to be properly channelized and institutionalized in a culture of openness and freedom.

Similarly, managers should allocate the majority of their time to weighing up and studying the creative ideas of employees, discussing the ideas that are innovative and initiating actions for their implementation. Thus, the management of these enterprises should adopt entrepreneurial orientation behaviours (autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness) and encourage creativity to exploit opportunities in the work environment, through the expansion of investment in technology in order to produce novel products as well as augmenting the current ones.

SMEs need to focus on applying specific strategies based on market orientation, to promote the principle of creative behaviour among individuals and teams, and to enable them to become entrepreneurial companies.

Besides, managers of SMEs need to promote an entrepreneurial culture and link it with strategy, objectives and performance results in the short and long term, provide innovative incentives, create challenging working conditions, and promote learning opportunities. In order to enhance the entrepreneurial orientation within
SMEs, there is a need to consolidate the concept of organizational culture, especially the expectations and organizational values that contribute to enhancing EO. Consequently, these enterprises should encourage implementing labour standards that help creating a collective work environment, and stimulate distinct work practices that reflect supporting entrepreneurship in SMEs.

In addition, SMEs need to consider the concept of organizational culture as an administrative concept, given its role in the success or failure of enterprises, and its importance in achieving the objectives. Thus, working to build an organizational culture that supports creative behaviour and teamwork to improve the performance should be viewed as a serious undertaking.

Managers should develop the creative behaviours of employees by developing out-of-the-box critical thinking as well as analysis and utilize these traits to solve enterprise-related problems. Getting rid of routine and boredom at work is imperative, as this inactiveness is a hindrance to the promotion of creative performance; the removal of this malice should be the prime focus of the attention of managers of SMEs.

In summary, in order for small and medium enterprises in Oman to achieve outstanding performances and a competitive position in the labour market, and to achieve sustainability of competitive advantage in a rapidly changing and evolving work environment, these enterprises should build and adopt a distinct organizational culture. This will support and encourage the entrepreneurial orientation of enterprises, encourage organizational learning and support
innovation performance, which will ultimately improve the performance of these enterprises and distinguish them from competitors, expanding the volume of activities and practices that they carry out.

7.5. Theoretical Implications
The current study has many theoretical implications that can add to the body of knowledge in several ways. Firstly, in a small and medium enterprises context, EO has become an important factor that enhances performance. Identifying the mediating factors affecting the relationship between EO and firm performance provides a clear picture of a strategy to help improve a firm’s performance through EO. Secondly, this study explores the mediating role organizational learning and innovation performance play in the relationship between EO and firm performance, which has not been investigated in the small and medium enterprises sector before. Thirdly, previous studies have discussed the direct effect of EO on firm performance in countries other than the developed ones. This study explores the effectiveness of EO on a firm’s performance through the mediating role played by organizational learning and innovation performance in different developing cultural contexts (such as Oman).

7.6. Limitations and Avenues for Future Research
Although this study has gained several valuable insights, some limitations and avenues for future research do exist. Some scholars who examined the relationship between organizational culture and EO highlighted the fact that this relationship is moderated by national culture (Engelen, 2010; Menor & Roth, 2007; Vincent et al., 2004). In addition, these studies focused only on developmental
culture as a crucial element of EO development (Engelen, 2010). By using the Competing Value Model (CVM) of organizational culture, the present study reveals that other forms of organizational culture could have a significant positive impact on EO. However, investigating the effect of national culture could affect the relationship between different forms of organizational culture and EO; this would be an important direction for further research.

Secondly, the collected data in this study is cross-sectional in nature, and therefore it is recommended that future research make use of longitudinal data in order to better assess the relationship between EO and firm performance and how different forms of culture affect the dimensions of EO over time. A further possible area of research is to assess the influence of the external business environment (such as dynamism and hostility) on these various aspects of organizational culture and how firms can adapt in response to these environmental changes.

Thirdly, another novel area of empirical research is in using contextual and environmental variables as moderators or control variables in measuring the relationship between EO and firm performance. While Wang (2008) considered the four strategic orientations of Miles et al. (1978), further research is urged which would include various contingencies such as environmental uncertainty, environmental munificence, the state of the economy and the life cycle of the industries under examination.

Finally, Wiklund (1999) and Baker and Sinkula (2009) highlighted that SMEs in particular try to foster EO. However, Baker and Sinkula (2009) found that
organizational culture has also played an important role in larger firms. Further research could investigate whether the significant positive relationship between EO and those types of an organizational culture characterized by an external focus in large firms is called for. Another limitation of the present study is the mixture of firms of different sizes. The fact that, contrary to small companies, larger organizations are very likely to be structured in divisions means that they require a more fine-grained interpretation. In addition, although the study is limited to and constrained by employees’ demographics, the research could argue that such factors may play a moderate role in the relationship between entrepreneurship orientation and firm performance. This study therefore further calls for a thorough as well as an intuitive investigation into such effects.

7.7. Summary
This chapter introduced an overview of the study and displayed its objectives and questions. The chapter then detailed all results reached and discussed them according to the previous studies. Next, it highlighted managerial and theoretical implications. It ended with limitations and avenues for future research.

Unlike previous studies, this study explores the relationship between entrepreneurial orientation and a firm’s performance in the presence of organizational learning capabilities and innovation performance as mediating factors, particularly focusing on the SME sector of Oman. It was not clear earlier how the culture of Oman affects EO; therefore, it was necessary to study the role of cultural factors in shaping the entrepreneurial orientation specific to the Sultanate of Oman. The empirical results reveal that culture is a key factor that is
instrumental in shaping the EO. This finding is consistent with the existing studies. The results postulate that the hierarchical, rational and development culture positively affect entrepreneurial orientation, whereas group culture has no significant impact. This result is different than the previous studies conducted in other countries. This difference can be anticipated, as Oman has a very unique social culture. Like previous studies, the results indicate a positive relationship between OE and firm performance. The mediating role of organizational learning capabilities and innovation performance on the relationship between OE and firm performance has not been tested before. The empirical results indicate a partial mediation of organizational learning and innovative performance in the relationship between EO and firm performance. The results of this study have great practical implications for policy makers and management of the SME sector of Oman. Entrepreneurial orientation should be encouraged in the SME sector by undertaking different policy measures, thereby resulting in better performance. The firm’s performance can be leveraged to enhance organizational learning processes, creative performance, corporate performance, improved decision-making processes and adaptation to a rapidly changing work environment. The study also has great theoretical implications which can effectively contribute to the body of knowledge. The study also has certain limitations, such as:

- national culture is not included, which may potentially change the results
- the data used in this study is cross-sectional; incorporation of longitudinal data may affect the results
- other contextual and environmental variables could be included in the study
- the study focuses exclusively on SMEs.


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Appendix

School of Management
Plymouth Business School
University of Plymouth
Plymouth

United Kingdom

English Questionnaire Form

The main objective of this study is to investigate empirically the indirect relationship between entrepreneurship orientation and firm performance of Omani SMEs, as well as to investigate the influence of organizational culture on entrepreneurship orientation. We would like to invite you to take part of this study by filling the present questionnaire. Your contribution will be highly valuable and will contribute toward the improvement of entrepreneurship in Omani SMEs. The questionnaire will take approximately 10 minutes to complete and the answers will be treated anonymously and confidentially. We would be extremely grateful if you accept to take part in this study. Many thanks for your cooperation.

(1) To what extent do you agree with the following statement towards organizational culture: 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Neutral (N), 2 = Disagree (D) and 1 = Strongly Disagree (SD).

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work environment in the company I work in is a very private place. It is</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>like an extension to my family, and individual seem to share lots of</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>themselves</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The glue that holds the company I work in together is loyalty and</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>tradition. Commitment to the company I work in runs high.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The company I work in emphasizes human resources. High morale is</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>important.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The company I work in is a very dynamic and entrepreneurial place. People</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>are willing to stick their necks out and take risks.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The glue that holds the company I work in together is commitment to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>innovation and development. There is an emphasis on being first with</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>products and services.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company I work in emphasizes growth through acquiring new resources.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Acquiring new products/services to meet new challenges is important.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company I work in is a very formal and structured place. People pay</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>attention to bureaucratic procedures to get things done.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The glue that holds the company I work in together is formal rules and</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>policies. Following rules and maintaining a smooth running institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>are important.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company I work in emphasizes permanence and stability. Efficient,</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>smooth operations are important.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company I work in is a very production-oriented place. People are</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>concerned with getting the job done and are not very personally involved.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The glue that holds the company I work in together is an emphasis on</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>tasks and goal accomplishment. A production and achievement</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>orientation is commonly shared.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The company I work in emphasizes competitive actions, outcomes, and achievement. Accomplishing measurable goals is important.

<table>
<thead>
<tr>
<th>Please use the following scale to describe your opinion towards entrepreneurship orientation: 5= Strongly Agree (SA), 4= Agree (A), 3= Neutral (N), 2= Disagree (D) and 1= Strongly Disagree (SD).</th>
</tr>
</thead>
<tbody>
<tr>
<td>We highly value new product lines. 1 2 3 4 5</td>
</tr>
<tr>
<td>When it comes to problem solving, we value creative new solutions more than solutions rely on conventional wisdom. 1 2 3 4 5</td>
</tr>
<tr>
<td>We consider ourselves an innovative company. 1 2 3 4 5</td>
</tr>
<tr>
<td>We encourage people in our company to take risks with new ideas. 1 2 3 4 5</td>
</tr>
<tr>
<td>We value new strategies/plans even if we are not certain that they will always work. 1 2 3 4 5</td>
</tr>
<tr>
<td>We engage in new risky investments (e.g. new employees, facilitates, debt, stock options) to stimulate future growth. 1 2 3 4 5</td>
</tr>
<tr>
<td>We consistently look for new business opportunities. 1 2 3 4 5</td>
</tr>
<tr>
<td>Our marketing efforts try to lead customers, rather than respond to them. 1 2 3 4 5</td>
</tr>
<tr>
<td>We work to find new businesses or markets to target. 1 2 3 4 5</td>
</tr>
</tbody>
</table>

Please use the following scale to describe your opinion towards Organizational Learning Capability and Innovation performance: 5= Strongly Agree (SA), 4= Agree (A), 3= Neutral (N), 2= Disagree (D) and 1= Strongly Disagree (SD).

| People here receive support and encouragement when presenting new ideas. 1 2 3 4 5 |
| Initiative often receives a favourable response here so people feel encouraged to generate new ideas. 1 2 3 4 5 |
| It is part of the work of all staff to collect, bring back, and report information about what is going on outside the company. 1 2 3 4 5 |
| There are systems and procedures for receiving, collating, and sharing information from outside the company. 1 2 3 4 5 |
| People are encouraged to interact with the environment: competitors, customers, technological institutes, universities, suppliers, etc. 1 2 3 4 5 |
| Employees are encouraged to communicate. 1 2 3 4 5 |
| There is a free and open communication within my work group. 1 2 3 4 5 |
| Managers in this organization frequently involve employees in important decisions. 1 2 3 4 5 |
| Policies are significantly influenced by the view of employees. 1 2 3 4 5 |
| People feel involved in main company decisions. 1 2 3 4 5 |
| Replacement of products being phased out. 1 2 3 4 5 |
| Extension of product range within main product field through new products. 1 2 3 4 5 |
| Extension of product range outside main product field. 1 2 3 4 5 |
| Improvement of production flexibility. 1 2 3 4 5 |
| Reduction of production costs by cutting labour cost per unit. 1 2 3 4 5 |
| Reduction of production costs by cutting material consumption. 1 2 3 4 5 |
| Reduction of production costs by cutting rejected production rate. 1 2 3 4 5 |
| Average innovation project development time. 1 2 3 4 5 |
(4) The following pertain to the important performance areas of your firm. Please review each of the following and select a number between 1 and 5 that best represents your views. Selecting a 1 indicates the performance area is of no importance, selecting a 5 indicates the performance area is extremely important, and a selection of 3 indicates neutrality.

<table>
<thead>
<tr>
<th>Sales Growth Rate</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth in sales</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Market share</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Profit to Sales Ratio</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Section 2

INFORMATION ABOUT YOURSELF
In this part, I would like to ask you some questions about yourself.

(5) Record gender: Tick one
Male □ (1) Female □ (2)

(6) Your age group: Tick one
30-40 Years □ (1) 41-50 Years □ (2) 51-60 Years □ (3) More than 60 Years □ (4)

(7) Your education level: Tick one
Bachelor degree □ (1) Diploma □ (2) Master's Degree □ (3) Doctorate Degree □ (4) Others □ (5)

(8) Your Marital Status: Tick One
Single, never married □ (1) Married □ (2) Widowed □ (3) Divorced □ (4) Separated □ (5)

(9) Your work Experience: Tick one
Below 5 Years □ (1) 5-10 Years □ (2) 11-15 Years □ (3) Above 15 Years □ (4)

Thank You Very Much for Your Participation