

2021

# ADOPTION OF INTERNAL SOCIAL MEDIA FOR EMPLOYEE ENGAGEMENT AND ITS INFLUENCES ON EMPLOYEE PERFORMANCE AN EXAMINATION OF AIRLINE EMPLOYEES IN THE UK AND NIGERIA

Ugochukwu, Uju Perpetual

<http://hdl.handle.net/10026.1/18390>

---

<http://dx.doi.org/10.24382/1006>

University of Plymouth

---

*All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.*

## Copyright Statement

*This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with its author and that no quotation from the thesis and no information derived from it may be published without the author's prior consent.*



**UNIVERSITY OF  
PLYMOUTH**

**ADOPTION OF INTERNAL SOCIAL MEDIA FOR EMPLOYEE ENGAGEMENT  
AND ITS INFLUENCES ON EMPLOYEE PERFORMANCE**

**AN EXAMINATION OF AIRLINE EMPLOYEES IN THE UK AND NIGERIA**

**By**

**UJU P UGOCHUKWU**

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

**DOCTOR OF PHILOSOPHY**

**Plymouth Business School**

**November 2021**

## Acknowledgments

This study has been a long and challenging journey, but truly memorable. I would like to acknowledge everyone who played a role in my academic accomplishments. First, my foremost appreciations and praise go to God, the Most gracious and the Most merciful, for His great guidance in this thesis. I am forever grateful to my dear parents for their infinite love, care, attention and financial support. I cannot thank them enough for their moral and parental support throughout the time of my study. I will not forget my brothers, sisters, my lovely friends and all my family for their care, love and unconditional support. I would like to show my deepest gratitude to my director of studies, Dr Mohamed Haddoud, and my other supervisors, Dr Lise Hunter and Dr Johnathan Lean; you have been very supportive and generous with your time and knowledge during the four years of my journey. Without your support, guidance, critical feedback and patient advice I could never have reached this current level of success. Thanks also to Dr Peter Norrington for assistance with proofreading. Thank you all for your unwavering support.

## 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. This thesis has been proofread by a third party; no factual changes or additions or amendments to the argument were made as a result of this process. A copy of the thesis prior to proofreading will be made available to the examiners upon request. A programme of advanced study was undertaken, which included: Developing Methodological Approaches, Understanding Paradigms of Inquiry, Human Resources and Talent Management, Employee Resourcing.

### Presentations at conferences

'Social Media in Organizations'. Plymouth Doctoral Colloquium. UKPDC 2017, Plymouth, UK, 05–06 June 2017.

'Investigating the Drivers of Using Social Media for Securing Employment'. QA Higher Education Research Conference 2019. Birmingham, UK, 14 Nov 2019.

Word count of main body of thesis: 69,480

Signed..... *Uju Perpetual Ugochukwu*

Date.....12/11/2021

## **Abstract**

### **ADOPTION OF INTERNAL SOCIAL MEDIA FOR EMPLOYEE ENGAGEMENT AND ITS IMPACT ON EMPLOYEE PERFORMANCE**

#### **A CASE OF UK AND NIGERIAN AIRLINE COMPANIES**

**UJU P UGOCHUKWU**

The digital age has fundamentally changed employees' and organizations' notions of convenience, speed, information sharing, and employee interactions, which has given organizations a whole new way to engage employees and build employee relationships. Effective communication among employees within an organization enhances two-way productivity. Hence, organizations are increasingly using internal social media platforms to communicate and engage employees through the application of internal social media technology. Some of these mediums of communication are Facebook, Workplace by Facebook, WhatsApp, Twitter, LinkedIn, Yammer, and Google+, to name but a few. This is more evident in the airline industry, whose large, dispersed workforce, that is people working different shifts, in different time zones, and various departments in different geographical areas, need coordination and engagement of individuals and teams across organizations.

Although there is much research on the importance and benefits of using internal social media platforms for employee engagement, there is limited research on the factors influencing adoption and use of internal social media for employee engagement, and the extent to which internal social media influences employees' intellectual, affective and social engagement and its impact on employee performance. This research has brought this into single study to examine factors that influence employee adoption and usage of internal social media on employee engagement and performance and their relationships for two countries' employees, a top priority for airline companies who utilize internal social media for employee engagement to enhance performance in their organizations. Moreover, this study proposed and tested an extended theoretical model; the technology acceptance model (TAM). Using survey data from 343 airlines employees in UK and Nigerian airline companies that had adopted internal social

media for engagement, this study uses the partial least squares structural equation modelling approach to test the proposed relationships between influencing factors of internal social media adoption and usage and employee engagement and their impact on employee performance, the results indicate that perceived ease of use and uncertainty avoidance are important, significant factors in internal social media adoption and usage for employee engagement in Nigerian airline companies. However, perceived usefulness and uncertainty avoidance are also significant actors in internal social media adoption and usage for employee engagement in UK airline companies. This finding is consistent with prior research and hold significant implications for both theory and practice.

# Table of Contents

List of Tables.....	xii
List of Figures.....	xiii
List of Abbreviations.....	xiv
<b>CHAPTER ONE: INTRODUCTION.....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 Research Background.....	2
1.3 Rationale for the Study.....	4
1.5 Research Aim and Objectives.....	6
1.6 Research Questions.....	7
1.7 Research Context.....	7
1.7.1 Why airline companies?.....	8
1.7.2 Why a comparison between Nigeria and the UK?.....	9
1.8. Significance of the Study.....	12
1.8.1 Theoretical Significance.....	12
1.8.2 Practical Significance.....	13
1.9 Thesis Outline.....	15
1.10 Summary.....	16
<b>CHAPTER TWO: LITERATURE REVIEW AND THE RESEARCH CONTEXT OF THE CASE STUDIES.....</b>	<b>17</b>
2.0 Introduction.....	17
2.1 Conceptual Definition of Social Media.....	17
2.2 Social media in the Workplace.....	19
2.3 Impact of Social Media in the Workplace.....	23
2.3.1 Potential benefits and challenges.....	23
2.4 Conceptual Definition of Employee Engagement.....	29
2.5 Conceptualization of Internal social media and Employee Engagement.....	31
2.5.1 Employee engagement and internal social media.....	31
2.6 Literature Summary.....	33
2.7 Research Context.....	34
2.8 Airlines' Use of Internal social media to Improve/Enhance Employee Engagement.....	34
2.9 Case Study Examples of Internal Social Media for Employee Engagement.....	43
2.9.1 American Airlines.....	43
2.9.2 United Airlines.....	43

2.9.3 KLM Royal Dutch Airlines.....	44
2.9.4 British Airways.....	44
2.9.5 Virgin Atlantic.....	45
2.9.6 Arik Air .....	45
2.9.7 RwandAir.....	45
2.10 Research Context Summary .....	46
<b>CHAPTER THREE: THEORETICAL FOUNDATION AND CONCEPTUAL FRAMEWORK</b> .....	<b>47</b>
<b>3.0 Introduction.....</b>	<b>47</b>
3.1 Theories Underpinning Individual Technology Adoption and Usage .....	47
3.1.1 Technology Acceptance Model (TAM).....	48
3.1.2 Technology Acceptance Theory 2 (TAM2).....	49
3.1.3 Theory of Planned Behaviour (TPB) .....	49
<b>3.1.4 Unified Theory of Acceptance and Use of Technology (UTAUT) .....</b>	<b>50</b>
3.2 Research Conceptual Framework and Hypothesis.....	53
<b>3.2.1 Perceived usefulness .....</b>	<b>53</b>
<b>3.2.2 Perceived ease of use.....</b>	<b>55</b>
3.3 Extended Model of TAM.....	57
<b>3.3.1 Perceived management support.....</b>	<b>64</b>
<b>3.3.2 Perceived behavioural control .....</b>	<b>67</b>
3.3.3 Perceived relevance.....	69
3.3.4 Uncertainty avoidance .....	71
3.4 Effect of Actual Usage of Internal Social Media on Dimension of Employee Engagement within the Workplace .....	74
3.4.1 Internal social media and intellectual employee engagement .....	75
3.4.2 Actual usage of internal social media and affective employee engagement.....	77
3.4.3 Actual usage of internal social media and social engagement .....	80
3.5 Impact of Dimensions of Employee Engagement on Employee Performance.....	83
3.5.1 Intellectual engagement and employee performance.....	86
3.5.2 Affective engagement and employee performance.....	88
3.5.3 Social engagement and employee performance.....	91
<b>3.6 Hypotheses.....</b>	<b>94</b>
<b>3.7 Summary.....</b>	<b>95</b>
<b>CHAPTER FOUR: RESEARCH METHODOLOGY .....</b>	<b>96</b>
<b>4.0 Introduction.....</b>	<b>96</b>
<b>4.1 Research Philosophy.....</b>	<b>96</b>

4.2 Paradigm of Inquiry .....	100
4.3 Research Approach .....	102
4.4 Research Design and strategy.....	104
4.4.1 Research Design.....	104
4.4.2 Research strategy.....	106
4.5 Research Population and Sampling.....	107
4.6 Data Collection Protocol .....	110
4.7 Survey Design .....	111
4.8 Research Ethics .....	112
4.9 Reliability and Validity .....	113
4.9.1 Content validity.....	114
4.9.2 Construct reliability and validity.....	114
4.10 Measurement Variables .....	115
4.11 Independent Variables .....	117
4.12 Dependent Variables.....	119
4.13 Mediating Variable .....	120
4.14 Sample Size and Non-Response Rate.....	123
4.15 Data Analysis Software: PLS (partial least squares) .....	125
4.16 Pilot Study .....	126
4.17 Summary .....	128
<b>CHAPTER FIVE: ANALYSIS OF THE NIGERIAN AND UK DATA.....</b>	<b>129</b>
5.0 Introduction .....	129
5.1 Descriptive Statistics.....	129
5.1.1 Demographic profile of Nigerian and UK respondents .....	130
5.1.2 Demographic profile of UK respondents.....	131
5.1.3 Missing data and outliers.....	133
5.1.4 Common method bias.....	134
5.2 PLS-SEM Analysis.....	134
5.2.1 Measurement model of research constructs.....	136
5.2.2 The Structural Model.....	146
5.3 Mediating Latent Variable Test (Direct and Indirect Effect).....	155
5.4 Multi-group Analysis (MGA) .....	156
5.4.1 Country comparison .....	157
5.5 Summary .....	159
<b>CHAPTER SIX: DISCUSSION.....</b>	<b>161</b>
6.0 Introduction .....	161

6.1 Discussion of the Research Findings .....	161
6.2 RQ1 – Factors influencing employee adoption of internal social media platforms for employee engagement .....	163
6.2.1 Perceived usefulness (PU).....	163
6.2.2 Perceived ease of use (PEOU).....	165
6.2.3 Perceived relevance (PR) .....	166
6.2.4 Perceived behavioural control (PBC).....	168
6.2.5 Perceived management support (PMS).....	169
6.2.6 Uncertainty Avoidance (UA).....	170
6.3 RQ2 – Impact of internal social media usage on employee intellectual, affective, and social engagement .....	171
6.3.1 Actual use of internal social media (AU) and Affective engagement (AE).....	171
6.3.2 Actual usage of internal social media (AU) and Intellectual engagement (IE) .....	173
6.3.3 Actual usage of internal social media (AU) and social engagement (SE) .....	174
6.4 RQ3 – The impact of intellectual, affective, and social engagement on employee performance .....	176
6.4.1 Affective engagement (AE) and Employee performance (EP).....	176
6.4.2 Intellectual engagement (IE) and Employee performance (EP).....	177
6.4.3 Social engagement (SE) and employee performance (EP).....	178
<b>6.5 RQ4 – Differences in the influence of internal social media usage on employee engagement and performance of airline employees in the UK and Nigeria .....</b>	<b>179</b>
6.6 Summary.....	180
<b>CHAPTER SEVEN: CONCLUSIONS AND IMPLICATIONS.....</b>	<b>183</b>
<b>7.0 Introduction.....</b>	<b>183</b>
<b>7.1 The Study’s Main Conclusions (Research Overview).....</b>	<b>183</b>
<b>7.2 Meeting the Aim and Objectives of this Thesis .....</b>	<b>184</b>
<b>7.3 Key Findings of this Thesis .....</b>	<b>188</b>
7.4 The Researcher’s Contribution and Novelty.....	190
7.4.1 Implications for theory .....	190
<b>7.4.2 Implications for practice /managers.....</b>	<b>192</b>
7.5 Research Limitations.....	193
<b>REFERENCES.....</b>	<b>197</b>
<b>APPENDICES.....</b>	<b>243</b>
<b>Appendix 1: Ethical Approval Form .....</b>	<b>243</b>
<b>Appendix 2: Survey Questionnaire.....</b>	<b>252</b>
<b>Appendix 3: Total Variance Explained.....</b>	<b>262</b>
<b>Appendix 4: Z-Score for Assessing Outliers (UK).....</b>	<b>264</b>

<b>Appendix 5: Z-Score for Assessing Outliers (Nigeria).....</b>	<b>266</b>
<b>Appendix 6: Item Multicollinearity.....</b>	<b>268</b>

## List of illustrations

### List of Tables

Table 2.1	Examples of social media networking sites used within the workplace	20
Table 2.2	Potential benefits and risks of using social media in the workplace	25
Table 2.3	The 8Cs of internal social media activities	36
Table 3.1	Summary of technology adoption models in various contexts and scopes of research	58
Table 3.2	Research constructs and its root sources	71
Table 3.3	Research hypotheses	91
Table 4.1	Research philosophies	95
Table 4.2	Research variables and measurement scales	112
Table 4.3	Dependent variables	115
Table 4.4	Mediating variable	116
Table 4.5	Composite and Cronbach's alpha for employee adoption of social media platforms for engagement and its impact on performance for Nigeria	116
Table 4.6	Composite and Cronbach's alpha for employee adoption of social media platforms for engagement and its impact on performance for the UK	117
Table 4.7	Number of questionnaires distributed to individual airlines for the UK and Nigeria	
Table 4.8	Number of hard-copy survey questionnaires, returned and usable for the UK and Nigeria	119
Table 4.9	Sample size of the pilot study	122
Table 5.1	Descriptive statistics for the Nigerian sample (demographic profile of respondents)	126
Table 5.2	Descriptive statistics for the UK sample (demographic profile of respondents)	127
Table 5.3	Variables in the research model and their allotted codes	135
Table 5.4	Composite reliability and Cronbach's alpha measures for Nigeria and the UK	137
Table 5.5	Latent variables' AVE for the Nigerian and UK samples	139
Table 5.6	Square root of AVEs for the Nigerian airlines	141
Table 5.7	Square root of AVEs for the UK airlines	142

Table 5.8	VIF interpretation: Dauod (2017)	143
Table 5.9	Indicator weights and VIF for Nigeria and the UK	144
Table 5.10	Full collinearity VIFs of constructs for Nigeria	146
Table 5.11	Full collinearity VIFs of constructs for the UK	146
Table 5.12	Model fit indices for the Nigerian and UK samples	148
Table 5.13	Path coefficients, p-values and R-squareds for Nigerian airlines	152
Table 5.14	Path coefficients, p-values and R-squareds for UK airlines	153
Table 5.15	Effect sizes for the Nigerian airlines	154
Table 5.16	Effect sizes for the UK airlines	154
Table 5.17	Q <sup>2</sup> of the endogenous constructs in the Nigerian and UK samples	156
Table 5.18	Results of mediating indirect effect for Nigeria and the UK	157
Table 5.19	Path comparison	158
Table 5.20	Results of the hypotheses	160

#### **List of Figures**

Figure 2.1	The 8Cs of internal social media activities used by airlines companies for employee engagement	34
Figure 3.1	Original Technology Acceptance Model (TAM) (Davis, 1991)	54
Figure 3.2	Research Conceptual Model (Adapted from TAM)	90
Figure 4.1	Research design	102
Figure 4.2	Theoretical model	111
Figure 5.1	Structural model results for the Nigerian sample	150
Figure 5.2	Structural model results for the UK sample	151

## List of Abbreviations

AE	Affective engagement
AU	Actual usage of internal social media
AVE	Average variance extracted
CIPD	Chartered Institute of Personnel and Development
EP	Employee engagement
ERP	Enterprise resource planning
EVG	Educational video game
HRD	Human resources development
IE	Intellectual engagement
IHRM	International human resources management
IS	Information system
ISA	Intellectual, social and affective
IT	Information technology
MPCU	Model of Personal Computer Utilization
PBC	Perceived behavioural control
PEU	Perceived ease of use
PMS	Perceived management support
PR	Perceived relevance
TPB	Theory of Planned Behaviour
PU	Perceived usefulness
SE	Social engagement
TAM	Technology Acceptance Model
TAM2	Technology Acceptance Model 2
TRA	Theory of Reasoned Action
UA	Uncertainty avoidance
UTAUT	Unified Theory of Acceptance and Use of Technology
VAF	Variance accounted for
VIF	Variance inflation factor

# CHAPTER ONE: INTRODUCTION

## 1.1 Introduction

Researchers have long been interested in the various factors that influence employee intentions to use internal social media for employee engagement (Smith et al, 2009; Parry & Solidoro, 2013; Breunig, 2013; Goldwasser & Edwards, 2014). Prior research suggests that internal social media communication can provide opportunities for employee engagement and enhance employee performance (Van Zoonen & Banghart, 2018; Hakanen & Koivumäki, 2014). Employees who adopt and use internal social media for communication, knowledge sharing and work-related matters with colleagues and employers are more likely to improve engagement and increase performance, since employees can easily communicate and keep up to date with news and information, as well as share content with colleagues anywhere, irrespective of time and location (Bartram; 2002; Van Zoonen & Banghart, 2018). Leonardi (2013) considers internal social media as web-based and mobile applications that enable employees and organizations to foster social interaction, share user-generated content and display user connections via multi-way communication. These internal social media include but are not limited to Twitter, Facebook, LinkedIn, YouTube, Myspace, company websites, as well as other social networking enterprise sites (Beer, 2008). As a growing employee engagement strategy, especially in the airline industry, internal social media is used by employees and the organizations to connect, communicate, share knowledge and content with colleagues to enhance engagement.

However, despite much research on the use of internal social media for employee engagement within the organization, the literature reveals that relatively little is known about the factors influencing employee attitude towards using internal social media for engagement. Furthermore, the actual use of internal social media as well as what factors create employees' willingness to use internal social media platforms for engagement and its impact on employee engagement and performance may varies across industries and countries. Therefore, this study seeks to contribute to the growing body of knowledge by examining the factors that influence employees' actual usage of internal social media for engagement and the impact on employee engagement and performance within the context of airline employees in the UK and Nigeria.

In the following sections, a brief research background to the study is provided. Then, the research gaps and the research contribution are highlighted. Thereafter, the aim and objectives of the research are presented, followed by the rationale for researching the UK and Nigerian airline industries. Finally, the theoretical and practical significance of the study, and the structure of the research are presented.

## 1.2 Research Background

The usefulness and importance of internal social media in achieving better communication, relationship and collaboration have become a driving force in organizations (Walsh et al, 2016). Also, it helps in providing opportunity for exchange of dialogue among employees. The internal social media platforms have also proven effective in the area of communication alignment between employees and employers and provides a new dimension to the building of relationship within the organization (Miller–Merrell, 2015). The interactive nature of internal social media may help to support collaboration, transparency, and increased trust across the organization.

The usage of internal social media platforms has become an important communication avenue for organizations, particularly airlines companies, whose large, dispersed workforce, that is, people working different shifts, in different time zones and various department in different geographical areas, need to coordinate work and engage individuals and teams across organizations. Thus, communication and collaboration are sometimes contending issues in getting across these different geographical boundaries. As the second most socially devoted industry (Socialbakers, 2012), evidence indicates that airline companies have successfully used internal social media not only for disseminating information and marketing communication, customer relationship management, recruitment and selection (Seo & Park, 2018; Koch & Tritscher, 2017; Sabato et al, 2017). However, it helps in supporting and enhancing effective communication and improves relationships between co-workers (Seo & Park; 2018; Koch & Tritscher, 2017; Cleveland, 2016; Bühler et al, 2014; Parry & Solidoro, 2013; Parekh, 2012; Doherty, 2010). Internal social media, which is of course a 24-hour service, are nowadays used by many airlines to engage employees. Research has indicated that airlines are beginning to use social media platforms often to engage employees and communicate work-related issues (Chamberlain, 2020). Hence, employee engagement using internal social media platforms can lead to positive employee and organizational performance, if used effectively (Walden, 2016; Rothbard, 2016; Tudu & Pathak, 2015; Schultz et al, 2015; Dreher, 2014). Considering these

facts, it is reasonable to say that organizations today cannot disregard this extremely popular, ubiquitous and convincing form of communication and collaboration to support the attraction and retention of talent. Several airline companies have started taking initiatives by embedding internal social media as an integral part of their employee engagement strategy:

“If the use of internal social media leads to more engagement, then it seems likely that there will be a corresponding improvement in areas such as: productivity, profitability, safety, customer satisfaction, turnover, and absenteeism”. (Haddud et al, 2016, p.6)

The adoption of internal social media networks, as an extra-organizational communication strategy in communicating and interacting with their employees in current times, has brought about ongoing transformation. As an important tool for engaging employees, as well as gaining valuable insight into establishing good working relationships and creating a network base among employees, internal social media are seen as a wide range of internet-based services that allow employees to communicate and collaborate among themselves. Rauniar et al (2014) suggest that the widespread popularity of social media platforms is because of its acceptance and usage in the professional, social and personal life of users. However, a great challenge to the inclusion of internal social media in organizations is predicting its adoption and eventually its utilizations, especially for work purposes. Smith et al (2009) observe that the adoption of a communication and engagement digital platform in the workplace is often impeded by the unwillingness of employees to accept and adopt the digital platform. Therefore, achieving success in implementation of new technology usage within the workplace is often quite challenging (Smith et al, 2009). In this sense, organizations and practitioners have often preferred to understand individual perceptions of adopting and using internal social media for work purposes. Naik (2015) asserts that understanding individual perceptions is important to gauge how individuals perceive and react to the elements of internal social media platforms. Other researches have argued the use of internal social media platform within the workplace for engagement activities. Fundamentally, criticism is dependent on the interaction between the individual, technology, environment and organization context in which it is rooted (Gonzalez et al, 2013; Van et al, 2013). Such interaction and attitude may lead to actual usage of technology (Van et al, 2013; Rauniar et al, 2014). Most organizations nowadays are putting efforts into taking advantage of using internal social media platforms due to their advantages, especially in the aspect of employee and employer engagement.

### **1.3 Rationale for the Study**

The concept of internal social media, employee engagement and employee performance have wider implications within organizations, Prior research demonstrates a high level of interest in studying the adoption and usage of internal social media as a tool of engagement in the workplace (Kaplan & Haenlein, 2010). A review of the existing literature positions the need for the current study. Firstly, there is a growing body of empirical research paying attention to the adoption and usage of internal social media platform on employee engagement within the workplace (Parry & Solidoro, 2013; Breunig, 2013; Goldwasser & Edwards, 2014). Internal social media are becoming an indispensable part of organizations, particularly airline companies, with many airline companies using them as a tool to enhance employee engagement and enable employees to work more efficiently (Caslosi, 2008). This advantage drives organizations to develop deeper understanding of internal social media and effectively utilise it (Bety et al, 2015). The concepts of internal social media and employee engagement have wider implications within the organization. Several studies have claimed that use of social media in the workplace has negative consequences for both individual and organization (Carlson et al, 2016; Yang & Treadway, 2016; Moqbel & Kock, 2018). Yang and Treadway (2016) stated that the use of social media in the workplace results in job inattention and leads to lack of time management and performance decline.

However, there is no conclusive evidence from prior study on the dark side of adoption and use of internal social media for employee engagement, and the relationship among these variables (Internal social media and employee Engagement). This is true when it comes to the adoption of internal social media for employee engagement and its impact on employee performance in the airline sector. Nevertheless, research that is mainly focused on the airline sector is very limited and is rather in its early stages. Hence, this research aims to fill the identified gaps and provides implications for academia and practitioners.

### **1.4 Research Gap and Contribution**

Irrespective of extensive empirical studies dedicated to assessing factors influencing employees' adoption and usage of internal social media for work purposes, the extant literature remains inconsistent and inconclusive. In fact, several limitations are identified and addressed in this research. These are summarized below:

Firstly, most of the empirical studies investigated factors influencing individual adoption and usage of internal social media in the workplace and were based on the technological capabilities

of using technology in the workplace (Lee et al, 2016; Haddud, 2013; Wang et al, 2013; Denyer et al, 2011; Davis et al, 1992).

Conversely, due to the nature of internal social media usage for work purposes, more especially for employee engagement, such an approach is considered to be limited concerning actual individual behaviour in using a specific domain of technology designed for work-related purposes. Therefore, behavioural factors together with technological factors are adopted to provide a more accurate and deeper understanding of what influences employees' behaviour towards adoption and usage of internal social media for employee engagement.

Another study which explored internal social media usage for work purposes was conducted mostly in western countries and assumed behavioural similarities in their findings (Vörös & Choudrie, 2011). In addition, the models of individual innovation adoption proposed by Davis (1993), Venkatesh et al (2003) and Goodhue and Thompson (1995) were used as the basis for the development of this work. The research only addressed individual aspects of the decision to adopt technology in western countries. However, relevant literatures provided minimal mention of an individual's perception towards adoption and usage of internal social media in the workplace (Leonardi et al, 2013; Chin et al, 2015), more especially for employee engagement, within the contexts of Nigeria. The influencing factors may significantly differ and may not be applicable in both countries (Nigeria and the UK). However, given that differences in culture or environment play a role in shaping individual perception and group adoption of technology, especially within the workplace (Erumban & de Jong, 2006), comparing factors influencing adoption and usage of internal social media for engagement between these two countries is problematic. Thus, testing the model developed in this research in both the UK and Nigeria, brings more evidence from developing countries, enabling comparison between the two selected culturally different work environments.

Thirdly, similar to the second point above, some of the studies on internal social media adoption and usage for work purposes, specifically employee engagement, were mainly conducted in different sectors, such as education, IT, healthcare and banking. Hence, the adoption of internal social media for work purposes has not been explored in the context of airlines. As such, this aspect is relevant to this study as this is explored in the framework of the Nigerian aviation industry, the reason being that the research is designed to explore internal social media adoption and usage for the employees within the Nigerian aviation industry.

Fourthly, although the use of internal social media for work purposes aimed at engaging employees in their work (Colbert et al, 2016), the empirical literature that studied the effectiveness of internal social media usage on employees, only focused on employee engagement as a whole, thus, neglecting the kind of engagement employees may derive when using internal social media. It included what internal social media activities impact and target employees' intellectual, affective and social engagement, which leads to performance outcomes. Consequently, this study fills this gap by investigating the influence of internal social media on these three dimensions of employee engagement (intellectual, affective and social engagement) and the impact on employees' performance. This gives an understanding of what type of engagement level employees could derive using internal social media for engagement in the workplace, considering the fact that social media platforms have mainly been argued as used for socialization.

Finally, most previous studies on internal social media usage in the workplace lack strong theoretical foundations to explain the impact of internal social media usage on employee engagement (Men et al, 2020; Oksa et al, 2020; Ewing et al, 2019; Haddud et al, 2016). Therefore, drawing on the Technology Acceptance Model (TAM) proposed by Davies (1998), the present study uses and extends TAM by incorporating external variables to provide evidence on the applicability of the developed research theory concerning internal social media adoption for employee engagement and its impact on performance. Additionally, other studies that investigated the adoption of technology used within the workplace in education, IT, healthcare and banking industries found that employees' adoption of technology was affected by variables such as perceived relevance, perceived management control, perceived behavioural control, perceived management control, uncertainty avoidance and original TAM constructs. Thus, incorporating these factors towards actual usage of internal social media could help obtain a more accurate model.

## **1.5 Research Aim and Objectives**

The research is aim at exploring factors that influences airline employees' usage and adoption of internal social media for employee engagement. Also, the research accesses how the use of internal social media impacts and targets employees' intellectual, affective and social engagement and its impact on employees' performance within the contexts of Nigeria and the UK.

To address this aim, the following objectives are set:

- To assess the factors that influence employees' usage of internal social media in the workplace.
- To examine relationship between usage of internal social media and employees' affective, intellectual, and social engagement
- To assess the relationship between employees' affective, intellectual, and social engagement and employee performance
- To understand differences between Nigeria and the UK regarding factors that influence internal social media use and impact on employees' engagement and performance.

## 1.6 Research Questions

To better understand the factors influencing adoption and usage of internal social media for employee engagement and the aspect of employee engagement (affective, intellectual and social engagement) in which internal social media can have an impact on engagement and performance of airline employees in the UK and Nigeria, this thesis aims to achieve the highlighted research, aim and objectives, and seeks to answer the following four, broad research questions:

1. What are the influencing factors facilitating employees' adoption and usage of internal social media?
2. To what extent can the usage of internal social media platform drive employees' intellectual, affective, and social engagement?
3. Is there an association between employees' affective, intellectual and social engagement and employee performance?
4. Are there differences between Nigeria and the UK in terms of influence of internal social media adoption on employee engagement and employee performance?

## 1.7 Research Context

Based on literature regarding adoption and usage of internal social media in the workplace urging for comparative studies between the developed and developing contexts, the current study tests the developed research model by investigating comparatively the use of internal social media for employee engagement and its impact on performance among employees in

developing and developed nations in the airline sector. Whereas Nigeria represents a developing nation, the UK represents a developed nation.

Even though there is research evidence on the use of social media generally in organizations, most of this existing research relates to how organizations use them to boost their profits and to engage employees (Sabato et al, 2017; Siamagka et al, 2015; Nah et al, 2012; Kuikka & Akkinen, 2011). In a business, such as in the airline sector, internal social media is implemented to provide employees with an easy way to communicate and share personal and professional information with other co-workers. Men et al (2020) assert that organizations' adoption of social media is facilitated by its ease of accessibility and opportunity of using it advantageously in communication and as an employee engagement channel:

“Organizations' adoption of internal social media can not only satisfy employees' information needs but also employees' psychological needs for connectedness, relatedness, community, socialization, and empowerment”.  
(Men et al, 2020, p.8)

The gesture helps to improve employee engagement, more especially airline companies that often connect with their employees outside of traditional communication mediums, due to its nature of a dispersed workforce and coordination of large teams across the whole organization.

### 1.7.1 Why airline companies?

While organizations have various tools to connect and communicate with employees, internal social media are unique channels for organizations to communicate, collaborate and enable two-way dialogue. Various organizations, especially airline companies that manage a dispersed workforce, are increasingly using internal social media for engaging and communicating with employees. Previous studies have reported that internal social media has become a business tool and an opportunity for communication and collaboration, as well as fostering workplace learning between internationally dispersed work colleagues (Breunig, 2013, Goldwasser & Edwards, 2014). Studies suggest they yield important benefits for employees and organizations (Men et al, 2020; Haddud et al, 2016) and indicate their overwhelming impact in the airline industry; for example, study reveals that internal social media used for employee engagement can help employees communicate, collaborate and connect to coworkers and the organization, which enables them to develop sense of belonging, enhance learning and innovation and promote engagement and in turn improve performance. Moreover, as the second most socially devoted industry (Socialbakers, 2012), there is evidence that airline companies adopt and use

social media externally to manage, and engage customers which help boost profit margin. Despite these important benefits, however, little is known about employee behaviour towards the usage of internal social media for employee engagement and its impact on employee performance. Therefore, a better understanding of the factors that influence employees' perception to successfully adopt and use internal social media for employee engagement and the influence on employee intellectual, affective, and social engagement and the impact on performance, and their relationships will provide insights for improving the development and implementation of internal social media for engagement in airline companies.

### 1.7.2 Why a comparison between Nigeria and the UK?

The Nigerian airline industry, though nascent, has a unique historical evolution. It operates both national and international flights. Nigeria, the most populated African nation, is endowed with both natural, financial resources and human, material which make the nation a favourable destination for other countries of the world (Obioma et al, 2013). In 2019, more than 14 million passengers passed through Nigerian airports, with local travel accounting for over 10 million of these passengers. Almost 43,000 inbound flights were completed across the country's 22 airports. This figure illustrates an 11.2% increase in flights versus 2018 (Obioma et al, 2013). Air travel in the country is on the increase and this has brought about demand for more aircraft, as well as standard infrastructure and service to meet the needs of passengers. The Nigerian aviation sector is predicted to be one of the highest revenue earners for the country due to its huge opportunities. Moreover, in 2013, domestic and foreign airlines that operate in Nigeria contributed about \$159 million (N58 billion, the Naira is Nigeria's currency) to the nation's economy and supported 61,000 jobs. This was disclosed by the country's Ministry of Aviation (Obioma et al, 2013). According to the report, airlines registered in Nigeria directly employed 7,000 people locally and supported through their supply chain a further 33,000 jobs. Furthermore, 21,000 jobs were supported through the household spending of those employed by airlines and their supply chain (Eze, 2013). In 2018, Nigerian airlines accounted for 49% (i.e., US\$462 million or N90.8 billion) of the country's GDP (gross domestic product) (Daramola & Fagbemi, 2018). In 2016, the aviation sector in Nigeria contributed \$0.3 billion to the country's GDP and air transport directly employed over 5.5 million people (Shadare, 2017), which is more than the previous year. Similarly, the total contribution of travel and tourism to GDP (including wider effects from investment, the supply chain and induced income impacts) was N5,124.3 billion in 2016 (4.7% of GDP), and rose 1.3% to N5,059.4 billion

representing 4.6% of GDP in 2017 (WTTC, 2017). The Nigerian airline sector is faced with numerous problems. The major, and noticeable, problems confronting the Nigerian airline sector include poor interaction and processes experienced in the purchase of air tickets both online and offline, persistent flight delays and regular flight cancellations without information to passengers. Additionally, there is a lack of aviation operational guidelines and policies, and where a policy exists, there is the inability of airline service providers to operate within the confines of the policy (Adiele & Etuk, 2017). Aside from the abovementioned issues there are also poor supervisory roles by the management and poor customer relationship management (Adiele & Etuk, 2017). These challenges may be due to lack of communication, information coordination and collaboration among departments within the organizations, and among management and subordinates, which often occur due to airlines operating complex business activities and managing dispersed workforce. With the importance of the sector in the country's economy and being the face of any nation given its strategic role, and as the sector currently serves more than 14 million people around the world, service quality and good business operation are important in meeting the needs and expectations of stakeholders. In the literature there is a relationship between service quality and employee engagement. However, Wake and Green (2019) stress that business success depends on employees and their happiness, energy, morale, beliefs and attitudes as key factors. Hence, many organizations have started adopting different strategies to improve business performance through employee engagement, more especially the Nigerian aviation sector. Due to their large and complex business activities, Nigerian airlines are turning to internal social media platforms because of its functionality of reaching many people at the same time to enhance employee engagement and ensure easier locations for communication and information among employees to improve business operations.

Moreover, the UK plays a vital role in the international aviation industry. Remarkably, most of the recent growths in the British aviation were attained only after the 1970s (Mazareanu, 2020). Now, the UK aviation industry continually contributes to the further development of global passenger air travel opportunities. In more than 25 years, the number of air passengers arriving and departing at airport terminals in the UK has almost tripled; in 2018 more than 292 million people were transported by air in the UK. The sector contributed £52 billion in overall GDP with 961,000 jobs and £8.7 billion in taxation (Oxford Economics, 2020; Sustainable Aviation, 2016). According to the Oxford Economics (2019) report, this is connected to 3.4% of the whole UK economy. Furthermore, "its contribution to UK employment is 960,000 jobs (3.4%

of the UK total), with airports and ground services contributing 433,000 jobs, aerospace 327,000 jobs and airlines 200,000 jobs” (Oxford Economics, 2019). Furthermore, aviation is the backbone to any nation’s tourism sector. For example, the value of tourism to the UK economy in 2014 was £127.4 billion, representing 7.1% of the UK GDP. Also, the country remains the fifth largest international tourism destination ranked by visitor expenditure. The first four destinations are the USA, China, Spain and France (Oxford Economics, 2014). Therefore, based on the statistics above, it could be concluded that the contribution of the airline sector to any nation’s economy, whether developing or developed, is non-trivial. Additionally, with 3.4% of total UK jobs, it could be inferred that any innovative effort or approach deployed by employers to engage this huge workforce is equally non-trivial.

The choice of the UK and Nigeria as the case studies is due to the fact that these two countries are the largest players in the aviation industry in their respective continents. Additionally, a significant number of studies on individual use of technology have been carried out mostly in western countries and have assumed behavioural similarities in their findings (Vörös & Choudrie, 2011). While there is an increasing body of research on employee adoption of internal social media within the workplace in western countries, there remains a lack of investigation into the factors that influence employee usage and adoption of internal social media within the workplace in developing African countries (Tarhini et al, 2016; Chiemekwe & Ewuekpaefe, 2011; Licker & Motts, 2000). The relevant factors such as individual characteristics, organization characteristics, and technical competencies in adoption of an internal social media platform within the workplace differs and is often overlooked; therefore, further investigation into the factors that influence employee adoption and usage of internal social media for employee engagement and its influence on employee performance in a developing African country must be undertaken. Hence, this study compares Nigeria (developing Africa country) and UK (western, developed country) in terms of factors that influence employee adoption and usage of internal social media for employee engagement and its impact on employee performance within the context of airline employees in Nigeria and the UK. Finally, no proposed framework(s) appear to have emerged based on the findings of the growing body of empirical work within a comparison of developing African countries and western countries context in relation to internal social media usage for employee engagement; therefore, this study seeks to fill these identified research gaps through assessing the following twelve hypotheses using the extended TAM model.

## 1.8. Significance of the Study

The present study will make a significant contribution to both the practical and theoretical understanding of the influencing factors of internal social media adoption and more importantly, the impact of internal social media usage of employee intellectual, affective and social engagement, and its influence on employee performance in the airline industry within the context of of the UK and Nigeria.

### 1.8.1 Theoretical Significance

There are numerous studies in different fields that link technology and engagement by showing cases in which use of technology can develop positive attitude associated with individual engagement (Domingo & Gargante, 2016; Stempniak, 2014; Law, 2009). Conversely, there has been no empirical research conducted to support these relationships in the context of human resource management (HRM) and technology communication. Therefore, this study has the potential to make valuable contributions by examining the relationship between adoption and usage of internal social media network and employee engagement in the context of HRM.

Secondly, the influencing factors of internal social media adoption and usage and the impact it can have to employee engagement and performance are not well documented (Svenja et al, 2017; Moqbel, 2012). This study contributes to the literature by exploring the influencing factors regarding internal social media usage and the impact of internal social media on employee engagement and performance among employees of airline companies in Nigeria and the UK.

Thirdly, the Technology Acceptance Model (TAM) focuses only on cognitive attributes and technological functionality and fails to acknowledge other behavioural attributes that affect individual intention to adopt and use technology. Therefore, the study investigated other attributes (i.e., behavioural and physiological factors) that could influence employee adoption and usage of internal social media platform for engagement within the workplace, which can have impact on their performance (Read et al, 2011; Bagozzi, 2007). TAM was extended/modified to understand what factors are perceived as crucial for employee usage of internal social media platforms for engagement within the contexts of the UK and Nigeria. In this context, as a contribution to technology innovation, this study provides a comparative analysis of the factors influencing individuals concerning internal social media adoption for engagement activities in the workplace. The models of individual innovation adoption

proposed by Davis (1993), Venkatesh et al (2003) and Goodhue and Thompson (1995) were used as a basis for the development of this study. These models only address individual aspects of the decision to adopt technology in western countries. It is important to determine the factors influencing the effective usage of social media platforms for engagement in both the UK and Nigeria and compare these with the research model. It is within this premise that the scales used in this study were separately tested and validated within the contexts of the UK and Nigeria, to shed some light into the underlying factors that may influence current and future adoption and usage of internal social media platform for employee engagement in two culturally different work environments.

Furthermore, this study is important due to limited research focused on the role of societal context in adoption of internal social media platform within the workplace. A significant number of studies on individual use of technology have been carried out mostly in western countries and have assumed behavioural similarities in their findings (Vörös & Choudrie, 2011). While there is an increasing body of research on employee adoption of internal social media within the workplace in western countries, there remains a lack of investigation into the role of culture in acceptance and usage of social media within the workplace in developing countries (Tarhini et al, 2016; Chiemeké & Ewuekpae, 2011; Licker & Motts, 2000). The relevant aspect of the societal context in adoption of internal social media platform within the workplace is often overlooked; therefore, the behaviour in developing countries of technology adoption is not known and remains under-researched. However, given that differences in culture play a role in shaping individual behaviour and group adoption of technology, further investigation into the role of culture in accepting and using social media platforms within the workplace must be undertaken (Erumban & de Jong, 2006).

### **1.8.2 Practical Significance**

From the discussion above, this study contributes to the body of knowledge in different ways, first it seeks to understand different factors that can impact on employees' adoption and usage of internal social media for employee engagement. It investigates factors that may influence employee adoption of internal social media platforms for engagement within the organization. It will also be used to determine the importance of perceived management support, perceived behavioural control and perceived relevance, uncertainty avoidance on employee adoption and usage of internal social media for engagement within the workplace.

Secondly, in spite of the growing importance of employee engagement on internal social media, not much is also known about the antecedents of this phenomenon and its level of engagement with employees, which comprises of intellectual, affective and social engagement and its influence on employee performance (Read et al, 2011; Bagozzi, 2007). Hence, this study provides a different perspective on the organizational understanding of these phenomena and their impact on employee performance.

Thirdly, the research has the potential to help organizations to understand the importance of using internal social media for employee engagement. It has the potential to help HRM understand the internal social media platform as a two-way communicative channel that enables employees to express their feelings, establish relationships, and exchange knowledge and expertise with one another. The main contribution to practice is for organizations to acknowledge that the use of internal social media can enhance employee engagement through giving and receiving support and collaborating with colleagues via internal social media platforms. This support and collaboration, as well as creating the feeling of being emotionally connected to work, especially when employees are not physically at the same location, can positively impact employees' engagement in their work (Oksa, 2020). Thus, it is critical to allow and promote internal social media usage within the workplace for work-related discussions, especially in airline companies: this will help enhance higher employee engagement.

Fourthly, studies that have used TAM as an underlying theoretical lens to study individual adoption and usage of technology within the workplace indicated ease of use and usefulness as influencing factors of technology adoption and usage (Hubert, 2019; Granić & Marangunić, 2019; Koul & Eydgahi, 2018; Rauniar, 2014). A significant number of these studies have been carried out mostly in western countries and have assumed behavioural similarities in their findings (Vörös & Choudrie, 2011). However, there is insignificant literature on individuals' perception and attitudes towards technology usage within the context of Africa (Leonardi et al, 2013; Chin et al, 2015). The influencing factors may significantly differ and may not be applicable within African contexts, such as Nigeria. However, given that differences in culture or environment play a role in shaping individual behaviour and group adoption of technology (Erumban & de Jong, 2006), this study provides understanding of what factors influence employees' ability to use internal social media for engagement in both countries.

## 1.9 Thesis Outline

This study contains eight chapters. These are detailed below.

**Chapter One** provides a brief overview of the study. It highlights the study's background, the research gap and contribution, the research, aim, objectives and questions and lastly, the significance and structure of the thesis.

**Chapter Two** reviews the literature on the meaning of social media in general, internal social media, the concept of employee engagement and the research context. This chapter supports the focus of this research and extensively evaluates the importance and implications of internal use of social media for employee engagement, including establishing the relationship between independent variables, mediator and dependent variables. This chapter also concerns the research context. It presents company case examples on the use of internal social media for employee engagement. It briefly evaluates airlines' use of internal social media to improve/enhance employee engagement, as well as the 8Cs of internal social media activities used by airline companies for employee engagement and effectiveness.

**Chapter Three** starts by emphasizing the theoretical basis which this research study is built on. The extended TAM is defined, and the application of the theory is justified. The chapter presents the research model and states the hypotheses tested in this research. Also, it discusses and defends the theoretical assumptions of the thesis.

**Chapter Four** first presents the methodological viewpoints of this research. Second, it analyses and justifies the philosophical assumptions, the research approach, the paradigm of enquiry, the research methodology and the research approach selected for this study. Third, it identifies the research methods used to gather the data and test the hypotheses. It also discusses the research ethics, and the statistical method used to analyse the data; the research methods are also justified and backed up by previous key studies in the field.

**Chapter Five** presents the analysis of the Nigerian and UK data; it presents the results obtained from both surveys. The results are jointly analysed beginning with descriptive statistics describing the samples and assessing the measurement models to check the validity and reliability of the measurement models. Thereafter, the structural models are assessed, and the hypotheses are tested. The chapter also presents a multi-group analysis to identify the differences emerging between both researched countries.

**Chapter Six** is the discussion chapter. This chapter discusses the findings of this study and explains the findings using relevant literature to underpin the discussion. In this chapter, the proposed research questions are answered, and areas where the current research results contradict prior study are discussed. Additionally, differences between the two researched countries are explained and discussed.

Finally, **Chapter Seven** concludes this thesis. The aim of the research, objectives and questions are linked to the research findings. The theoretical and practical implications of the study are presented, the limitations of the research are acknowledged, and future research is also identified.

### 1.10 Summary

This chapter has outlined the primary focus of this study, clearly stating the introduction, the background of the research and the problem statement. This chapter has presented the research gap, aim and objectives, as well as the research questions. In addition, it explored the rationale for UK and Nigerian airlines, together with the theoretical and practical significance of the study in order to understand the importance factors influencing the actual usage of internal social media for employee engagement and the impact of internal social media usage on employee engagement and its influence on employee performance. Thereafter, the research outline was stated to describe in detail the major parts of the thesis and clarify the content of each chapter of the thesis. The next chapter starts with the literature review. It explores the conceptual meaning of social media in general and internal social media. This chapter also discusses the conceptual meaning of employee engagement, highlighting the importance of internal social media for employee engagement in the workplace.

# CHAPTER TWO: LITERATURE REVIEW AND THE RESEARCH CONTEXT OF THE CASE STUDIES

## 2.0 Introduction

This chapter discusses the analysis of the literature: it provides an overview of social media in general, internal social media and employee engagement, important theories about several technology acceptance models, external factors and impact of employee engagement on employee performance. This section also examines the theoretical basis of this study. It presents the key factors that influence an individual employee's behaviour and intention to adopt and use internal social media within the workplace for engagement. Research gaps are identified as the reason for the justification of this research. A conceptual model has been developed based on the literature review. The model defines the factors that may influence an employee's intention to use internal social media for engagement, and the relationships between the factors. Finally, hypotheses are proposed to test the links between the empirical data.

## 2.1 Conceptual Definition of Social Media

As the most crucial development of our time, social media platforms have essentially changed our private and professional lives (Walden, 2016). Studies have indicated that individuals are spending more time on social media and other similar communication technologies (Walden, 2016). In the past, communication was mainly through traditional means which offered limited features, preventing people from engaging in other activities; certain people relied on written correspondence to disseminate information, where messages and emails were mostly passive acts; leaving people to make sense and assess the credibility of the messages (Flanagan, 2017). Traditional communication media lost their popularity due their limited capacity to reach a wider range of people across the globe, as well as their lack of two-way communication patterns that promote mutual understanding between peers (Grung & Hunt, 1996).

The advent of Web 2.0, the term coined by Tom O'Reilly, brought about a shift in the use of the internet. Social media are specific internet services which employ Web 2.0 principles. Web 2.0 is a change in the way individuals make use of the internet for information sharing, productivity, content creation and collaboration (O'Bannon, 2008). As computer-mediated technologies enable the sharing of information and creation of user generated content, there

has been an increase in the use of social media tools both inside and outside organizations due to its media richness, social presence and strong user content (Bennett et al, 2010). The growing importance and penetration of this communication medium into businesses are encouraging organizations to embrace social media platforms to enhance employee performance and organizational strategies. Moreover, indicating the massive growth of social media in the past 20 years, studies claim that social media platforms are an increasingly important environment where organizations engage with employees (Boyd & Ellison, 2007; Haddud, & Dugger, 2016; Sabato et al, 2017). Walsh et al (2016) state that organizations are investing in social media to improve communication and collaboration to enhance performance. Mogbel et al's (2013) study points to the use of social media in the workplace as having a greater impact on employee job satisfaction and performance.

Moreover, social media have been defined as system-based services that permit individuals to build a public or semi-public profile within a constrained system (Boyd & Ellison, 2007). Marketo (2010) defined this tool as any individual-originated communication with other individuals who share an interest and use the web as a platform to create a community to share information, build and maintain relationships and connect with one another. Greenberg (2010) maintained that social media is mainly an internet- or mobile-based application which allows individual sharing, collaborating, creating and publishing of information. Other researchers maintain that social media sites are public web applications which give users access to create a personal profile, find other users, read messages and send both private and public messages, as well as post content and react to postings made by others on the site (Bryer & Zavatarro, 2011; Boyd & Ellison, 2013).

The emergence of new communication modes in the form of social media and the response to the new reality of using social media for corporate life has provided opportunities for organizations to speedily deliver content and links, and engage with people worldwide (Bennett, 2010). As a medium for communication, social media is used by individuals or groups of people for different purposes such: as texting, uploading images, blogging, tweeting and posting video or audio content and can take place irrespective of the platform. Its characteristics enable various individual comments, recommendations and evaluations, and individual users take active participation and interest in the content, and thus develop a social relationship amongst themselves (O'Reilly, 2007). The interaction involves the mutual exchange of individual opinion, information, experience, expertise and impression, as well as involvement in the creation of content (O'Reilly, 2007). According to Lee et al (2015), the one-

to-many nature of social media communications eliminates the communication gap between individuals. Past studies have indicated that social media have been used or adopted for various incentives and reasons which include information, social aspects and entertainment (Shao, 2009; Stafford et al, 2004). Heinonen (2011) said that its usage is divided into three elements, namely, social connection, entertainment and information processing. These sites have become a day-to-day routine for people.

## 2.2 Social media in the Workplace

The existence and usage of social media tools in the past 20 years has emerged significantly and led to a cultural shift, linking people and allowing them to collaborate in ways that were impossible before (Cao et al, 2013). Social media has become a crucial point for almost every human interest and activity (Richards, 2011). The advancement of online communities has crept into employees' individual space, extending to the workplace (Icha & Edwin, 2015). Nowadays, organizations use both internal and external social media, which is generally known as enterprise social media, to connect stakeholders who share similar business ideas and interests. Internal social media in the workplace has been mainly defined as any organization's internal social media platforms such as: blogs, wikis, Facebook, Twitter, LinkedIn, Myspace, Instagram, and other forms of social media platforms that are used only by the employees within the workplace for work purposes, collaborations, interactions, and nurturing relationships among employees. on the other hand, external social media is a public social media platform such as Twitter, Facebook, Instagram, Google+ etc. that is used by an organization to conduct research and stay connected to their customers to improve business operation and process. Kuegler et al (2015) studied social media use among employees in the organization and found that use of internal social media platforms has a greater impact on employee job performance than external social media use. Internal social media is becoming increasingly important for many organizations. Bennett et al (2010) claim that there has been an increase in the use of social media in organizations due to its media richness, social presence and strong user content. Anand (2010) added that the growing importance and penetration of this communication medium into businesses are encouraging organizations to embrace social media platforms to enhance employee performance and organizational strategies. Previous studies have reported that social media has become a business tool and an opportunity for communication and collaboration, as well as fostering workplace learning between internationally dispersed work colleagues (Breunig, 2013; Goldwasser & Edwards, 2014). The

work of Marcia (2013) showed that 91% of the top 250 of “Fortune’s most admired U.S companies utilized at least one social media platform in the workplace” (p5). Similarly, recent statistics have indicated the overwhelming impact of social media in modern businesses. Recent research on social media statistics for 2018 indicated that the internet holds 3.5 billion users globally, there are 3.03 billion active social media users, 91% of retail brands use two or more social media channels, and 81% of all small and medium businesses use more social media platforms (Statusbrew.com, 2018). Similarly, Perdue (2010) found that more than one million active developers and entrepreneurs from more than 180 countries use Facebook, proving that social media interest is not only for entertainment and socializing purposes. In the United Kingdom alone, 88% of the top 100 companies use at least one social media platform. A study carried out by a chartered management institute (CIPD, 2014) found that in UK organizations like the police force, retail industries, social enterprises, service providers and the transportation sector use social media in the workplace to transform learning and development.

Skeels and Grudin (2009) maintain that social media has made it possible for employees to work anywhere they are, inside or outside the organization and connect with other colleagues, allowing good connection and communication, which result in good working relationships between employees. Mangold and Faulds (2009) state that many organizations have used social media to strengthen their brands and create a network base. The work of Forcier et al (2013), which studied social media use of public libraries in Canada, found that these non-profit organizations adopt social media platforms as part of their communication strategies to build relationship and engagement. Sinickas (2005) added that organizations adopt social media platforms for different functions of human resources management, which include learning and development, employee engagement, employee voice and feedback, and to enhance the collective brainpower of all employees to improve business decisions.

It has been revealed by Kirby and Raphan (2014) that most companies are actively pursuing the digital opportunity because of its potential business benefits. Traditionally, the Chartered Institute of Personnel and Development (CIPD) (2014) have subscribed to the belief that the benefits of social media communication have made organizations recognize its power and adopt these interactive platforms to create a more engaged workforce and positive work environment (CIPD, 2014). Similarly, Chao et al (1994) maintain that the central focus of why social media was adopted in the workplace is to increase employee voice, enhance communication between employees, ensure an effective transfer of knowledge and foster

workplace learning. For Chao et al (1994) social media is utilized in the workplace for socialization: socialization for organizational internal use means learning behaviour and skills necessary for employees to assume their roles and responsibilities and participate as part of the organization to increase organizational commitment and improve engagement. Williams and Cothrell (2000) hold the view that social media in the workplace involves the influence of employees' perceptions and behaviour. Laroche (2012) supported this view and added that employees like to contribute, create and join groups to feel a sense of belonging, and feel socially connected and recognized by their colleagues in the organization. Bennett et al (2010) state that social media can facilitate improved workplace productivity by enhancing the communication and collaboration of employees, which aids knowledge transfer and consequently makes organizations more agile. Bennett et al (2010) further argue that "social media can provide enhanced levels of employee satisfaction by reducing the social isolation of teleworkers, making them feel part of organizational culture during long absences from the physical office" (p.139).

According to Raacke and Bonds-Raacke (2008), social media can serve as a platform which makes it easy for employees to interact with one another, build important relationships with co-workers and develop business strategy, especially in recent workplace environments when employee loyalty and commitment can decline at the smallest demotivation and dissatisfaction, which can have influence on employee retention and turnover rate (Williams & Williams, 2008). Kirby and Raphan (2014) said that social media use within the workplace is a vital tool that helps to shape effective organizational strategies and can make a great difference within the organization. The impact of social media use within the workplace has created a way for employees to collaborate and develop, providing management insight into understanding their employees and what motivates or interests them (Miller–Merrell, 2015). In spite of the claim that social media are essential tools which help to shape effective organizational strategies. Kirby and Raphan (2014) claim that the interactive technology is currently being underutilized by some major organizations, due its perceived dark side. However, Carlson et al (2016) added that the use of social media in the workplace may contribute to productive behaviours, as well as unproductive behaviours.

In the workplace, employees use internal social media effectively when it helps them locate required information and knowledgeable individuals to answer questions, to learn about the skills and functions of others in the organization, and to boost work performance (Thomas & Akdere, 2013; Morch, 2015). Marcia (2013) believes that these elements of social media are

an integral part of business, which can enable an organization to drive a better, more transparent, engaged and collaborative culture to increase productivity and performance. Williams and Willams (2008) claim that social media as an interactive platform is known as a powerful tool, as it can help bring together like-minded people in the workplace and can be used to develop business strategy. Table 2.1 shows organizations use of social media.

**Table 2.1: Examples of social media networking sites used within the workplace**

<p><b>Facebook:</b></p>		<p>Social networking site that enables users to create personal profiles and connect with like-minded people and friends, the site ensures that users receive automatic notifications and updates of current news and activities. At the same time users can join and follow topics and areas of interest such as company learning and development and can receive instant messaging.</p>
<p><b>Blog:</b></p>		<p>Blogs and microblogs are discussion sites where publishers post write-ups on a particular topic of choice. This is done on a regular basis and attracts interested people to leave commentaries and share with people in their network. Blogs in the workplace are used to increase knowledge sharing. The benefit of increased knowledge sharing is higher levels of productivity. Employees with access to information about the inner workings of the company may feel more included. They might become enthused to act on that knowledge or further develop it.</p>
<p><b>LinkedIn:</b></p>		<p>A social networking site focused on business and professional connection and networking. Users can link with people of the same profession and interest. In the workplace, LinkedIn is used for personal, professional and organizational development. Employees can use it for networking and for keeping up with trends.</p>
<p><b>Twitter:</b></p>		<p>A widely used microblogging site, it enables users to post messages which are made visible to followers only or the public depending on privacy settings. The messages, known as tweets, are up to 140 characters which can be retweeted by followers or shared on different platforms. Many businesses use Twitter to invite online feedback, reviews or comments. In the workplace, Twitter is used to keep employees up to date with current information about the business.</p>
<p><b>YouTube:</b></p>		<p>A video-sharing site which enables users to upload, share and view videos of their interest. This is a typical site for user-generated content as a user of any level of expertise can make and share videos on different topics and interests. Users can set up channels and encourage interested people to subscribe to their channel. Due to the popularity of this site, organizations are increasingly using it to share company information and vacancies. Employees use it to access recorded webinars and tutorials, etc. Additionally, certain industries, such creative arts, are using it as a tool for recruitment.</p>

**Google:**  Known for its search engine technology to give users relevant information, Google is a commonly used site for online search specialising in internet services. The site also has its own social networking site Google+ which has the same features as Facebook.

**Website:**  A company website is a place to find background information about an organization. Websites are intended to appeal to visitors by creating content that people want and is presented in a way that is organized and easy to consume. It is now a common practice for organizations to have a dedicated internal website for information sharing, internal recruitment, communication, peer-to-peer engagement, business updates and performance.

**Forum:**  An online interaction tool, which can be used to facilitate learning. Individuals generate ideas on a subject that will be addressed, questions raised, suggestions and ideas are exchanged. Forums are still used regularly by 10% of UK online users (Li & Bernoff, 2011). The benefit of an online forum is that it gives the user the potential for anonymous interaction (Pendry & Salvatore, 2015). It can also be used to improve rapport between employers and employees and improve brand reputation.

**Others:**  This covers other forms of social media networks used within the workplace for communication, building relationships, learning and development, sharing knowledge or used for any form of activities aimed at bringing employees together. For example, wikis, file sharing, ideation blogs, bookmarks, Yammer, etc. (Haddud, 2016, p.4).

Sources: Li & Bernoff (2011); Pendry & Salvatore (2015); Haddud (2016)

## 2.3 Impact of Social Media in the Workplace

### 2.3.1 Potential benefits and challenges

Social media has provided networked interaction channels that facilitates communication and collaboration, allowing messages to propagate within social and professional academic communities (Collins et al, 2016). Social media use within the workplace is fast becoming a vital tool for an organization. It plays an important role in the building of relationships within the organization, by supporting employee interaction and eliminating rigid, traditional means of communication (Thomas & Akdere, 2013). Previous studies have indicated that organizational initiatives for establishing effective interaction and closer links within the workplace, to increase productivity and performance cannot be fruitful without strong involvement and engagement of employees using social media (Parry & Solidoro, 2013; Marcia, 2013; Girard & Fallery, 2010; Miller–Merrell, 2012; Parry, 2011). To this end, many

organizations understand the values of social media within the workplace, regarding improving technical and professional skills (Cairo, 2014), thus finding smarter ways to improve their business strategies using new technologies (Gutierrez, 2016). According to Marlow et al (2012), there are two likely causes for a search for new ways of improving business strategies: (i) employees expect effective and speedy information and collaboration within the workplace; and (ii) twenty-first century employees are moving away from a one-to-many model of communication, to a many-to-many model of communication: a shift from the kind of communication model that “suited hierarchical organization to a model that best suits the network-like organization” (p.159). Gutierrez (2016) believes that these skilled employees cannot be managed with the old style of management regarding communication pattern. Employees expect a culture of transparent, speedy and clear communication. It is due to these facts that organizations are becoming more people-oriented and companies are finding smarter ways to boost employee engagement and performance using technology (Gutierrez, 2016). Despite the numerous benefits of social media, several studies have indicated various drawbacks of using social media within the workplace. Buche et al (2013) argue that social media can be a valuable tool to a business, but it can also cause serious issues in the organization and as a result, organizations are slow to adopt social media platforms for workplace activities due to their inability to control corporate communication and the belief that employees may use the medium for personal use during working hours. Leftheriotis and Giannakos (2014) said that some organizations think that the use of social media in the workplace is a waste of management time, as managers and supervisors may have to frequently check and provide warnings and reminders to employees to focus more on their work.

According to Walden (2016), social media can become a real challenge to an organization and organizations are concerned about the risk of misuse and its consequences. In addition, studies have also indicated that the use of social media networks within the workplace can be a waste of time and pose many challenges to an organization, such as trust, privacy concerns and fear of damage to reputation (Moorcraft, 2006; Parry & Solidoro, 2013). Leftheriotis and Giannakos (2014) have also challenged other authors’ view (Aguenza et al, 2012; Çetinkaya & Rashid, 2018) on the benefits of using internal social media in the workplace, arguing that employees may use the medium for personal use during working hours, and problems start when employees abuse workplace internet access for individual use during working hours. Thus, the risk of misuse and its consequences become a serious concern to organizations. This is certainly true in the case where workplace social media policies are not implemented. Ployhart (2012)

suggests that an organization can enhance success and minimize the risk of social media usage if they can create and implement formal social media policies, stating clearly the functional policies, which include organizational privacy policy.

Furthermore, to ensure adoption and effective use of internal social media within the workplace, it is important to understand that individuals and organizations differ from one another in the degree to which they adopt or use technology; these differences are motivated by different factors (Parveen, 2012; Bogue & Brito, 2018). According to the institutional theory, an organization's adoption of innovation is driven by social and cultural factors, which means that organizations are motivated to adopt e-commerce due to pressures from competitors or customers (external pressure) which motivates them to copy from market leaders, instead of making internally driven decisions to adopt technology (Oliveira & Martins, 2011). Despite considerable research on organizational innovation adoption, little is presently known about the adoption of innovation at the individual level within organizations (Talukderi et al, 2008). Similarly, Oliveira and Martins (2011) argue that there is a belief that technology has significant impacts on an organization's productivity; these impacts can only be realized if technologies are widely spread and used, but it is important to understand the individual determinants of technology adoption, as there are few studies on adoption models at the individual level (Oliveira & Martins, 2011).

Additionally, Kim and Chung (2017) maintain that as innovation is considered idea utilization, the process of innovation involves two different stages: *adoption*, which consists of the decision of the organization to make use of innovation and *implementation*, which involves employees' constant use of the innovation after adoption (Klein & Sorra, 1996). Although the adoption of innovation is expected to create the desired performance increase or organizational change, it is also vital for innovation success: innovation success can be achieved when the innovation is constantly used by individuals (Kim & Chung, 2017). In spite of its practical importance, studies on innovation have shown limited research on implementation (Choi & Chang, 2009) as a practical phenomenon or implementation factors that lead to innovation success (Kim & Chung, 2017). However, organizational innovations that need to be integrated in the work process of an organization are of less value if they are not consistently used by employees (Talukderi et al, 2008). It is said that giving employees opportunity to be innovative drives employee engagement. McLeod's report (2009) supports this view, stating that high levels of employee engagement are positively correlated to high levels of innovation.

This section has analysed the potential benefits and potential risks of using internal social media in the workplace and has argued that the allegedly positive implications of using social media in the workplace are driving the academic and practical interest in explaining and adopting the concept. Table 2.2 indicates potential benefits and risks of using social media networks in the workplace.

Section 2.4 discusses the conceptualisation of social media employee engagement strategy, providing insight into the impact of social media usage on employee engagement within the workplace.

**Table 2.2: Potential benefits and risk of using social media in the workplace**

Organizational Use	Potential Benefits	Potential Risks
<b>Recruitment and selection</b>	<ul style="list-style-type: none"> <li>❖ Improved sourcing of high-quality candidates</li> <li>❖ Enhanced candidate quality</li> <li>❖ Increased time and cost efficiency</li> </ul>	<ul style="list-style-type: none"> <li>❖ Employment discrimination (e.g., obtaining personal information that is not job-related from sites such as Facebook and using it in hiring decisions)</li> <li>❖ Variability in applicant use of social media disadvantages those who do not use it (Some age groups or racial/ethnic groups may be underrepresented on social media sites.)</li> </ul>
<b>Socialization, engagement and onboarding</b>	<ul style="list-style-type: none"> <li>❖ Greater organization identification and commitment</li> <li>❖ Reduced turnover</li> <li>❖ Improved employment compatibility and job satisfaction</li> <li>❖ Bring down personal or hierarchy barriers within the workplace</li> </ul>	<ul style="list-style-type: none"> <li>❖ Spread of inappropriate or damaging information (e.g., negative information posted by disgruntled employees could discourage new hires)</li> <li>❖ Creation of division rather than inclusion (e.g., establishment of cliques or subcultures)</li> <li>❖ Concern about employees posting offensive, provocative and irrelevant contents, or posting content outside organizational goals and objectives.</li> <li>❖ Concern about cyber-bulling (the medium may be used to harm people in hostile and deliberate ways if not management do not monitor employee online behaviour)</li> </ul>
<b>Training and development</b>	<ul style="list-style-type: none"> <li>❖ Reduced training cost</li> <li>❖ Greater training effectiveness</li> <li>❖ Continuous skill enhancement and self-directed learning</li> <li>❖ Facilitates knowledge sharing among team members with diverse expertise</li> </ul>	<ul style="list-style-type: none"> <li>❖ No positive effect on learning or development (e.g., skills to be learned are not transferred to the job)</li> <li>❖ Unequal access or usage (e.g., those who do not use social media have fewer opportunities for training and development)</li> <li>❖ Potential risk of accessing dubious or incorrect information.</li> </ul>
<b>Knowledge sharing</b>	<ul style="list-style-type: none"> <li>❖ Fast and inexpensive dissemination of information</li> <li>❖ Easy sharing of knowledge from few to many</li> </ul>	<ul style="list-style-type: none"> <li>❖ Unequal access or usage (e.g., those who do not use social media have less opportunity to share)</li> <li>❖ Too much information (e.g., work time consumed with reading social network posts)</li> <li>❖ Quick spread of negative information (e.g., co-workers learn of an employee's serious medication condition)</li> </ul>
<b>Branding and marketing</b>	<ul style="list-style-type: none"> <li>❖ Ability to reach new customers</li> <li>❖ Customer loyalty enhancement</li> <li>❖ Increased time savings and cost efficiency</li> </ul>	<ul style="list-style-type: none"> <li>❖ No relevant effect on customers metrics (e.g., investment in social media does not generate rise or customer growth).</li> <li>❖ Hidden costs with maintenance of media (e.g., staff time to monitor social network site and constantly provide fresh content)</li> </ul>

<b>Organizational Use</b>	<b>Potential Benefits</b>	<b>Potential Risks</b>
<b>Creativity and problem solving</b>	<ul style="list-style-type: none"> <li>❖ Increased problem-solving accuracy and speed</li> <li>❖ Innovation spread throughout the organization with minimal effort</li> </ul>	<ul style="list-style-type: none"> <li>❖ Consensus process slows decision making (e.g., the more people involved in decision making, the more time needed to resolve an issue)</li> <li>❖ Consensus leads to pursuit of poor choices; lack of critical thinking (e.g., groupthink or an influential employee generating support for a bad idea)</li> </ul>
<b>Influencing organizational culture/change</b>	<ul style="list-style-type: none"> <li>❖ Enforcement of organizational culture</li> <li>❖ Culture change through communication</li> </ul>	<ul style="list-style-type: none"> <li>❖ Broad resistance to organizational change (e.g., employees bond together to resist change)</li> <li>❖ Facilitation of undesirable company culture (e.g., employee use of social media to form coalitions counter to the organization's culture)</li> </ul>
<b>Performance management</b>	<ul style="list-style-type: none"> <li>❖ Used for appraisals and development of performance objectives for employees</li> <li>❖ Used as a performance indicator (e.g., time spent by employee may be an evidence of procrastination)</li> <li>❖ Can be used as a tool to disseminate the overall organizational and employee goals</li> </ul>	<ul style="list-style-type: none"> <li>❖ Concern about leakage of information or disclosure of confidential information</li> </ul>

Sources: Lee (2013); Yokoyama (2016)

## 2.4 Conceptual Definition of Employee Engagement

As discussed in Section 2.1 regarding the meaning of social media, it is important to know about the meaning of employee engagement in order to have a clear understanding of the impact of internal social media on employees' level of engagement in the workplace, which is elaborated in Section 2.5.

Kahn's (1990) widely cited paper defined employee engagement as the psychological condition whereby employees can be engaged in three different components, namely, physical, emotional, and cognitive. Truss et al (2006), however, offer a different view and construe employee engagement as a 'passion for work' which results from motivational drivers.

May et al (2004) indicated that employee engagement is a flexible application of employee emotions and behaviours. Cha (2007) defined employee engagement as the active involvement of employees in their role in a physiological, cognitive, and emotional state. Wellins and Concelman (2005) maintain that engagement is a combination of employee commitment, loyalty to the organization, improving productivity, and ownership. Bakker (2011) added that engagement is when an individual is in a positive and highly awakened emotional state with two characteristics: energy and involvement. However, in the context of this study engagement is defined as a state or extent to which employees are involved and committed affectively, intellectually, and socially to their role and the organization.

In the business context, employee engagement is acknowledged and accepted to have multidimensional constructs, as suggested by Khan (1990). Building on the work of Kahn (1990), Alfes et al (2013) introduced an engagement scale that consists of three dimensions: Intellectual, Social and Affective (ISA). The three dimensions of employee engagement are similar to that of Kahn (1990) and Schaufeli et al (2002) employee engagement facets which involve "a physical-energetic (vigour), an emotional (dedication), and cognitive (absorption) component" (Schaufeli, 2013, p.9). These dimensions of employee engagement are used in the workplace to determine the employee level of engagement. The ISA scale shapes an employee's mental ability, satisfaction, perception and commitment and can be measured using different instruments (Truss et al, 2006). However, the definition of intellectual/cognitive engagement varies slightly in different fields. Within the organization context, many authors have defined intellectual/cognitive engagement. Among them are Schaufeli et al (2002) who define intellectual/cognitive engagement as a state where an employee is mentally present and focused on their job activities, and which has been considered as positive, satisfying and

persistent mental state. Sundaray (2011) defined intellectual/cognitive engagement as the perception employees have about the company, workplace culture and its management/leaders. Research in the education field defined intellectual/cognitive engagement as a physiological process that involves the attention, effort and interest that a student puts in during learning (Marks, 2000). Newmann et al (1992) also defined intellectual/cognitive engagement as a psychological investment and effort that a student puts towards learning activities, understanding, skills and mastering of knowledge that academic work aims to promote.

Allen and Meyer (1996) defined affective engagement as an internal engagement which involves individual feeling and emotion. In addition, Agyemang and Ofei (2013) see affective engagement as an individual emotional attachment to, identification with and involvement in the organization, hence, resulting in a stronger belief about achieving organizational goals and values. In addition, Affective engagement involves an individual employing more effort on behalf of the organization and consists of three subcomponents, namely: (1) emotional attachment employees have about the organization; (2) sense of belonging in the organization; and (3) employee involvement in the organization, while Social engagement is defined as the degree to which an individual is socially connected to their work environment and shares common values with others; it is an individual experience of connectedness with colleagues (Soane et al, 2012). In this study employee engagement is defined as a new concept relating to positive psychology of the employees which contributes to the positive operational and experiences in work-related contexts (Mauno et al, 2007).

Moreover, employee engagement and its significance have attracted much research attention in academic fields and in work organizations, as many organizations struggle to find, engage and retain their workforce in a competitive job market. Richman (2006) indicated that engaged employees have high level of involvement and attachment to their organizations. Cummings and Worley (2008) explained that the involvement of employees tends to increase employees' input in the decisions that affect the performance of the organization and the wellbeing of the employee. MacLeod and Clarke (2006) argue that engagement through the heart of the organization relationship that exists between employees and employer can be a key to unlocking productivity and to transforming the working lives of many in the organization. MacLeod and Brady (2008) support this viewpoint and state that engaged individuals are emotionally connected, involved with enthusiasm and willing to exert greater discretionary effort in their work. Similarly, Harter et al (2002) state that the engaged employee will typically demonstrate initiative, proactively seeking opportunities to contribute, and be willing to share

information with colleagues while speaking up for the organization. Goldwasser and Edwards (2014) suggested that it is often important when an organization can enhance proactive employees who demonstrate initiative and are enthusiastic to go the extra mile beyond their normal duties; these employees become dedicated and committed to their work, which ensures they are hardly absent from work, become loyal to the organization and therefore are easier to retain (Goldwasser & Edwards, 2014).

## 2.5 Conceptualization of Internal social media and Employee Engagement

### 2.5.1 Employee engagement and internal social media

Numerous literatures seek to emphasise the importance of internal social media for engagement within the workplace (Bondarouk et al, 2016; Parry & Solidoro, 2013; Marler, 2009; Qteishat, 2014; Huang et al, 2012). Many authors have maintained that internal social media can enhance employee engagement and performance (Parry & Solidoro, 2013; Parveen et al, 2016). There is an opinion that using internal social media for employee engagement can help enhance organizational brand image (Groysberg & Slind, 2012). Dutta (2011) claims that the adoption of internal social media for employee engagement increases collaboration, breaks down barriers that hinder the flow of information in the organization, and creates a culture of openness and transparency, as well as potential productivity gains across business activities such as recruitment, customer relationships, channelizing best talent, competitive intelligence and enhanced decision making.

Britt et al (2005) found that the employees having higher level of engagement and dedication to the organization and the work, often are negatively influenced by different negative events occurring within the business environment. In such cases, the provision for an effective and congenial environment is required. Caldwell and O'Reilly (1990) assessed the implications of organizational pressures and different forms of uncertainties that influence the motivational concerns of the employees in different perspectives. Chalofsky and Krishna (2009) argued that engagement showed by the employee has been associated with both intrinsic factors. Previous studies have shown that intrinsic motivations such as enjoyment and commitment play a crucial role in motivating users to share online (Wamba et al, 2017), for example, on internal social media.

Internal social media drives the entire work environment to collaborate, give or collect knowledge within the workplace. In the recent times, internal social media, especially built by

the organizations, circle knowledge across various units. Leonardi (2015) states that increased internal social media usage may play a key role in enhancing employees' engagement, communication, innovation capabilities, collaboration and retention. Leonardi (2015) explored the relationship between internal social media usage and employee engagement within the organization. The results showed that the greater the self-reported usage of internal social media, the greater the levels of self-reported employee engagement. Internal social media is an exclusive platform incorporated by organizations for their employees to connect among themselves and create an internal network to share ideas (Buettner, 2015). Internal social media can be a major variable of study to elucidate the effect on knowledge exploitation. Though intense studies have been put forth to analyse the benefits of social media on organization performance (Haddud et al, 2016; Agostini et al, 2017), internal social media is associated positively with employee engagement and self-reported competence (Haddud et al, 2016). Notably, studies have also claimed that internal social media can be a means by which organizations can establish dialogue and relationships between employees and employer (MacLeod & Clarke, 2009; Kahn, 1990). Rees et al (2013) added that employee engagement is all about establishing a good relationship between employee and employer and social media platforms provide a new avenue for building relationships within the organization (Parry & Solidoro, 2013).

Furthermore, as a critical enabler of engagement, internal social media create the conditions in which employees offer more of their capability and potential and show active and positive behaviour towards their work, which help to integrate employees into the organization's culture and provide the opportunity to create a sense of community (Shutan, 2017). Internal social media have encouraged a more flexible communication and collaborative approach and have been used to encourage individuals to voice their opinion directly rather than as a collective voice within the workplace (Bryson et al, 2006). Providing a platform where employees feel free and motivated to nurture ideas would lead to an increased level of commitment and performance (Saone et al, 2012). Today, there is an emphasis on maximizing employee engagement in organizations and promoting a more inclusive culture where employees are encouraged to present their points of view. Thus, employees develop these emotions when they are given the freedom to contribute to the organization's goals through informed opinions, ideas and suggestions (Martin et al, 2015) via internal social media. These innovative contributions are at times based on the knowledge obtained by being part of a socially connected online network within the workplace (Martin et al, 2015). Parry and Solidoro (2013)

added that the use of internal social media to engage employees brings effective interaction that encourages knowledge sharing and easy problem solving and facilitates employee communication in a more organized manner. Marcia and McCorkindale (2013) suggest that businesses that want to streamline internal communications and engagement initiatives may take a step forward and consider the use of social media platforms internally. Internal social media has a unique ability to pull users in, getting them to share content willingly; this in turn adds greater value to an organization by fostering creativity and collaboration amongst employees, streamlining goals and energizing employees to actively participate in the organization's affairs.

## 2.6 Literature Summary

The above analysis explores the influence of internal social media on employee engagement. Much literature indicated that employees' usage of internal social media contributes to an improved level of perceived transparency of the organization, as a result, leads to employee engagement. It is vital to understand the role of internal social media may play in nurturing employee engagement. The applications of Internal social media provide employees with a convenient way to communicate and exchange personal and professional information with other colleagues; it also enhances relationships between colleagues and improves the individuals' and organizations' knowledge base. The effective use of internal social media can result in increased employee engagement. These advantages may lead to more innovation and greater productivity (Buettner, 2015). Organizations need to be aware of the barriers for internal social media adoption and psychological engagement conditions on internal social media usage. Furthermore, much has been written and discussed on employee engagement and internal social media separately, but very few studies have analysed practical links between employee engagement and internal social media usage within airline companies. The topic is further explored in the following research context by examining the activities of internal social media for employee engagement within airline companies.

## 2.7 Research Context

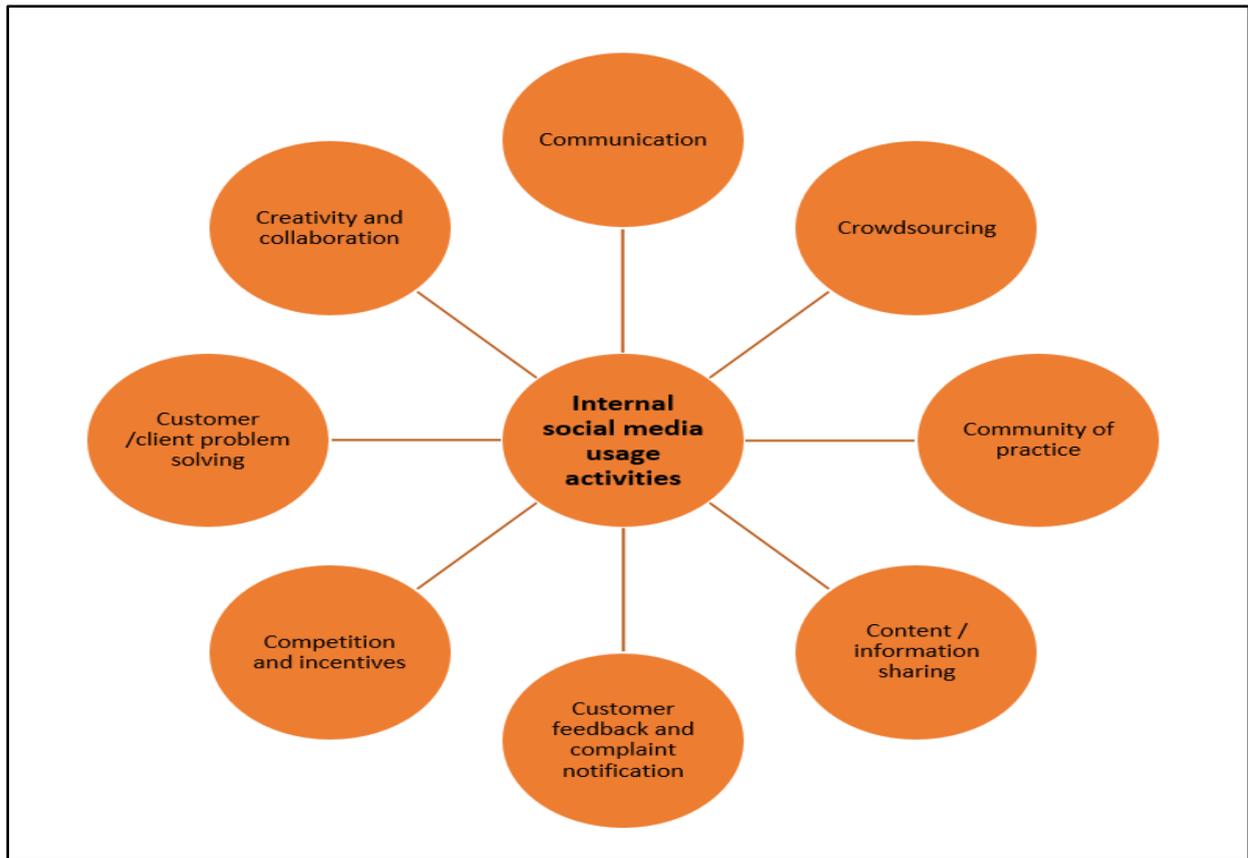
The following sections examine case examples of use of internal social media within the airline companies chosen for comparison. It draws on multiple sources of evidence from different airline companies to illustrate how and why airline companies use internal social media for employee engagement. The sections also discuss the 8C framework of internal social media activities used by airline companies. The case example evidence could lead to a better understanding of various key activities that are carried out on the internal social media of these airline companies to engage with employees, and also challenge prevailing assumptions and beliefs about the negative impact of social media usage in the workplace and its impacts on employee performance.

## 2.8 Airlines' Use of Internal social media to Improve/Enhance Employee Engagement

Human resources (HR) leaders in today's global organizations with dispersed workforces, as in the airline sector, face these key challenges: creating a culture of transparency, eliminating hierarchy and democratizing decisions; improving employee inclusion and engagement (SHRM, 2018). Much research has indicated lack of efficient and effective collaboration, timeless information and communication challenges among dispersed workforces (Tenzer et al, 2014; Friesl & Silberzahn, 2012; Monalisa et al, 2008). It can be challenging to collaborate and communicate across teams made up of employees with different shift patterns and work locations. An organization where employees are not involved, committed, energized and psychologically present can be challenging and can negatively affect employee performance. The implications of disengaged employees are far-reaching for many large organizations, more especially airline companies. Implications such as lower output, lack of morale and high employee turnover influence organization productivity (Wynen et al, 2018). Changes in the workplace environment with the introduction of new media are driving the need for more efficient and effective employee engagement (Parry & Solidoro, 2013). The effective use of internal social media plays a vital role in enabling communication and collaboration among employees (Haddud, 2016; Gaál et al, 2015; Parry & Solidoro, 2013). The use of use internal social media to improve internal communication gives employees a single platform for communication. This type of platform implies that work and sharing of information are seamlessly integrated into an organization's already existing enterprise, bringing people together and allowing communication to happen where and when needed. Research shows that

airline companies are harnessing the potential of internal social media for effective employee engagement to gain valuable opportunities for communication and knowledge sharing (Kelly, 2019; Brumberg; 2018; Louwers, 2016; Bashford, 2011). Given the exceptional influence of internal social media, organizations such as airline companies are increasingly trusting it as a medium for effective employee engagement (Naim & Lenka, 2017). Research indicates the main eight activities of employee engagement on internal social media within the airline companies to be communication, creativity/collaboration, customer problem solving, content/information sharing, customer feedback/complaint notification, competition and incentives, community of practice and crowdsourcing (Ewing et al, 2019; Haddud, 2016; Parry & Solidoro, 2013). These 8Cs of internal social media activities reflect the airline companies' idea of an engagement tool available to influence and engage employees. The activities streamline goals and energize employees to activity participate and engage in the organization's affairs, which in turn reinforces organizational values, culture and beliefs (Ewing et al, 2007).

Figure 2.1 shows the eight main internal social media activities of airline companies that engage employees and provoke responses.



**Figure 2.1: The 8Cs of internal social media activities used by companies for employee engagement**

(Source: Originated by this researcher)

In determining the right way to engage employees effectively in their work using internal social media platforms, a toolbox called activities of internal social media has been created. The elements of the activities of internal social media are known as the eight Cs: communication, creativity/collaboration, customer problem solving, content/information sharing, customer feedback/complaint notification, competition and incentives, community of practice and crowdsourcing. As Table 2.3 shows, each of the Cs is an activity that can be run on different companies' internal social media platform. The idea of the internal social media activities for employee engagement in this context is an internal communication activity which is a fundamental part of all work interactions within an organization that coordinates, motivates, energizes and empowers employees, which occurs at all levels within an organization, and directly affects employees' performance and the organization's productivity. Moreover, it is important to highlight that one internal social media activity may not be sufficient to engage

employees internally. Therefore, organizations within the airline sector may need to include multiple activities to create effective and superior employee engagement which will enable employees to adopt and use the platform.

Moreover, in accordance with Leonardi et al (2013), employees can do different activities on internal social media such as communicating messages with specific colleagues in the organization, indicating or revealing a colleague as a communication pattern, running digital focus groups and training. Other activities also include editing, posting, viewing messages and connecting with colleagues at any time of choosing. Lee and Xue (2013) highlighted that the ability to communicate issues, solutions and insights on internal social media leads to employee empowerment and fostering of innovation. Moreover, the implementation of internal social media can provide top management direct access to suggestions posted on the platforms, which will help in decision making processes. Top management can simply search for, identify and consolidate employees' skills to match a specific company project requirement (Lee & Xue, 2013). Holtzblatt et al (2013) claim that internal social media tools improve employees' social capital by enhancing employees' connection, reinforcing existing ties and expanding social networks within the workplace. An organization can gain numerous advantages from implementing and using internal social media (Lee & Xue, 2013), for instance, "employees remain focused on corporate objectives and can share resources and information easily and effectively" (Haddud et al, 2016, p.6). Additionally, Tierney and Drury (2013) state that the use of internal social media enables a process that provides a single and easily findable platform that helps to reduce the issues of employees working in isolation. A study by Haddud et al (2016) on the impact of internal social media usage on employee engagement has demonstrated that the increased use of internal social media may play an important role in enhancing employees' collaboration, communication and innovative capabilities; the idea is that more engaged employees can communicate and manage their work tasks more effectively, align their work goals more with the overall organizational goals and strategies. If the adoption and usage of internal social media leads to more engagement, then it seems likely that there will be a corresponding improvement in areas such as: productivity. (Haddud et al, 2016, p.6). Using these viewpoints, an internal social media activity common to all businesses, more especially the airline companies, was identified and divided into primary activities, as described in Table 2.3.

**Table 2.3: The 8Cs of internal social media activities**

The 8Cs	Meaning / Concept	Usage and application	Authors	Organizational case examples
<b>Communication</b>	Communication is defined as a process of transmitting information whereby individuals give or receive information from one another about their needs, desires, knowledge, perceptions or affective states” (Beattie & Ellis, 2014). In the airline environment, communication is seen as a means by which employees (air crew, ground crew and management) connect with each other to receive and share information related to safety, customer issues, employee issues, social activities and other aviation activities through different or specific communication platforms.	With the general adoption of internal social media within the airline industry, internal social media is a powerful and efficient communication medium used by airline companies to directly interact, communicate, share corporate news, channel employees’ comments related to work activities, programmes or policies through corporate Facebook, Google+, YouTube, Twitter, LinkedIn and Yammer, thus allowing bottom–up communication.	Ewing et al (2019)	Airline companies such as British Airways, Virgin Atlantic, American Airlines, Arik Air, United Airlines and RewandAir use internal social media to facilitate communication across the organization, employees express their opinions and ideas, by communicating and messaging, employees feel more connected with one another and the organization and better communicate about work-related issues to improve the efficiency of the organization.

<p><b>Creativity collaboration / Collaborative creativity</b></p>	<p>Creative collaboration describes a relationship between two or more persons with a common purpose of creating new objects through certain ideas and shared understanding of something new and a common goal.</p> <p>It is also the art of bringing people together to explore emotions, themes, characters, both positively and negatively, in a normal course of action. Taking initial thoughts on an entire journey; delving deep into concepts and running with ideas until a natural stop is reached.</p>	<p>With the use of internal social media in airline companies, employees with a common purpose and interest come together to create new ideas and share understanding of common goals. For example, employees use internal social media such as corporate Facebook, Google+ and corporate WhatsApp to form formal or informal groups with people of common interest to come together and come up with new ways to improve services and customer experience.</p>	<p>Railean et al (2015)</p>	<p>The use of internal social media as one of the strategies that virgin airline uses as a means of collaboration increases employee engagement, Employees with common interest come together to share ideas, disseminate company news, share users' message through video or picture, solve real-time problems and collaborate more freely with their colleagues: this facilities interaction, participation and engagement among groups.</p>
<p><b>Customer problem solving</b></p>	<p>The act of defining a customer problem, determining the cause of the problem; identifying, prioritizing and selecting alternatives for a solution; and implementing a solution.</p>	<p>Airline companies use internal social media for support seeking and solving customer problems, by allowing employees to share great ideas, post news, ask questions and share links. For example, employees put out problems on internal social media related to customers issues and allow colleagues to come up with different ideas on how to solve the problems.</p>	<p>Moro and Rita (2018)</p>	<p>In airline companies such as British Airways, Virgin Atlantic, Arik Air, American Airline, internal social media plays a vital role in keeping employees informed about work-related problems, through internal social media, it creates opportunity for employees to share solutions and exchange ideas on customers issues such as customer flight booking, lost bag enquiries and other related work issues, which helps to create efficiencies for getting tasks done.</p>

<b>Crowding sourcing</b>	A practice of engaging a group of people with common interest and different specialties via an online medium to collectively contribute ideas or expertise to a cause or project.	With the help of internal social media airline companies create an online community of employees who genuinely and collectively contribute their ideas and expertise towards innovation, problem solving or completing a work-related task. These online communities allow employees from different departments, divisions and locations to share their ideas and expertise or news relevant to them.	Prpić et al (2015)  Estellés-Arolas and Guevara (2012)  Ikediogo et al (2018)	Through internal social media Virgin Atlantic and Arik Air improve collaboration and increase knowledge sharing among employees across the organization and geographies, which gives employees faster access to internal experts, making knowledge sharing and management easier and less expensive.
<b>Competition and incentives</b>	A process by which two or more people in an organization try to gain something or compete for an incentive, aimed at engaging, motivating, and inducing employees to work harder.	Airline companies embrace internal social media to incentivise employees by engaging them in healthy and friendly competition. Employees are engaged in some activities such as polls, contests, questionnaires, special deals and promotions, as well as photo caption contests, creating a best-comment competition, a play-to-win game, vote-to-win and like-or-comment to win. These competitions also allow employees to show support for their colleagues by internally voting for them, which in turn inspires employees, motivates, boosts engagement, and creates interpersonal connection between employees.	Lubienski and Lee (2016)	Virgin Atlantic uses internal social media such as Workplace by Facebook to connect and interact with employees. The interactive platform is used for competitions that allow employees to like contents and win prizes, maximizing all opportunities to build employee engagement internally in a fun and unique way, helping employee to learn from one another by discussing important topics, share opinions and content openly, in turn building enthusiasm and support amongst employees.

<b>Customer feedback and complaint notification</b>	Positive and negative expressing of satisfied and unsatisfied action/event experienced by customers which serves as a valuable source of feedback to the organization that can be used to evaluate services.	Internal social media are used by airline companies to disseminate customer feedback and complaints by notifying employees of customer satisfaction and dissatisfaction, aimed at enlightening employees to understand customers' experience and learn, solve and correct past mistakes to keep employees enthusiastic and engaged.	Behrens (2018)  Cao (2016)	In KLM, teams make use of Yammer to report challenges, share innovative new ideas and streamline business processes, as well as suggestions, customer feedback, questions, reports of problems, and receive responses, within 24 hours, significantly increasing response time and business agility.
<b>Content and information sharing</b>	A distribution of webpage content and information across channels with the aim of building engagement.	Airline companies make use of internal social media for content and information sharing, by providing content on a regular basis, such as posts, photos, videos, comments, and newsletters, helping employees to get quicker information.	Karen et al (2016)  Bokunewicz (2013)	British Airways, Virgin Atlantic, Arik Air, American Airlines, KLM and United Airlines use internal social media to keep employees informed and involved in its activities; the companies use the platform to empower employees to share their own stories, and regular updates; and encourage employees across the organization to share and comment on content and questions.

<p><b>Community of practice</b></p>	<p>A group of people with the same interest or discipline who share a concern, passion, set of problems or topic, aim at fulfilling both individual and group goals.</p> <p>Learning that happens among practitioners in a social environment.</p>	<p>Internal social media, such as Google+, is used by airline companies to encourage and bring together groups of employees who have a common interest in a specific aviation issue. These groups of people regularly share information and exchange knowledge, develop their professional skills, solve problems, help retain talent in the organization and actively work on advancing the general knowledge of the airline business. Communities of practice within the airline sector have much longer life than project teams, as they drive a long-term strategic plan and promote best practices within the organization, as well as helping to build a sense of belonging within networks.</p>	<p>Li et al (2009)</p> <p>Wenger (2000)</p>	<p>British Airways implemented and adopted a digital workplace platform, a mobile intranet solution Unily, to communicate with employees. The digital platform operates on a personal and individual level, where team members can host personal and professional interactions through internal social media. The platform is used as a tool for group communications, fostering interaction and knowledge sharing through strong online community. Group members, often practitioners and experts, pursue their interests through developing and maintaining core collective knowledge and ideas that they take back to their practice to enhance work performance.</p>
-------------------------------------	--	--	---	--

(Source: Originated by this researcher)

Furthermore, the 8Cs provides an insight that internal social media use is impactful on employee engagement and performance. It helps in facilitating innovative management and better communication, engagement, and performance improvement through open communication and interaction from employees with different skill sets, which promotes innovation, strengthens existing ties, and enhances employees' connection to the organization (Holtzblatt et al, 2013). This gears them towards developing a sense of belonging and encourages employees to voicing behaviours, thus contributing to employee engagement, which in turn improved employee motivation, decreased employee turnover, improved employee physiological and social wellbeing and increased organizational productivity and profit.

## **2.9 Case Study Examples of Internal Social Media for Employee Engagement**

In this section, the study analyses some airline companies' use of internal social media for employee engagement, discussing how selected airline companies use some of the 8Cs of internal social media activities practically to engage employees. These selected airlines companies have presence both in Nigeria and the UK.

### **2.9.1 American Airlines**

American Airlines adopted podcasting to communicate with its 122,000-plus employees. Podcast as an engaging platform is used by the organization to explain policy changes, navigating turbulent topics, and providing a glimpse into strategic direction. Management use the medium to communicate and answer employee questions regarding their business operations (Brumberg, 2018).

### **2.9.2 United Airlines**

United Airlines is a large company, with different people working different shifts, in different time zones, communication is sometimes an issue for them. The company believes that leveraging employee advocacy can effectively deliver multiple benefits for its brand. As social media is 24/7, they rely on their blog to connect, communicate, and inform the 90,000 employees who work in numerous markets across the globe. United Airlines leverage employee advocacy leading to big business benefits internally and externally (Anon, 2018).

### **2.9.3 KLM Royal Dutch Airlines**

KLM deployed enterprise internal social media to improve communication between teams and enable faster decision making, helping to improve business processes. With more than 9,000 cabin crew members and back-office staff. KLM crew make use of Yammer on their mobile devices to engage and communicate in a seamless, real-time network to provide feedback for back-office employees or ask questions and receive answers (Brubaker, 2018). For example, when there are issues or a shortage of items on certain flights, a cabin crew member may post the issue on Yammer and the issues would be resolved very quickly. Over 5,000 employees post more than 100 new posts per week. Yammer is filling a real need for unified communication that helps employees work together as an efficient network. Teams make use of Yammer to report challenges, share innovative new ideas and streamline business processes, as well as suggestions, customer feedback, questions, reports of problems, or receive responses, within 24 hours, significantly increasing response time and business agility (Louwers, 2016). Additionally, cabin crews often share engaging experiences that strengthen the pride the brand takes in providing exceptional service, and brainstorm on how to arrange special initiatives for customers. Due to the use of this internal social media platform (Yammer), KLM Inflight Services achieves tangible improvements in customer service and business efficiency (Louwers, 2016).

### **2.9.4 British Airways**

One of the biggest challenges British Airways had was to unite a disparate workforce, from cabin crew and engineers to baggage-handlers and back-office staff. Newer forms of communication, such as social media and apps, were used as a key part of the brand's strategy to improve internal communication (Bashford, 2011). British Airways use internal social media to 'engage, inform, connect and share ideas' with its 44,000 employees from all corners of the globe. British Airways adopted a digital workplace platform, a mobile Unily intranet solution to communicate with employees, and provide more consistent and effective high-quality delivery of services to its customers. Unily platforms operate on a personal and individual level, where team members can host personal and professional interactions through email, video and other internet or social media interactions; the platform can also be used as a tool for group, company-wide communications. Thus, this helps relationships between people whether they are in the next room, country, or continent. In addition, the use of internal social media is a significant communication platform for British Airways which also operate in Nigeria: the

subsidiary company uses intranet and WhatsApp to interact, build relations, communicate, and share information with employees, which help to boost engagement. The use of internal social media enhances the performance of its employees and reinforces company culture to increase business outcomes.

### **2.9.5 Virgin Atlantic**

Virgin Atlantic uses social media such as Yammer, blogging and Workplace by Facebook to create adverts using a short video on digital signage or a gif to drive traffic to messages. Virgin Atlantic uses Workplace by Facebook to connect to some 10,000 employees, of which 70% are out of the office and most of the time out of the country (the UK). Workplace by Facebook helps Virgin Atlantic to publish news, send messages, create videos and interact with employees. The interactive platform is also used for competitions that allow employees to like contents and win prizes. In addition, Virgin Atlantic uses technology such as iPads to monitor and manage employee performance on the flight deck. Performance information is loaded directly to the tablets, which allows pilots to use iPads to monitor and manage their performance, which is being integrated into flight procedures.

### **2.9.6 Arik Air**

Arik Air is a Nigerian-owned commercial airline which operate both international and domestic flights. The company recognizes the importance of maintaining good communication and employee engagement, therefore the company uses internal social media such as intranet to facilitate open communication between teams and between managers. The use of internal social media enables managers to communicate more actively with employees; this offers a dynamic way of connecting and informing employees which helps to enhance a strong line of communication. Most Arik Air employees work on a shift pattern; thus, it can be difficult to reach them instantly through traditional electronic channels such as email. Employees use their personal mobiles to stay connected to the business.

### **2.9.7 RwandAir**

RwandAir operates domestic and international services to East Africa, Central Africa and West Africa; the airline has an established presence in Nigeria. The company uses internal social media network for internal communication which allows for instant communication with

employees; staff are equipped with relevant information that can easily help them address issues about flights, new rules and procedures, or any work-related problems. Internal social media creates a unique voice and a safe place for employees to receive information that they need to enhance performance and stay engaged with the organization.

## 2.10 Research Context Summary

Today, there is an emphasis on maximizing employee engagement in airline companies. As discussed above, airline companies are turning to internal social media to boost engagement and build friendlier workplace cultures, especially those with a large proportion of remote employees. The utilization of internal social media helps to pull users in and get them to share content willingly to facilitate healthy communication across channels, regions and hierarchical levels. Within the airline companies, access to the internal social media is restricted to members of the organization and guided by policies and procedures allowing employees to generate content and voice opinions, hence helping to enhance their engagement. It has been shown that internal social media within the airline companies as a tool for employee engagement can play an effective role to support the engagement of employees. The airlines mentioned above have successfully integrated internal social media strategy within their organizations to increase levels of employee engagement. These airlines have managed to increase the flexibility of interaction and communication among their employees. The integration of different internal social media platforms proves to be helpful for the organizations as internal social media open new avenues for employees to communicate and collaborate with one another, which would not have been possible without social media technology. Hence, with this new ability to communicate with one another via different internal social media platforms, employees quickly began to maximize their performance and creativity. Therefore, choosing the right internal social media platforms to enhance employee engagement is important as the medium has worked to foster a cohesive culture among the airlines' thousands of employees by allowing them to be involved with one another.

# CHAPTER THREE: THEORETICAL FOUNDATION AND CONCEPTUAL FRAMEWORK

## 3.0 Introduction

This chapter examines different theories proposed to explain individuals' acceptance of technologies and their intention to use a technology. The chapter also discusses the TAM model as the theoretical foundation underpinning this research. TAM is extended and discussed to clearly explain and predict the underlying factors influencing airline employees in their intention to use internal social media for work purposes. Two main TAM constructs and additional constructs are discussed in more detail.

## 3.1 Theories Underpinning Individual Technology Adoption and Usage

According to Wade (2009), there are various theories and models in IT research. These theories have been applied to study the adoption of IT innovation – among the models are: Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980), Theory of Planned Behaviour (TPB) (Ajzen, 1985), Technology Acceptance Model (TAM) (Davis, 1989), Model of PC Utilization (Thompson et al, 1991), Motivational Model (Davis et al, 1992), Social Cognitive Theory (Brown, 1999), Extension of the Technology Acceptance Model (TAM2) (Venkatesh & Davis, 2000), Diffusion of Innovation (DOI) Model (Rogers, 2003) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al, 2003). This study focuses only on theories of technology adoption because these theories establish the foundation for conducting research on factors that can influence individual acceptance and adoption of technology. The most used models in IT adoption and acceptance include: TAM (Davis, 1986; 1989; Davis et al, 1989), TAM2 (Venkatesh & Davis, 2000), TPB (Ajzen, 1985, 1991), UTAUT (Venkatesh et al, 2003), DOI (Rogers, 1995) and the Technology, Organization and Environment (TOE) framework (Tornatzky & Fleischer, 1990). These theories have been used over the years by various researchers in different contexts to elaborate on the rationality of individuals when they adopt and use a certain technology (Chen et al, 2017). After reviewing all the models of technology adoption, this study discusses the main, important models used to study technology adoption at the individual level: this means that TAM, TAM2, TPB and UTAUT are examined briefly in the following section and TAM is discussed as the research framework for the novel technology of internal social media for employee engagement.

### 3.1.1 Technology Acceptance Model (TAM)

The origin of TAM can be traced back to TRA (Ajzen & Fishbein, 1975, 1980). It is a theory that explains the various phases of the technology innovation process. According to TRA, behavioural intention of an individual affects their actual behaviour. Davis (1989) used TRA to examine the link between factors of affections, perception and usage of technology and he developed TAM from his findings. The TAM model is the idea that an individual's acceptance of a technology is influenced by their attitude to using the system. It consists of two main constructs: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), and these constructs ascertain a user's attitude towards a particular technology usage, which in turn, influences usage intention to use the technology (Davis, 1989). The TAM model was used for adoption of technologies in the context of online shopping and the study of the effect of enjoyment and trust (Sánchez-Prieto et al, 2017). The theory has been widely supported and recognized in numerous studies and proved to be valid and reliable in explaining technology acceptance and usage (Davis & Venkatesh, 1996; King & He, 2006), across levels of user expertise (Gefen, 2002) and across various contexts including social networks (Hossain & de Silva, 2009). Although TAM had focused on the perception of usefulness and convenience of technology adoption (Luarn & Lin, 2005; Lai & Zainal, 2015). TAM attempt to help researchers and practitioners to understand why a technology or system may be acceptable or unacceptable. TAM is most extended and tested in the study of technology adoption (Sánchez-Prieto et al, 2017; Teo et al, 2008; Venkatesh & Davis, 2000; Lai, 2016) to provide a better understanding of what influences individual users of technology in different situations; for example; Moon and Kim (2001) added a new variable 'playfulness' to study acceptance of the world wide web. Lim (2000) proposed to modify TAM by adding variables like experiences self-efficacy, perceived risk and social influence. Van der Heijden (2000) added two new constructs to TAM: perceived entertainment value and perceived presentation attractiveness to study user adoption of technology In addition, Chau and Hu's (2001) comparison study of three technology adoption models – TAM, TRA and TPB on intention to use and adopt technology in a professional setting indicated that TAM was superior to TPB in explaining individual intention to adopt and use technology. Han (2003) as well as Lai and Zainal (2014, 2015) noted that using TAM capability was favourable compared with TRA and TPB. As TAM is derived from the theory of TPB and TRA, it is expected that it should explain or predict actual behaviour more accurately than TPB and TRA. Thus, the comparisons of the study confirmed that TAM was more flexible to use across different research settings. While TAM has been criticized on

several grounds, it serves as a useful general framework and is consistent with several investigations into the factors that influence employee's adoption and use of technology. Similarly, it is the most common ground theory of technology adoption among human resource information system literature (Menant et al, 2021; Jones et al, 2010). Therefore, it is appropriate to use TAM in this research to study the internal social media adoption within the context of employee.

### 3.1.2 Technology Acceptance Theory 2 (TAM2)

According to the TAM model, technology behavioural intention to use results from technology adoption and actual use. Scholars have made significant and prolific efforts to extend TAM by introducing new variables to hypothesise various relationships between constructs (Lee et al, 2003). TAM2 was developed by Venkatesh and Davis (2000) and derived from TAM. Due to limitations in relation to low level of explanatory power ( $R^2$ ), two processes were incorporated into the model: social influence (comprising Subjective Norm, Voluntariness and Image) and cognitive process (comprising Job Relevance, Output Quality, Result Demonstrability and Perceived Usefulness) for the purpose of capturing the social influence that requires an individual to use technology (Venkatesh & Davis, 2000). This extended TAM version (TAM2) explained 40%–60% and 34%–52% of variance in Perceived usefulness and Intention to use, respectively (Venkatesh & Davis, 2000). However, the two processes, social influence and cognitive process, were vital to the study of individual acceptance. Furthermore, the extended TAM models had drawbacks that have a methodological nature. First, TAM2 was tested using four longitudinal studies, that used four different systems. Two of these systems were for mandatory and voluntary usage settings each, however, each study had less than 50 participants (Weerasingh, 2017). It was presumed that small sample size could decrease the statistical power of the significance test (Venkatesh & Davis, 2000). Secondly, “some constructs were measured using only two items (e.g., job relevance, output quality). Although the scales had strong reliability, still the number of items created the basis for questioning the reliability and validity of the measurements” (Marikyan & Papagiannidis, 2020, p.10).

### 3.1.3 Theory of Planned Behaviour (TPB)

There are many theories that address human behaviour. The most widely studied model that predicts behavioural intention is the theory of planned behaviour (TPB). TPB was developed from the extension of the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975). TPB

is an important, social cognitive model whose purpose is to explain variance in behaviour of consumers (Kassim et al, 2017). The idea of TPB is to predicate individual intention to engage in a behaviour at a time and place, it represents an individual's perceptions of control over a behaviour, which reflects individual actual control.

The main element of TPB is behavioural intentions; behavioural intentions are influenced by the attitude about the likelihood that the individual behaviour will have the predicated outcome. TPB comprises of constructs that symbolise an individual's actual control of behaviour. According to TPB, behavioural intention is influenced by attitude, subjective norms and perceived behavioural control (PBC). The theory has been used in various studies to explain individual behaviour and intentions (Liao et al, 2007; Kaiser, 2006). It is a leading model that has been shown to be effective, parsimonious and versatile for examining the antecedents of behaviour, and is considered as the most important theory in the study of health psychology (Zemore & Ajzen, 2014). In addition, most research that predicts behavioural intention found 50% of variance in intention and 10% of variance in behaviour. Intentions, which are seen to show the amount of effort an individual is expected to devote to perform a behaviour, are determined by attitudes.

#### 3.1.4 Unified Theory of Acceptance and Use of Technology (UTAUT)

The acknowledgement of individual intentions and acceptance towards using technology has been a long-standing, important study topic in information management (Legris et al, 2003). The summary of various past literature relating to IT user behaviour and acceptance brought about the model of UTAUT, proposed by Venkatesh et al (2003). UTAUT comprises of eight important models in the study of information system (IS) adoption that explain user acceptance of information technology (IT), namely, TRA, TAM, Motivational Model, TPB, Combined TAM and TPB, Model of PC Utilization, DOI and Social Cognitive Theory (Liana & Yen, 2014). There are various constructs employed in UTAUT: the theory employed ten important variables to explain individual behaviour towards technology use. The variables include effort expectation and social influence, performance expectation, and facilitating conditions, age, gender, voluntariness of use experience, behavioural intention and user behaviour. Among the variables, three variables (performance expectation, effort expectation and social influence) are anticipated to have direct influence on user behavioural intention to use technology (Liana & Yen, 2014), and one variable (facilitating condition) a direct influence on usage. However, gender, age and experience are the moderators of the models (Lescevic et al, 2013). In other

words, performance expectancy implies the degree to which using a technology will give benefits in terms of performing certain activities, effort expectancy is the degree of ease associated with the use of the technology, while social influence is the degree to which an individual perceives that it is important others believe they should use the new system (Chao, 2019). The UTAUT model provides a framework that not only explains acceptance of ITs and ISs but also explains the actual use of such technologies and systems. Although the UTAUT model has been widely adopted and indicated to produce a considerable improvement in variance in behavioural intention to use technology, the model has been examined by other researchers and doubts exist over its capability to explain individuals' technology acceptance (Chao, 2019). Although the UTAUT model is a robust model and is commonly used in the field of IS to predict IS adoption and usage behaviour, this theory has raised a few questions among IS researchers (Moghavvemi et al, 2011). The UTAUT model is more relevant to study consumers rather than employees. Venkatesh et al (2003) did add self-efficacy and attitude as direct factors of behavioural intention in the UTAUT model. Self-efficacy in the UTAUT model is believed to be an indirect construct and measures specific self-efficacy towards a particular technology (Venkatesh et al, 2003; Straub, 2009) Evidence indicated that the perceived total self-efficacy considerably adds to the motivation and performance of an individual (Bandura & Locke, 2003; Bandura, 1997). However, TAM considers attitude as a direct determinant of intention. The UTAUT model does not measure the individual characteristic towards behavioural intention to adopt technology (attitude, self-efficacy)

This section reviewed the four main technology adoption models at the individual level used in IT literature, shedding light on individual acceptance and effective use of technology. From the above analysis, this study adopted TAM and extends the original TAM to explain adoption and usage of internal social media for employee engagement by integrating six external variables, discussed in detail in the next chapter. The foremost rationale for using the TAM in this study is to present a basis for ascertaining the influence of external variables on personal abilities, internal beliefs, own abilities, mind-set and intention in using internal social media in the workplace for employee engagement and impact on employee performance. However, despite TAM2, TPB and UTAUT being applicable to information technology research at the individual level and that they might be a powerful model due to their parsimonious structure and higher explanatory power ( $R^2$ ), the models disregarding examination of direct effects which might reveal new relationships as well as important factors from the study. Therefore, TAM is most appropriate for the current study because it stands out in investigating

individuals' acceptance and usage of new technology and helps to predict users' behaviour (Huda et al, 2012; Shroff et al, 2011). TAM is expected to explain or predict actual behaviour more accurately than TPB and UTAUT. Durodolu (2016) states that the variables that comprises of TAM are like the individual ability expected of modern professionals to attain employee engagement. The idea of TAM is the intention that it can be used to predict individual motivation and curiosity to act on a behaviour. Individual beliefs influence attitudes towards behaviour, and behavioural intention in turn influences actual behaviour to use the new technology within the organization (Davis et al, 1989). The validity of the theory has also been well tested and was found to be impressive. TAM with and without extensions, has been successfully used in wide of range of information system empirical studies to predict and explain acceptance and usage of different technology, such as social networks (Pinho & Soares 2011; Shin & Kim 2008), mobile education (Tan et al, 2012), e-banking (Al-Smadi, 2012), online shopping (Vijayasathy, 2004) and web-based learning (Chiu & Wang, 2008), and has proven to be of quality and statistically reliable.

Furthermore, the application of TAM to technology, more especially social networks, was validated and confirmed by numerous studies such as Talukder (2008), Dixit and Prakash (2018), Singh and Srivastava (2019) and Nistor (2019) that show the relationships between attitude and intention, in that it may be reasonable to apply TAM to acceptance and usage of internal social media for employee engagement. According to Olushola and Abiola (2017), TAM is more suitably applied in online contexts in the light of many advantages; It is specific to information system usage in applying the concepts of ease of use and usefulness, it adopts the simplest assumptions when formulating or interpreting data, The model offers a basic framework to explain the influence of external variables towards behavioural ideas (Davis, 1989): "TAM predicts IT acceptance under different conditions, such as time and culture, with different control factors, it has also explain technology adoption in a wide variety of contexts, ranging from individual to organisational technology acceptance" (Olushola & Abiola; 2017; p.77). It is for this reason that TAM was employed as a baseline for the theoretical framework to explore the important requirements for the use of internal social media for employee engagement. The application of TAM in this study is relevant to the acceptance of internal social media engagement within the workplace.

In summary, the Extended Technology Acceptance Model (TAM2) by Venkatesh and Davis (2000) and Fishbein and Ajzen (1980), and UTAUT by Venkatesh et al (2003) were not selected since the situation was for internal social media to be implemented in the

workplace/organization, and taking into consideration the subjective norm that includes society is not required for this research involving the innovative technology of single platform internal social media. According to Davis et al (1989), the scale of social norms had a very poor psychometric viewpoint and might not apply any influence on individuals' behaviour intention or actual usage, especially when information system application, like an internal social media platform, was fairly personal while individual usage was voluntary.

Additionally, UTAUT is an extension from TAM2 that comprises social influence; therefore, it is not used in this study based on social norm and is more relevant to study consumers rather than employees. TAM2, TBP and UTAUT use moderators but the current research focuses on the factors and employees' ability to adopt and use internal social media for employee engagement. As mentioned earlier, TAM2 and UTAUT did not include direct relation studies and TAM was derived from the TPB; hence, it is expected that it should explain or predict actual behaviour more accurately than TPB. Therefore, TAM2 and TBP, UTAUT were not suitable to study the innovative technology of internal social media platform for employee engagement. The next section examines the foundation, growth and limitation of TAM as the theoretical background of this study, to understand its relevance in the context of this research.

## **3.2 Research Conceptual Framework and Hypothesis**

### **3.2.1 Perceived usefulness**

According to Davis (1993), perceived usefulness (PU) is seen as the extent to which an individual believes that using a specific system would help to improve their job performance. Lin's (2005) findings indicated that perceived usefulness was an important predictor of intention to use an object and also a promising variable for explaining attitude in using internal social media sites for employee engagement. To understand the desired influence of internal social media on employee engagement, several literatures have been employed to achieve predicating factors that influence employee behaviour to adopt internal social media for engagement. As many organizations are using internal social media for work activities, it is important to examine factors that affect employees' successful adoption of these technologies (Graham, 2004; Lin & Lee, 2006). The main concern with any technology is the extent to which its adoption and usage benefit users. Research indicates that perceived usefulness impacts on intention and behaviour to use social media. Won and Wen (2010) state that perceived usefulness is believed to impact on people's intention to use social media for improved

collaborative work performance among employees. However, in this research, perceived usefulness is explained as the belief that the use of a specific technology improves performance and that the invention of the technology is better than its precursors (Mazman & Usluel, 2010). The original TAM assumes that people are likely to adopt new technology when they believe it can help them improve their work. However, within the context of an organization, employees would accept and adopt internal social media when they feel that the medium would enhance their skills, knowledge and motivation, as well as their competence (Prieto et al, 2017). However, even if employees believe that social media is useful, they may at the same time believe that the technology is too complicated or difficult for them to use and that the benefits of using the medium are out-weighed by the effort of using the system. Latiba et al (2014) added that an employee may dislike a technology but may still use the technology if it is perceived to increase job performance.

Additionally, researchers see perceived usefulness as a factor of actual behaviour that encourages users of the present-day organization to use more advanced and user-friendly technologies that give them more independence to perform work activities. However, Berthon et al (2007) state that perceived usefulness of internal social media is dependent on the organization's services offer and utilization of the technology. This is consistent with the work of Kaplan and Haenlein (2010) which argued that organizations that lack understanding of the definition and the functionality of internal social media will not identify the functionalities of internal social media in engaging with their employees regarding developing strategies and allocating resources. However, there is much evidence that proves the significance of influence of perceived usefulness on actual intention to adopt technology, such as studies of e-learning (Lee et al, 2005; Saadé et al, 2007). Money and Turner (2005) also employed the TAM model to investigate the adoption of knowledge management systems and discovered that perceived usefulness has a positive influence on intention to use technology. Other researcher which adopted the TAM approach in various studies were consistent with the previous findings (Pasaoglu, 2011; Chen & Barnes, 2007; Guriting & Ndubisi, 2006; Jaruwachirathanakul & Fink, 2005; Eriksson et al, 2005; Venkatesh, 2000; Venkatesh & Davis, 1996).

Furthermore, Tan and Teo (2000) identified perceived usefulness is an important determinant of adoption of technology. As with internal social media usage for engagement, employees seek values clearly different from existing social media platforms, which is expected to provide an important function, and is trusted to help them improve in their performance; it is also trusted

to improve collaboration and open communication within the organization. Therefore, when employees perceive the internal social media platform to have the abovementioned usefulness and values from their individual experience, they will develop a positive attitude towards using the internal social media services. Thus, the greater the perceived usefulness of using internal social media for employee engagement and work activities, the more likely that internal social media will be adopted and used. Therefore, the following hypothesis is formulated:

**H1:** There is a positive relationship between Perceived usefulness with Actual usage of internal social media.

### 3.2.2 Perceived ease of use

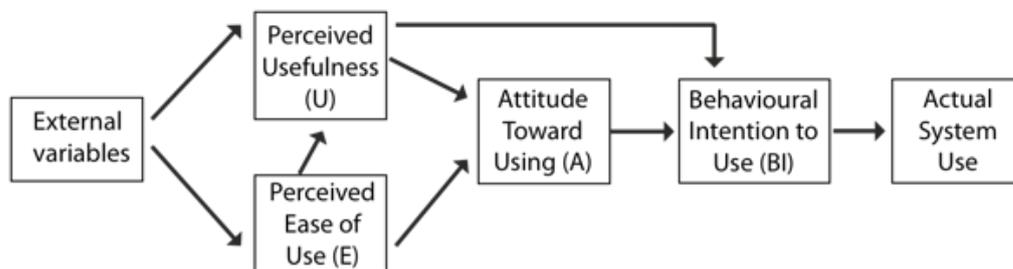
Ease of use is another main determinant of behaviour towards use in technology proposed in the TAM model. According to Davis (1989), ease of use is defined as the attention of mental and physical effort received from the user when deciding the use of technology. This means the ability of users to use technology free from effort. This view is supported by Teo (2001) who states that a technology that is easy to use should be effortless on the part of the user, which increase the chances of acceptance and adoption of a specific technology. Zeithaml et al (2002) added that the level to which a technology is found easy to use and understand can be regarded as perceived ease of use. The work of Teo (2001) further states that a technology which is always easy to use needs less effort on the part of the user and increases the intention to adopt the technology. Selamat et al (2009) added that technology that is perceived to be easier to use than other technology is more likely to be adopted by users, while the more difficult a technology is perceived to be, the slower the user will be to accept it. Other scholars found that perceived ease of use has a positive influence on people's attitude to using a technology (Bisdee, 2007; Yuliharsi & Daud, 2011).

Leng et al (2011) analysed adoption of social media and found that ease of use has influence on usefulness, as a result affecting the intention towards using Facebook. A study by Rauniar et al (2014) on the use of social media among 900 students in US-based universities indicated that social media has an impact on usefulness. In addition, Lee's (2014) study on the use of "social media among businesses in Japan and the United States indicated that usefulness for knowledge sharing using social media has an influence on usefulness for business in Japan" (p.27). Adams et al (1992) proposed that the user's perception of ease of use may develop only through continuous usage. The increase of perceived ease of use leads to improved

performance, which is supported by Latifah et al (2014), as their study concluded that employee engagement among academic staff using Facebook to engage with work colleagues is influenced by perceived ease of use. Therefore, it can be argued that social media platforms used for employee engagement purposes which can provide clear key functions that are understandable, with less mental effort and allow employees to use internal social media platform easily to communicate with their work colleagues result in an ease-of-use perception in the mind of employees.

Furthermore, Davis et al (1989) specified that behavioural beliefs and outcome evaluation are not enough to measure a user’s acceptance of technology as they are much influenced by several external factors, such as system characteristics. Therefore, two variables, perceived usefulness and perceived ease of use have been indicated as influential factors in influencing individual intention to adopt and use technology both directly and indirectly (Guriting & Ndubisi, 2006; Wang et al, 2003; Venkatesh, 2000; Venkatesh & Davis, 1996). Hence, perceived usefulness and perceived ease of use were adopted as important antecedents to understand employee intention towards adoption and usage of internal social media for employee engagement. Therefore, the following hypothesis is formulated:

**H2:** There is a positive relationship between Perceived ease of use with Actual use of internal social media.



**Figure 3.1: Original Technology Acceptance Model (TAM) (Davis, 1991)**

The next section discusses the extension of TAM and its additional variables in detail.

### 3.3 Extended Model of TAM

Based on the review of literature and by considering the main features of internal social media usage within the workplace, a conceptual framework has been created: the proposed conceptual model is an extension of the conventional TAM model. Since the TAM model was first proposed, it has been gradually refined and subjected to modifications by authors, both to use it in various contexts and to increase its variance percentage. In the field of business, the number of studies that use TAM to examine the technology adoption process is on the increase. There are significant examples of its adoption in research both by employers and employees at all business levels, especially in the field of information technology and human resources management / business management (Hayes, 2012; Yu & Tao, 2009; Rauniar et al, 2014). The number of studies on technology acceptance among employees within the HRM field is growing, as managements attempt to use social media to leverage information and knowledge (Leonardi, 2015), with a rise in the number of studies focusing on the organizational context of these technologies (Breunig, 2016; Snow et al, 2017; Holland et al, 2016), many of the studies on the adoption of social media networks used within the workplace are centred on employers, workplace learning and development, recruitment and selection, employee voice and other areas of HRM (Bente et al, 2008; Bingham, 2009; Bingham & Conner, 2010), paying less attention to employee characteristics and employee engagement. In this case, this study examines the adoption of internal social media networks among employees in the workplace for employee engagement within airline companies. Engaging employees using internal social media networks is a new communication strategy for delivery of effective communication, collaboration and development within the workplace, especially within airline companies. From practical and academic viewpoints, it is interesting to understand and examine employees' attitude towards adoption and usage of internal social media network within the workplace. TAM is chosen as the baseline model for examining this study because the model has offered well known and well tested constructs regarding user's acceptance and adoption of technology, more especially in the workplace. As much research that used TAM focused on attitudinal and behavioural intentions as determinants of factors of technology acceptance and usage, Thompson et al (1991) state that the TAM model needs to drop behavioural intention and directly link attitude to actual behaviour; this is because behavioural intention was found to be a weak moderator (Davis et al, 1991) and behavioural intention is not enough to measure a user's adoption and acceptance of technology as they are much influenced by several external factors, such as system characteristics (Davis et al, 1989). As this study is interested in actual

behaviour and specifically focuses on individual adoption of internal social media platforms for engagement to enhance performance in the workplace, the factors influencing employee internal social media adoption and usage in the workplace have not been well documented and incorporated in TAM. In addition, the TAM approach does not address the functions of other users in influencing the actual attitude of an individual towards using social media networks, and hence the usage behaviour (Rauniar et al, 2014). Similarly, Read et al (2011) state that TAM only focuses on cognitive processing or attributes, ignoring other behavioural components/responses. Yousafzai et al (2007) added that TAM only focuses on the system/technology factors alone, ignoring human characteristics. This becomes a concern since many psychological studies have indicated that the behaviour of an individual is influenced by other factors; for example, behaviour of individuals around them (Rauniar et al, 2014). Due to these limitations, researchers recommend extending TAM by incorporating components that better explain an individual's acceptance and usage of technology. Yi et al (2006) recommended that TAM should incorporate more variables associated with both human and social processes to discover factors directly influencing individual attitude towards adopting innovation. Winarto (2011) maintained that there are various external variables that can be used with TAM to explain the process necessary to acquire new skills. Yousafzai et al (2007) classified the variables into four categories, namely: organizational characteristics, system characteristics, user's personal characteristics and other variables. Talukder (2008) supported this claim and maintained that variables such as social factors, organization factors, individual factors and system characteristics need to be considered as critical factors to explain technology acceptance and usage behaviour.

In addition, drawing from the suggestion of Kim and Chung (2017), authors have regarded individual factors as the main predictors of an individual's implementation behaviour towards the use of new technology. Frambach and Schillewaert (2002) maintain that organizational factors influence individual ability to adopt and use innovation, i.e., "Organizational influence can motivate individual employees adopting an innovation" (Talukderi et al, 2008, p.468). Thonget et al (2002) state that organizational contexts also affect attitude to use technology. In addition, Surendran (2012) states that the most actual system use is influenced by external variables and one of the external factors which is mainly manifested are social factors. The author maintained that an employee's adoption of innovation is motivated by the social environment, which plays a role in adoption of technology. Employees may accept using technology due to perceived social pressure, which may come from individuals whose opinions

are important in the organization (Surendran, 2012). Kiriakidis (2017) states that user intention is determined by attitude towards the user behaviour, a social factor and a personal factor, as well as perceived social pressures, and subjective norm from significant referents to act on the behaviour. Within the context of this study, Rauniar et al's (2017) empirical study that examines individual acceptance behaviour of the most popular social media network, Facebook, suggest "the need to add key variables to TAM in considering user engagement on social media networks and other social-media-related business strategies" (p.25), such as internal social media platforms. Therefore, due to the recommendations of the previous studies and the model superior attributes, this study adapts TAM by retaining the main constructs of perceived ease of use and perceived usefulness while extending the model with eight other important factors from different models and information system literature: these factors include: Perceived behavioural control, Perceived relevance, Perceived management support, Uncertainty avoidance, Affective engagement, Intellectual engagement, Social engagement and Employee performance, to understand the influencing factors for internal social media for employee engagement and their relationships. Furthermore, the extended TAM stresses the importance of key factors in this research and seeks to enhance the model by incorporating individual, social and organizational factors and system characteristics which influence an individual employee's attitude towards acceptance and actual use of internal social media adoption for engagement in airline companies. In addition, the intrinsic motivational factors which have greater effect towards technology adoption and usage in the workplace including positive perceptions (Perceived usefulness, Perceived ease of use, Perceived management support, Perceived behavioural control, Perceived relevance, Intellectual, Affective and Social engagement) and negative perceptions (Uncertainty avoidance) were considered in the model and used to understand the influencing factor associated with internal social media actual usage and influence on employee engagement and performance among employee in the airline companies. This research contributed to the model by adding 8 constructs to extend the model and introduce new relationships based on previous research. The new relationships will enable testing of individual employee intention and actual behaviour towards internal social media usage for employee engagement and its impact on employee performance in airline companies within the context of developing and developed countries, therefore establishing the link between them in a single study.

The summary of prior studies about understanding TAM and its extension in various contexts and scopes of research is shown in Table 3.1.

**Table 3.1: Summary of technology adoption models in various contexts and scopes of research**

Variables	Research setting	Study sample	Instruments / model	Author	Findings	Limitation
<b>Perceived ease of use</b>	Taiwan	Individuals	TAM	Fu et al (2006)	A manual taxpayer's decision to adopt e-tax method is influenced by perceived ease of use (PEOU).	Limited to a single population (Taiwan) and e-government services.
	USA	Consumers	TAM	Ma et al (2017)	Perceived ease of use was associated with consumers' use of sustainability labels.	Limited to apply findings to other product categories and limited to consumers outside the USA.
	USA	Students	Extended TAM	He et al (2018)	Perceived ease of use enhances an end user's beliefs about one's ability to perform the recommended act (i.e., self-efficacy) and, in turn, impacts adoption.	Observations of college students. Replications of these results among other populations.
	Taiwan	Teachers	TAM	Weng (2018)	Ease of use of the multimedia material would enhance the intention to use.	Studies may examine teachers' acceptance depending on different types of cities.
	Malaysia	Individuals	TAM	Hamid et al (2016)	The findings indicated that perceived ease of use does predict the continuance intention of using the e-government services in Malaysia.	Sample consists of only government servant users. the proposed model did not include the other TAM construct (attitude).
<b>Perceived usefulness</b>	USA	Shoppers	TAM	Ma et al (2017)	Perceived ease of use IS associated with consumers' use of sustainability labels.	No investigation exists on other external variables that may influence consumers' perception, such as self-efficacy and knowledge.
	Nigeria	Hospital Employees	TAM	Kabir et al (2017)	Studies have found direct effect of Perceived usefulness on intention to use electronic collection system among employees of the Nigerian federal hospitals.	Results were based within the context of mandatory environment (government organization), hospitals employees from Accounts and Finance, Audit and IT departments.
	China	WeChat users	TAM	Chen et al (2017)	Perceived usefulness does not have very strong effect on the actual behavioural intention.	Survey questionnaire is in Chinese language and results were limited to WeChat. It would be interesting to extend the work into an international context and perhaps consider other social networks.

Variables	Research setting	Study sample	Instruments / model	Author	Findings	Limitation
<b>Perceived organizational support</b>	South Australia	University employees	TRA and TAM	Talukder (2012)	The findings indicate that managerial support is a dominant variable in explaining adoption.	Encompasses a single Australian tertiary education institution. The same research carried out in another setting might generate a different result.
	Taiwan	Employees (manufacturing, financial and service sectors)	DeLone and McLean (D&M) IS success model	Lin (2010)	Top management support both directly and indirectly influenced ERP (Enterprise resource planning) system usage. Top management support motivates increased user participation and increases ERP system success.	Seek an enhanced understanding of the determinants of ERP system usage through structured interviews and case studies. The sample size of this study is relatively small (containing only 97 firms operating in Taiwan).
<b>Perceived behavioural control</b>	USA	Students	TPB	Foltz (2016)	Results revealed that Perceived Behavioural Control positively predicted Behavioural Intention towards changing social networking privacy.	Environmental and economic factors were not investigated. Could examine how these factors might impact users' Intentions towards changing their social networking privacy settings.
	Ireland	Managers	TPB	McLaughlin and Stephens (2015)	The more the perceived level of confidence they have with social media, the more likely they are to use it.	Small sample size of eight participants. Also, survey ignored level of qualification, such as formal business or information technology (IT), qualifications which could give them a competitive advantage around using social media within an organization.
	Korea	Students	TPB, TAM and social influence theory	Hong (2018)	Perceived behavioural control has a positive effect on behavioural intention to use social networking sites.	The study tended to focus on university students in their twenties, and evaluation failed to identify drivers of behavioural intention in light of changes in the social and cultural environment.

Variables	Research setting	Study sample	Instruments / model	Author	Findings	Limitation
<b>Perceived relevance</b>	USA, South Korea and China	Students	TPB	Kang et al (2013)	Perceived personal relevance significantly affects young consumers' attitudes; perceived behavioural control affects purchase intentions for environmentally sustainable textiles and apparel.	Model could be applied to each country in order to understand how each model is different or consistent using multi-group comparison tests.
	Sweden	Employees	TAM	Clarke (2009)	Perceived relevance is positively associated with adoption of technology.	Results are cross-sectional in nature. Hence all the limitations for cross-sectional studies apply.
	Spain	Teachers (Higher Education)	Keller's ARCS model	Sanchez-Mena (2017)	Perceived relevance was not found to influence either teachers' attitude towards educational video games (EVGs) or teachers' intention to use EVGs.	Study used convenience sample to collect data from Education institutions teachers which does not allow for generalization of findings. Also, future research should analyse the moderating role of gender in both attitude towards EVGs and intention to use EVGs.
<b>Uncertainty avoidance</b>	Emerging economies	Individuals	TAM	Tibor (2011)	Cultures with high uncertainty avoidance level are expected to show lower levels of new technology adoption. Individuals in high UA countries seek more prominent supportive signals to use new ICT solutions.	The original data collection of Hofstede dates back to the 1980s. In relation to the emerging economies, with their changing status, it is important to use more recent data.
	Multiple countries (148 economies)	Business leaders	Hofstede's cultural framework	Ozbilen (2017)	Uncertainty avoidance, has a satisfactory influence on the adoption of new technology at firm-level	Study only used survey questionnaire.
	Libya	Employees (management)	Hofstede's cultural framework	Twati (2008)	High uncertainty avoidance influences the adoption of IS negatively in Libya. Low adoption rate in Libya may be attributed to factors such as the influence of aging top senior management executives with no technical background and low education level.	Study has only been carried out in one sector and country, and only focused on Hofstede's four original cultural dimensions.

Variables	Research setting	Study sample	Instruments / model	Author	Findings	Limitation
<b>Intellectual engagement</b>	USA	Students	TRA and TAM	Alsaleh et al (2019)	Direct positive effect of intellectual on attitude and adoption intention.	The participants in this study were students, who are knowledgeable and obsessive about virtual world websites such as yoowalk.com. Hence, future study should be performed on those consumers who are less exposed to virtual world websites and see the impact of cognition, affect and social factors on their attitude towards technology adoption. A replicating study should examine equivalence across different cultures (e.g., Asian, African).
<b>Affective engagement</b>	USA	Students	TRA and TAM	Alsaleh (2019)	Result indicated that high technology innovation has positive significant effect on consumers' affective engagement if technology used was challenging enough to evoke stronger dominance-related emotions.	Study did not treat tech products that are privately consumed, or non-tech products.
	Australian	Consumers	TAM	Read et al (2011)	Affective engagement was not significant to behavioural intention to adopt e-reader technology.	The generalization of findings is an issue as the study only tested a single product (e-reader) and actual adoption was not examined.
<b>Social engagement</b>	UK	Employees	ISA Engagement	Soane et al (2012)	Social engagement significantly impacts on employee task performance, organizational behaviour and turnover intentions.	Data were cross-sectional, self-report and focused on the UK.

### 3.3.1 Perceived management support

It is also revealed that management support helps to encourage technology adoption and acceptance, and enhances user performance, impacts user perceptions and improves the overall technology experience (Dong et al, 2009). Indeed, much management literature has stressed the importance and impact of management support on the acceptance and usage of technology in organizations (Liang et al, 2007; Dong, 2008; Sharma & Yetton, 2003; Jordan, 2008; Aloini et al, 2007). Perceived management support is the degree to which employees believe that the necessary resources provided, such as technical support and training, could enhance employees' satisfaction and help in an effective use of the technology (Yoon & Guimaraes, 1995). According to Peansupap and Walker (2005), perceived management support is the degree to which an employee believes that support from management would help them successfully adopt and utilize new technology. Liu et al (2010) mentioned that management support is the key factor for project success. In the context of the construction industry, Gambatese and Hallowell (2011) discovered that effective top management support was the strongest facilitator for implementing innovation of new technology. This means that employees with a sense of management support feel that in situations where they need support in their work, the management is eager to assist them; employees feel respected and recognized and thus show cooperation, and increased performance, appreciation and organizational commitment (Aselage & Eisenberger, 2003). In the organization, management can help to influence the adoption and implementation of new technology, which requires management to invest their time into the technology and monitor results (Jordan, 2008). Piercy et al (2006) state that organizational support stimulates employees' commitments to act in accordance with the objective of the organization. When employees believe that the organization has great concern about their personal values, they tend to respond. This statement is supported by social exchange theory which proposed that when employees feel a positive attitude towards their organization's concerns about their wellbeing, they show positive work attitude towards the organization.

In addition, employees experience social exchange relationships with their organization: these relationships have behavioural, emotional and cognitive implications where employees reciprocate the favour they receive from the organization and from their supervisor (Masterson et al, 2000; Sluss et al, 2008). Amabile (2004) supported this view by stating that management support such as providing clear goals and good work environment that promotes innovation, encourages and influences an employee's intrinsic motivation to become creative, resulting in

an innovative culture. Research carried out by Neufeld et al (2007) among 680 employees of a construction company in Australia indicated that management support plays a key role in influencing implementation of technology success or failure. Ifinedo (2008) claims that a significant body of knowledge has linked management support to success of technology implementation. Huang (2005) added that management support helps to provide the needed resources and eliminate obstacles to operation restructuring, thus encouraging users' satisfaction. The study of Boonstra (2013), which examined top managers in 20 selected organizations with multiple levels of management that are responsible for strategy, the strategic use of IS and corporate policy, indicated that management support is a vital element of IS project success. Igbaria et al (1995) argue that management support provides an environment and culture needed for change, which is a vital factor in encouraging a user's satisfaction. In terms of social media implementation and adoption, it is noted that resistance to change within business has been a key issue for innovation of social media. Therefore, to implement social media-related activities in the workplace, management need to support and understand social media innovation, and have social media insight when making strategic decisions. Evidence from IGI Global and the Information Resources Management Association (2015) states that lack of management support and their little interest in utilizing social media discourage employees from using the technology and make it difficult for them to understand the benefits of utilizing social media for work.

Peansupap and Walker (2005) asserted that in a situation where the use of technology is necessary, it is important to consider management influence. Successful adoption of internal technology by employees for work purposes needs implementation encouragement and support from management if individuals are to accept and utilize it (Peansupap & Walker, 2005), as the influence of management can help in the implementation and use of the technologies; Gambatese and Hallowell (2011) verified this claim in their research and identified effective management support as the strongest influencer on innovation implementation. This can also be supported using social influence theory which is of the idea that an individual's attitudes, beliefs and subsequent actions or behaviours are influenced by referent others. According to Khan (2017), the basic idea behind the theory of social influence is the change in behaviour that one person causes in another, intentionally or unintentionally, as a result of the way the changed person perceives themselves in relationship to the influencer, other people and society in general (Khan, 2017).

Additionally, numerous studies have indicated that the role of management (CEO, top management or manager) is vital to the enterprise, since they have an impact on the current and future activities of the organization (Fuller–Love, 2006; Smith, 2007). This is also associated with different stages of technology adoption decisions, which include: planning, implementation, maintenance and system grade (Bruque & Moyano, 2007; Nguyen, 2009; Fuller & Lewis, 2002). Chuang et al (2009) and Li et al (2006) posit that the personality traits of honesty and extroversion, as well as demographic characteristics are the significant determinants of technology usage behaviour and performance within organizations. Similarly, Ghobakhloo et al (2012) state that in technology adoption top management support and commitment in technology adoption is one of the main bases of a high level of success and satisfaction with technology adoption. Top management support, however, plays a vital role in determining an organization's technology innovation strategies and decisions (Hsu et al, 2019). Dong et al (2009) also maintain that top management support encourages the use of technology and influences positive individual perceptions and enhances the overall technology adoption and usage. Similarly, Coeurderoy et al (2014) found that management influence has a direct influence on the implementation and speed on technology adoption and usage. Therefore, when managers support the usage of technology innovation by providing support activities such as support technicians and new services sources, employees will tend to foster a greater usage of technology within that workplace (Hasan, 2013). Similarly, factors which include innovations, perceived behavioural control over technology, support and commitment, in-house IT experts, level of IT investment and financial resources available directly impact the process of technology in small and medium-size enterprises (Premkumar, 2003; Qureshi & York, 2008; Drew, 2003; Thong et al, 1993). Sargent et al (2012) proposed that the knowledge of top management will reduce the level of uncertainty associated with technology, which will lead to low risk in technology adoption. Therefore, a high level of management support can influence employee usage of internal social media for engagement within the organization. Hence the following hypothesis is formulated:

**H3:** There is a positive relationship between Perceived management support with Actual use of internal social media.

### 3.3.2 Perceived behavioural control

Perceived behavioural control (PBC) has attracted the attention of many researchers; the interest in PBC has been stimulated in a number of works (e.g., Cheung & Chan, 2000; Sheeran, et al, 2003; Kraft et al, 2005; Fila & Smith, 2006; Zolait, 2014; Cristea & Gheorghiu, 2016; Shin & Hancer, 2016; Aurigemma & Mattson, 2017) and has been used frequently in efforts to predict different kinds of behaviours. Cristea and Gheorghiu (2016) provided evidence indicating that individuals' behaviour is strongly influenced by their confidence in their ability to perform. PBC is a part of TPB coined by Ajzen (1986): the view that user behaviour is a determinant of behavioural intentions. However, current research has proved that the main concept of perceived behavioural control, as normally assessed, encompasses two components: "self-efficacy (dealing mainly with the ease or difficulty of performing a behavior) and controllability (the extent to which performance is up to the actor)" (Ajzen, 2002, p.665).

Ajzen and Madden (1986) defined PBC as an individual belief about how tough or easy performance of a behaviour will possibly be. "It is assumed to reflect past experience as well as anticipated impediments and obstacles" (Ajzen, 1991, p.188). PBC states that the possibility of successful performance behaviour will differ as a function of the perceived controllability with regard to performing a behaviour (Armitage et al, 1999). Similarly, Teo and Lee (2010) state that PBC refers to the perceived ease or difficulty of performing a particular behaviour and how much control an individual has over the accomplishment of the goals from said behaviour. It is interesting to note that PBC differs from perceived ease of use (PEU) in the sense that PEU is the extent to which a user believes that using a system would be free from effort and easy to use while Perceived behavioural control is the ease or difficulty of using a system, i.e., "beliefs about the presence of factors that may facilitate or impede performance of the behavior" (Ajzen & Fishbein, 1980, p.453; Ajzen & Madden, 1986). PBC theory suggests that an individual's intention to act results from perceived behavioural control and that the more the perceived high level of control, the more the behavioural intention (Ajzen & Madden; 1988), this means the degree to which an individual perceives a behaviour to be in their control (Ajzen, 2002), in turn from a set of control beliefs which "deals with the presence or absence of requisite resources and opportunities" (Ajzen, 1991, p.196). Armitage and Conner (2001) added that lack of individual ability to have control over their performing behaviour results in a weak relationship between intentions and behaviour. Therefore, there is a strong theoretical belief that perceived behavioural control plays a vital role in individual acceptance of technology.

In addition, IS researchers (such as Morris et al, 2005; Davis & Davis, 2003) claim that there is a relationship between PBC and intention to use technology. According to the authors, PBC enables and fosters an individual to gain confidence to successfully perform a specific behaviour (Morris et al, 2005; Davis & Davis, 2003). Similarly, Ajzen (2002) proposed that a high degree of perceived control strengthens an individual's intention to perform behaviour. Fella et al (2014) state that loss of control can negatively influence people's attitude when considering technology. However, authors such as Sparks and Shepherd (1992) call for more research to understand, improve and expand the PBC construct; therefore, it is important to answer the call for better understanding of the factors which influence individual behaviour, as crucial for promoting the acceptance of a desired behaviour. Perceived behavioural control can be an important predictor when encouraging and motivating employees to use social media to support work activities in the workplace. In addition, PBC has been indicated to be associated with perceived ease of use or difficulty regarding a specific technology, which have been indicated to be main factors predicting intention to use that technology (Compeau & Higgins, 1995). Similarly, if an individual perceives a behaviour as difficult to perform or not under their control, the intention to perform the task will decrease consequently. However, in the context of this study, the use of internal social media for employee engagement, it is expected that with higher perceived behavioural control in the use of a social media platform for a desired purpose in the workplace, there will be positive acceptance behaviour. Olumide (2016) indicates that confidence in technology usage can lead to flexibility, control, and competent use of information. Thus, increased knowledge can result in an improved productivity. On the other hand, "the inability for a user to take control and accept the use of technology can be overwhelming which may eventually result in anxiety to the level that it will deteriorate the quality of decisions" (Olumide, 2016, p.20). Similarly, in the opinion of Dupin-Bryant (2002), the inability of an individual to adapt to change and their resistance to innovation can result in a negative influence on cognitive performance. This may be due to fear of unpredictability of computers, risk of failure and public display of ignorance that may weaken users' attitude. Therefore, this study added PBC to TAM to account for employee intention to adopt and use internal social media for engagement in the workplace and to understand how PBC can hinder or facilitate the actual performance.

The hypothesized effects of perceived behavioural control as proposed by Ajzen (1991) are presented below. First, if individual perceives a behaviour as difficult to perform or not under one's control, the intention to perform it will decrease accordingly. Second, for behaviours not

under total will control, to the level that perceived behavioural control realistically reflects the external factors that can hinder or facilitate the performance (i.e., actual control), perceived behavioural control can have a unique effect beyond behavioural intention in predicting the actual performance. Third, “when there is a control problem in enacting a behaviour, perceiving a behaviour as controllable and easy will be a necessary but not a sufficient condition for translating intention to actual performance” (Cheung et al, 2000, p.9). Thus, perceived behavioural control could impact on individual behavioural intention and actual performance of a behaviour. Therefore, the following hypothesis is formulated:

**H4:** There is a positive relationship between Perceived behavioural control with Actual use of internal social media.

### 3.3.3 Perceived relevance

Employee perceptions of relevance is defined in the present research as the degree to which employees perceived that the adoption of technology for work purposes is relevant to their own goals and needs (Tan, 2019). This means the degree to which internal social media is important and would help employees in their work. Perceived relevance is subjective and may differ significantly among employees. It has less to do with kind of industry or particular job role, and more to do with a deep relation that employees make or do not make between their work and performance. This subjective idea is in line with Warr and Inceoglu (2012), which is of the view that “job features are often recorded in terms of incumbents’ perceptions rather than through independent measurement” (p.135). Studies characterized that job relevance is the purpose to perceive the usefulness of technology application and employees tend to use the technology if they perceive that the use of the technology is more advantageous and relevant to their job (Venkatesh et al, 2008; Alharbi & Drew, 2014; Alambaigi & Ahangari, 2015). In this study, perceived relevance focuses on employee perception that using internal social media platforms in their work roles could be relevant and enhance their professional development needs. However, to differentiate perceived relevance and perceived usefulness; Job relevance refers to an individual's perception regarding the degree to which the target system is applicable to their job (Venkatesh & Davis, 2000), while Perceived usefulness is the degree to which a person believes that using a particular system would enhance their job performance (Davis, 1989). This means that what is useful to one user may not be relevant to another user; an internal social media platform may be useful for work activities but may be perceived not to be relevant to an employee or fit into their work goals. The relevance of internal social media

for work purposes and the ability to make employees become more productive in their work is a valid determinant as to what makes employees adopt internal social media; this is suggested by the work of Bandura (1997), which states that technology is believed to be efficient when an individual uses it to achieve a given outcome. Thatcher et al (2007) maintained that the efficiency of a technology was found to be the primary factor in the adoption of technology in the workplace. Similarly, a technology which is perceived to be of more relevance for employees' work activities than another is high likely to be adopted by users, whereas the less important a technology is perceived to be, the more unlikely it will be adopted (Surowiec & Bansal, 2016). This is supported by social influence theories within social communication theory, like that of Paul Lazarsfeld et al's (1950) theory which is of the view that employees' perception of relevance between their needs and personal goals is an important basis for adoption. In addition, the two-factor theory of job satisfaction of Herzberg's Motivation–Hygiene theory (1966) also explains employee intention and actual use of technology: the theory proposed that people are influenced by two sets of factors, motivator and hygiene factors. The motivator factor such as growth and self-improvement which would help employees uplift their professional competence could be a motivator to why employees could adopt social media at work to improve their work performance.

Zhang et al (2008) state that individuals and employees have different views of results they expect to get from social media due to different natures of their job roles, which influences their intention of choosing a technology. In other words, if information or messages on an organization's internal social media are not relevant to employees or did not help employees to improve in their jobs, they would develop a negative attitude towards using social media. Kim (2008) noted that there is an empirical relationship between user acceptance and relevance. Therefore, it could be conceptualized that employees/individuals' significant and positive perceptions about internal social media relevance to their job would help reinforce towards internal social media adoption. Expectancy–value theory has been proposed to explain the mental basis of individual attitude when making a decision. Expectancy–value theory holds the belief that individuals that have different beliefs may have the same attitudes, stating that a negative implication for one of the attributes does not necessarily mean a general negative attitude (Zhang et al, 2008), thus, the adoption and use of technology depends on individual belief that the technology is compatible with their needs and values (Pantano, 2015). Additionally, Venkatesh et al's (2008) and Davis's (2000) studies indicated that job relevance is a determinate of perceived usefulness. Action theory, work motivation theory and

behavioural decision theory used in TAM2 and TAM3 argue that Job relevance would significantly influence perceived usefulness. Therefore, in this study, which is examining the adoption and usage of internal social media, it can be argued that job relevance would be associated with actual usage of internal social media for employee engagement. Perceived relevance was added to the TAM to extend Venkatesh et al's and Davis's work to examine the relationship between perceived relevance and actual usage of internal social media. Therefore, the following hypothesis is formulated:

**H5:** There is a positive relationship between Perceived relevance with Actual use of internal social media.

### 3.3.4 Uncertainty avoidance

According to Hofstede (2001), uncertainty avoidance is the degree to which an individual in a culture feels comfortable or uncomfortable with ambiguity and uncertainty or being in an unstructured situation. Uncertainty avoidance signifies the collective ability of a society to accept ambiguous outcomes. Hofstede's cultural dimension model suggests individual perception, behaviour and attitude are based on country culture (Pauleen, 2003). Research suggests that an individual's behaviour, knowledge and belief are shaped by their culture and environment (Harrison & Huntington, 2000), and their behaviour is learned through studying the social environment in which they live (Chen, 2014). It is also indicated that differences in culture play a vital function in shaping individual behaviour and group adoption of technology (Erumban & de Jong, 2006). In addition, there is substantial evidence that culture can have a significant influence on an individual's tacit epistemologies and cognitive processes (Nisbett et al, 2001). In marketing communication, culture has been seen to impact on consumer behaviour (Chen et al, 2007); this means that cultural orientation is a force that shapes individual behaviour, attitude and beliefs, and can also be a principal guide to one's life (Chen, 2014). However, many organizations recognize the importance of cross-cultural relations in their business operations; taking this cultural relation as an important factor in implementing change across the organization, it is important to understand what national culture's influences are on individual adoption of technology use. In the context of this study, as the research focus is on two different countries (the UK and Nigeria), it is important to provide empirical justification on how differences in national culture affect an employee's behavioural intention, perception and attitude to adopt social media platforms in the workplace. Indeed, much research in cross-cultural issues in relation to IT has provided evidence to support the notion

that cultural factors moderate technology adoption (Erumban & de Jong, 2006; Huang et al, 2003; Karahanna et al, 2002; Meyers & Tan, 2002).

Hofstede's (1981) cultural dimension theory proposed cross-cultural communication exploration on countries' culture with the idea of a six-dimensional model. The model indicated uncertainty avoidance as an index that impacts on people's behaviour, perception or adoption intention. Perez (2010, p5) states that technology adoption contains risk and uncertainty, and "differences in the level of Uncertainty Avoidance determine the rate and pace of innovation" (Singh, 2006; McCoy, 2002; Shane, 1995). In addition, Perez (2010) states that as individuals from culturally distinct societies make use of technology, their perception and satisfaction level differ: "These differences are a function of the differential found in cultural dimensions such as Uncertainty Avoidance" (p.5). Similarly, differences in the level of Uncertainty Avoidance determine the rate and pace of innovation (Singh, 2006; McCoy, 2002; Shane, 1995). Numerous studies that examine cross-cultural issues related to technology have provided evidence to support the claim that cultural factors moderate the adoption of technology (e.g., Erumban & de Jong, 2006; Huang et al, 2003; Karahanna et al, 2002; Meyers & Tan, 2002). The UA cultural dimension has been identified as a key element moderating technology adoption (Vörös & Choudrie, 2011). Thus, uncertainty avoidance is added to TAM to examine significant differences in the level of uncertainty avoidance and group perceptions towards internal social media adoption in the workplace in two distinct cultures.

Moreover, numerous articles have proposed a theory of high uncertainty avoidance for culture, society or employees. For instance, DiRienzo et al (2007) proposed that in countries with high uncertainty avoidance, people feel uncomfortable in unpredicted situations, resulting in inability to challenge authority, accept change or take risk (Chui et al, 2002). Leung et al (2005) added that in high certainty avoidance societies there is resistance to change and employees in these kinds of societies prefer greater standardization, while countries or societies with low uncertainty avoidance are comfortable with taking risks. Past research has indicated that uncertainty avoidance has an impact on individual attitude (Panina & Aiello, 2005). Panina and Aiello (2005) added that the uncertainty avoidance construct may impact on users in behaviour; for example, in online transaction activities, the feeling of uncertainty may occur because users perform their online activities far from societal presences.

Therefore, in high uncertainty avoidance cultures, individuals in these societies are less concerned with involving themselves in technology use than individuals in low uncertainty

avoidance cultures: people in low uncertainty avoidance cultures prefer situations where they can feel free and are not guided by any rules (Belkhamza & Azizi Wafa, 2014). Applying this statement to behavioural theories, such as TRA and TPB, many studies have supported the notion of individual behaviour in various cultural contexts. Bagozzi (2007) maintained that environment, exposure, society and economic status in the area where technology is exposed to individual can influence adoption and usage (p.212). People living or born in low uncertainty avoidance countries tend to take risks and feel comfortable in ambiguous situations, they accept uncertainty conditions and feel conformable and have positive attitude towards involving themselves in technology activities; on the contrary, people in a high uncertainty avoidance country tend to avoid uncertainty and prefer to act under known condition and recognized zones, and also try to avoid unknown situations. This claim is supported by McCoy et al (2005) who state that when assimilating cultural value into the investigation of technology adoption among individuals, “the assumption of homogeneity amongst a national or ethnic group is not appropriate” (p.169). Therefore, for people to become involved in technology adoption there should be a positive attitude towards the technology, which is proposed to give them confidence to facilitate knowledge sharing and engagement regarding technology usage activities. In addition, positive attitude is expected to reduce barriers in technology adoption usage. Therefore, the following hypothesis is formulated:

**H6:** There is a positive relationship between Uncertainty avoidance with Actual use of internal social media.

The next section examines the impact of social media usage on employee level of engagement, exploring on the relationship between employee use of social media platforms and three dimensions of employee engagement. The original TAM variables (Perceived usefulness and Perceived ease of use) with the added constructs and where it was adopted from (its root sources) are presented in Table 3.2.

**Table 3.2: Research constructs and their root sources**

Research Constructs	Root Model	Reference
Perceived usefulness	TAM	Davis (1991)
Perceived ease of use		
Perceived management support	Social influence theory	Kelman (1958)
Perceived relevance	TAM2	(Venkatesh & Davis, 2000)
Perceived behavioural control	TPB	Icek Ajzen (1985, 1991)
Uncertainty avoidance	Hofstede’s cultural dimensions	Hofstede (1980)
Social engagement	Dimensions of employee engagement	Afes et al (2010)
Affective engagement		
Intellectual engagement		

### 3.4 Effect of Actual Usage of Internal Social Media on Dimension of Employee Engagement within the Workplace

The development of social media platforms is presenting opportunities for organizations to effectively communicate and collaborate with employees and improve employee engagement (Haddud, 2016). The application of internal social media provides employees better ways of sharing personal and professional information with other colleagues. Evidence presented by Haddud et al (2016) indicated that internal social media has a relationship with the level of employee engagement. Nelson et al (2011) posited “that users of internal social media are drawn to different levels of contribution, which is dependent on their functions in the organization” and that different social media platforms may have their own pattern of adoption in an organization. Moreover, many research initiatives (e.g., Herlle et al, 2012; Fusi & Feeney, 2018) have examined the technical side of social media used in the workplace, but limited research has been carried out to explore internal social media ability to enhance organizational performance through a more empowered workforce. Therefore, it is important to understand the relationship between employee use of internal social media platforms within the workplace and the level of their engagement, by exploring social media and the dimension of employee engagement. The following sub-section examines the relationship between internal social

media and three dimensions of employee engagement, exploring the impact of usage of internal social media on each dimension of employee engagement.

#### 3.4.1 Internal social media and intellectual employee engagement

A CIPD report (2010) states that intellectual engagement is defined as the degree to which an individual is intellectually absorbed in their work role and thinks hard about the job and how best to carry out their tasks. However, many of the controversial questions regarding social media sites ask what impact these technologies have on employees and organizations (Leftheriotis & Giannakos, 2014; Huang & Wang, 2017; Turel & Serenko, 2012). Given this focus, literature that examines the outcomes of social media in general indicates mixed outcomes and effects of social media on individuals. For example, prior research found that long use of social media networks was associated with loneliness, increased depression and small social circles, and was also linked to a negative effect on individual psychological wellbeing (Kraut et al, 1998). Parker et al (2014) added that within the workplace, the use of social media is seen as disruptive and to negatively affect productivity. Turban et al (2011) argue that social media use in the workplace is communication tool which is blamed for decreasing employee productivity, as employees spend an unacceptably long time online and chatting. In addition, the authors added that social media are considered as a waste of time and could cause security issues to organizations.

While some research on social media use has indicated negative psychological outcomes, current research finds positive benefits of using social media within the workplace (Tudu & Pathak, 2015; Rothbard, 2016; Schultz et al, 2015; Dreher, 2014; Walden, 2016; Fusi & Feeney, 2018; Çetinkaya & Rashid, 2018; Forsgren & Byström, 2018; Jackson, 2019; Men et al, 2020). Research has indicated that individuals adopt internal social media platforms for personal and professional purposes (Schultz et al, 2015). Rothbard (2016) maintained that individuals use social media for personal purposes such as collaborating, gathering and publishing information and socialization. Sinickas (2005) states that organizations adopt social media platforms for employee engagement and the collective brainpower of all employees to improve business decision making. MacLeod and Clarke (2009) and Kahn (1990) state that social media can be a means by which an organization can establish dialogue and relationships between employees and employer and provide a new avenue of relationship building within the organization (Parry & Solidoro, 2013). Zoonen et al (2014) added that in a work-related context, social media serve the function of disseminating information, improving engagement,

managing relationships and connecting employees to one another (Roberts, 2013). However, earlier research argues that there is no long-term impact of social media usage on depression or loneliness (Kraut et al, 2002), and that prior research does not state what social media activities might affect individual psychological wellbeing and why those activities affect these outcomes (Kraut et al, 2002).

In addition, Smith et al (2017) stated the use of social media may be described in the literature as a planned activity, although use of social media may be shown in a study as a planned activity, but that there is also a point in the advancement of social media usage that goal-directed behaviour gives way to absorption in the social media experience; thus, when people are engaged while using social media, they feel committed to, inspired by and attached to media content (Oh & Sundar, 2016, p.178). Additionally, Oh and Sundar (2016) state that individual engagement consists of a strong cognitive focus on the media content and signifies a deep investment in the interaction of human and computer (O'Brien, 2016). Individual engagement has been associated with the feeling of being lost in a state where their intellectual system and abilities are focused on events in the narrative (Smith et al, 2017). The study by Oh and Sundar (2016) indicated that engagement as a concept of experience consist of curiosity, attraction and interest in using social media sites. The experience of attraction is triggered by intrinsic interest and curiosity (Smith et al, 2017). These outcomes however depend on the quality and the experience of using the social media platform (O'Brien, 2016).

Moreover, research has proposed that factors that keep the social media user engaged include interest, curiosity, ease of use, likelihood of interaction and novelty of the experience (McCayPeet & Quan-Haase, 2016; Oh & Sundar, 2016). Similarly, O'Brien (2016) claimed that to derive engagement through social media activity, the experience must be categorized by the perceived attractiveness of the system, perceived ease of use, felt involvement and durability, as well as freedom, resourcefulness and imagination (Smith et al, 2017). However, this statement can be best explained using the job demands-resources model (JD-R model) which basically assumes that work engagement results from the nature of the resources that an individual needs to achieve the demands of their job. These needs involve two resources: job resources and personal resources. Job resources consist of those parts of the job that are useful in achieving work goals, individual growth and development; for example, the control individuals have over their jobs, performance feedback and support from managers and colleagues. While personal resources involve those aspects of the individual that are linked to

resiliency, which means the ability of an individual to control and impact successfully on their environment; for example, self-efficacy, being emotionally stable and optimism (Schaufeli, 2013). The JD-R model explains engagement on the basis that, where employees have high levels of personal resources, they are expected to be engaged and absorbed with their role (Catherine et al, 2015). This means that intellectual engagement is seen as a serious cognitive investment in doing an activity and may occur when an individual is involved in a task that deeply arouses their interest. Therefore, it is suggested that when a social media platform provides employees with resources or activities that they need to build individual and collective knowledge to overcome difficulties in their jobs and meets the demand of their roles (resourcefulness), they develop a strong sense of self-efficacy (O'Brien, 2016). Efficacious behaviour fosters intrinsic interest and deep engrossment in activities and creates personal accomplishment. Thus, employee intellectual social media engagement can be achieved depending on the types of activities, information and interactions employees get from using the social media, and the quality of the social media experience (O'Brien, 2016). However, arguments of whether an individual uses a specific social media site or not, will likely be an inconclusive prediction of psychological wellbeing. Instead, it would be more beneficial to move towards finding activities within the social media environment and the theoretical description about why those activities would impact individual psychological outcomes. Therefore, the following hypothesis is formulated:

**H7:** There is a positive relationship between Actual usage of internal social media with Intellectual engagement

#### 3.4.2 Actual usage of internal social media and affective employee engagement

Hardaker and Fill (2005) claim that individuals are no longer satisfied with becoming just part of an organization; they also desire to become ambassadors and progress to the level where they are proud or pleased to talk highly about their organization. The emotional commitment employees develop towards their organization enables them to become brand advocates and become committed to achieve their stated goals. Understanding the importance and value of social media in the workplace can help to influence employee engagement in a way that was impossible before the development of the internet. However, judgements about the various attributes of social media network have been indicated as a significant factor of social media use (Oh & Sundar, 2016). With development of social media, it has attracted many users. Many individuals and organizations use social media for various needs. The significance of social

media is an important step in taking employees into the digital arena. Organizations utilize social media to leverage knowledge and experiences from multiple geographically dispersed projects and have embraced the desire to involve employees through an effective strategy of social media communication to achieve virtual collaboration (Breunig, 2016). Every day, organizations are looking for better ways of eliciting that extra stimulus that causes employees to develop deeper emotional dedication and enthusiasm (affective engagement) to commit and engage to their work, especially in online communities. Research has indicated that technology or online engagement is a multidimensional construct and a valid means for capturing user engagement in terms of affective engagement.

However, 'affective' comes from the word 'affect' which is defined as the ability to affect or to be affected by and which are two sides of the same event (Massumi, 2002). Massumi (2002) states that affect is pre-personal, pre-individual and nonconscious but real, which offers a potential for action or influences a person to take change or act. However, 'affective' comes from the noun 'affect' and it can be used interchangeably with 'emotion'. 'Affective' describes something that has been impacted by emotions (CIPD, 2014) and is explained to relate to the way in which an individual feels about being involved in a particular role or job (Barmby, 2014).

In the HRM field, emotional or affective engagement occurs when employees have emotional commitment to their job or organization, and identify with the organization's aims and values (CIPD, 2014). Similarly, emotional or affective engagement also occurs when employees develop a positive feeling towards their jobs and are motivated by the desire to do their best in their jobs and work with other colleagues (CIPD, 2011). However, within this study, the phrase 'affective engagement' is used rather than 'emotional engagement' because affective engagement captures an individual's deep feelings and thinking, which always result in action. Thus, in this study, the affective dimension of engagement is defined as a total and enduring level of emotions which is experienced by an individual in regard to their engagement focus (Calder et al, 2013) and transpires through long-lasting and recurrent feelings, rather than one-off emotions. The affective dimension of engagement has two aspects: enthusiasm and enjoyment. These two sub-dimensions of affective engagement indicate the excitement, interest, pleasure and contentment an individual feels in regard to being involved in a social media brand community (Dessart et al, 2014).

The participation, collaboration and interaction with a community of like-minded employees is a vital factor that contributes to the success of the organization and employee engagement. The interest in usage of the internet for interaction and collaboration to enhance engagement among employees within the workplace has been growing strongly in both practice and academia. Much research has looked at the influence of the use of technologies or social media platforms on the affective dimension of engagement in different fields, such as in education, IT, marketing and health care, but little or no research has focused on the relationship between social media use and affective engagement in the human resources context. Therefore, the relationship between social media and affective engagement would mainly be drawn from other fields. However, there is evidence that suggests the influence of social media on individual affective engagement. For example, there is the empirical study by Dessart et al (2015) on consumer engagement in online brand communities: a social media perspective which interviewed 21 international online brand community members, which covers different brand categories and social media platforms, and indicates that a social media brand community is an environment where individuals develop strong emotional links among themselves and these aggregate into deep and long-lasting affective bonds (Bergami & Bagozzi, 2000). In addition, Dessart et al (2014) maintain that the emotions that the individual feels towards the social media brand community are strong and mainly positive and contain enjoyment and excitement. Dessart et al (2015) also added that interaction with peers through social media helps to generate individual excitement and happiness, which is inspired by the individual's own comments and posts and those of other users; thus, individual usage level of social media triggers and sustains enthusiasm and enjoyment (affective). In addition, the work of Barge et al (2016), which examined the attitudinal and behavioural brand loyalty as consequences of consumer engagement in social media, proposed that perceptions of enjoyment, which is a sub-dimension of affective engagement, is significantly associated with consumer engagement. In addition, Neidlinger (2014) maintained that social media is uniquely placed for making emotional connections, which is improved relational engagement. Therefore, it is proposed that there is likely to be a relationship between social media and affective engagement. Therefore, the following hypothesis is formulated:

**H8:** There is a positive relationship between Actual usage of internal social media with Affective engagement

### 3.4.3 Actual usage of internal social media and social engagement

In times of challenging business environment, organizations need to engage employees socially through the utilization of social media to promote active participation. Kahn (1990) claimed that engagement has a clear social component and presented social engagement as the extent to which an individual is socially connected with their workplace and shares common interest and values with colleagues. Social engagement as one of the facets of the ISA Engagement scale (intellectual, social, affective) proposed by Soane et al (2012), could be measured and assessed by the extent to which employees share the same work goals, attitudes and values with their work colleagues (Soane et al, 2012). These constructs are associated with task performance and turnover intentions and are significant to organizational change since effectiveness of social process are vital to positive outcomes (Soane et al, 2012). Khan (1990) proposed that social engagement is the experience of relatedness with other people, and it is an important element of the expression of oneself in-role.

In addition, the emergence and acceptance of social media networks has encouraged human participation and communication on a unique scale (Sharma & Bhatnagar, 2016). Social media platforms allow individuals to share contents and interact with one another, and offer various purposes besides personal use, that encourage organizations to adopt the network to support their strategic business plans. The value of social media networks in a business arena started to be acknowledged as forward thinking. In the marketing field, businesses incorporated social media as a marketing medium, using various social media platforms such as Facebook, YouTube, blogs and Twitter for marketing their products and services (Taman, 2014). In the workplace, organizations are now integrating their internal communication strategy using social media strategy to involve employees in communicating with people across the organization, and conducting different activities such as to share ideas, solve problems, organize meetings, generate awareness on work-related matters, collaborate and build work relationships between colleagues (Fabre, 2015).

The growth and acknowledgement of social media has made organizations adopt the tool to engage individuals on a deep and meaningful level (Dessart, 2017). Employee engagement is a necessary condition that has organizational purpose and consists of behavioural and attitudinal elements such as employee involvement, energy, passion, dedication, absorption and vigour (Mills, 2012). Jackson et al (2000) added that it is important that employees work collectively to operate together to solve challenges and learn from one another. Saks (2006)

recognized the importance of connectedness with others in the work environment and suggested that implementing and sustaining social interaction on work demands would result in engagement with others, especially when solving a complex task (Krauss et al, 2005). In addition, that study indicated that the feeling of working with others improves intrinsic motivation and determination among individuals working alone (Quintero, 2014), and that shared values encourage organizational culture (Scott & Bruce, 1994). Sharma and Bhatnagar (2016) posit that the ability of employees to become part of online communities where they can connect and interact with all levels of employees to discuss work-related issues based on their expertise, can encourage a more flexible learning approach across various parts of the organization, and “also overcome hierarchical boundaries and power dynamic in internal communications” (Sharma & Bhatnagar, 2016. p.17). Sharma and Bhatnagar (2016) also suggest that giving employees such opportunities would help to meet their psychological and emotional needs, which is a good source of employee motivation, as employees feel involved, encouraged and valued, and motivated to develop, learn and collaborate with others in the organization.

On a similar note, Sharma and Bhatnagar (2016) state that giving employees the opportunity to connect to diverse members of the organization within different groups, departments and countries, will help create a dynamic social network of heterogeneity where employees share ideas and bring solutions to solve work-related problems on a common platform. Social media such as blogs, internal Facebook, Twitter, company intranet and discussion forums can help employees to share their opinions, new ideas and provide feedback on organizational policies and process (Sharma & Bhatnagar, 2016). Nohria and Eccles (1992) maintained that technology enabled shared values between people, and enhances the intra-organizational relationships, which provides opportunities for transfer of personal and technical knowledge, as well as other resource exchanges. Therefore, seeking employee involvement and participation through social media will help to create conditions for employee collaboration, facilitate interactive communication, share common interest and get social support for colleagues (Sharma & Bhatnagar, 2016).

Littlejohn (2003) urges that the use of technology enhances and encourages individual interaction and communication and gives individuals the opportunity to go in depth and engage fully in interaction and communication with their peers. This statement can be underpinned using the technology-based learning engagement theory proposed by Kearsley and Shneiderman (1998), which is the idea that individuals must be meaningfully engaged in their

learning activities by interacting with others and worthwhile tasks. The theory maintains that the use of technology encourages an individual's collaboration, as it helps to encourage learning, develop individual deeper understanding of their activities and develop ideas beyond the scope of individual activities (Kearsley & Shneiderman, 1999). Technology engagement theory promotes individual activities which involve cognitive processes such as problem solving, creativity, decision taking, evaluation and reasoning in which individuals are motivated to learn due to the nature of the learning environment and tasks (Kearsley & Shneiderman, 1999). Despite the significance of social media for engagement, Kearsley and Shneiderman (1998) argue that engagement can happen without the use of technology; but that technology can help facilitate engagement in ways that are difficult to achieve. An empirical study of the learning management system WebCT indicated the significance of engagement theory in the development and implementation of WebCT courses; the study indicated the effectiveness of the technology engagement theory in the implementation and outcomes of teaching and learning using technology (Marshall, 2007). This is consistent with the works of Feildman (1987), Barua et al (1995), Quinn et al (1996), Huber (1990) and Bhatnagar (2016), which maintained that the use of technology in the workplace plays a role in promoting collaboration and sharing of information within, inside and across the boundaries of the organization.

Furthermore, the evolution of new technologies and the beliefs about its usefulness and its acceptance in the workplace, where employees use technology to express their viewpoint and ideas (Madsen, 2017). Also, where organizations utilize the social media network to collect peer praise, objective alignment, manager feedback and idea generation, this helps employees and organizations to make sense of communication on internal social media as job-related communication among employees (Madsen, 2017). In addition, Moorman et al (1993) state that social media used within the workplace influence group activities, help employees to solve colleagues' work-related problems and keep employees updated with changes within the organization. With the presence of social media within the workplace, the process of helping colleagues becomes easier. It also makes it easier for organizations to keep employees updated on the issues of the organization, which also results in group cohesiveness (Moorman et al, 1993).

Anderson and Nar (2010) maintained that professional social media used within the workplace ease the processes of information sharing and achieving of goals, which result in a high evaluation of the relationship quality. Relationship quality improves employees' organizational

citizenship behaviour (Warkenting et al, 1997). Hence, organizational citizenship behaviour refers to the willingness of an employee to go the extra mile in their job or serve the employer in matters that are outside the scope of their job descriptions and contributes to positive functioning of the organization. It consists of Helping behaviour, Civic virtue, Sportsmanship, Organizational commitment, Individual initiative, Compliance and Personal development (Podsakoff et al, 2000; Castro et al, 2004). Kahn (1992) suggests that employees who are engaged are more likely to “initiate citizenship behaviours due to their participation in a positive cycle of input and rewarding outcomes” (p.14). Kahn’s (1992) suggestion has been confirmed in an empirical study by Rich et al (2011). Another work’s findings also supported Kahn’s study and proposed that organizational communication must be considered as a vital issue to foster employees’ organizational citizenship behaviour (Yildirim, 2014). This is because organization citizenship behaviour reinforces close friendship, intimacy, sense of effectiveness and usefulness, emotional communication, and organizational effectiveness, and in social networks enhances virtual life within the online community. This section has examined the impact of workplace use of social media networks on three dimensions of employee engagement, to understand the influence of social media usage on employees’ level of engagement. Therefore, the following hypothesis is formulated:

**H9:** There is a positive relationship between Actual usage of internal social media with Social engagement

Actual usage of internal social media (AU) as one of the study variables included in the conceptual framework, will be tested to determine the relationship with intellectual, affective, and social engagement. The next section explores the impact of dimensions of employee engagement on the level of employee performance, providing more insight into how employees’ level of engagement derives from the usage of social media networks within the workplace can impact on their performance.

### 3.5 Impact of Dimensions of Employee Engagement on Employee Performance

Performance is an important variable in management literature. Xiaojun (2017) defined employee job performance as an employee’s overall job effectiveness which can be obtained by organizational performance information (e.g., sales) or assessed by employees’ managers, peer colleagues or employees themselves (Sykes, 2015; Tepper et al, 2011). Many studies have

examined the relationship between engagement and performance in the workplace. Demerouti and Cropanzano (2010) stated that engagement can lead to performance due to various mechanisms. This view is in line with a growing number of different studies which demonstrate a positive link between engagement and employee performance (Xanthopoulou et al, 2008; Whittington & Galpin, 2010; Clutterbuck, 2005; Kazimoto, 2016). Recently, interest has been shown in the relationship between employee engagement and performance. Linking employee engagement and performance, it could be suggested that engagement may constitute the process through which HRM practices influence employee and organizational performance. This is evident from much research which shows that there is a positive relationship between engagement and performance at individual and group levels (Harter et al, 2002; Rich et al, 2010; Christian et al, 2011; Bakker & Bal, 2010).

Fredrickson's (2001) theory of 'Broaden and Build' explains the positive link between engagement and job performance: the theory states that the engaged individual experiences a positive emotion that widens the individual's thought, which results in the employee concentrating more on their jobs and being more immersed in their job (Soane, 2012). Positive emotions can build and contribute to intellectual, affective and social behaviour. An engaged employee has a high retention rate which decreases the employee's intention to leave the organization and increases productivity, profitability and growth of the organization (Markos & Sridevi, 2010). Employee engagement is a critical element of employee and organizational success. Schaufeli and Bakker (2008) state that employee engagement predicts employee performance and organizational success, and the impact of employee engagement or disengagement can be evident through organizational performance.

Raza et al (2014) maintained that performance is an individual or employee's physical and mental ability to carry out a specific task in a way that can be measured as high or low in scale. Specifically, employee performance involves the way in which employees achieve the goals set for them by the organization and relate their personal behaviours to the norms of the organization (Imran et al, 2012): It is also an effective, efficient and timely completion of mutual job agreement between employees and employers (Tinofieri, 2011). In this study performance is described as that behaviour of employees that contributes to the success and goals of the organization. However, the term performance is considered to have different aspects which include behavioural and outcome aspects (Roe, 1999; Campbell et al, 1993; Borman & Motowidlo, 1993). The behavioural aspect encompasses how the individual or employee performs their job, that is, the action itself, and involves specific individual

behaviour (e.g., sales volume, sales interaction with clients, test of job knowledge, etc.). This concept means that only actions that are goal-oriented and which can be measured or evaluated are considered as performance (Campbell et al, 1993). Campbell et al (1993) maintain that the outcome of performance involves the outcome and result of individual behaviour, which is an accomplishment of organizational goals and objectives which result from the behavioural aspect (i.e., employee behaviour).

In addition, Albrecht (2012) explained that when employees are supported and provided with open and clear autonomy for their career development, this will ensure engagement in their jobs and improve performance. Khan (1990) explains that psychological differences may influence an employee's ability to engage or not to engage in their work performance, exactly as they shape employee willingness and ability to be committed to work. Khan (1990) further argued that an individual would engage in different ways based on their psychologically meaningfulness experiences, psychological safety and availability in specific situations. In addition, Kahn (1992) stated that when employees are psychologically present, they feel connected, integrated and focused deeply into their role performance and keep themselves in the work they are performing. Macey et al (2009) added that the feeling of engagement leads to engagement behaviour which results in performance outcomes. Therefore, Macey et al (2009) and Kahn's (1992) models proposed that deep employee engagement has a state and cognitive dimension; the state of engagement leads to engagement behaviour and engagement behaviour leads to performance outcomes. These links are important in understanding the development and management of employee engagement.

Although numerous studies have confirmed a positive link between engagement and performance outcomes, Sparrow's (2014) study advised against confident claims that deep employee engagement leads to high performance. The authors explained that there is a possibility that being in a well-performing unit results in employee engagement and not the reverse. This view is supported by social exchange relationship theory (SET) which focuses mainly on principles of reciprocity. SET specifies that certain workplace antecedents lead to interpersonal connections and "these relationships produce effective work behaviour and positive employee attitudes" (Cropanzano & Mitchell, 2005, p.882). Purcell (2014) argues that one issue with employee engagement is presenting conclusive and causal evidence between deep employee engagement and employee performance. Soane et al (2012) suggested further research on the examination of dimensions of employee engagement in relation to other

concepts relevant to human resource development (HRD) researchers and professionals, such as performance. However, before the association between each facet of employee engagement on performance is more clearly understood, one possible suggestion is to employ a much more systematic approach to identify how each dimension of employee engagement (Intellectual, Affective and Social) is linked to performance; as a result, this study assesses the link between three dimensions of employee engagement (intellectual, social, and affective) and performance to understand how these dimensions impact the level of employee performance in the workplace.

### 3.5.1 Intellectual engagement and employee performance

Intellectual engagement is an important research area in the field of business management psychology. Intellectual engagement requires not only being absorbed but thinking hard about the role and how to do it better. However, to understand the relationship between intellectual engagement and performance, it is important here to clarify exactly the meaning and concept of intellectual engagement.

The term intellectual dimension of engagement refers to an individual's absorption in their work and the way in which the individual thinks hard about improving their performance. (Soane et al, 2012) defined intellectual engagement as the degree to which an individual is intellectually engrossed in their work and thinks how to focus hard on, concentrate in and pay attention to their work. For Michele et al (2013), intellectual engagement means an absorbing, creative and energizing focus which results in the individual's deep commitment to explore, investigate and solve problems and inquiry over a sustained time. Soane et al (2012) stated that given the significance of intellectual activity to individual and organization performances and given that engagement means more than an ordinary fulfilment of job roles, they see intellectual engagement as the extent to which an individual is absorbed in their work intellectually. In addition, intellectual engagement is defined as a state where an employee is intellectually/cognitively engaged and thinking hard about their job and how to perform better in their role (Alfes et al, 2010). This means that employees engage and involve in psychological activities such as brain tests, being social, keeping open to experience to acquiring different knowledge and understanding about their role, to develop their cognitive or intellectual skills to perform well in their role. However, intellectual engagement is often associated with cognitive activities or constructs such as knowledge acquisition, peer interaction, making a

judgement about something and generating solutions to achieve good performance outcomes (Drusendahl, 2014).

Saks (2006) argues that intellectual/cognitive engagement is more than an individual's attitude or behaviour and represents how an individual pays attention to their work and their ability to think tactically and place high importance on their job role to their daily life (Appleton, 2012; Wilms et al, 2009). Zyniger (2008) added that intellectual engagement is linked with internal processes such as motivation, mental strategy use, deep processing, effort and self-regulation. Rothbard (2011) states that intellectual/cognitive engagement consists of two factors: absorption and attention. Absorption involves the focus and immersion that an individual experience during work, the individual would be engrossed in a deeper manner and not distracted easily from their activities (Rothbard, 2011). In addition, absorption involves a deeper and much stronger level of individual immersion and concentration in their work and links to individual cognitive effort and investment in work. While attention relates to the amount of intellectual or cognitive resources, such as mental energy and concentration, that a person spends in thinking about their job roles. Although some research in different fields has looked at the relationship between intellectual/cognitive enjoyment and performance, there are limited studies directly investigating the relationship between intellectual/cognitive enjoyment and performance in the HRM context.

In the field of education, research indicates that intellectual engagement has been understood to have positive influence in student learning outcomes (Fredricks et al, 2004; Greene, 2015; Greene et al, 2004; Wigfield et al, 2008). Marks (2000) defined cognitive/intellectual engagement as “psychological process that involves student's attention, investment and interest, as well as effort that a student puts in the work of learning” (pp.154–155). For Rotgans and Schmidt (2011), cognitive/ intellectual engagement is a psychological investment of a student and effort directed towards their skills, learning goals, planning, mastering of knowledge and self-regulation. Bircan and Sungur (2016) indicated that students who are intellectually engaged use different strategies which can help them organize information, connect their current knowledge to their previous knowledge, monitor, plan and access their learning, contributing to their academic accomplishment. Research has indicated that “intellectual/ cognitive engagement is a strong predictor of academic performance” (Bircan & Sungur, 2016, p.154). This means that students who have a high level of intellectual or cognitive engagement are likely to do well on academic tasks (Paris & Paris, 2001; Pintrich & Garcia, 1991; Pintrich & De Groot, 1990).

In the organizational context, research has indicated that intellectual/cognitive engagement with sub-dimensions of attention and absorption, contributes to greater performance. However, evidence from engagement research proved that when employees are intellectually/cognitively absorbed in their role, they are not only less easily distracted with issues that are peripheral to their task, but also less easily discouraged by challenges or issues that emerge while doing the job (Sonnentag, 2003). Also, due to their strong attention and concentration on the work, they tend to overcome possible challenges and issues that may arise and hence, become more efficient and effective in carrying out their job, thereby resulting in greater performance (Violet et al, 2011). Therefore, the following hypothesis is formulated:

**H10:** There is a positive relationship between Intellectual engagement with Employee performance

### 3.5.2 Affective engagement and employee performance

Researchers have since tried to establish the relationship between affective engagement and performance in the workplace. One challenge that organizations face involves the implementation of strategies designed to improve interest in employee engagement, employee motivation and commitment, and employee satisfaction to boost performance. However, there is a growing interest among HRM practitioners and researchers in understanding how employees in the workplace become emotionally attached to their workplace (Robertson et al, 2007; Yang & Pandey, 2009; Hassan & Rohrbaugh, 2011, 2012; Moon, 2000; Lyons et al, 2006; Moynihan & Pandey, 2007; Armstrong et al, 2008). This is because evidence shows that the emotional attachment an employee has in the workplace has been indicated to be associated with increased employee performance (Riketta 2005; Podsakoff et al, 2000). A better understanding of the relationship, hence, has both theoretical and practical significance for HRM. In addition, researchers believe that providing employees with an environment that promotes knowledge sharing, learning and development opportunities, and supports a balance in the lives of the employees, would create the basis to support employee effort and personal initiatives and make employees become committed and feel positively about doing a good job (affective) (Alfes et al, 2012). Until now, study indicates that affective engagement predicts employee performance (Meyer et al, 2004). Also, the emotional attachment employees have about organization values and how much they enjoy the relationship they have with the organization, as well as the way they feel as part of the organization, has a remarkable influence on employee performance (Meyer et al, 2004).

Practically, Meyer and Allen (1997) state that employee emotional attachment to their workplace has been scrutinized with respect to commitment. The term commitment has been used extensively in engagement literature and it is found to be a common concept used to define employee engagement. Clearly, there are various concepts that have been used to explain the definition of employee engagement; types of commitment are used to define engagement, meaning that engagement and commitment can be used interchangeably. However, commitment is viewed as a psychological state that shows the relationship employees have with the employer. A decision that an employee makes is to either stay with the organization or to leave the organization. This decision involves employees' positive and negative reactions that make them feel emotionally connected with their organization, and this is also known as affective commitment or affective engagement (Fredricks, 2004). Both affective engagement and affective commitment have been examined in various perspectives, and it is extensively acknowledged that the two concepts slightly differ. Affective engagement refers to an individual's loyalty and emotional commitment to their work, while affective commitment refers to an individual's loyalty and emotional commitment to their organization (Little & Little, 2006). The two concepts can be used interchangeably, as they are considered as a component of employee engagement, employee involvement and employee commitment (Little & Little, 2006). In the context of this study, affective engagement is used because it goes a step further to explain the employee making extra efforts to attain organizational goals.

An empirical study on how satisfaction translates into performance in China, which surveyed 292 employees in seven different manufacturing companies, indicates that affective engagement is an element through which employee satisfaction influences job performance (Zhang & Zheng, 2009). Meyer and Allen (1993) added that employees develop a psychological attachment when they are treated favourably, and their sense of personal importance and competence are induced, which in turn can foster satisfaction and employee performance. Furthermore, Meyer et al (2004) maintained that employees want to stay when they are involved in and committed to their workplace (i.e., affective engagement) and are eager to utilize their effort on behalf of their employer due to the benefit they get from the relationship they have with the organization. This explanation is rooted in the social identity theory proposed by Tajfel (1972), which states that society is made up of different social groups with different status and power, and that individuals derive their social identification from the social group to which they belong. Social identity theory is also seen as an individual's knowledge or perception that they are part of a specific social group, and that they place high

importance and pride in the group they belong to. In addition, Hogg and Vaughan (2002) explain social identity theory as an individual's positive feeling which is derived from perceived membership of desirable social groups.

Edward and Peccei (2007) applied a social identity theory in the work context to define organization identification as the psychological link between employees and their organization whereby the employee has an intense self-defining "affective attachment with the organization as a social entity" (p.30). In addition, Tyler and Blader (2001) pointed out that an individual with a stronger social identity tends to develop a greater motivation to associate and collaborate directly and indirectly with their colleagues through the effect of identity on values and attitudes. Additionally, Hogg and Terry (2011) also maintained that an organization can become a key source of employee social identity and that organization identification helps employees to develop collective self-esteem, and make them feel the successes and failures of their employer as their own, and involves them in behaviour or attitude that supports the goals and aims of the organization. On a similar note, Karanika-Murray et al (2015) stated that a stronger attachment and psychological bond between employee and their organization strengthens an employee's motivation and reinforces their ability and willingness to do better and engage with their work. This is to say that organizational identification can predict employee motivation and performance beyond their core job roles (Reade, 2001). Also, an employee with a strong identification with their workplace is likely to be involved actively in the achievement of goals and activities of the organization, and as a result, become more motivated to work hard to attain the goals of the organization (Karanika-Murray et al, 2015). This may mean that organization identification could be a condition necessary to determine an employee's attitude towards their job roles, and specifically job satisfaction and performance, by reinforcing their engagement with their work (Karanika-Murray et al, 2015).

Furthermore, employee involvement as an aspect of affective engagement is often known as enriching job design. Job enrichment helps to improve the important nature of employee work performed and gives employees opportunity and greater control over how to perform their work. Job enrichment increases employee's commitment and alters their psychological state in a way that they develop their competencies and become involved with their work (Kim & Sung-Choon, 2013). In addition, employee involvement consists of employees having power to make and participate in decision making, providing necessary training for employees to do their jobs which would positively influence outcomes by increasing the employee's motivation and skills (Sanchez, 2015). Thus, employee involvement has a positive effect on employee performance.

Current research proposes that work practices that encourage employee involvement can create emotional attachment, positive attitudes and belief that are linked with employee engagement, and that this type of work practice can create a behaviour that results in improved performance (Konrad, 2006). Therefore, the following hypothesis is formulated:

**H11:** There is a positive relationship between Affective engagement with Employee performance

### 3.5.3 Social engagement and employee performance

Social engagement is one dimension of employee engagement which is defined as the extent to which an employee is socially connected to work colleagues and the work environment and aims to discuss work-related issues and share common values with one another. Soane et al (2012) argued that “social engagement is the experience of connectedness with others and is an integral feature of the expression of self-in-role” (p.9). The significance of the social context to engagement is well known by scholars in the field of HRD (Rich et al, 2010; Macey & Schneider, 2008; Swanson, 2001).

In addition, in the context of a psychological approach, it is believed that the workplace that creates a unique and dynamic work environment has expectations and needs that are social and psychological in nature. These needs consist of success and survival within the group to which the employee belongs. Then, when these needs are met, the employee develops a sense of engagement which results in increased job performance and commitment (Soane, 2012). Employee social engagement is a vital way to enhance engagement throughout an organizational process. Khan (1990) states that employees get socially involved or committed to their work role when they have opportunity to share the same work-related values and goals with their colleagues and share the same work attitude with their colleagues. Soane et al (2012) claim that an important and previously neglected element of engagement is the perceived social connectedness between an employee and their colleagues that involves the employee sharing the same work-related values, goals and attitudes, and this may be interesting to examine in depth (Truss et al, 2013). This is to understand the social engagement process and how the practice of social connectedness can enhance engagement in and experience of work.

Based on the literature, social connectedness, which consists of all elements of belonging, is defined “as the ongoing momentary affective experience of belonging based on awareness and appraisals of social relationships and interactions” (Hakanson & Ohlen, 2016, p.47). Maslow’s

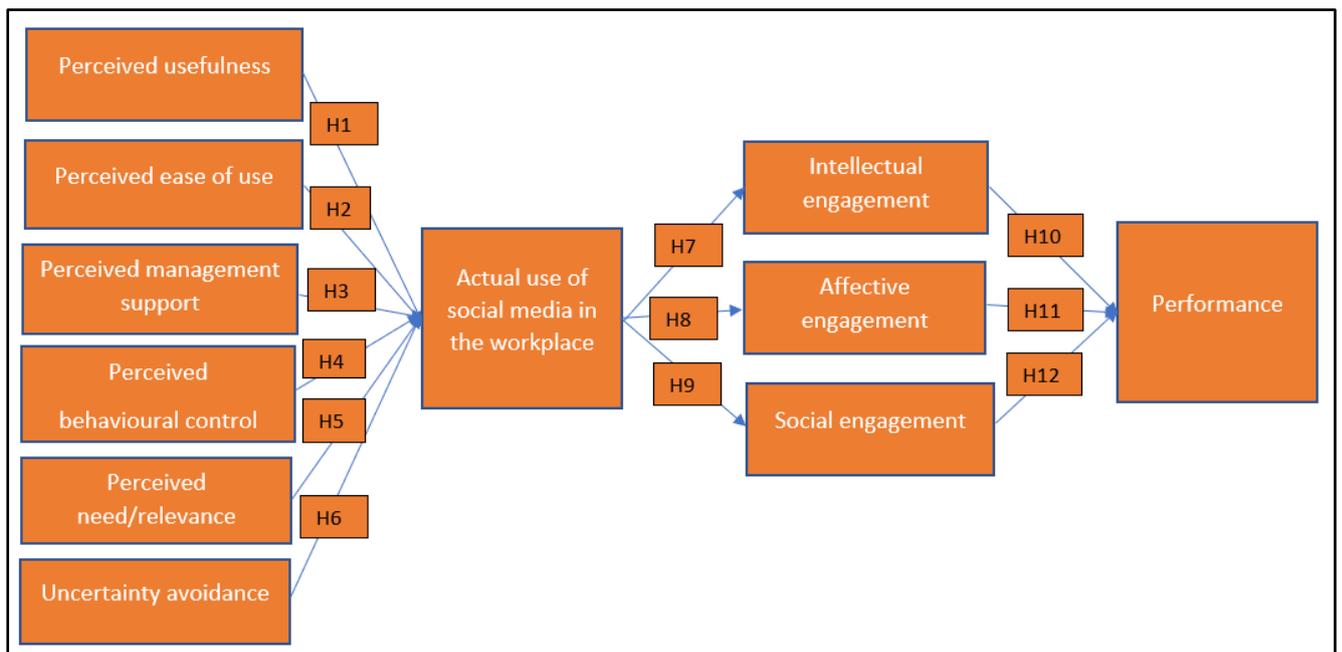
(1968) theory of hierarchy of needs points out that the importance of feeling connected to others can be placed only behind safety needs and basic physiological needs. The theory explains that social need which involves feelings of belonging, sense of connection and being part of a group, as well as the need for social relationships, motivates behaviour. In addition, recent research in psychology, health and social science has found that social aspects of life contribute to a general sense of well-being (Umberson & Montez, 2010; Burke & Kraut, 2016). Umberson and Montez (2010) added that social relationships influence health in behavioural, physiological and psychosocial ways. A growing body of evidence strongly proposes wellbeing as an essential aspect of social engagement. Brown and Leigh (1996) maintained that poor staff engagement can be damaging to organizations because of the ensuing decrease in employee wellbeing and productivity. However, there are different factors that affect individual wellbeing. These factors influence and increase individual wellbeing to boost employee performance; good communication is an element of individual wellbeing, as having a more direct form of interaction, involvement and colleague support can be beneficial and can increase high levels of commitment and motivation (CIPD, 2007).

Moreover, the human relations theory proposed by Kurt Lewin (1950) suggests that communication is a tool that can be used to encourage employees, especially during change, to improve employee performance. Communication was indicated to be a tool which enables interactions between various departments within the organization, and encourages team building and proper work coordination. In addition, research shows that communication within the organization drives employee engagement (Ruck, 2012; MacLeod & Clarke, 2009). Bleecker and Hill (2013) added that good relationships and interaction between employees is one way to motivate and engage employees. In addition, employees experience friendship in the workplace from the level of intimacy they find and the extent to which the workplace environment is friendly and welcoming (Atambo & Momanyi, 2016). Nurturing feelings of intimacy and highlighting the importance of a sense of community in the workplace leads to employees developing relationships, and cooperation and effective communication with each other. Klein (1994) supported this statement and states that effective communication in the workplace among employees is known to create change readiness and serves as an important factor in obtaining dedication among employees. Thus, communication, teamwork and cooperation, which is a by-product of friendship, have a positive effect on the employee's morale and performance (Atambo & Momanyi, 2016).

Furthermore, social support and communication provided by the immediate supervisor is likely to enhance employee engagement. The literature proposes that social support is associated with organizational engagement (Osca et al, 2005). For instance, support from colleagues and management has positive relationship with work engagement (Fone et al, 1997). In addition, Joiner and Bakalis (2006) discovered that an employee who has positive relationships with their colleagues and their supervisors develops a high level of commitment to their workplace. The social relationship employees have with their colleagues, where employees feel safe in their work environments, which is categorized by supportiveness and honesty, allows employees to try new things, take the initiative and become open in ever-changing situations (Kahn, 1990). In addition, Boswell (2006) states that employees who understand the relationships they have with their colleagues and the contribution they make to the strategic goals of the organization are more likely to feel a sense of belonging and fit into the organization. Therefore, effective social engagement and collaboration among employees in the workplace can improve employee performance. Therefore, the following hypothesis is formulated:

**H12:** There is a positive relationship between Social engagement and Employee performance.

Figure 3.2 shows the conceptual hypothesis which predict the theoretical relationship between the research variables.



**Figure 3.2: Research Conceptual Model and Corresponding hypothesis**

### 3.6 Hypotheses

Based on the various reviews of literature shown above and the features of internal social media usage for engagement purposes within the workplace, the conceptual model proposed here incorporates all constructs to capture possible factors that influence the directions and relationships of all the constructs in the modified research model. In total, twelve hypotheses have been proposed, as shown in Table 3.3. In addition, as stated above, various review of literature on internal social media within the workplace, more especially within airline companies, indicated limited study on internal social media adoption and usage from a TAM perspective. Based on the relationships proposed by the extended TAM model (Figure 3.2), the hypotheses in Table 3.3 are proposed.

**Table 3.3: Research hypotheses**

Hypothesis	Research hypothesis relationship for (a) Nigeria and(b) the UK
H1a H1b	Perceived usefulness has a positive relationship with Actual use of social media
H2a H2b	Perceived ease of use has a positive relationship with Actual use of social media
H3a H3b	Perceived management support has a positive relationship with Actual use of social media
H4a H4b	Perceived behavioural control has a positive relationship with Actual use of social media
H5a H5b	Perceived relevance has a positive relationship with Actual use of social media
H6a H6b	Uncertainty avoidance has a positive impact on Intention to use social media
H7a H7b	Actual usage of internal use of social media has a positive influence on employee Intellectual engagement
H8a H8b	Actual usage of internal social media has a positive influence on employee Affective engagement
H9a H9b	Actual usage of internal social media has a positive influence on employee social engagement
H10a H10b	Employee Intellectual engagement has a positive relationship with employee Performance
H11a H11b	Employee affective engagement has a positive relationship with employee Performance
H12a H12b	Employee Social engagement has a positive relationship with employee Performance

### 3.7 Summary

This chapter reviewed extensively the technology adoption models: Technology Acceptance Model (TAM), Extended Technology Acceptance Model (TAM2), Theory of Planned Behaviour (TPB) and Unified Theory of Acceptance and Use of Technology (UTAUT). This research focuses on the Technology Acceptance Model (TAM) developed by Davis (1989) to explain employee adoption and actual usage of internal social media for employee engagement and the impact on employee performance. The chapter discussed TAM adoption, validation and extension, and explained that TAM was chosen because it stands out in investigating individuals' acceptance and usage of new technology and helps to predict users' more accurately than TPB and UTAUT, and performed better than TAM2 in respect to the explained variance in behavioural intention (Tang & Chen, 2011). Moreover, the chapter also discussed the relationship between external variables and internal social media adoption for employee engagement. The research model indicates and considers previous research to identify external variables (e.g., Perceived usefulness, Perceived ease of use, Perceived relevance, Perceived behavioural control, Perceived management support and Uncertainty avoidance) and also explains the relationship between internal social media usage directly on employees' intellectual, affective and social engagement, which in turn impact on employee performance. Finally, the chapter addressed the development of research hypothesis based on the available literature regarding individual adoption and usage of social media and technology in general; based on the literature review in the social sciences, information systems and behavioural science, it was indicated that a set of causal factors influences a series of intermediate indicators, which in turn determines the outcome regarding changes in employee performance.

The next chapter presents the research methodology.

## CHAPTER FOUR: RESEARCH METHODOLOGY

### 4.0 Introduction

According to Rajasekar (2006), methodology can be defined as a study of how research is carried out. It can also be referred to as a strategy and process used to select and analyse research information (Crotty, 1998). It is in fact how researchers go about their work of describing, explaining and predicting phenomena. It is also defined as the study of method through which knowledge is gained (Rajasekar, 2006). Research methodology is important not only because it embodies philosophical assumptions, but also because it guides the choice of research methods. The methodology enables the researcher to draw implications from the sample studies and generalize them for the targeted population (Gray, 2009). Social science research involves exploring and understanding social phenomena, which involves social science questions that could be investigated in a suitable manner and the methods which enable such investigation acceptable (Dash, 1993).

This chapter gives an outlines of research methods. First, the chapter explores the philosophical assumptions, the paradigm of inquiry, the research methodology, the research design and the strategy of inquiry employed in this study. This guides the study when selecting the right methods for the research investigation. It is claimed that the use of a chosen method is influenced by the philosophical paradigm of inquiry that the researcher needs to adopt a creative stance (Creswell, 2009). Similarly, Bryman (2008) recognises the importance of choosing a questionnaire based on the philosophical assumptions. Second, the chapter outlines and justifies the methods used in this study, the data collection method, the research ethics and the instruments used to measure the key variables for the research model. According to Mill (2014), research methods are procedures and techniques employed to carry out a research. The method used to gather data can include surveys, experiments, interviews, etc.

### 4.1 Research Philosophy

Analysing the philosophical assumptions when carrying out research is important for both shaping research design and for explaining different approaches taken in order to support credibility of the research outcome (Paul, 2004). Eriksson and Kovalainen (2008) recognized that understanding the philosophical position that guides the researcher in specifying the overall research design and strategy is important. Saunders et al (2009) proposed that it is

important to know about different philosophies in research before selecting the right research philosophy approach for investigation.

Research philosophy is referred to as a system of beliefs and assumptions about the development of human knowledge. The development of new knowledge may arise from a desire to answer a specific problem in a particular field or organization. In the field of research, the research philosophy adopted contains important assumptions about the way the world is viewed. These assumptions underpin the research strategy and methods. The classification of research philosophy into such as epistemology (assumptions about human knowledge), ontology (realities encountered during research) and axiology (judgments about value) shapes how we understand our research questions and the interpretation of our findings (Crotty, 1998). An understanding of research philosophy is important because it is fundamental to how we approach our research. Easterby-Smith et al (2002) state the importance of understanding philosophical issues. First, it can help to clarify research designs. This involves considering the evidence needed and how it is to be gathered and interpreted. Second, understanding different research philosophies can help the researcher to identify which research designs work best. Table 5.1 provides a short comparison of research philosophies which support research in social science disciplines and the relationships between each paradigm's ontology, epistemology, methodology and methods (Bryman & Bell, 2007).

**Table 4.1: Research philosophies**

Adapted from various sources: Wilson (2010); Saunders et al (2009); Guba & Lincoln (2000)

<b>Paradigm</b>	<b>Ontology</b> <i>Researcher assumptions of the nature of reality, i.e., researcher's view on the way the world operates</i>	<b>Epistemology</b> <i>The researcher's view about knowing reality and what can be discovered</i>	<b>Axiology</b> <i>The researcher's view of the role of values in research</i>	<b>Methodology</b> <i>How do you go about research?</i>	<b>Method</b> <i>What are the techniques for data collections?</i>	<b>Research approach</b> <i>What are the plans and procedures for the research.?</i>
<b>Positivism</b>	Consider the world to be external and objective. Maintain minimal interaction with research participants (i.e., independence).	Reality can be measured and hence the focus is on reliable and valid tool to obtain that.	Research is undertaken in a value-free way, the researcher is independent from the data and maintains an objective stance.	Scientific experiments based on hypothesis; these are usually quantitative. Conditions that confound are manipulated.	Quantitative, but can use Qualitative	Deductive
<b>Interpretivism / Constructivism</b>	There is no single reality or truth. Reality is created by individuals in a group.	Reality needs to be interpreted and it is used to discover the meaning of events and activities.	Biased.  Research is value bound, the researcher is part of what is being researched, cannot be separated and so will be subjective.	Create a consensus through individual constructions including the construction of the investigator.	Qualitative	Inductive

<b>Paradigm</b>	<b>Ontology</b> <i>Researcher assumptions of the nature of reality, i.e., researcher's view on the way the world operates</i>	<b>Epistemology</b> <i>The researcher's view about knowing reality and what can be discovered</i>	<b>Axiology</b> <i>The researcher's view of the role of values in research</i>	<b>Methodology</b> <i>How do you go about research?</i>	<b>Method</b> <i>What are the techniques for data collections?</i>	<b>Research approach</b> <i>What are the plans and procedures for the research.?</i>
<b>Realism</b>	Realities are socially constructed entities that are under constant internal influence (Critical Realism).	Observable phenomena provide credible data, facts. Insufficient data means inaccuracies in sensations (direct realism). Alternatively, phenomena create sensations which are open to misinterpretation (Critical Realism). Focus on explaining within a context or contexts.	Research is value-laden; the researcher is biased by world views, cultural experiences and upbringings. These affect research findings.	Pursues falsification of hypotheses. Methods chosen must fit the subject matter, quantitative or qualitative.	Qualitative	Deductive / Inductive
<b>Pragmatism</b>	Reality is constantly debated and interpreted in light of its usefulness in new, unpredictable situations.	Researcher uses whatever materials and methods are needed and necessary to find answers to research questions. Use the best method to solve problems.	Value-free/biased.  Values play a large role in interpreting results, the researcher adopting both objective and subjective points of view.	Mixed method design-based research  Action research	Quantitative and Qualitative	Deductive / Inductive

In the field of social sciences, it is claimed that the causal theory of human behaviour can result in the development of models and laws that can anticipate human behaviour (Rosenberg, 2005). This research aims at investigating the factors that can influence employees' adoption of internal social media for employee engagement and its influence on employee performance. The researcher aims to identify the factors influencing employee behaviour towards usage of internal social media for engagement. Moreover, it intends to gather findings from a developed and a developing country.. In research studies, there are three types of research philosophies: interpretivism, positivism, and realism. The research philosophy adopted is influenced by practical considerations and different views of the researcher. In this regard, the positivism approach was adopted. Positivist philosophy suggests that knowledge can only be attained and justified by observation, experience and experiment (Gray, 2009). The positivist philosophy considers the quantitative methods and focus on the objective nature of the research study (Taherdoost, 2016). In relation to this research study, the positivist research philosophy has been adopted by the researcher due to its importance in developing the foundation of a clear direction of the future of the research regarding information gathering and analysing, and for its suitability in generating objective understanding of theories and concepts in relation to theories of employee engagement and performance etc. Another rationale for adopting positivist philosophy was the logic, experiences, and the reasons that lead the study towards producing credible information that will enable solving the research problems (Babii, 2020). Moreover, by adopting positivist theory, it will help to consider early theories and concepts of technology adoption, employee engagement and employee performance in order to generate knowledge about the phenomena researched. Additionally, the application of such a philosophy on social sciences asserts that the causal theory of human behaviour can result in developing models, regularities and laws that are capable of predicting human behaviour (Rosenberg, 2005). In this regard, the next section identifies and discusses the paradigm of inquiry employed by the study within the positivist philosophy.

## **4.2 Paradigm of Inquiry**

Paradigm of inquiry is frequently used in social science and plays a vital role in the research process of any research study. Paradigm refers to a way of explaining social phenomena from which particular understandings of these phenomena can be gained and explanations attempted (Guba & Lincoln, 1994). In addition, it explains aspects of the paradigm of inquiry which include epistemology, ontology and methodology (Burrell & Morgan, 1979; Guba & Lincoln, 1994; Creswell, 2009). Epistemology assumption refers to how reality is captured or known; it is in fact the relationship between researcher and reality (Carson et al, 2001). It is the belief

that the researcher and what is researched are not separated, as the researcher has developed new knowledge from the review of literature. According to Guba and Lincoln (1985), epistemological assumptions determine an individual's view of the world and reality; they affect the process in regard to developing questions, adopting appropriating strategies and designing research. Ontology assumption refers to the science of being (Baikie, 1993). It involves the nature of reality. Additionally, it is a system of beliefs that reflects an interpretation by an individual of what constitutes the facts (Hudson & Ozanne, 1988). An ontological assumption can be either subjective or objective. An objective ontological assumption sees the world and reality as independent and separate from the individual, while a subjective ontology is the existence of a relationship between the people and reality (Eriksson & Kovalainen, 2008). Axiology refers to how the researcher can go about finding out about a given question (Morgan, 1998). In other words, axiology claims similarity between ontological and epistemological views (Mittman, 2001).

Guba and Lincoln (1994) cited four philosophical paradigms used in social science: positivism, post-positivism, constructivism and critical theory and their dimensions; ontology, epistemology and methodology. Generally, positivism and post-positivism are seen as the traditional paradigm of research, which is often known as the scientific approach; these methods are more quantitative than qualitative (Creswell, 2009). While constructivism and critical theory are more qualitative than quantitative, their methods are based on the views of participants and interpretations of the examined situation (Creswell, 2009). As a result, the emphasis is more on the inter-relationship between cause and outcomes (Howell, 2013).

The present research employs the approach of positivism. According to Cohen et al (2007), Positivism is an assumption that explains the researcher's approach to investigate social phenomena. It holds the view that knowledge is derived through close observation and that phenomena are shaped from perceptions and consequent actions of those social actors which are concerned with their existence (Burningham & Cooper, 1999). Myers (2008) added that positivist philosophy consists of the view that science is the way truth can be uncovered, which is the idea that "factual" knowledge obtained from observation and experience is trustworthy. Additionally, Levin (1988) states that positivists own the belief that reality is stable and can be explained from an objectivist point of view.

The paradigm of this research holds a critical realism viewpoint and altered the approach of the dualist where the concept of independence is dropped and the objectivity remains (Guba &

Lincoln, 1994). According to Howell (2013), post-positivism criticized positivism in relation to positive knowledge. The post-positivist holds the view that outcomes are the consequence of antecedents. The relationships are in general articulated through research questions and hypotheses (Creswell, 2009). Additionally, post-positivism considers that the researcher and the researched are inseparable (Eriksson & Kovalainen, 2008). Johnson and Duberley (2000) state that post-positivism claims that understanding of human behaviour and attitude within the context of business must consider the reality of people's interpretations and perceptions. This study's ontological position is critical realism, which suggests that reality can only be seen incorrectly and probabilistically as the human factor impedes its full understanding (Guba & Lincoln, 1994; Howell, 2013). This research examines the factors influencing employee adoption and usage of internal social media for engagement. This reality is external to the researcher and therefore can be observed and measured objectively. Nevertheless, it is understood that this reality cannot be understood in an objective manner as the study recognizes the impact of employee attitude towards adopting and using internal social media for engagement. Such an impact comes from the usage of Likert scales in this study which are based on employee attitude and belief, hence justifying the approach of critical realist ontology. Regarding epistemological position, the view is that the researcher and what is researched are not separated, as the researcher's ontological position developed a pre-existing knowledge from reviewing the literature; however, the objectivity of the study can be enacted by measuring the study's variables in a quantitative manner. The result findings are replicable yet can still be fallible as a result of contextual differences. This view justifies the context used to approach the adoption and usage of internal social media for employee engagement.

### 4.3 Research Approach

An approach is taken based on the different choices made by the researcher. In research, the use of theory recognises two research approaches: deductive and inductive.

The deductive approach is the nature of the relationship between theory and research which aims at testing theory (Bryman, 2003). According to Saunders et al (2012), the deductive approach consists of the use of hypotheses to explain the relationships between variables, and often makes use of quantitative methods. The authors added that the deductive approach explains why a phenomenon is happening. While inductive research involves the generation of new theory which emerges from data, it also makes use of research questions to narrow the scope of the research. In addition, Saunders et al (2012) argue that the inductive research

approach examines the reason a phenomenon is happening. In the field of social science, it is accepted that the deductive research approach is the most common way to test a theory-based approach (Eriksson & Kovalainen, 2008). However, in order to ensure content validity, this study adopted deductive reasoning as a primary mode of theoretical reasoning to test statements (hypothesis) of theory: hypotheses were tested by analysing existing data and theory based on observed patterns of behaviour (DePoy & Gilson, 2007) in order to understand if the data reject or support the hypothesis. According to Ochara (2013), deductive approaches are the most heavily employed modes of theorizing in IS research. As a result, existing theory was adopted and modified to explain phenomena in a new context, in order to know whether the theory applies to specific instances (Hyde, 2000). Hence, the stance of this approach is to deduce findings from samples collected from the UK and Nigeria and then compare the analysis of the two countries to bring to the internal social media and employee engagement literature some theoretical foundations. Additionally, this study adopted the deductive approach as it considered the methodology of the research studies and its appropriateness with the selected positivism research philosophy within the study. Moreover, the use of deductive approach was also important in this study to develop casual knowledge regarding research problems and effectively generalize research outcomes through the amount of information gathered. This helps to gain insight into understanding airline employee behaviour towards using internal social media platforms for engagement. The testing of the hypotheses also provided a clear understanding and enabled reaching a logical conclusion on the relationship between constructs, drawn from data collected from the UK and Nigeria. Moreover, the use of questionnaires as a tool for the deductive form of theorizing was used to collect data about employee behaviours to reach conclusions about associations between variables (Straub et al, 2004). This helps to answer the objective questions of how and why the phenomenon happens (Gioia & Pitre, 1990).

## 4.4 Research Design and strategy

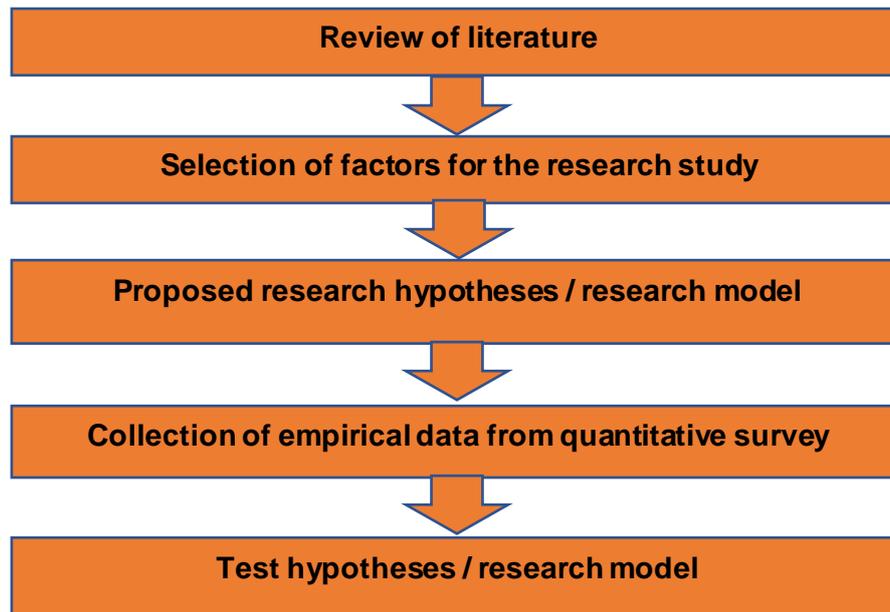
### 4.4.1 Research Design

According to Anderson (2017), a research design is defined as methods used by a researcher to specify the procedures for the collection and analysing of information in a coherent and logical way, in order to ensure research problem is effectively addressed. The research design help in data collection, evaluation, and data analysis using quantitative information such as survey questionnaire, case study, experiments, etc (Cope, 2015). And helps to formulate the type of data to collect for the study. Creswell (2009) states that there are three types of research designs: quantitative, qualitative and mixed method. As the aim of this research is to investigate factors influencing airline employees attitude towards adopting and using internal social media for employee engagement and its impact on their performance within the context of UK and Nigeria, in response to this predefined research aim, the study aimed to find the factors affecting employees' adoption of internal social media for employee engagement within the workplace, as well as to examine the effect of usage of internal social media platforms on employees' performance in both countries using a customised TAM model. The present study adopts a quantitative approach to present data and formulate facts (Sukamolson, 2005). Generally, this approach was adopted to test pre-established research hypotheses and evaluate the modified TAM model, still considering the individual's perceptions and attitudes, through perception-based Likert questions.

A quantitative approach in TAM research accords with the positivist tradition. It is stated that the positivist paradigm favours the quantitative method (Clark, 1998; Giddings & Grant, 2006). This is in accordance with the positivist idea which allows value-free research. The researcher remains independent of and neutral to what is being researched and maintains an objective stance. Therefore, the collection of quantitative data provided a deeper understanding of what the influencing factors are for internal social media adoption and usage among airline employees. The quantitative studies are used in this study to compare modified technology acceptance and usage practice across the UK and Nigerian airline sectors. Similarly, adopting a quantitative research approach is a suitable approach to generalized findings and provides a statistical quantitative relationship between the two countries (Bryman, 1988; Eriksson & Kovalainen, 2008). The quantitative approach draws from the philosophical position that the problem under examination can be measured in data rather than opinions, this enables the researcher to confirm or reject the hypothesised relationships between the variables in the study and generate

measurable deductions according to the theory. The quantitative deductive approach comprises of a five-level process: exploration, development of construct, hypothesis development, hypothesis testing, internal and external validity testing. The first three steps were explored and discussed in the earlier chapters. The review of the literature led to development of constructs and the study of hypothesis and their links to the constructs. The research design adopted help in testing the study hypotheses for internal and external validity. Additionally, the study seeks to gather quantitative information and use statistical techniques to achieve the research outcome. The use of qualitative approach was not appropriate to achieve the aim of the study. The philosophical views of individual experience and subjective meanings of the world (Crotty, 1998) would not enable the explanation of the significance of the interrelationship between independent variables: Actual usage of internal social media, employee Engagement and employee Performance based on the underlying theory articulating this research. The researcher understands the factual data obtained from quantitative through survey. In regard to this, important steps were taken to ensure that the pilot study was completed by participants by ensuring that they understood the constructs and their dimensions as criteria for validating the research instrument. The use of perception-based Likert scale allows participants to rate the direction/strength of their experiences and feelings that best reflect their understanding of the subject being examined. Moreover, to fully achieve the aim of the study, the quantitative approach improves the researcher's ability to measure the relationships between the variables and to confirm the pre-existing realities of the developed hypotheses.

Figure 4.1 shows the key areas of enquiry and the knowledge sources used to address these enquiries.



**Figure 4.1: Research design**

#### 4.4.2 Research strategy

In a positivist study, there are many methods of collecting survey data; these include: online, hard copy, self-administered and postal questionnaires, and face-to-face and telephone interviews (Collis & Hussey, 2009). The survey strategy is common in social sciences and linked with the deductive research approach (Mark et al, 2009). In relation to the undertaken study, this research adopted hard copy questionnaire design to collect quantitative information, the hard copy structured questionnaire was developed and designed for selected participants (airline employees in the UK and Nigeria) without the involvement of the researcher. This survey questionnaire was self-administered and consisted of close-ended questions, which helped the researcher to gather different employees' views, knowledge, feelings, emotions, and opinions related to the research questions. The questionnaires were analysed through Partial Least Squares Structural Equation Modelling (PLS-SEM). Authors state that the use of PLS-SEM is on the increase in business and marketing research projects, particularly research projects examining the cause or effect connection between variable and constructs (Hult et al, 2009; Hair et al, 2011).

The purpose of using survey in this study is to analyse findings of a sample from a whole population (Pinsonneault & Kraemer, 1993). It is believed that using questionnaire for this study is predominantly relevant. The data gathered through this structured research instrument

is useful to develop knowledge by identifying variables, as well as testing research questions and theories (Johnson & Onwuegbuzie, 2004).

Self-administered and structured questionnaires allow the researcher to gather comparable and standardised responses by asking respondents to respond to exactly the same set of questions in a predetermined order collecting descriptive and explanatory data about people's opinions, behaviours and attributes, from a large population (Akinci & Saunders, 2015; Alhassany & Faisal, 2018; Oshaib et al, 2019). The survey strategy is easy and flexible to use compared to other methods of data collection (such as interviews and observations), as this research requires a large number of close ended questions. The questionnaire contains standard questions were researcher aim that the questions will be interpreted in same manner by all respondents (Robson, 2011). In addition, the vast majority of the previous empirical studies on human resources development (HRD) and information system (IS) were conducted through self-administered and online questionnaires (Akinci & Saunders, 2015; Piabuo et al, 2017; Bondarouk et al, 2017; Mozgovoy & Mettler, 2019; Chowdhury & Haidear, 2019), and has been validated and found to have good statistically significant results compared to other data collecting methods. Similarly, a study by Turulja and Bajgoric (2016) that looked at the importance of human resources and information technology to organization performance used questionnaires to gather data from companies; thus, confirming the appropriateness of such a method to social media and employee engagement literature. However, it is acknowledged that this type of data collection can be affected by the available resources, such as time available to complete data collection and financial implications, which may result in low response rate (Bryman, 2012), and can increase the likelihood of statistical biases (Tomaskovic-Devey et al, 1994). However, due to the objectives of this research, this instrument is administered to gather useful information from a large sample size in the UK and Nigeria in order to explore the impact of external factors on employee behaviour towards using internal social media platforms for engagement and its influence on performance. The gathering of information through the questionnaire helps the researcher to gather sufficient information from the number of employees in a reasonable time frame. The adopted research design help to significantly increase the validity and reliability of the information gathered.

#### **4.5 Research Population and Sampling**

According to Saunders (2007), a research population is defined as the full set of cases from which a sample is taken. In line with this, Cohen et al (2000) state that a population is a group

of people who are subject to a piece of research, while sampling is the method of choosing the segmentation of a population for study. Smith (2002) also defined population as a group of people with a similar characteristic at which the study is being directed. According to Flick (2014), individuals must have specific traits to be considered as part of the targeted population. However, it is impossible for the researcher to survey the entire population due to several limitations, which include funds and time. The research population entails the selection of the quantitative research approach within this research paradigm. Questionnaires were distributed to individuals from whom the researcher expects to find answers to the research questions. In this study, the research population consists of employees of airline companies in the UK and Nigeria; these employees are those that are active users of internal social media usage within the airline industry. Additionally, the population involved different nationalities and considered employees who are Nigerian or British, but not only Nigerian or British. It is expected that there will be employees who are from other countries within the UK and Nigerian airline industry. Relevant samples were selected to represent the entire populations.

The sampling strategy provides different methods that ensure that the sample the researcher uses in the research study represents the entire population from which sample is drawn (Saunders et al, 2009). Hair (2003) states that sampling is the process of selecting sample units from a set of data for measuring individual characteristics, attitudes and beliefs. Cooper et al (2003) suggested that the reasons for sampling are to better speed collection of data, obtain accurate results and ensure cost efficiency. Therefore, a sample is chosen out of the entire population to be studied in order to evaluate and assess them. Moreover, the conclusion obtained from this study sample can be used to generalize to the whole population (Maxwell, 2012). Yin (2014) explained that samples can be taken by different approaches and can be subdivided into two categories: probability and non-probability sampling. In probability (random) sampling all subjects in the target population have equal chances of being selected in the sample (Shorten & Moorley, 2014) and consist of: simple random sampling, systematic sampling, stratified sampling and clustered sampling. While in non-probability sampling methods the population sample is selected in a non-systematic process and subjects may not have the chance of being selected, and consist of: convenience sampling, quota sampling, judgement (or purposive) sampling and snowball sampling (Elfil & Negida, 2017; Patton, 1990). This study adopts the non-probability approach of purposive sampling Previous study suggested that this method satisfied the criterion for the population being studied given their experience and understanding of internal social media usage for engagement within the

workplace (Binsardi et al, 2013). In fact, this study made use of experts ( Management and non-management staff) who work with the airline companies to obtain cases that are informative (Neuman, 2000). Purposive sampling relies on the researcher's judgement when selecting the sample for study and enables the researcher to select individuals with a specific characteristic that suits the needs of the study. This approach was used in this research to get deeper understanding of the topic being studied (Neuman, 2000), and also canvass the opinion of employees to make theoretical and analytic generalisations from the sample. Moreover, by studying the targeted population, unlike similar studies, this study has widened its base by studying employees of airline companies. This research samples show the characteristics of employees who are actively or currently using internal social media platforms for engagement activities.

In addition, purposive sampling was employed to select individuals based on their knowledge and experience in using internal social media for employee engagement. In this case, due to the theoretical nature of this study, more specific, predefined groups were selected to capture a wide range of perspectives relating to employees' use of internal social media for engagement in a specific industry (airline companies). The rationale for employing this technique is to get the opinions of the targeted population (Ishal et al, 2019) to better understand the regular patterns of employee behaviour and the relationship between employee usage and adoption of internal social media and engagement within the workplace. In addition, purposive sampling was considered a more accurate and rigorous base on the guidance of relevant literature (Bryman, 2012; Patton, 1990). Relevant methodological literature (Bryman, 2012; Binsardi & Green, 2012) specifies several purposive sampling techniques: homogeneous sampling, typical case sampling, extreme case sampling, critical case sampling, total population sampling, maximum variation sampling (MVS) and expert sampling. Based on the nature of this study and other similar studies using this type of sampling (Al-Thunibat & Sahari, 2011; Binsardi et al, 2013; Ishal et al, 2019), as well as different criteria for expert and to also determine employee behaviour towards using internal social media for employee engagement within the workplace, a purposive sampling technique was considered feasible as it provided the researcher with the justification to make theoretical generalizations based on knowledge rooted in these particular individuals and the industry (Binsardi & Jackson, 2013).

## 4.6 Data Collection Protocol

A data collection protocol helps researchers to ensure that all data are collected in a coherent and efficient manner to ensure valid, reliable and quality data analysis, in order to prevent challenges such as common method variance and non-response or incomplete questionnaires (McDonald & Adam, 2003). Bryman (2001) states that data collection is seen as the most important stage of any research, therefore the data collection procedures should be carefully planned and implemented. Moreover, there is one main type of data collection for this research, the primary data obtained from the questionnaires. The researcher selected to conduct a survey as the form of collecting information. In order to achieve the objectives of the study, a quantitative approach was taken. This study adopted a face-to-face hard-copy questionnaire. In addition to the structured questions, close-ended questions were used to obtain the demographic information of the participants. The use of an online questionnaire using the Qualtrics platform was considered but dropped due to some challenges experienced during the pilot study, such as: non-responses/incomplete data, time consumed and internet problems. It is important to mention that this study is focused on the UK and Nigeria and therefore, using an online questionnaire for both the UK and Nigeria can be time consuming, particularly for Nigeria where most individuals often turn off their internet data due to high cost of data from the service providers and so they are less likely to respond to online questionnaires in a timely manner or when needed; hence gathering data online may be difficult. However, to prevent any form of bias, face-to-face hard-copy questionnaires were used to collect data from both the UK and Nigeria. It is indicated that hard-copy questionnaire has high response rate compared to web-based questionnaire (Zuisgeest et al, 2011; Kongsved et al, 2007). Fitzgerald et al (2019) claimed that hard-copy questionnaires are likely to appeal to different populations with different behavioural and sociodemographic characteristics.

In this study, an email was sent including a copy of the questionnaire and a covering letter to airline companies clearly stating the purpose and the implication of the research (Bryman, 2003), as well as the anonymity and confidentiality of respondents (Saunders et al, 2012). The purpose of the email was to solicit permission from airline companies to distribute face-to-face paper-based questionnaires to employees (both management and nonmanagement). After a few weeks, an email reminder was sent to the airlines, emphasising the importance of the data collection (Rea & Parker, 2012). Moreover, the questionnaire was distributed to employees of airline companies to find answers to the underlying concepts. As indicated, the questionnaire was distributed face-to-face by the researcher and through different airline managers and

station managers who approached staff and explained to them what the study was about and the importance of the research. Prior to the distribution of questionnaire, research was made to find out the airline companies that uses internal social media before distribution of the questionnaire. Moreover

For the employees who are willing to participate, the researcher handed the questionnaires to them before and after their work shifts, which was the time suitable for them. Being a tool of the quantitative approach, questionnaires were designed and tested using the pilot study, described later.

#### 4.7 Survey Design

As this study is conducted under the positivist philosophical perspective, all the survey questions used in this study were close-ended and involved respondent choice to select boxes. The survey questionnaire was based on the research conceptual model discussed in this research and consisted of questions designed to measure each of the 11 factors indicated to influence employee adoption and hence usage. The use of close-ended questions makes the collection of data comparable, and enables the tabulation, coding and interpretation of data (Zikmund et al, 2010). Likert-type scales were used to measure employee intention towards adopting social media within the workplace. According to Madu (2003), Likert scales include a scaling procedure that enables respondents to express the extent to which they agree or disagree with a statement. It is considered as the most reliable tool to measure individual opinions (Monette, 2013). Burns and Grove (1997) indicated that Likert-type scales are designed to measure individual attitudes or human behaviour. Respondents were offered a choice of seven pre-coded responses with point labels ranging from strongly agree to strongly disagree and that each scale has its own advantages and disadvantages (Rahi, 2017). Therefore, to ensure reliability and accuracy a seven-point scale was used for all items in the questionnaire. Thomas and Lewis (1993) suggested that a seven-point Likert scale shows optimal reliability. The Likert scale used in this study was based upon previous works, supports and justifications; it was decided to adopt the commonly used seven-point Likert scale for all items, since the use of seven-point scales may improve validity, reliability and rate of responses (Thomas & Lewis, 1993; Ogbonna & Harris, 2000; Finstad, 2010; Johns, 2010; Hair et al, 2010).

Moreover, research has been carried out to determine the influence of cultural differences on individuals' response style. While numerous studies have found distinctive cultural differences

associated with Likert scales, such as cultural values (Dolnicar & Grun, 2007; Lee et al, 2002), it is interesting to mention that cross-cultural research can have response bias in terms of response style because certain cultural groups may likely respond to questions with a specific response style (Smith, 2004). For instance, some cultures or nationalities can typically show an extreme response style (ERS), while others may show a middle response style (MRS) or an ambivalent response Style (ARS). However, since increasing the number of Likert items from 3 to 7 contributed to a higher internal reliability and extra discriminating power, the researcher opted for a high (7-point) Likert scale, taking into consideration culturally rooted context and difference of respondents' shared background (Lee et al, 2002). The survey questions were divided into two sections: the first section contained eleven sub-sections with the items in each section relating to one of the study's eleven constructs. The second section contained the demographic questions. These demographic questions allow the researcher to report and discuss the attributes of the employees involved in the study. All the questions were closed-ended with 7-point Likert scales; this enabled the researcher to measure the independent, mediating and dependent variables of the research model developed.

#### **4.8 Research Ethics**

The key component of any study is dealing with potential ethical issues related to data collection processes. In quantitative research, there are many steps that a researcher can take to ensure transparency and honesty within the field of research (Creswell, 2012). In the case of this research, it was important to disclose the full purpose of the study to the respondents, for them to be aware of what they were accepting in regard to their voluntary participation, which is known as informed consent. Informed consent was needed to carry out this research because the research involved human participation. Respondents were made aware of the purpose of the research, by providing an information sheet that showed the nature of the study. In addition, additional ethical principles were considered by providing respondents with verbal information to ensure that they fully understood the purpose of the research and they were willing to participate before the collection of data commenced. Gregory (2003) posits that if the appropriate information is clearly stated to participants, it is sensible to assume that the ethical requirements have been met. According to McNabb (2013), it is important that the researcher protect the rights of the respondents by ensuring that their privacy is respected and protected. In this respect, norms of all participants were considered and respected such as culture, religion and gender, which are considered sensitive in nature and can pose a key issue in research. To

respect confidentiality, this study also took into consideration information that would be considered personal or implicate participants to ensure fairness and openness for all participants. McNabb (2013) states that when gathering data, objectivity and truthfulness should be maintained throughout the study; this implies that the researcher should prevent any form of bias which can lead to a false conclusion by ensuring that the data collected are not misinterpreted or encouraging one answer over others.

Furthermore, to safeguard the privacy of respondents, it is understood that the information shared by participants will not be compromised or disclosed to any third party (Homan, 1991). Ultimately, there are a number of limitations and challenges acknowledged. There would be challenges in terms of honesty. This implies that respondents may tend not to be totally honest on a questionnaire, especially when they feel they should give a certain response to a question (Dornyei, 2003). In addition, due to the close-ended style of the survey questionnaire, there is often a low rate of validity (Dornyei, 2003). Finally, issues may arise if there are many respondents who offer non-responses (Dornyei, 2003).

Overall, this section presented the research method, methodology, ethical considerations and potential limitations that might be experienced during the study. The ethical approval form is attached in Appendix 1. The next section discusses the reliability and validity of the research. It examines the internal consistency and accuracy (reliability and validity) of the research tool used for this study.

#### **4.9 Reliability and Validity**

According to Ghauri and Gronhaug (2005), validity describes how well the already collected data covers the actual area of research being investigated. Validity primarily means measuring what is meant to be measured (Field, 2005). In research there are different types of validity, namely, content validity, construct validity, face validity, criterion validity and reliability. While reliability relates to the extent to which a measurement of a phenomenon provides stable and consistent results, similarly, it refers to the consistency of the research findings or results if the research is repeated over a period of time (Bazeley, 2013). It also refers to the “stability of measurement over time; and the similarity of measurements within a given time period” (Kirk & Miller, 1986, p.41). “Testing for reliability is important as it refers to the consistency across the parts of a measuring instrument” (Huck, 2007, p.33).

#### 4.9.1 Content validity

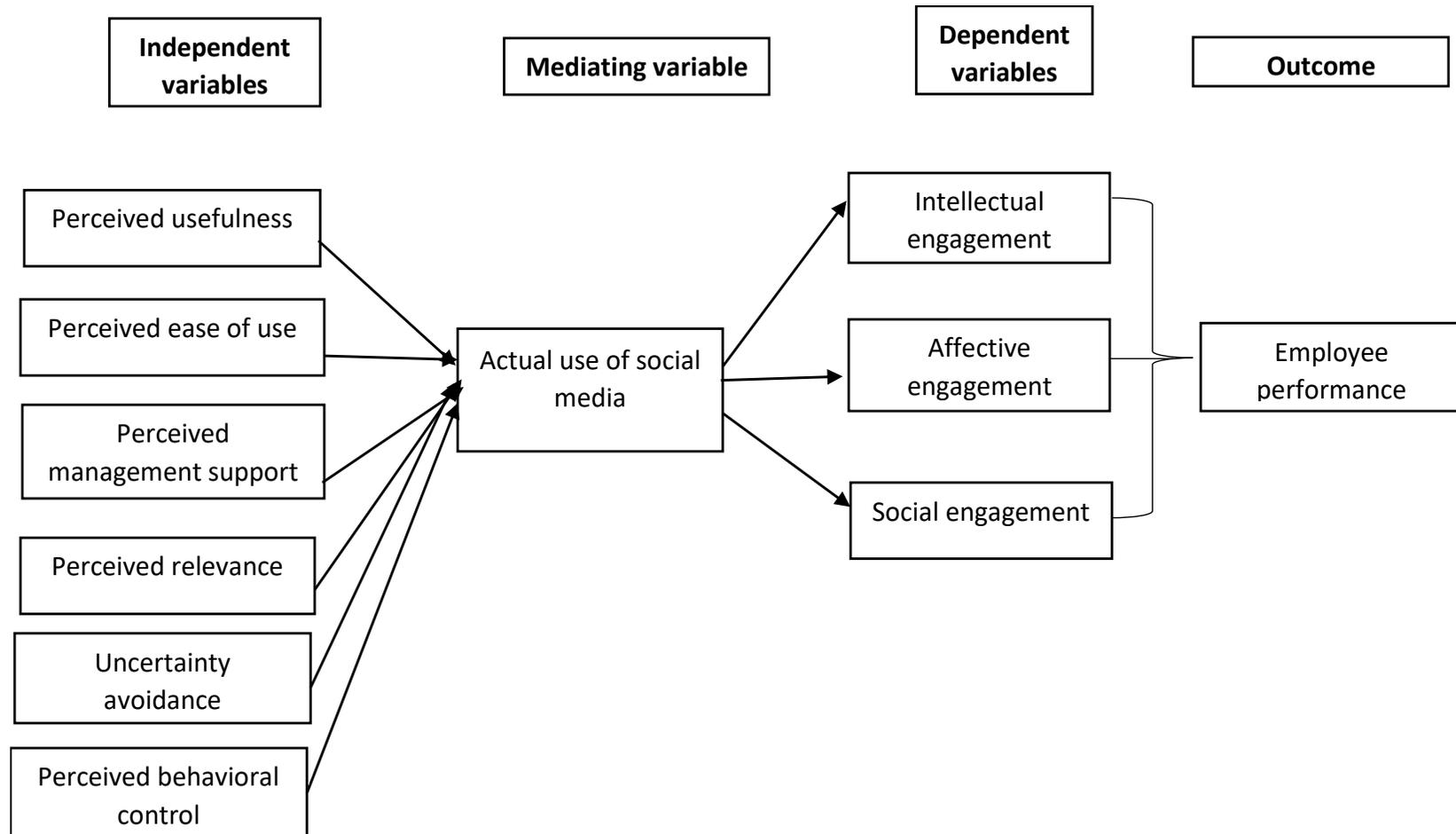
Content validity is the initial step to evaluate the research questionnaire and measurement procedure. According to Haynes et al (1995), content validity is the extent to which the essential assessment instruments are relevant and fairly represent the targeted construct for a specific assessment purpose. In this study the first draft of the questionnaire was checked by the supervisory team, then with 8 human resources professionals and 6 academic doctoral research students. The process was important for the following reasons: (1) that the survey was free from error; (2) that items to be tested fairly represented all items that are to be measured; (3) the accuracy of the measurement tool; and (4) tangential and irrelevant materials are not included in the measurement items. Moreover, before commencing the pilot study, feedback and comments were received, and the following issues were indicated: (1) the length of the questionnaire was too long; (2) the questions on perceived management support were seen to be answerable by managers rather than “ordinary employees”; (3) there were spelling and formatting problems in the questionnaire, and unclear sentences; and (4) the measure for employee performance comprised only two items, and thus the researcher was advised to get a measure with more items. As a result, some questions were modified in the main and demographic parts of the questionnaire to ensure accuracy.

#### 4.9.2 Construct reliability and validity

The construct reliability and validity of this study were piloted to test that all constructs for this study were measured, using instruments that have already been used in the same study context. The construct reliability and validity tests of each measure were conducted to assess the relationship of each measured item and the extent to which the factor loadings were consistent and significant (Andreson & Gerbing, 1988). To test for internal consistency, Cronbach’s alpha coefficient was used in this study: its values range on a scale of 0 to 1, with high intercorrelations indicating reliability. High factor loadings indicated good convergent validity. It is acknowledged that 0.7 is the recommended threshold, as recommended by Hair et al (2003). Field (2009) maintained that if the Cronbach’s alpha is low, the items measured should be checked and odd items loading less than 0.3 should be removed. In this study, almost all the factor loadings were above 0.7, reaching the recommended threshold.

#### 4.10 Measurement Variables

Having stated the method used in this study, this section explains the instruments used to measure the investigated variables in this study. Almost all the measurements used in this study have already been used and tested in the same context. The primary aim of this research was to investigate the extent to which employees adopt social media platforms for employee engagement and its influences on performance. The conceptual research model consists of six exogenous variables, perceived usefulness, perceived ease of use, perceived management support, perceived behavioural control, perceived relevance and uncertainty avoidance and four endogenous variables, intellectual engagement, affective engagement, social engagement and employee performance. In addition, the mediating variable, actual usage, explains the relationship between the independent variables and dependent variables. The measures for each variable were adapted from various authors. Figure 4.2 recalls the theoretical research model proposed in this study. The next section discusses the items used to measure the abovementioned variables.



**Figure 4.2: Research Conceptual Model (adapted from TAM)**

#### 4.11 Independent Variables

As indicated in Table 4.2, the measurement of variables was adopted from various studies in order to measure the indicators (Dreher, 2014; Razak & Latip, 2016; Cilliers et al, 2017). The same items were used for both the UK and Nigeria in order to allow research model comparison. The respondents were asked to select a rating which best described their choice of agreement with the statements on a 7-point Likert-type scale ranging from 1 = strongly agree to 7 = strongly disagree. This was to understand the extent to which employees used social media platforms for engagement within the workplace. Moreover, various scales have been used to measure individual attitude towards technology adoption. It is important to understand the effect of external variables (independent variables) on employee attitude and how the external variables could cause changes in employees' attitude to adopt social media platforms for engagement. The items reflected the six external variables: perceived usefulness, perceived ease of use, perceived management support and perceived behavioural control. Table 4.2 presents all the measures for this research.

**Table 4.2: Research variables and measurement scales**

	<b>Variables and measurement scales</b>	<b>Source</b>
	<i>Perceived User-friendliness (UF)</i>	
PU1	Using my company's internal social media platform makes it easier to stay in touch with colleagues	Davis (1998)
PU2	Using my company's internal social media platform makes it easier to stay in touch with managers	
PU3	I find my company's internal social media useful in my professional life	
PU4	Using my company's internal social media makes it easier to stay informed with my colleagues	
PU5	Using my company's internal social media makes it easier to stay informed with my managers	
PU6	Using my company's social media would help me communicate and interact with my colleagues	
PU7	I can use my company's internal social media if I found it improve my work	
PU8	My company's internal social media allows me to accomplish my task more quickly	

	<b>Variables and measurement scales</b>	<b>Source</b>
	<b><i>Perceived ease of use (PEU)</i></b>	
PEU1	I find my company's internal social media platforms easy to use	Davis (1993)
PEU2	Interaction with my company's internal social media is clear and understandable	
PEU3	My company's internal social media is a flexible technology to interact with	
PEU4	With minimal effort, I find it easy to use my company's internal social media platform to obtain information that is of relevant to me	
PEU5	With minimal effort, I find it easy to use my company's internal social media platform to disseminate information that is of interest to me	
PEU6	It could be easy for me to become skilful at using my company's internal social media platform	
	<b><i>Perceived management support (PMS)</i></b>	
PMS1	Management is aware of the benefits that can be achieved with using my company's internal social media platforms	Lin (2010)
PMS2	Management supports and encourages the use of internal social media platforms	
PMS3	Management provides most of the necessary resources and help to support the use of internal social media platforms	
PMS4	Management is keen to see people happy with using internal social media platforms	
PMS5	Management provides adequate resources, technical support and training for effective utilization of internal social media platforms	
	<b><i>Perceived relevance (PR)</i></b>	
PR1	When I see work related information on my company's internal social media, I feel that it might be of value to me	Kim & Huh (2017)
PR2	When I see work related information on my company's internal social media, I feel that it might be relevant to my needs	
PR3	Using my company's internal social media is important to me	Jung (2017)
PR4	Using my company's internal social media is likely to give me new ideas	
PR5	Using my company's internal social media is interesting to me	

	<b>Variables and measurement scales</b>	<b>Source</b>
	<b><i>Perceived behavioural control (PBC)</i></b>	
PBC2	I am confident that I can use my company's internal social media to interact, share contents and network with colleagues if I want to	Zhao et al (2016)
PBC3	I am confident that I can use my company's internal social media to interact, share contents and network with managers if I want to	
PBC4	I feel I have the time, skills, resources and knowledge to communicate and interact on my company's internal social media with colleagues	
PBC5	I feel I have the time, skills, resources and knowledge to communicate and interact on my company's internal social media with managers	
PBC6	It is mostly up to me whether or not to use my company's internal social media in my daily job task	
	<b><i>Uncertainty avoidance (UA)</i></b>	
UA2	I dislike using any company's internal social media platforms for communication and interaction within the workplace	Baek and Morimoto (2012)
UA3	I discard or ignore information on my company's internal social media	
UA4	It is important to have instruction, rules and regulations spelled out, so I will know what is expected of me when using my company's internal social media to interact and communicate with colleagues and managers	Quintal et al (2010)

#### 4.12 Dependent Variables

In this study, the dependent variables consist of intellectual engagement, affective engagement and social engagement. These variables are influenced by the independent variables and are measured using the independent variables. As highlighted above it can be seen that changes in dependent variables are caused by independent variables. The factors which are high in dependent variables can constitute powerful predictors of employee performance. This means that employees who are reportedly higher in intellectual engagement, affective engagement and social engagement are likely to experience a greater level of employee performance (Frederickson, 2001). Table 4.3 shows dependent variables and measures used in this study.

**Table 4.3: Dependent variables**

	<b>Variables and measurement scales</b>	<b>Sources</b>
	<b><i>Intellectual engagement (IE)</i></b>	
IE1	I focus hard on my work	Soane et al (2012)
IE2	I concentrate on my work	
IE3	I pay a lot of attention to my work	
	<b><i>Affective engagement (AE)</i></b>	
AE1	I feel positive about my work	Soane et al (2012)
AE2	I feel full of energy and strength in my work	
AE3	I am enthusiastic about my work	
	<b><i>Social engagement (SE)</i></b>	
SE1	I share the same work values as my colleagues	Soane et al (2012)
SE2	I share the same work goals as my colleagues	Thomas (2011)
SE3	I share the same work attitudes as my colleagues	
	<b><i>Employee performance (EP)</i></b>	
EP1	I often carry out the core parts of my job well	Drewery (2016)
EP2	I always initiate better ways of doing my core tasks today	
EP3	I always fulfil all the responsibilities specified in my job description	
EP4	I consistently meet the formal performance requirements of my job	Parke (2018)
EP5	My competency (knowledge, skill and ability) improves through internal social media activities	Suriati (2016)
EP6	My performance has been getting better through company internal social media activities	

#### 4.13 Mediating Variable

The mediating variable explains the relationship between the dependent and independent variables. As indicated above and from Table 4.4, it can be seen that independent variables influence the dependent variables by means of a “middleman” which is the mediating variable. In this study the mediating variable consists of actual use of social media in the workplace and helps to explain the cause-and-effect relationship between the use of social media for employee engagement and employee performance. The actual use of social media in the workplace explains why and how there is a relationship between the independent variables and dependent variables. The analysis of mediating variable answers the question of how independent variables are related to dependent variables (Nima et al, 2013). The respondents were asked to

indicate to what extent on average per week they would say they used company internal social media for work purposes within the workplace. Table 4.4 shows the mediating variable and measures used in this study.

**Table 4.4: Mediating variable**

	Variables and measurement scales	Source
	<i>Actual use of social media in workplace (AU)</i>	
AU 1	Less than 1 hour	Rauniar et al (2014)
AU2	1 to 3 hours	
AU3	3.5 to 5 hours	
AU4	5.5 to 7 hours	Venkatesh and Davis (2000)
AU5	7.5 hours or more	
AU6	We have internal SM, but I don't use it	
AU7	I'm not aware that my company has internal social media	

**Table 4.5: Composite and Cronbach's alpha for employee adoption of social media platforms for engagement and its impact on performance for Nigeria**

Constructs	Items	Composite reliability	Cronbach's alpha
Perceived usefulness (PU)	8	0.876	0.832
Perceived ease of use (PEU)	6	0.918	0.892
Perceived management support (PMS)	5	0.910	0.875
Perceived relevance (PR)	5	0.916	0.886
Perceived behavioural control (PBC)	5	0.892	0.847
Uncertainty avoidance (UA)	3	0.751	0.522
Actual usage of social media (AU)	4	0.798	0.677
Intellectual engagement (IE)	2	0.902	0.784
Affective engagement (AE)	3	0.934	0.895
Social engagement (SE)	3	0.806	0.667
Employee performance (EP)	6	0.860	0.805

**Table 4.6: Composite and Cronbach's alpha for employee adoption of social media platforms for engagement and its impact on performance for the UK**

Constructs	Items	Composite reliability	Cronbach's alpha
Perceived usefulness (PU)	8	0.878	0.832
Perceived ease of use (PEU)	6	0.903	0.871
Perceived management support (PMS)	5	0.850	0.777
Perceived relevance (PR)	5	0.850	0.775
Perceived behavioural control (PBC)	5	0.883	0.883
Uncertainty avoidance (UA)	3	0.812	0.648
Actual usage of social media (AU)	4	0.818	0.692
Intellectual engagement (IE)	2	0.937	0.865
Affective engagement (AE)	3	0.903	0.838
Social engagement (SE)	3	0.874	0.804
Employee performance (EP)	6	0.818	0.732

As seen in Table 4.5 and Table 4.6, the test results for construct reliability indicate that almost all the items measured had sufficient correlation among the set of variables. As mentioned above, some scales were removed to improve the Cronbach's alpha for internal consistency and reliability for both the Nigerian and UK data; this means that three indicators were removed from Actual use of internal social media (AU), and one item each were removed from Perceived behavioural control (PBC), Uncertainty avoidance (UA), Perceived usefulness (PU) and Intellectual engagement (IE). The remaining indicators were on their respective scale and were statistically significant. Employees were presented with multiple item statements to measure the extent to which they adopted internal social media platform for engagement. In Table 5.5 and Table 5.6 the mediating variable and one item each from independent and dependent variables had Cronbach's alpha below 0.70 and other items were above 0.7. In addition, all the composite reliabilities satisfied the standard for reliability. This means that all variables of the model produced the recommended values for construct reliability (0.70), indicating strong convergent reliability (Said et al, 2011). Thus, it can be concluded that the eleven model constructs showed satisfactory discriminant validity and reliability.

#### 4.14 Sample Size and Non-Response Rate

There are many debates in academic literature on sample size. Selection of the right sample size has been an issue for researchers (Rahi, 2017). Rahi (2017) also states that sample size needs to be considered carefully as statistical methods are affected by it. Other sources suggested that sample size which is based on analysis techniques, for example, structural equation modelling that analyses confirmatory factor analysis, structural path analysis, casual modelling with latent variables, as well as multiple regression analysis, need to be treated in a careful manner (Collis and Hussey, 2009). Moreover, based on the useful suggestions and arguments regarding selection of the right sample size (Comrey & Lee, 1992; Hair, 2003), sample size for this research was selected by following the important guidance mentioned in academic literature. Data was drawn from 136 and 207 employees of selected licenced airline companies in the UK and Nigeria, respectively, through the administration of a survey questionnaire. The number of responses in Nigeria was lower than that in the UK as airline companies operating in the UK, both domestic and international, are more than double the number of domestic and international airlines operating in Nigeria. In other words, the UK has the third largest airline network in the world (Association of UK Airlines, 2020), compared to Nigeria which is still growing in airline business (Bailey, 2019). Additionally, a small sample size was gathered in Nigeria due to cost, time frame and accessibility. Although 136 and 207 responses may be considered as relatively low, they are still within the average sample size and threshold sample size for PLS-SEM. Henseler et al (2009), Reinartz et al (2009), Hair et al (2014a) found that PLS-SEM achieves a high level of statistical power with small sample sizes. Therefore, the data collection was sufficient to compare and contrast the two countries investigated.

Respondents were selected based on their knowledge, expertise, and relationship in terms of the research topic (Freedman et al, 2007). In this research, the respondents who were selected had a relationship with the topic being studied, adequate and relevant work experience in the use of internal social media, active involvement in several engagement initiatives within the organization and were in roles with customer- or client-facing roles, as well as administrative roles and managerial positions. Within this context, the respondents for this study were in managerial and non-managerial position such as: customer/passenger service agents, baggage-handlers, pilots, cabin crew members, call centre agents, ramp agents, managers, etc. Five hundred hard-copy questionnaires were distributed by employees of airline companies in the UK and Nigeria, 250 questionnaires for each country. The totals of usable questionnaires

obtained in Nigeria and the UK were 136 and 207, respectively. The questionnaire was distributed face to face in both countries by going to the airline companies. It is suggested that face-to-face questionnaire mode distribution appears to be the most suitable way of collecting primary data in cross-cultural projects (Jong, 2016). Face-to-face mode was possibly convenient for the participants to take part in the survey due to the nature of their jobs. It has been claimed that face-to-face or hard-copy surveys garner higher response rates than online surveys (Duncan, 2008). Questionnaires were distributed to participants at a convenient time (during their break time and after work). Some questionnaires were filled and returned immediately. To increase the number of responses a phone call was made to remind the companies of completion of the remaining questionnaires, and three follow-up visits were made to the airline companies to collect more completed questionnaires.

Moreover, to reduce the problem of missing data in the study, the researcher collected only the essential information, and the pilot study was conducted to identify problems that could occur during the main study. In order to test for data accuracy, missing data were checked to identify the missing value for each variable. Cases with missing data were omitted to ensure unbiased and conservative results (Kang, 2013). According to Hair et al (2006), missing data occur when respondents miss or fail to answer one or more question in the questionnaire. Similarly, missing data can occur when the researcher fails to store or record a data value. This can have a significant effect on the research result drawn from the data (Graham, 2009). Table 4.7 shows the number of hard-copy survey questionnaires distributed and the number of questionnaires returned and usable for the data collection result for the UK and Nigeria.

**Table 4.7: Number of questionnaires distributed to individual airlines for the UK and Nigeria**

<b>Nigeria</b>	<b>UK</b>
<ul style="list-style-type: none"> <li>• Airline A (International and national carriers) <i>Handed 54 questionnaires to station manager</i></li> <li>• Airline B (International carriers) <i>Handed 52 questionnaires to operations manager</i></li> <li>• Airline C (National carriers) <i>Handed 60 questionnaires to duty manager</i></li> <li>• Airline D (International carriers) <i>Handed 57 questionnaires to station manager</i></li> <li>Airline E (International carriers) <i>Handed 27 questionnaires to station manager</i></li> </ul>	<ul style="list-style-type: none"> <li>• Airline A (International and national carriers) <i>Handed 54 questionnaires to duty manager</i></li> <li>• Airline B (International and national carriers) <i>Handed 52 questionnaires to station manager</i></li> <li>• Airline C (International and national carriers) <i>Handed 60 questionnaires to duty manager</i></li> <li>• <i>Self-distributed 84 questionnaires</i></li> </ul>

**Table 4.8: Number of hard-copy survey questionnaires distributed, returned and usable for the UK and Nigeria**

<b>Country</b>	<b>Questionnaires</b>		
	<b>Sent</b>	<b>Returned</b>	<b>Usable</b>
<b>UK</b>	250	213	207
<b>Nigeria</b>	250	146	136

#### 4.15 Data Analysis Software: PLS (partial least squares)

The single method approach adopted in this research required the analysis of quantitative data. As a result, PLS software (partial least squares) was used to analyse the data. However, the main drawback of this statistical tool is that its use for theory testing and theory confirmation is limited since it has no global fitness indexes to confirm, as well as its minimum sample size (Henseler & Sarstedt, 2012; Goodhue et al, 2012; Marcoulides & Saunders, 2006; Hair et al, 2012b; Henseler et al, 2009).

Moreover, the Smart PLS approach has become one of the most popular multivariate analytical methods, especially in social science studies. Development of PLS-SEM was made to deal with

issues of data inadequacy, such as heterogeneity. In addition, it has given researchers the appropriate means to conduct a simultaneous test for multiple inter-relationships between variables in the case of multivariate and complex phenomena (Hair et al, 2014). Moreover, PLS-SEM software is a powerful statistical tool to analyse path analysis with multiple dependents. It is a “soft-modelling-technique with minimum demands, in terms of scales, sample sizes and residual distributions” (Monecke & Leisch, 2012, p.2). Its aim is to predict the behaviour of the relationship between constructs and to explore the underlying theoretical concept (Hair et al, 2013, Pavlou & Sawy, 2006). In addition, Smart-PLS can handle many independent variables at the same time (Hair et al, 2011; Chin & Newsted, 1999). Moreover, due to the objectives and theoretical view of this study, PLS-SEM was used as a statistical tool to predicate significance of relationships between constructs and to explore theory. The interest in using PLS-SEM is stimulated by the increased need for modelling formative constructs in organization / management research (MacKenzie et al, 2005; Diamantopoulos & Winklhofer, 2001), and its appropriateness in analysing research models that have many constructs and links (Pavlou & Fygenson, 2006). Marcoulides and Saunders (2006) state that PLS-SEM is widely used in information systems research, its ability to model both factors and composites is appreciated by researchers across disciplines and makes it a promising method particularly for new technology research and information systems research. However, as this research aims to analyse employee attitude towards adopting and using social media platforms in the workplace, Smart-LS path modelling is an appropriate statistical tool for this research compared to other structural equation modelling tools.

#### **4.16 Pilot Study**

Brink et al (2012) define a pilot study as a small-scale form of a major study. Pilot studies represent a vital stage of the research process and aim to examine the feasibility of a method that is proposed for use before the main data collection (Leon et al, 2010). Similarly, Gilbert (2001) states that a pilot study helps the researcher to ensure the suitability of the questionnaire, design a research technique, evaluate whether the research technique is feasible, determine the sample size and gather preliminary data. The research instrument design for this research was extensively piloted to ensure that the questions were right and of a high quality before carrying out the main data collection (Saunders et al, 2009). In addition, it is important to pilot a questionnaire before the principal data collection to clarify and make changes to the questions before the main data collection (Saunders et al, 2009). However, De Vaus (1993) states that

although it is important for the researcher to know the weakness of a research instrument, a pilot study does not assure success in the main research; but it can be used to determine the overall appropriateness of the research instrument. According to Van Teijlingen and Hundley (2002), pilot studies exist primarily to pre-test an instrument needed for the research process. Once the main data collection has started, there is limited scope to clarify or change the questionnaire elements within the study. Additionally, to make sufficient application of the pilot study, a sample of the selected survey population was used to test both the survey questionnaire and the procedures. However, there is no specific threshold regarding what an acceptable number for large or small samples means; but Churchill (1999) confirms that the subjects of a pilot study should be about 10% of the sample size intended in the main study. Hence, the pilot study for this study was carried out with 50 people from both countries to determine the general appropriateness of the research instrument before the main data collection commenced. This means that the pilot study was carried out with individuals from each country, comprised of non-employees (academia) and airline employees (professionals) who were not part of the main study. Twenty-three out of the 27 respondents completed all the questions without the researcher's involvement. Twenty-seven attempted it but had problems with some sections. Errors on the questionnaire were corrected using feedback and comments from the supervisors and lecturers (academia) and employees (professionals) involved in the pilot study. During the pilot study, participants were selected randomly, and the initial version of the hard-copy questionnaire was distributed. Individuals who participated in the pilot study were willing to share their views and comments about their experience in completing the questionnaire. It was observed that the questionnaire was too long, and some respondents struggled to cope with certain words and phrases used in the questionnaire. The questions seemed unclear at the pilot stage; hence, amendments were made based on the suggestions from the respondents and therefore, the length was reduced to enable a participant to answer the questions within 12 to 15 minutes. In addition, understanding the questionnaire items and the flow of statements was another issue observed during the pilot study. However, some of the questions were understandable, and participants found it easy to answer without help. Conducting a pilot study provided an opportunity to obtain important ideas and approaches that helped in modifying the questionnaire.

**Table 4.9: Sample size of the pilot study**

<b>Category</b>	<b>Pilot study sample</b>
<b>Lecturers</b>	10
<b>Airline company management</b>	15
<b>Airline company non-management</b>	25
<b>Total</b>	50

#### 4.17 Summary

This chapter has outlined the primary focus of this study, stating clearly the methods and process employed for this study and the rationale for choosing the methodologies. In addition, this chapter has presented the theoretical view of this study, together with the overview of the single approach (quantitative) used in this study to achieve the research objectives. The research employed a quantitative method of data collection in order to attain a complete and accurate representation of the topic being researched. The approach for the data collection, procedure and measures, as well as pilot study have been discussed in detail. The research model aims to explain the extent to which employees adopt social media platforms for employee engagement and its impact on their performance. The research administered the same questionnaire in one developing country (Nigeria) and one developed country (the UK) to test the model. The rationale for testing the research model across two countries was to allow for comparison and identify differences that may arise within the contexts of these countries, and hence better predict social media platform adoption and use across the two countries.

However, despite the many reasons that this methodology is most appropriate for this study, it still has some drawbacks. Due to the quantitative nature of this study, the use of close-ended questions gave respondents a limited choice of responses. The data collection method used during the field work, for example, face-to-face distribution of hard-copy questionnaires in the UK and Nigeria, increased the time frame and cost of the research. In addition, a quantitative research method needs a large sample size. However, due to inadequate resources the obtainability of a large sample size was impossible in Nigeria.

## CHAPTER FIVE: ANALYSIS OF THE NIGERIAN AND UK DATA

### 5.0 Introduction

This chapter presents the results through quantitative analysis of the Nigerian and UK social media adoption samples to confirm the research model. The data collected from the UK and Nigeria were tested to allow comparisons between the countries and to determine whether the differences observed across countries were significant. The chapter starts by analysing the Nigerian data, and thereafter the UK data. However, one on-going problem in the management of technology is the difficulty of identifying influencing factors that determine individual acceptance and use of systems developed and implemented by others (Lim & Ting, 2012). The determination of the adoption and usage of these systems may differ according to the individual, the environment and between different countries; thus, this study incorporates predicating factors by proposing an extended TAM. Moreover, the chapter starts with analysing the descriptive statistics of the sample responses received from employees of airline companies in order to state the characteristics of the collected samples. Additionally, WrapPLS-SEM was used in this study to analyse the measurement and structural model. PLS-SEM has been used by many researchers and is claimed to be a powerful statistical method to analyse data (Ali et al, 2016).

### 5.1 Descriptive Statistics

It is important to discuss the descriptive statistics analysis of the study samples. According to Zikmund et al (2010), descriptive analysis provides information on the characteristics of the investigated sample. Descriptive analysis is useful in this study to establish the respondents' demographic and general characteristics and enables the presentation of raw data in a more meaningful manner. The analysis of the respondents' demographic information gives the participants' general background information and a clarification of their viewpoint of the factors that influence employee adoption and usage of internal social media for employee engagement, from the following perspectives: Age, Gender, Job role, Length of employment, **Qualification** and Ethnicity, which were investigated in this study. SPSS (version 24) was used in the analysis of demographic and descriptive data: however, there was not much variation in demographic information such as qualification and ethnicity, therefore these demographics were not included in Table 5.1. Additionally, in the context of this research, demographic

information was not considered important or relevant in this research, hence it was not further analysed and interpreted in this study. The following sub-sections discuss the demographic profile of respondents, data distribution, non-response bias, missing values, and outliers.

### 5.1.1 Demographic profile of Nigerian and UK respondents

This section reports the respondents' age, gender, job role and length of employment for both countries. The sample sizes for Nigerian and UK airline employees were recorded as 136 and 207, respectively. Table 5.1 and Table 5.2 present a general overview of respondent characteristics, while the other part of this section reviews a more detailed sample characteristic separately.

**Table 5.1: Descriptive statistics for the Nigerian sample (demographic profile of respondents)**

Variable	Category	Frequency	Percentage
Age	18–25	8	5.9
	26–35	54	39.7
	36–45	60	44.4
	46–55	11	8.1
	56–65	2	1.5
	65 or more	0	0
Gender	Male	75	55.1
	Female	60	44.1
	Other	1	0.7
Job role	Passenger services agent	47	34.6
	Flight/Cabin crew	3	2.2
	Flight dispatcher	2	1.5
	Pilot	1	0.7
	Baggage-handler	10	7.4
	Management/Admin	11	8.1
	Customer services / Call centre	20	14.7
	IT	8	5.9
	Other	31	22.8
Length of employment	Less than one year	12	8.8
	1–5 years	51	37.5
	6–10 years	43	31.6
	11–15 years	20	14.7
	16–20 years	8	5.9
	More than 20 years	1	0.7

The original sample contains 136 Nigerian airlines employees and covers both international and national airlines. The age distribution of the respondents was: 5.9% of the sample was in the 18–25 age range, 39.7% in the 26–35 age range, and 44.4% in the 36–45 age range. The ratio of respondents in the 46–56, 56–65 and 65 and more age ranges were 8.1%, 1.5% and 0%, respectively. Regarding the gender distribution, 55.1% were male (75) and 44.1% were female (60) and other 0.7%. Of those that reported their job role, 34.6% were passenger service agents, 2.2% were cabin crew, 7% pilots, 7.4% baggage handlers, 8.1% management, 14.7% in customer service, 5.9% in information technology (IT) and 22.8% were other roles not listed in the questionnaire. Examining the length of time in the organization, 8.8% of respondents were less than one year in the organization, 37.5% were 1–5 years, 31.6% were 6–10 years, 14.7% were 11–15 years, while 16–20 years and more than 20 years were 5.9% and 0.7%, respectively.

#### **5.1.2 Demographic profile of UK respondents**

This section reports the respondent's age, gender, job role and length of employment for the UK sample. The sample size for the UK airline employees was recorded as 207 individuals. A hard-copy questionnaire was used to collect data. A total of 207 responses were found to be usable. Table 652 presents an analysis of the UK demographic profile.

**Table 5.2: Descriptive statistics for the UK sample (demographic profile of respondents)**

Variable	Category	Frequency	Percentage
Age	18–25	76	36.4
	26–35	65	31.1
	36–45	32	15.3
	46–55	16	7.7
	56–65	17	8.1
	65 or more	1	0.5
Gender	Male	90	43.1
	Female	117	56.0
	Other	0	0
Job role	Passenger services agent	87	41.6
	Flight/Cabin crew	29	13.9
	Flight dispatcher	17	8.1
	Pilot	8	3.8
	Baggage-handler	14	6.7
	Management/Admin	15	7.2
	Customer services / Call centre	20	9.6
	IT	11	5.3
	Other	6	2.9
Length of employment	Less than one year	63	30.1
	1–5 years	82	39.2
	6–10 years	28	13.4
	11–15 years	22	10.5
	16–20 years	4	1.9
	More than 20 years	5	2.4

The main sample contains 207 UK airline employees and covers both international and national airlines. The age distribution of the respondents is: 36.4% of the sample was in the 18–25 age range, 31.1% in the 26–35 age range, and 15.3% in the 36–45 age range. The ratio of respondents in the 46–56, 56–65 and 65 and more age ranges were 7.7%, 8.1% and 5%, respectively. Regarding the gender distribution, 43.1% were male (90) and 56.0% were female (117); of those that reported their job role, 41.6% were passenger service agents, 13.9% cabin crew, 8.1% flight dispatchers, 3.8% pilots, 6.7% baggage-handlers, 7.2% management, 9.6% in customer service, 5.3% in information technology (IT) and 2.9% were in other roles not listed in the questionnaire. Examining the length of time in the organization, 30.1% of respondents were less than one year in the organization, 39.2% were 1–5 years, 13.4% were 6–10 years, 10.5% were 11–15 years, while 16–20 years and more than 20 years were 1.9% and 2.4%, respectively. The demographic information of both countries' sample demonstrates a

dramatic shift in the demographic of the current airline employees in adoption and usage of internal social media in the workplace. This is very useful to understand how demographics would influence the adoption and usage of internal social media for employee engagement. In this respect, the following reviews the characteristics in more detail.

### 5.1.3 Missing data and outliers

Missing values and outliers are often encountered while gathering data (Kwak & Kim, 2017). Missing data occurs when a respondent fails to answer a particular question accidentally or deliberately (Field, 2009). In the WrapPLS-SEM software, missing values are automatically replaced by the mean of the other values of that particular factor (Kock, 2013). The presence of missing data in the study reduces the data to be analysed and compromises the statistical power and reality of the results. According to Peng et al (2006), when missing data are ignored, it leads to loss of information which can compromise the data set, increase standard error and can make the collected information unsuitable for statistical analysis. Enders (2003) stated that a missing rate of 15% to 20% was common in educational and psychological studies. Hair et al (2014) suggested that if an observation is missing more than 15% of the data, the researcher should consider deleting the missing observation. Thus, to have a complete data set in order to avoid weakening the generalization of findings, all the cases with missing data higher than 15% were removed. This means that 6 responses were removed from the data set of the Nigerian sample while for the UK sample, there is not even a single missing value in the study; therefore, all 207 samples were free of missing values.

In regard to the outliers, these result from numerous factors including error in respondents' answers and errors in data entry. Cho et al (2013) state that responses which are different from or inconsistent with other data sets with extremely small or large values are known as outlying responses. According to Kwak and Kim (2017, p.409), "Outliers significantly affect the process of estimating statistics; for example, the average and standard deviation of a sample, which results in overestimated or underestimated values". Therefore, it is important to deal with data sets containing outliers before the analysis. This comprises of modification of outliers or replacing the value of outliers with substitute values (Kwak & Kim, 2017). Other authors suggest dealing with data sets by removing outliers by trimming the data set to get a more robust statistic (Saunders et al, 2012; Zikmund et al, 2010; Field, 2009). However, Davison and Hinkley (1997) argue that outliers should not be removed from the data set, rather they should be further analysed using bootstrapping unless they are caused by measurement error.

In this study a test was undertaken using the SPSS statistical software to detect the presence of outliers. Hair et al (2010) suggested that when the Z-scores for all attributes are less than the value of 4, it means there is no presence of outlying responses. In this study, the Z-scores for all attributes were less than the recommended value, thus there were no outlying responses detected in the data set for either country (see Appendices 4 and 5).

#### 5.1.4 Common method bias

Measurement error can affect research validity and relationship between measures (Bagozzi & Yi, 1991). However, the issue of common method biases differs according to discipline and by investigated constructs. For example, research found that in the fields of marketing and education the method variances are 15.8% and 30.5%, respectively, while in job performance and attitude measures, method variance accounts for an average of 22.5% and 40.7% of method variance, respectively (Cote & Buckley, 1987).

According to Podsakoff et al (2003), some issues of common method bias result from: (1) artefactual covariance between the predictor and criterion variables produced by the fact that the respondent providing the measure of these variables is the same; (2) repeated use of the same anchor points (e.g., extremely, always, never) on a questionnaire; and (3) propensity for respondents to try to maintain consistency in their responses to questions” (p.882). Common method bias can cause potentially serious effects in research findings, resulting in possibly misleading empirical results and conclusions. To eliminate issues of common method bias, this study conducted a test for the UK data using Harman’s one factor. The measurement items were entered into the component factor analysis and the test showed that the single factor analysis is 0.39% less and 29.1% of total variance, respectively (see Appendix 3). If the test accounted for more than 50% of the variances there would be bias. Therefore, the results suggest that there was no problem of common method bias (Mattila & Enz, 2002; Lings et al, 2014). Having discussed the descriptive statistics of this study, the following section presents the research model for Nigeria and the UK. Using the PLS-SEM analysis the research hypotheses are supported or rejected.

#### 5.2 PLS-SEM Analysis

The developed research conceptual model was drawn in WrapPLS 6.0 software to assess the effect of variables on employee behaviour in social media usage for engagement activities. The PLS-SEM model is constructed by assessing and calculating different parameters which consist

of reliability, validity and item loading tests. It consists of a two-phase process, as stated by Henseler et al (2009), which involves the assessment of the measurement model (outer model) and the structural model (inner model). The rationale behind such assessment of the essential difference is the need to create proper specification for the measurement model to attain valid analysis (Jarvis et al, 2003).

According to Hair et al (2011), the assessment of the measurement model is done through the reliabilities of each variable and latent variable, as well as the test on convergent and discriminant validities. The convergent validity is assessed by average variance extracted (AVE) or by the loadings, which determines the average amount of variance that is captured by the latent construct (Hair et al, 2011). In this study convergent validity was checked and assessed to know the relationship between each item measured and the extent to which factor loadings are significant (Andreson & Gerbing, 1988). Hair et al (2011) also state that the non-assessment of reliability and validity may cause bias, leading to unreliability and misinterpretation of the structural model. Table 5.3 shows the variables in the research model and their allotted codes.

**Table 5.3: Variables in the research model and their allotted codes**

<b>Variable</b>	<b>Code</b>
<b>Independent variables</b>	
Perceived usefulness	PU
Perceived ease of use	PEU
Perceived management support	PMS
Perceived relevance	PR
Uncertainty avoidance	UA
Perceived behavioural control	PBC
<b>Mediating variable</b>	
Actual use of social media	AU
<b>Dependent variables</b>	
Intellectual engagement	IE
Affective engagement	AE
Social engagement	SE
<b>Outcome</b>	
Employee performance	EP

### 5.2.1 Measurement model of research constructs

The measurement model is that part of the model that examines the correlation between the latent variables and their measures. The examination of the measurement model can assess the reliability, validity and unidimensionality of a latent construct (Cheah et al, 2018). However, a latent construct can be modelled in two ways – reflective and formative (Edwards & Bagozzi, 2000; Diamantopoulos & Winklhofer, 2001). Typical calculations conducted in the measurement model include composite reliability, Cronbach's alpha reliability, indicator reliability, convergent validity, discriminant validity, etc. In this study, the reliability and validity of the study was analysed using partial least squares (WrapPLS-SEM) to determine how the extended TAM model affects employee intention towards using internal social media platforms for engagement and the impact on employee performance.

It is acknowledged that the PLS-SEM is suited equally to analyse both reflective and formative measurement models. In this study, all the variables are considered to be reflective as these variables have indicators which are caused by these variables. Conversely, in a formative construct, indicators become the cause of the variables. Also, the indicators of these variables are correlated to measure the variable and do not hold equal importance, and therefore, are considered reflective. Conversely, in formative models indicators are not necessarily correlated and also hold equal importance. In addition, PLS-SEM is a multivariate statistical method which has been widely used by information system researchers (Wetzels et al, 2009), and has been used in this study by reason of: (1) the size of the research sample; (2) it did not sufficiently satisfy the power requirements for the covariance-based structural equation modelling method; and (3) it did not meet the multivariate normality postulation related to those methods (Boakye et al, 2014). The next section discusses the individual item reliability, construct reliability and validity for all constructs used in this study.

#### *A) Individual item reliability*

The individual item reliability was checked through the indicator's loadings to assess the consistency manifest of the variables (Hair et al, 2012). The indicator loading evaluates the strength of the correlation between the item measures and the latent variable. In research, the rule of thumb for determining highly satisfactory standard outer loadings is 0.7 or higher. This would mean that the indicator shares more variance with its construct than error variance. In empirical literature, outer loading values of 0.5 are acceptable (Kock, 2011). The variables with less than 0.5 should be eliminated (Chin, 1998; Hair et al, 2010). Henseler et al (2009) suggested

that item with loading values between 0.4 and 0.7 should be carefully reviewed before eliminating the items as the removal of the indicators increases the composite reliability. In this study, all item loadings less than 0.5 were eliminated as suggested by Henseler et al (2009). After eliminating the items with loading below 0.5, all of the combined loading of the indicators that were retained exceeded the recommended threshold of 0.5 and above (Goffee, 1996). This means that items with loading value of 0.5 and above were kept, hence the indicators' loadings signify good satisfactory individual reliability. The indicators removed for the Nigerian sample were: AU5, AU6, AU7, PBC1, UA1, IE1, PU2 and PU4. In the UK data, the indicators removed were: AU5, AU6, AU7, PBC1, UA1, IE1, PU2 and PU4; this is to determine the identity underlying hypothesized constructs and compare the significant difference in the applicability of the extended TAM model across Nigeria and the UK.

### *B) Construct reliability*

According to Hair et al (2011), construct reliability is the measuring of constructs to evaluate their internal consistency. The reliability shows whether all the items used to measure latent variables reflect the same underlying construct or produce the same results. The assessment of reliability considers two types of internal consistency reliability, namely: composite reliability and Cronbach's alpha coefficient (Peterson & Kim, 2013). In an exploratory study, a significant construct's composite reliability needs to be between 0.60 and 0.70 while in an explanatory research the reliability should be between 0.70 and 0.90. In this study, the composite reliability and Cronbach's alpha values were tested using WrapPLS. The composite reliability was used to assess the reliability of latent constructs. The composite reliability values for all the constructs for both the Nigerian and UK samples are between 0.798 and 0.934, greater than the suggested value of 0.7 (Nunnally & Bernstein, 1994). This means that the values extracted from the Nigerian data show sufficient composite reliability, as their values indicated between 0.8 and 0.9 (above the recommended threshold for construct reliability: 0.70). The UK data shows sufficient composite reliability values between 0.8 and 0.9 (also the recommended threshold: 0.70). This indicates that all variables of the model satisfied the minimum recommended value for construct reliability (0.70).

The use of Cronbach's alpha in this study examines the internal reliability of the scales. In addition, the measurements of scale internal reliability using Cronbach's alpha were to test the inter-relationship between sets of items. Cronbach's alpha was used to assess the reliability of the twelve constructs and the reliability test exceeded 0.7 for both countries' sample, showing

sufficient evidence of reliability and as recommended by Hair et al (2003). Table 6.12 shows the composite reliability and Cronbach's alpha measures for all the constructs for the two countries used in this study.

**Table 5.4: Composite reliability and Cronbach's alpha measures for Nigeria and the UK**

Variable	UK		Nigeria	
	Composite Reliability	Cronbach's alpha	Composite Reliability	Cronbach's alpha
AU	0.818	0.692	0.820	0.706
PU	0.878	0.832	0.890	0.850
PEU	0.903	0.871	0.918	0.892
PMS	0.850	0.777	0.910	0.875
PBC	0.883	0.833	0.892	0.847
PR	0.850	0.775	0.916	0.886
UA	0.812	0.648	0.751	0.522
IE	0.937	0.865	0.902	0.784
AE	0.903	0.838	0.934	0.895
SE	0.874	0.804	0.806	0.667
EP	0.818	0.732	0.860	0.805

As shown in Table 5.4, both composite reliability and Cronbach's alpha coefficient exceeded the minimum thresholds. However, despite the low Cronbach's alpha coefficient for the uncertainty avoidance construct (UK=0.648, Nigeria=0.522) and actual use of social media (UK=0.692), the composite reliability achieved the recommended threshold of 0.7 which is claimed as a popular alternative to Cronbach's alpha coefficient in terms of assessing internal consistency measures (Fornell & Larcker, 1981; Peterson & Kim; 2013). Thus, it was concluded that the measurement instrument used in this study supported reliability.

As shown in Table 5.4, both composite reliability and Cronbach's alpha coefficient exceeded the minimum thresholds. The next step in the measurement model process is the assessment of construct validity.

### *C) Construct validity*

According to Hair et al (2011), the assessment of construct validity requires the evaluation of two types of validities, namely, discriminant validity and convergent validity. The assessment of the construct validity is to ensure that the set of items used is measuring the latent construct (Henseler et al, 2009). The discriminant validity examines the extent to which measures that are not related show sufficient differences between them, while convergent validity examines the extent to which two indicators under the same construct have sufficient inter-correlation (Hair et al, 2010; Hair et al, 2014). In this study, discriminant validity was determined by comparing square roots of average variance extracted (AVE) and correlations between constructs to determine whether square roots of AVE are greater than the relationship between constructs (Fornell & Larcker, 1981) Fornell and Larcker (1981) state that measured AVE values need to be greater than the acceptable items' variance: this means that constructs' measured AVE need to be greater than the acceptable threshold value of 0.50. In the tables below, all of the AVEs are greater than 0.50 and are above the acceptable level, the factor loadings indicate that all constructs in the research model have sufficient level of discriminant and convergent validities. Table 5.5 shows the AVE for all constructs in the research model.

**Table 5.5: Latent variables' AVE for the Nigerian and UK samples**

Construct	Average variance extracted (AVE)	
	Nigeria	UK
Actual use of social media (AU)	0.538	0.569
Perceived usefulness (PU)	0.575	0.546
Perceived ease of use (PEU)	0.652	0.608
Perceived management support (PMS)	0.670	0.536
Perceived behavioural control (PBC)	0.624	0.605
Perceived relevance (PR)	0.686	0.541
Uncertainty avoidance (UA)	0.557	0.601
Intellectual engagement (IE)	0.822	0.881
Affective engagement (AE)	0.826	0.756
Social engagement (SE)	0.570	0.638
Employee performance (EP)	0.509	0.435

Additionally, determining satisfactory discriminant validity implies that the latent construct is indeed different and measures a phenomenon that is not related to other constructs (Hair et al, 2014). According to Engellant et al (2016), “the validity correlation coefficients should be higher than the heterotrait-heteromethod correlation coefficients that share the same column and row” (p.46). Taherdoost (2016) states that “discriminant validity means that a latent variable is able to account for more variance in the observed variables associated with it than other constructs within the conceptual framework” (p.32). The examination of discriminate validity using AVE should be greater than the acceptable threshold value of 0.50. Table 5.6 indicates correlation between all constructs for the Nigerian samples. The square root of AVE is greater than the cross-loadings, therefore, the research model shows satisfactory discriminant validity. However, Fornell and Larcker (1981) state that if AVE is less than 0.5, convergent validity is still considered adequate if composite reliability is higher than 0.6. Arnentano et al (2015) state that “composite reliability (CR) and Average Variance Extracted (AVE) are the two measures that are useful for establishing validity and reliability” (p.6). Thus, in this study, the obtained value of AVE for employee performance (EP) for the UK sample was 0.43, when

considering the value of composite reliability for EP (which was greater than 0.6); so it was concluded that the research model shows adequate discriminant validity.

**Table 5.6: Square root of AVEs for the Nigerian airlines**

Construct	AU	PU	PEU	PMS	PBC	PR	UA	IE	AE	SE	EP
AU	(0.733)	0.070	0.218	0.082	0.066	0.113	0.024	-0.047	0.028	0.027	0.060
PU	0.070	(0.758)	0.546	0.525	0.557	0.632	-0.006	0.231	0.354	0.299	0.424
PEU	0.218	0.546	(0.807)	0.418	0.606	0.604	-0.112	0.325	0.257	0.226	0.480
PMS	0.082	0.525	0.418	(0.818)	0.686	0.490	-0.024	0.191	0.300	0.373	0.345
PBC	0.066	0.557	0.606	0.686	(0.790)	0.688	-0.027	0.176	0.380	0.309	0.407
PR	0.113	0.632	0.604	0.490	0.688	(0.828)	-0.098	0.184	0.312	0.296	0.472
UA	0.024	-0.006	-0.112	-0.024	-0.027	-0.098	(0.746)	0.204	-0.005	0.016	-0.074
IE	-0.047	0.231	0.325	0.191	0.176	0.184	-0.204	(0.907)	0.446	0.275	0.488
AE	0.028	0.354	0.257	0.300	0.380	0.312	-0.005	0.446	(0.909)	0.329	0.440
SE	0.027	0.299	0.226	0.373	0.309	0.296	0.016	0.275	0.329	(0.755)	0.449
EP	0.060	0.424	0.480	0.345	0.407	0.472	-0.074	0.488	0.440	0.449	(0.714)

**Table 5.7: Square root of AVEs for the UK airline sample**

<b>Construct</b>	<b>PU</b>	<b>PEU</b>	<b>PMS</b>	<b>PBC</b>	<b>PR</b>	<b>UA</b>	<b>AU</b>	<b>IE</b>	<b>AE</b>	<b>SE</b>	<b>EP</b>
PU	(0.739)	0.646	0.492	0.505	0.482	0.159	0.237	<b>0.031</b>	0.180	0.290	0.306
PEU	0.646	(0.779)	0.440	0.480	0.375	0.062	0.045	0.121	0.152	0.234	0.239
PMS	0.492	0.440	(0.732)	0.450	0.515	0.153	0.183	0.045	0.162	0.313	0.209
PBC	0.505	0.480	0.450	(0.778)	0.553	0.238	0.209	0.113	0.174	0.333	0.167
PR	0.482	0.375	0.515	0.553	(0.736)	0.211	0.206	0.075	0.226	0.374	0.274
UA	0.159	0.062	0.153	0.238	0.211	(0.775)	0.481	-0.122	-0.036	0.065	0.016
AU	0.237	0.045	0.183	0.209	0.206	0.481	(0.754)	-0.231	-0.042	0.110	0.004
IE	0.031	0.121	0.045	0.113	0.075	-0.122	-0.231	(0.939)	0.506	0.238	0.304
AE	0.180	0.152	0.162	0.174	0.226	-0.036	-0.042	0.506	(0.870)	0.483	0.347
SE	0.290	0.234	0.313	0.333	0.374	0.065	0.110	0.238	0.483	(0.799)	0.400
EP	0.306	0.239	0.209	0.167	0.274	0.016	0.004	0.304	0.347	0.449	(0.660)

#### *D) Collinearity test*

According to Hair et al (2014), collinearity refers to a situation where predictor variables are non-independent. In addition, it is when two or more indicators in a statistical model are linearly correlated, and is sometimes referred to as multicollinearity (Alin, 2010). If there is no linear correlation between indicators in a multiple regression model, they are referred to as orthogonal (Jensen & Ramirez, 2012). McKee (2002) adds that if correlation between two indicators happens, there will be an increase in the standard error coefficient. Dauod (2017) further states that in research collinearity is also assessed by using indicators called variance inflation factors (VIF). VIF is a tool for examining how much the variance is inflated and it is frequently used to assess collinearity of formative indicators. It is interpreted using the rules in Table 5.8.

**Table 5.8: VIF interpretation: Dauod (2017)**

<b>VIF – value</b>	<b>Conclusion</b>
VIF = 1	Not correlated
$1 < \text{VIF} < 5$	Moderately correlated
VIF > 5	Highly correlated

In addition, Hair et al (2012) suggested that VIFs should be less than a value of 5, while others recommended a threshold of 10 (Kaleka, 2012; Kock, 2013). Ringle et al (2015) suggested a value of 5 as the maximum acceptable level of VIF to guarantee collinearity. According to Becker et al (2015), VIF values of 5 or above indicate critical collinearity issues among the indicators of formatively measured constructs. However, collinearity issues can also occur at lower VIF values of 3 (Mason & Perreault, 1991; Becker et al, 2015). The VIF values should be close to 3 and lower. Knock and Lynn (2012) suggested a full VIF in PLS-SEM to assess the full collinearity. Hair et al (2012) reported a threshold of 5 for a full VIF.

Moreover, to determine statistical significance and relevance, it is also important to examine the indicator weight. Hair et al (2011) suggested that examination of the indicator weight is important to know whether each indicator truly contributes to the formation of latent variables. In PLS-SEM, Chin (1998) recommended the use of bootstrapping to determine statistical significance for indicator weights and to know whether correlation issues among indicators

should be accounted for. In significance testing of the indicator weight, Cenfetelli and Brasselier (2009) suggested that a low indicator but significant loading of 0.50 and below should consider removing except where there is strong support for its inclusion on the grounds of measurement theory. Kock (2011) clarified that researchers may depend on p-values related to the indicator weights to evaluate the validity of the formative constructs. Table 5.9 (see Appendix 6), Table 5.10 and Table 5.11 indicate VIFs, indicator loading weights and full VIFs. As can be seen, all p-values and VIFs are less than the threshold. The indicator loadings and weights were significant and with a VIF not exceeding the threshold value of 3.3 for both the Nigerian and UK samples, therefore suggesting a good validity. Regarding Full VIFs, Table 5.10 and Table 5.11 indicate the full collinearity (Full VIFs); all the VIFs are less than the value of 5, as recommended by Hair et al (2012).

**Table 5.9: Indicator weights and VIF for the Nigerian and UK samples**

(This table has been moved to Appendix 6.)

**Table 5.10: Full collinearity VIFs of constructs for the Nigerian sample**

AU	PU	PEU	PMS	PBC	PR	UA	IE	AE	SE	EP
1.089	2.032	2.223	2.131	3.182	2.551	1.081	1.632	1.547	1.381	1.917

**Table 5.11: Full collinearity VIFs of constructs for the UK sample**

AU	PU	PEU	PMS	PBC	PR	UA	IE	AE	SE	EP
1.455	2.213	1.926	1.603	1.814	1.803	1.349	1.507	1.685	1.590	1.367

Based on the above analysis, the examination of reliability, validity and collinearity indicates that the measurement model presents satisfactory values.

### 5.2.2 The Structural Model

Having examined the measurement model and confirmed the validity, reliability and collinearity of the constructs used in this study. the next stage is to examine PLS-SEM results by assessing the structural model to determine the relationship between the latent variables, and to decide whether to accept or reject the hypotheses. According to Shmueli et al (2016), the main criteria for assessing the structural model include: (1) statistical significance and relevance of the path coefficient; (2) assessment of the values of  $R^2$ ; (3) predictive relevance of the model  $Q^2$ ; and (4) evaluation of the effect size  $F^2$ . Therefore, the following sections present the assessment of the structural model.

#### *A) Model fit indices*

The evaluation of the model fit in measure for PLS-SEM is demonstrated in three indices: average path coefficient (APC), average R-squared (ARS) and average variance inflation factor (AVIF). Model fit was examined to evaluate the validity of the research model and statistical significance of path coefficients. Henseler et al (2016) suggested that a good model fit should be less than 0.05 (for APC and ARS) and less than 5 for AVIF. Regarding the measure of global goodness of fit (GoF), Henseler and Sarstedt (2012) argue that the goodness of fit for PLS-SEM does not represent a fit measure, hence it cannot accurately differentiate valid from invalid models, and since its application is limited to particular model setups, researchers are suggested to avoid use as a goodness of fit measure. Henseler and Sarstedt (2012) further state that the goodness of fit indices can only be considered in PLS multi-group analysis (PLS-MGA). Moreover, when the overall model fit indices were examined in this study for both Nigeria and the UK, it was clearly indicated that all indices and indicators complied with the criteria of a fit model; therefore, it can be concluded that the fitness of the research model is reasonable and usable. Table 5.12 shows model fit index results.

**Table 5.12: Model fit indices for the Nigerian and UK samples**

Indices	Results		Criteria for GoF
	Nigeria	UK	
Average path coefficient (APC)	0.179, p<.008	0.182, p=.002	p-value <.05
Average R-squared (ARS)	0.134, p<.027	0.161, p=.004	p-value <.05
Average adjusted R-squared (AARS)	0.119, p<.0039	0.152, p=.006	p-value <.05
Average block VIF (AVIF)	1.374	1.524	Acceptable if value $\leq 5$ , ideally $\leq 3.3$
Average full collinearity VIF (AFVIF)	1.888	1.665	Acceptable if value $\leq 5$ , ideally $\leq 3.3$

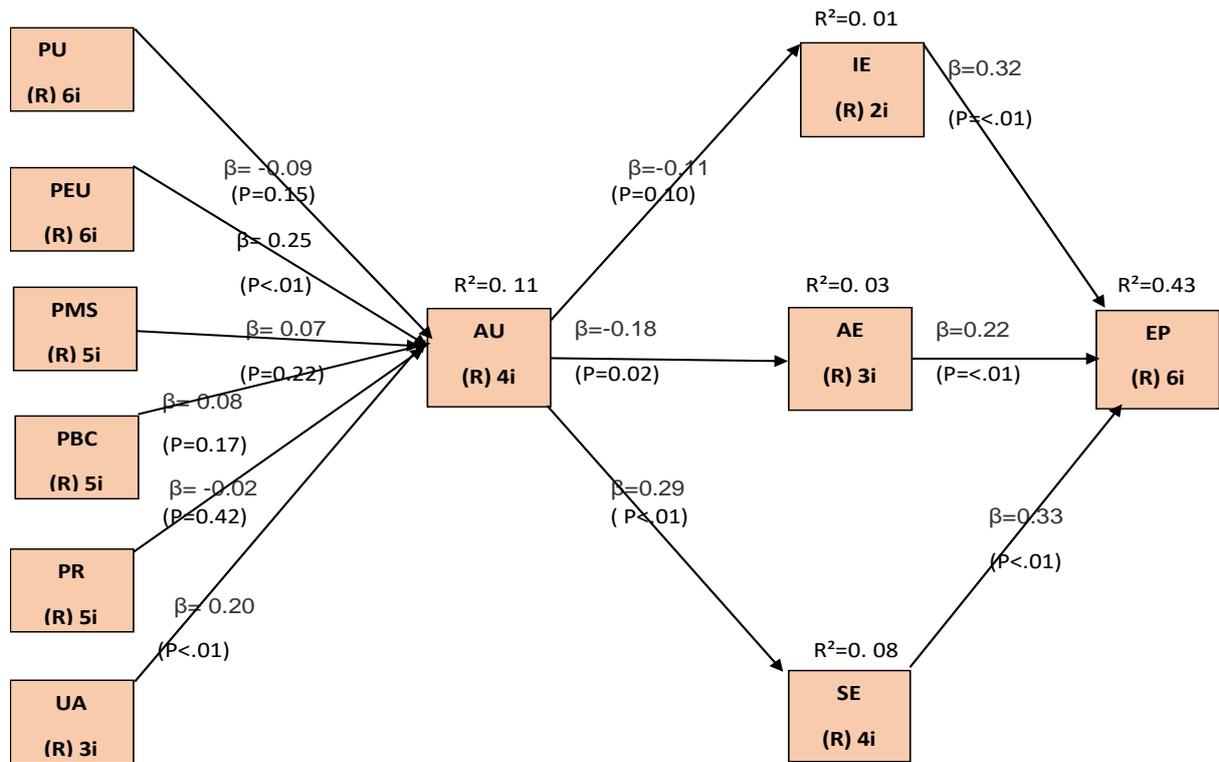
***B) The path analysis (structural relationships)***

The result of the data analysis of the research samples are shown in Figure 5.1. The arrows and adjacent values indicate the effects between the variables and their  $\beta$  coefficients; the  $R^2$  values indicate the variance of endogenous latent variables in the research model. The  $\beta$  coefficients have standardized values ranging from -1 to +1: values close to +1 represent strong positive relationships whereas values close to -1 represent the contrary (Hair et al, 2014). In Figure 5.1 and Figure 5.2, the relationship of the structural model represents the hypotheses proposed in this study. Eleven validated constructs were used to test the research model in this study: Perceived usefulness (PU), Perceived ease of use (PEU), Perceived management support (PMS), Perceived behavioural control (PBC), Perceived relevance (PR), Uncertainty avoidance (UA), Actual use of social media platform in the workplace (AU), Intellectual engagement (IE), Affective engagement (AE), Social engagement (SE) and Employee performance (EP).

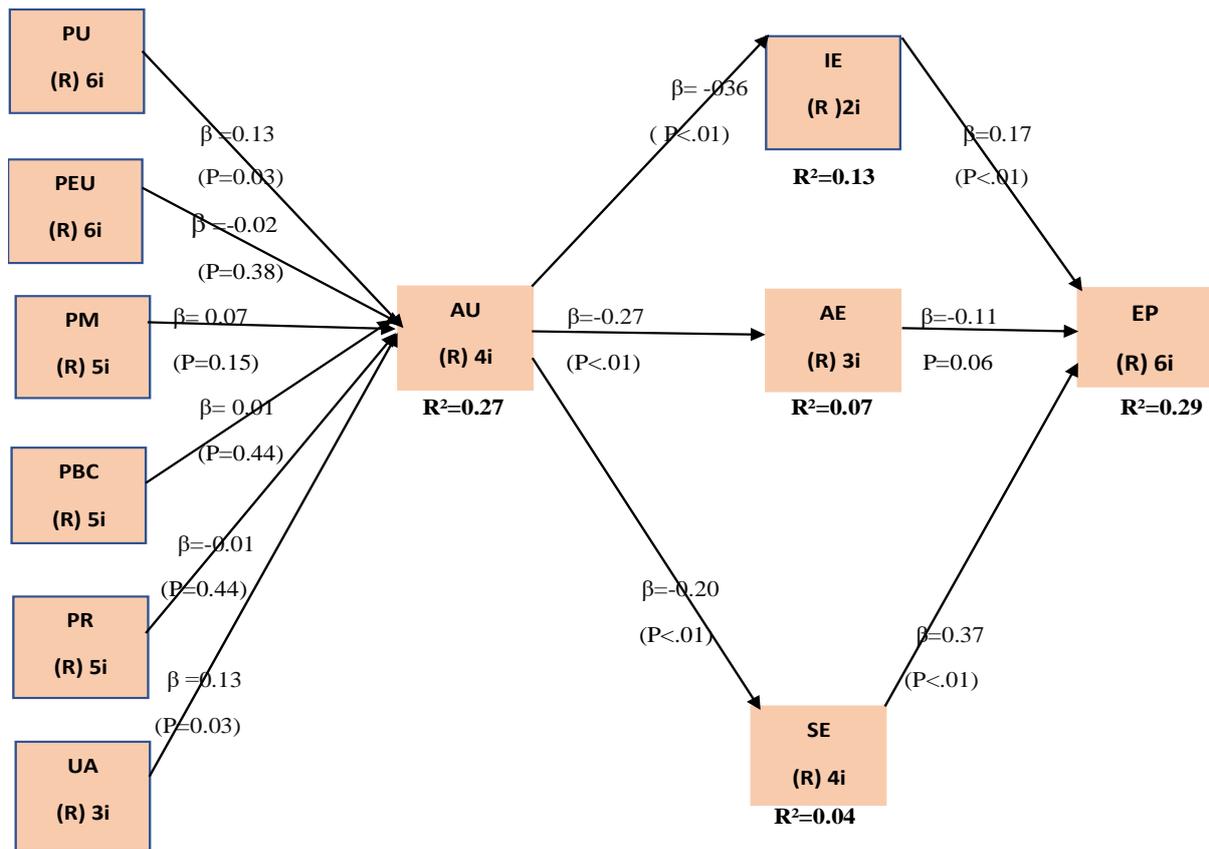
With respect to the Nigerian airline sample, the results of the structural model show that the direct effect of PEU on AU is 0.25 at  $p < .01$ . This supports the proposed hypothesis H2 which states that PEU directly and significantly impacts AU. Similarly, the result of the structural model has also shown that the direct effect of UA on AU is 0.20 at  $p < .01$ . This means that Nigerian airline employees' actual use of internal social media is associated with their perception of its ease of use. In addition, the result of the structural model indicates that AU has a direct effect on the three dimensions of employee engagement (AE, SE and IE). The direct effect of AU on AE is -0.18 at  $p < .02$ , and AU on SE is 0.29 at  $p < .01$ . Conversely, AU

has no significant impact on IE as the p-value is not less than .05. Similar to the explanation above, a weak but positive effect exists between AU and AE, and AU and SE. In addition, it was also indicated that IE ( $\beta=0.32$ ,  $p<.01$ ), AE ( $\beta=0.22$ ,  $p<.01$ ) and SE ( $\beta=0.33$ ,  $p<.01$ ) have a positive direct effect on EP. The result also shows that PU ( $\beta=-0.09$ ,  $p<.15$ ), PMS ( $\beta=0.07$ ,  $p<.22$ ), PBC ( $\beta=0.08$ ,  $p<.17$ ) and PR ( $\beta=-0.02$ ,  $p<.42$ ) have no significant effect on AU as the significance values are higher than threshold .05.

Regarding the UK airline sample, Figure 5.2 explains that PU ( $\beta=0.13$ ,  $p=.03$ ) has a positive but weak significant effect on AU. The structural model shows that there is no relationship between PMS and AU as effect is explained at p-values greater than .05. On the contrary, the result shows an insignificant impact of UA ( $\beta=0.20$ ,  $p<.13$ ) on AU as the p-value is not less than .05. Apart from this, PEU ( $\beta=0.02$ ,  $p=.38$ ), PBC ( $\beta=0.01$ ,  $p=.44$ ) and PR ( $\beta=-0.01$ ,  $p=.44$ ) have no significant effect on AU. Additionally, the result indicates that AU has a direct effect on the three dimensions of employee engagement (SE, IE, AE). The direct effect of AU on SE is  $-0.20$  at  $p<.01$ ; AU on IE is  $\beta=-0.36$  at  $p<.01$ , while AE is  $\beta=-0.27$  at  $p<.01$ . This indicates that a negative but weak effect exists between AU and SE. Similarly, there is a negative effect between AU and IE, and AU and AE. The analysis also indicates a positive direct effect of IE ( $\beta=0.17$ ,  $p<.01$ ) and SE ( $\beta=0.37$  ( $p<.01$ )) on EP. While AE ( $\beta=-0.11$ ,  $p=.06$ ) has no significant effect on EP.



**Figure 5.1: Structural model results for the Nigerian sample**



**Figure 5.2: Structural model results for the UK sample**

As for the R<sup>2</sup> coefficient, which is also known as the coefficient of determination (Rigdon, 2012), the R<sup>2</sup> measures the variance that describes each individual endogenous construct. The R<sup>2</sup>s range from 0 to 1, with higher values showing a strong explanatory power. According to Hair et al (2011), R<sup>2</sup> values of 0.75, 0.50 and 0.25 can be regarded as important, moderate and weak, respectively. Raithel et al (2012) argue that acceptable R<sup>2</sup> values differ based on different contexts; for example, some disciplines might consider R<sup>2</sup> as low as 0.10. Chin (1998) and Henseler et al (2009) proposed that values of 0.67, 0.33 and 0.19 could be regarded as high, moderate and weak, respectively, while Hair et al (2018) state that when evaluating a concept that is inherently predictable, such as physical processes, R<sup>2</sup> values of 0.90 and higher might be reasonable, but indicative overfit; therefore, the R<sup>2</sup> should be interpreted based on the context of the study. Moreover, the current study uses as acceptable levels of R<sup>2</sup> values of 0.75, 0.50 and 0.25 to interpret the R<sup>2</sup>. In the Nigerian sample and from Table 6.21 the explanation of the R<sup>2</sup> values of the endogenous variables is as follows: the R-squareds for AU (R<sup>2</sup> =0.11), IE (R<sup>2</sup> =0.01), AE (R<sup>2</sup> =0.03) and SE (R<sup>2</sup> =0.08) are indicated to be weak, while R<sup>2</sup> for EP (R<sup>2</sup> =0.43) was close to moderate. Generally, the R-squared for actual use of internal social media

within the workplace (AU) and employee performance (EP) were 11% and 43%, respectively. In AU 11% of variances were explained by PU, PEU, PMS, PBC, PR and UA, while 43% of variances in employee performance (EP) were explained by IE, AE and SE.

In the UK sample and from Table 6.22 the explanation of the R<sup>2</sup> values of the endogenous variables is as follows: the R-squareds for IE (R<sup>2</sup>=0.13), AE (R<sup>2</sup>=0.07) and SE (R<sup>2</sup>=0.04) are indicated to be weak effect size, while AU (R<sup>2</sup>=0.27) and EP (R<sup>2</sup>=0.29) were close to moderate. In addition, the R-squareds for actual use of internal social media within the workplace (AU) and employee performance (EP) were 27% and 29%, respectively. In AU 27% of variances were explained by PU, PEU, PMS, PBC, PR and UA. While 29% of variances in employee performance (EP) were explained by IE, AE and SE. Thus, these correlations can be regarded as statistically meaningful and have good predicative ability. Table 5.13 and Table 5.14 summarise all the path coefficient values.

**Table 5.13: Path coefficients, p-values and R-squareds for Nigerian airlines**

Relationship	Path Coefficient	p-value	R <sup>2</sup>	Description
PU → AU	0.09	.15	0.11	Insignificant
PEU → AU	0.25	<.01	0.11	Positive, significant and weak
PMS → AU	0.07	.22	0.11	Insignificant
PBC → AU	0.08	.17	0.11	Insignificant
PR → AU	-0.02	.42	0.11	Insignificant
UA → AU	0.20	<.01	0.11	Positive, significant and weak
AU → IE	-0.11	.10	0.01	Insignificant
AU → AE	0.18	.01	0.03	Positive, significant and weak
AU → SE	0.29	<.01	0.08	Positive, significant and weak
IE → EP	0.32	<.01	0.43	Positive, significant and weak
AE → EP	0.22	.05	0.43	Positive, significant and weak
SE → EP	0.33	<.01	0.43	Positive, significant and weak

**Table 5.14: Path coefficients, p-values and R-squareds for the UK airlines**

Relationship	Path Coefficient	p-value	R <sup>2</sup>	Description
PU → AU	0.13	<.03	0.27	Positive, Significant and weak
PEU → AU	0.02	.38	0.27	Insignificant
PMS → AU	0.07	.15	0.27	Insignificant
PBC → AU	0.01	.44	0.27	Insignificant
PR → AU	-0.01	.44	0.27	Insignificant
UA → AU	0.46	<.01	0.27	Positive, Significant and moderate
AU → IE	-0.36	<.01	0.13	Negative, Significant and moderate
AU → AE	-0.27	<.01	0.07	Negative, significant and weak
AU → SE	-0.20	<.01	0.04	Positive, significant and weak
IE → EP	0.17	.06	0.29	Insignificant
AE → EP	0.11	.06	0.29	Insignificant
SE → EP	0.38	<.01	0.29	Positive, significant and moderate

**C) Measuring the effect size (F<sup>2</sup>)**

It is important to report the F<sup>2</sup> effect size in order to explain the presence of full or partial mediation (Nitzl et al, 2016). Hair et al (2018) suggested that F<sup>2</sup> should be “assessed to know how the removal of a certain predictor construct affects an endogenous construct’s R<sup>2</sup> value” (p.11). The F<sup>2</sup> measure can be calculated using the following formula:

$$F^2 = \frac{R^2 \text{ included} - R^2 \text{ excluded}}{1 - R^2 \text{ included}}$$

“R<sup>2</sup> included means dependent variables if the particular independent variable is used, while R<sup>2</sup> excluded refers to dependent variables if the particular independent variable is removed” (Chin, 1998b, p.316). According to Cohen’s (1988) guidelines, values higher than 0.02, 0.15 and 0.35 signify small, moderate and large F<sup>2</sup> effect sizes, respectively. Table 5.15 and Table 5.16 report the values for the effect sizes (F<sup>2</sup>) for the current study.

**Table 5.15: Effect sizes for the Nigerian airlines**

Relationship	Effect size	Description
PU → AU	-0.09	Weak effect
PEU → AU	0.25	Weak effect
PMS → AU	0.07	Weak effect
PBC → AU	-0.08	Weak effect
PR → AU	-0.02	Weak effect
UA → AU	0.20	Weak effect
AU → IE	-0.11	Weak effect
AU → AE	0.18	Weak effect
AU → SE	0.29	Weak effect
IE → EP	0.32	Moderate effect
AE → EP	0.25	Weak effect
SE → EP	0.33	Moderate effect

**Table 5.16: Effect sizes for the UK airlines**

Relationship	Effect size	Description
PU → AU	0.033	Weak effect
PEU → AU	0.003	Weak effect
PMS → AU	0.016	Weak effect
PBC → AU	0.002	Weak effect
PR → AU	0.002	Weak effect
UA → AU	0.228	Weak effect
AU → IE	0.131	Weak effect
AU → AE	0.075	Weak effect
AU → SE	0.041	Weak effect
IE → EP	0.064	Weak effect
AE → EP	0.040	Weak effect
SE → EP	0.181	Weak effect

Based on Table 5.15, it can be stated that in the case of the Nigerian airlines, effect sizes of PU, PMS, PBC, PR and UA were weak on actual use of internal social media platform in the

workplace (AU), whereas PEU and UA had a moderate effect on AU. Looking at the importance of endogenous constructs in predicting employee behaviour towards the use of internal social media platform for engagement in the workplace, AU has a moderate effect on AE and SE and weak effect on IE. In addition, it is also indicated that IE and SE indicators are primary predictors of employee usage of internal social media platforms for engagement and a primary predictor on employee performance (EP). While for the UK (see Table 5.16) it can be seen that the effect sizes of PEU, PBC and PR were weak on actual use of internal social media platform in the workplace (AU), whereas PU, PMS and UA had a moderate effect on AU. Looking at the importance of endogenous constructs in predicting employee behaviour towards the use of internal social media platform for engagement in the workplace, AU has a moderate effect on IE, AE and SE. In addition, it is also indicated that IE, AE and SE indicators are the main predictors of employee usage of internal social media platforms for engagement and a primary predictor of employee performance (EP).

#### *D) Predictive relevance of the model (Q<sup>2</sup>)*

Hair et al (2012) stressed the need to assess and report the Q<sup>2</sup> measure. The examination of Q<sup>2</sup> is important to evaluate the reflective inner model (Hair et al, 2017). Tenenhaus et al (2005) stated that Q<sup>2</sup> is a cross-validated R<sup>2</sup> between the indicators of an endogenous construct and all the indicators related to the constructs envisaging the dependent variables. Hair et al (2018) argue that the value of Q<sup>2</sup> needs to be larger than zero for an endogenous construct to show predictive accuracy of the structural model for that construct. The authors further argue that Q<sup>2</sup> values higher than 0, 0.25 and 0.50 are considered as small, medium and large predictive relevance of the model, respectively. Similarly, Henseler et al (2009) state that to consider a degree of predictive relevance value greater than 0.02, 0.15 and 0.35 should be regarded as small, moderate and large, respectively. In addition, in PLS, Q<sup>2</sup> is calculated by applicability of blindfolding (Chin, 1998), and can be calculated using the following formula:

$$Q^2 = \frac{Q^2 \text{ included} - Q^2 \text{ excluded}}{1 - Q^2 \text{ included}}$$

“Q<sup>2</sup> included means dependent variables if the particular independent variable is used, while Q<sup>2</sup> excluded refers to dependent variables if the particular independent variable is removed” (Chin, 1998b, p.318). Therefore, this current study examines Q<sup>2</sup> using a blindfolding procedure

to assess the predictive relevance of the research model (Ali et al, 2006). Table 5.17 shows the  $Q^2$  of the endogenous constructs in the Nigerian and UK samples.

**Table 5.17:  $Q^2$  of the endogenous constructs in the Nigerian and UK samples**

$Q^2$	AU	IE	AE	SE	EP
<b>Nigeria</b>	0.135	0.018	0.033	0.085	0.439
<b>UK</b>	0.291	0.129	0.070	0.041	0.283

As indicated in Table 5.17, it can be seen that in the Nigerian sample, some of the  $Q^2$  values are higher than zero and substantial while others are less than zero. Thus, it can be concluded that AU and EP constructs had a strong predictive relevance for the model, while IE, AE and SE had a weak predictive relevance; while for the UK sample, the interpretation of  $Q^2$  for AU, IE, AE, SE and EP are 0.291, 0.129, 0.070, 0.041 and 0.283, respectively, some of the  $Q^2$  values are higher than zero and substantial while others are less than zero. Thus, it can be concluded that AU, IE and EP constructs had acceptable predictive relevance for the model, while IE and AE had a weak predictive relevance.

### 5.3 Mediating Latent Variable Test (Direct and Indirect Effect)

The examination of mediating effect represents a way of explaining the hypothesized correlation between variables. In research, mediation is said to exist “if a predictor variable operates through an intervening or mediating variable to affect a criterion variable” (MacKinnon & Fairchild, 2009, p.17). Wong (2015) states that if the direct path is not significant, there is no existence of a mediating effect. Mediation analysis can be done in three different approaches, namely, the Sobel test (1982), Baron and Kenny’s (1986) mediation analysis and the bootstrap method (Preacher & Hayes, 2004, 2008). This study has 11 constructs. Examining the findings of direct and indirect relationships, the model suggested that AU and employee performance (EP) has been modelled as a mediator in answering the research question of whether AU mediates the relationship between the independent variables (PU, PEU, PMS, PBC, PR and UA), between AU and IE, AE and SE and between IE, AE, SE and EP. Based on this, significance of direct and indirect paths was estimated to verify these relationships; the p-values are substantial; thus it can be concluded that a full mediation effect exists in indirect effect. However, as hypothesized, Table 5.18 shows the mediation test results for the indirect effects.

**Table 5.18: Results of mediating indirect effect for the Nigeria and UK samples**

	Relationship	Nigeria		UK	
		Path coefficient	p-value	Path coefficient	p-value
<b>Effect through AU (with two segments)</b>	PU → IE	0.010	.437	-0.046	.174
	PEU → IE	-0.027	.329	0.007	.440
	PMS → IE	-0.007	.453	-0.026	.298
	PBC → IE	-0.009	.442	-0.004	.468
	PR → IE	0.002	.488	0.004	.471
	UA → IE	-0.021	.363	-0.165	<.001
	PU → AE	-0.016	.397	-0.035	.239
	PEU → AE	0.044	.231	0.006	.455
	PMS → AE	0.012	.423	-0.020	.345
	PBC → AE	0.015	.405	-0.003	.476
	PR → AE	-0.003	.480	0.003	.478
	UA → AE	0.035	.281	-0.125	.005
	PU → SE	-0.026	.336	0.026	.300
	PEU → SE	0.072	.116	-0.004	.466
	PMS → SE	0.019	.423	0.015	.384
	PBC → SE	0.024	.376	0.002	.482
	PR → SE	-0.005	.348	-0.002	.484
	UA → SE	0.057	.173	0.093	.028
	AU → EP	0.100	.117	-0.017	.405
<b>Effect through AU, IE, AE &amp; SE (with three segments)</b>	PU → EP	-0.009	.459	-0.002	.488
	PEU → EP	0.025	.385	0.000	.498
	PMS → EP	0.007	.469	-0.001	.493
	PBC → EP	0.008	.462	-0.000	.499
	PR → EP	-0.002	.492	0.000	.499
	UA → EP	0.020	.409	-0.008	.456

Based on Table 5.18, in the case of the Nigerian sample, it can be concluded that there are no mediation effects as significance values are greater than the threshold value 0.05. Similarly, with respect to the UK sample, it can also be argued that there are no mediation effects, except of AU between UA and IE, UA and AE, and UA and SE.

#### 5.4 Multi-group Analysis (MGA)

According to Kock (2013), multi-group analysis is an analysis that can be used for the standard error for the path coefficient. This section discusses the results derived from the path comparison and country comparison of the Nigerian and UK samples. The aim of performing MGA was to check whether the paths between the two group were significantly different or not. Similarly, the multi-group analysis method in partial least squares was used to relate differences between groups (Keil et al, 2000; Kock, 2014). The presence of the significant

differences in the path coefficients among the two compared models would suggest that moderators do have an effect on the path weight (strength) and direction. Comparing two samples in two different countries and comparing paths is conducted in both measurement and structural models.

#### 5.4.1 Country comparison

To get more convincing evidence of non-invariance in path coefficients across the two countries investigated, a multi-group analysis was conducted to evaluate the hypothesis model for both countries (Nigeria and the UK). This approach is well recognized in the literature, which allows testing of moderating hypotheses to improve the probability of finding significant and meaningful differences in several relationships across the specific group results. The findings show that the two countries have notable differences regarding adoption and usage of internal social media, which explain how employees in both countries have different factors that influence their intention and usage. The outcomes of the multiple-group analysis for the model for both countries are shown in Table 5.19.

**Table 5.19: Path comparison**

Relationship	Nigeria	UK	p-value
PU → AU	-0.089	0.125	.024
PEU → AU	0.249	-0.023	.005
UA → AU	0.199	0.457	.006
PMS → AU	0.066	0.072	.479
PBC → AU	0.082	0.013	.265
PR → AU	-0.017	-0.011	.478
AU → IE	-0.113	-0.362	<.001
AU → AE	0.180	-0.273	.212
AU → SE	0.288	0.205	<.001
IE → EP	0.310	0.178	.103
AE → EP	0.222	0.107	.139
SE → EP	0.335	0.369	.370

With respect to the factors that influence employee adoption towards usage of internal social media for employee engagement, the following was identified.

Perceived usefulness (PU) was found to influence the actual usage (AU) of internal social media positively and significantly in the UK and has a negative relationship in Nigeria. Whereas on the Perceived ease of use (PEU) on actual usage of internal social media (AU) the positive influence was only significant in Nigeria, while in the UK it was negative. Perceived management support (PMS) was found to have no significant influence on AU in both the UK and Nigeria. Similarly, the relationship between Perceived behavioural control (PBC) and AU is not significant in both countries. Also, Perceived relevance was noted to have no significant influence on AU in both countries. Uncertainty avoidance (UA) was found to influence employee usage and adoption of internal social media positively and significantly in both countries. Although the relationship between UA and AU is positive for both countries, it is stronger in the UK with the value of 0.457 as compared to Nigeria. (0.199) This means that UA is more important to the employees in the UK than it is to the employees in Nigeria.

In addition to the actual usage of internal social media (AU) towards intellectual engagement (IE) there were no significant differences between the two countries in the model's relationships. In the context of AU and IE the relationship between the two countries is inverse; this means that the higher the actual usage of internal social media, the less employees become intellectually engaged in both countries; the of the relationship is higher in the UK than in Nigeria: this suggests that in the UK, AU is far less important to employee intellectual engagement, with a value of -0.362 than in Nigeria with -0.113. The actual usage of internal social media was found to have a significant influence on affective engagement (AE) in both investigated countries. The relationship between actual usage of internal social media and affective engagement is stronger in Nigeria. This seems to indicate that use of internal social media has more impact on employee affective engagement in Nigeria; the reverse applies in the context of the UK. This also suggests that AU has more impact on the AE of employees in Nigeria than in the context of the UK. Additionally, AU was indicated to have a positive significant relationship with social engagement (SE) in both countries. As indicated in Table 5.19, all the three dimensions of employee engagement (IE, AE and SE) were found to have non-significant relationship with Employee performance (EP) in both Nigeria and the UK. The conclusion of this study is closer to the ideas of other studies, which is discussed in the next chapter.

Table 5.20 presents the summary of the research hypothesis validation for the Nigerian sample.

**Table 5.20: Research hypothesis validation for the Nigerian sample**

	<b>Research Hypothesis</b>	<b>Nigeria H(a)</b>	<b>UK H(b)</b>
<b>H1</b>	Perceived usefulness has a positive relationship with Actual use of internal social media	Not supported	Supported
<b>H2</b>	Perceived ease of use has a positive relationship with Actual use of internal social media	Supported	Not supported
<b>H3</b>	Perceived relevance has a positive relationship with Actual use of internal social media	Not supported	Not supported
<b>H4</b>	Perceived behavioural control has a positive relationship with Actual use of internal social media	Not supported	Not supported
<b>H5</b>	Perceived management support has a positive relationship with Actual use of internal social media	Not supported	Not supported
<b>H6</b>	Uncertainty avoidance has a positive impact on Actual use internal social media	Supported	Supported
<b>H7</b>	Actual use of internal social media has a significant impact on employee Affective engagement	Supported	Supported
<b>H8</b>	Actual use of internal social media has a positive impact on employee Intellectual engagement	Not supported	Supported
<b>H9</b>	Actual use of internal social media has a positive impact on employee Social engagement	Supported	Supported
<b>H10</b>	There is a positive relationship between Affective engagement and employee Performance	Supported	Not supported
<b>H11</b>	There is a positive relationship between Intellectual engagement and employee Performance	Supported	Supported
<b>H12</b>	There is a positive relationship between Social engagement and employee Performance	Supported	Supported

## 5.5 Summary

Table 5.20 indicates the result of each research hypothesis for Nigeria and the UK, and from the table, in respect to the Nigerian sample, it is indicated that H2, H6, H7 and H9–H12 are supported, where these hypotheses correspond to the research questions Q1–Q4; these imply that almost all the variables proposed in the research model are influential on employee usage

of internal social media platforms for employee engagement and impact on employee performance. On the other hand, the result of the hypothesis validation demonstrate that the extended internal social media engagement model proposed in this study did not support all the hypotheses in the Nigerian context, i.e., H1, H3 H4, H5 and H8 are not supported. While in the UK it is indicated that H1, H6, H7, H8, H9, H11 and H12 are supported, and in contrast, H2, H3, H4, H5 and H10 were not supported. However, such significant and insignificant effects were statistically different across the two countries. The next chapter discusses the results obtained in this analysis.

## CHAPTER SIX: DISCUSSION

### 6.0 Introduction

The previous chapters of this thesis have completed a critical synthesis of the Nigerian and UK adoption and use of internal social media for employee engagement and its impact on employee performance within the airline industry. An examination of the extant literature on the relationship between PU, PUE, PR, PMS, PBC and UA as the main factors and latent variables helped to formulate the main research questions. In explaining the influencing factors of internal social media usage for employee engagement, the researcher posited that relationships between PU, PEU, PR, PMS, PBC and UA were mediated by the role of AU to the extent that AU attributes directly influenced the outcome of IE, AE and SE. Thereafter, the main research hypothesis was developed pointing to causal relationships between the variables. The study took a realist ontology stance with quantitative design in order to test the main hypotheses. The researcher made a further choice by using PLS-SEM to evaluate the relationship between variables. The measurement indicators of each latent variable in the conceptual framework provided the essential basis to measure an adequate degree of relationship between a predictor variable and a dependent variable where no other reasonable causes for the outcome are present. This chapter discusses the main findings in light of the conceptual debate relevant to this thesis. In line with the research aim the results of this thesis are situated within the debate on the influence of internal social media on employee engagement and adoption. The importance and use of internal social media within the workplace for employee engagement is evidenced not only from the theory building perspective but, more importantly in practice, by demonstrating the value of internal social media in driving employee engagement within the airline sector. The next section jointly discusses the result of the analysis of both the Nigerian and UK data and linked to the study's research questions.

### 6.1 Discussion of the Research Findings

The evolvement of internal social media has changed the organizational internal communication landscape. Many airline companies have incorporated internal social media in engaging and communicating with not only their digital savvy employees but the geographically dispersed workforce. With internal social media becoming popular in organizations, recent studies have made effort to explore the benefit of internal social media.

Extending prior research, this thesis took an employee viewpoint and described the relationship between employee adoption and usage of internal social media, and employee engagement and its impact on employee performance.

In addition, the review of literature revealed that most of these works have neglected both the influencing factors of internal social media adoption on employee engagement and its potential in enhancing employee performance (Men et al, 2020). Indeed, it appeared that the little research looking at such initiatives has stressed the use of internal social media for employee engagement and overlooked their influencing factors on individual employees and their potential impact on employee engagement and performance (Oksa et al, 2020; Ewing et al, 2019; Madsen, 2018; Haddud, 2016; Parry, 2013). Consequently, it is still not clear what factor influences individual employees to adopt internal social media for employee engagement, especially in airline companies in different countries.

The current study seeks to understand what leads to adoption of such internal social media usage within the contexts of Nigeria and the UK. On the basis of an extended TAM model, the study investigates the influencing factors of internal social media for employee engagement and its impact on employee performance among airline employees within the contexts of Nigeria and the UK. While TAM has been extensively applied in western world, there have been limited studies on other parts of the world (Al-Gahtani, 2001). Additionally, there has been argument on whether TAM can be applicable across cultures, more especially in Nigeria. Straub et al (1995) suggested a need to understand whether the applicability of TAM applies in other regions of the world. However, given that differences in culture or environment play a role in shaping individual perception and group adoption of technology (Erumban & de Jong, 2006), the influencing factors may significantly differ and may not be applicable within African contexts such as Nigeria, especially within the workplace. Similarly, it is evident that previous research on internal social media adoption and usage for work purposes was mainly conducted in different sectors, such as education, IT, healthcare, public relations and banking. Hence, the adoption of internal social media for work purposes may not be applicable to the airline context.

The empirical literature looking at the connection between internal social media usage and employee engagement only focuses on employee engagement as a whole, thus neglecting the kind of engagement employees may derive when using internal social media, including what internal social media activities impact and target employees' intellectual, affective and social engagement, which leads to performance outcome. Moreover, many present studies on internal

social media and employee engagement have been carried out using qualitative methods, such as in-depth interviewing, case studies and participant observation (e.g., Ewing et al, 2019; Haddud et al, 2016; Madsen, 2016). As these research works have been useful in providing in-depth understanding and knowledge of what factors can influence the adoption and use of internal social media for employee engagement in airline companies within the context of Nigeria and the UK, this research extends this work by using a quantitative approach to test the relationship in a larger sample within Nigerian and UK airline companies.

Additionally, using the conceptual model to give account of the extent to which airline employees use internal social media for employee engagement in the workplace in the Nigerian and UK airline contexts, uncovering the contribution internal social media plays in employee engagement and its effect on employee performance, a set of research questions was developed to address the shortcomings identified in the technology communication and employee engagement literature. The following sections discuss each factor separately in order to explain the hypothesis test result. The major findings of the study are summarized and further discussed below.

## **6.2 RQ1 – Factors influencing employee adoption of internal social media platforms for employee engagement**

### **6.2.1 Perceived usefulness (PU)**

Perceived usefulness has been recognized to be an important factor in studies of information technology acceptance, with internal social media adoption in the workplace being no exception. Numerous studies have looked at the perceived usefulness of internal social media within the workplace in both developing and developed countries, where it has been indicated to have a significant influence on adoption and usage of technology. Within the context of internal social media usage within the workplace, several studies have confirmed these associations to hold true (Teo et al, 1999; Shin & Kim, 2008; Lederer et al, 2000; Pinho & Soares, 2011). Scholars have suggested that employees who feel positive about using technology believe that it would enhance their job performance (Sujatavani et al, 2019). These suggestions are in fact vital defining elements of perceived usefulness, which entails employees feeling positive and inspired to use technology when it can improve their performance.

Regarding the findings about the influencing factors of internal social media adoption, in Nigeria, H1a states that there is a positive relationship between PU and Actual usage of internal

social media (AU). This assumption is not supported, the findings indicate a non-significant statistical correlation between PU and AU; the finding contradicts the hypothesis of TAM and results of other empirical research that indicates a significant correlation between perceived ease of use and technology usage and adoption (Davis, 1989; Davis et al, 1989; Hubert et al, 2019; Trinh et al, 2020). The contradiction may be that employees are unsure if the use of internal social media for engagement is worthy or useful, as nearly half of them disagree or are neutral on whether the use of internal social media can improve their work and make them accomplish their tasks quickly. Additionally, employees may see no value in using internal social media platforms: it can be useful in general but not as a specific tool to enhance their work or personal goals. This supports the view of Lee and Lehto (2013), who indicated that all individuals may not be equally motivated and inspired to recognize the value of social media platforms for work, such as YouTube, Facebook, Myspace, etc., since it is commonly seen as a medium for social networking rather than work purposes.

In contrast, the analysis of the result supported H1b for the UK, which predicted that perceived usefulness positively and significantly impacts on employees' actual usage (AU) of internal social media platform for engagement activities. This result indicates that when employees perceived internal social media platforms for engagement activities useful, they accept and use the technology. In other words, perceived usefulness increased the level of positivity towards internal social media usage, which in turn influences employee attitude to use internal social media. The empirical result of this hypothesis produced a convergent result in support of the various literature that perceived usefulness to directly influence employees' attitude towards internal social media usage (Rodríguez-Aceves et al, 2016; Rauniar et al, 2014; Skoumpopoulou et al, 2018). This research coincides with the research by Skoumpopoulou et al (2018) who stated that staff are intrinsically motivated to use technology when they think it is useful to them; it is expected that employees would be part of a workplace internal social media platform that contains activities that will help them efficiently communicate about and collaborate on work-related projects to improve their performance. This has been indicated through the impact of Perceived usefulness on Actual usage of internal social media being greater in the UK than in Nigeria. Employees in the Nigerian airline context may be more interested in the benefit of using internal social media for work purposes.

### 6.2.2 Perceived ease of use (PEOU)

Several studies have found that Perceived ease of use (PEOU) is an important determinant of technology adoption and usage (Tarhini et al, 2013). The direct relationship between PEOU and intention to use a system were found to be inconsistent in different contexts. There are some claims that PEOU has a significant effect on intention to use a technology (Ajzen, 1991). They pointed that if individuals perceive a system to be easy to use, then they believe they have a total accessible control towards using the technology.

Regarding the result of the analysis, it is indicated that hypothesis testing H2a for Nigeria shows Perceived ease of use to have a significant influence on employee Actual usage of social media platform for engagement, which is consistent with previous study (Davis et al, 1989; Hamid, et al, 2016; Amadu, 2018; Trinh et al, 2020), which had to do with measuring the use of social media for collaborative learning and the use of technology in general. Within the context of airline companies as the focus of this research, the result of the analysis indicated that employees in Nigeria believe that using internal social media required less effort to use when regularly engaging with work-related activities such as uploading and sharing photos and video, generating ideas and sharing knowledge across teams and departments (Khare et al, 2012).

This study also concurs with various literature that shows that ease of use directly influences the behavioural intention to use workplace social media on individual technology acceptance (Venkatesh, 2000; Ramayah & Ignatius, 2005). As hypothesized, Perceived ease of use (PEOU) significantly affects Actual usage (AU) of internal social media. Hence, when the internal social media is simple and easy to operate and performs work-related activities, employees will have positive attitude towards using the platform for engagement. Employees may assess the platform based on how effortless it is to use, and how effective it is in helping them achieve their work-related goals. The features of the technology have an influence on adoption and usage, as for culture with high uncertainty avoidance as is found in Nigeria and Africa in general, more complication and complexity when using a technology can make individual employees develop less favourable perceptions about that system (Anandarajan et al, 2002). To support employees using internal social media platforms, the design of the platform needs to be user-centric and have a clear and uncomplex overview of activities and effective user interaction. The internal social media platform should be easy to navigate and clearly show the user their position within the platform. The platform should furthermore use

consistent and simple terms when adding content to the platform and when presenting topics for discussions and should be efficient in getting tasks done (Rauniar et al, 2014).

However, the analysis of the Nigerian result contradicts with H2b for the UK result, which indicates a non-significant relationship between Perceived ease of use on Actual usage of internal social media for employee engagement. In this study the results indicate that the correlation between Perceived ease of use and Actual usage of internal social media is insignificant for employees in the UK; the result was not statistically supported. The result finding of (PEOU → AU) suggests that even if PEOU is increased by one unit it will have no impact on actual use of social for employee engagement. The result shows that the extent of the insignificance is great given that  $\beta = -0.02$  (-22%). This means that PEOU does not seem to have significant effect on Actual use of internal social media for employee engagement in the UK. Also, it is not an enabler of or a key barrier against the actual usage of internal social media for employee engagement among employees in the airline sector in the UK. The results support earlier studies carried out in different sectors, which argue that PEOU has no direct impact on individual actual usage of technology.

Moreover, it is indicated that the impact of perceived ease of use on actual usage of internal social media was greater in Nigeria than in the UK. Therefore, implementing internal social media training and support should aim to increase employees' confidence in their ability to use the platform on their own, and to decrease levels of computer anxiety (Blok et al, 2020). Evaluation of the effect of PEOU and Actual use of internal social media in the airline sectors in Nigeria and the UK provides the aspect of originality of this work compared to the existing literature.

### 6.2.3 Perceived relevance (PR)

It is assumed that the individual's perception of internal social media relevance to their work will impact on adoption and usage. Using structured equation modelling, the current study examines the influence of perceived relevance and internal social media for employee engagement within the context of UK and Nigerian airline companies. The findings show that perceived relevance has insignificant influence on actual usage of internal social media in both Nigeria ( $\beta = -0.02$ ,  $p = -0.42$ ) and the UK ( $\beta = -0.01$ ,  $p = -0.44$ ); this means that the results do not support the idea that PR has a positive relationship with AU for employee engagement, thus H3a and H3b are not supported. Surprisingly, employee perceived relevance was not found to influence employees' attitude towards usage of internal social media for engagement. This

implied that the relevance of internal social media does not directly impact on employees' adoption and usage of internal social media for engagement and work-related activities. This also means that the perceived relevance does not matter when it comes to using internal social media. Belch et al (2009) state that for individual acceptance of social media platform, social media activities need to be relevant and effective in engaging their interest. This finding supports the idea that perceived relevance insignificantly influences individual intention to use an information system course for a sample of prospective business students (Govender & Naidoo, 2013). This also corroborates the results by Antonio et al (2017), which found that perceived relevance was not indicated to influence teachers' attitude towards educational video games. In addition, Perceived relevance plays a crucial role in employees deciding whether to adopt an internal social media platform for engagement, as they must determine if the platform is valuable to them. This is in line with numerous studies that found an individual's perceived relevance of internal social media content, and relevance for professional practice determine whether or not they would use them (Belch et al, 2009; Wilks & Neto, 2013; Ogunlade & Bello, 2019).

Belch et al (2009) state that for individual acceptance of a social media platform, social media activities need to be relevant and effective in engaging their interest. In addition, the finding also contradicts earlier social influence theory within social communication theory which posited that employees' perception of relevance between their needs and personal goals is an important basis for adoption (Lazarsfels et al, 1950). This non-significant relationship might be due to employees' perception that the content of the internal social media platform has no influence on them to become efficient in work environments (Carlson et al, 2016), and they therefore had no significant influence on their work performance. Cao et al (2016) argue that individuals have different views about social media use in the workplace and the influence on job performance. The result also implied that employees' adoption and usage of internal social media did not depend on the relevance of the software. This finding is expected in the airline industry in both countries were employees have similar work roles and responsibilities; and would prefer a platform that could contribute to a meaningful vision that inspires, motivates and enhances their work performance (Louie et al, 2016; Dunne et al, 2010). The perception of employees is influenced by the activities or information provided by the organization on internal social media platforms (Tehrani, 1990). Therefore, it is important for organizations to provide activities or information that are relevant to employees' own goals and needs (Hamilton, 1989) and enhances their professional development needs.

#### 6.2.4 Perceived behavioural control (PBC)

Perceived Behavioural Control (PBC) is the perception of an individual's ability to have control based on their abilities, skills and resources to perform a specific behaviour (Ajzen, 1991). It is suggested that perceived behavioural control influences intention and behaviour, and emphasis on individual perceptions of control, rather than actual control (Ajzen, 1991). In the context of this research, respondents who have the ability to adopt and use internal social media for engagement activities or work-related activities report higher intention of adoption and usage of the platform. The result from the structural model established non-significant correlation between Perceived behavioural control (PBC) and Actual usage of internal social media (AU) in both Nigeria ( $\beta=-0.08$   $p=.17$ ) and the UK ( $\beta=-0.01$ ,  $p=.44$ ). Hence, H4a and H4b are not supported. The result did not support the hypothesis that perceived behavioural control significantly influences employee adoption and usage of internal social media. The results were consistent with previous studies that indicated that individuals who have the abilities, skills, knowledge and resources to use technology or perform a specific behaviour will assume that such changes are not important and have no consequences for them (Armitage & Conner, 2001; Cheung & Darius, 2000; Parker et al, 1992). The result indicated that perceived behavioural control has insignificant effect on employees' actual usage of internal social media for employee engagement. It is believed that self-efficacy is an important factor in using technology and employees' self-efficacy and belief in their abilities and potential to use internal social media for employee engagement play an important function in employees believing that using the platform is within their control. Therefore, perceived behavioural control has no strong influence on employee adoption and use of internal social media for employee engagement, indicating that the higher the ability of employees in computer skills, the more likely the employees will be to adopt and use internal social media for work-related activities. Issues related to difficulty in using the platform such as inconvenience and cost of time due to low self-efficacy that may impede performance of adopting and using internal social media will not be a concern to them, as these employees have the capabilities required to use the platform.

However, this result contradicts the theory of planned behaviour (Ajzen, 1985) and other previous studies which state a positive relationship between perceived behavioural control and intention to use technology (Martinez & Lewis, 2016; Mehrnoosh & Dolatabadi, 2016; Henle et al, 2010). Authors assume that individuals can perform specific behaviours based on self-control which include internal factors (skills, personal abilities and information) and external

control factors such as resources, capabilities and opportunities (Martinez & Lewis, 2016; Mehrnoosh & Dolatabadi, 2016; Henle et al, 2010; Kang, 2006) which will determine their willingness to adopt an internal social media platform for engagement activities. Therefore, organizations should focus on how to provide and help employees gain the necessary skills, resources and opportunities to use an internal social media platform for engagement activities. Once employees have the perception of the presence of necessary resources and opportunities to use the internal social media platform, they will develop a positive attitude towards actual usage of the internal social media platform. Organizations should keep in mind that an internal social media engagement platform that reflects situational enablers (Venkatesh, 2000) creates an instinct towards internal social media usage for employee engagement.

#### 6.2.5 Perceived management support (PMS)

To better explain, predict and increase individual adoption and use of technology, perceived management support was one of the constructs predicted in this study to show why individuals accept or reject the use of technology, especially in organizations. The results of the analysis revealed a statistically insignificant relationship between Perceived management support (PMS) and Actual use of internal social media (AU) in both Nigeria and the UK. Thus, hypotheses H5a ( $\beta = -0.02$ ,  $p < 0.42$ ) and H5b ( $\beta = -0.01$ ,  $p < 0.44$ ) were not supported. The correlation coefficient showed that the insignificant relationship is slightly stronger in the UK than in Nigeria. This means that the adoption and use of internal social media has no direct influence on employee actual usage of internal social media for engagement purposes. Perceived management support was not found in this study as a critical factor affecting employee adoption and use of internal social media for employee engagement. The statistical data showed that employees are likely to adopt and use internal social media for employee engagement with or without the involvement or support of management; this indicates that perceived management support is unimportant to employee adoption and use of internal social media for engagement or work-related activities. The insignificant correlation between perceived management support and actual usage of internal social media implies that employees are not optimistic about management support for the usage of internal social media platform for engagement activities.

This comes as a surprise as this finding contradicts previous studies that considered PMS a relevant predictor of AU of technology such as social media (Chandra & Kumar, 2018; Thong et al, 1996; Haderi et al, 2018; Wang et al, 2010; Neufeld et al, 2007; Boonstra, 2013;

Ghobakhloo et al, 2012), Existing literature acknowledges that when employees perceive their managers to be supportive of use of technology such as social media they feel more positive about adopting and using the platform (Chong et al, 2009; Thong et al, 1996). The differences between the results of this study and previous studies could be explained by the type of technology used (Internal social media), culture (African vs Western), respondents (Employees) and the statistical analysis tool used in this study (SEM-PLS). This study recommends that airline companies should develop a supportive management environment for employees. Duan et al (2012) are of the view that resistance to IT adoption can be reduced if management has a positive attitude towards adoption of the system. This means that without management support the employees may face problems in usage and adoption of internal social media for employee engagement. This highlights the overall principle that management need to support and understand internal social media innovation, encourage employees to use the system, make it easier for them to understand the benefits of utilizing internal social media platform for employee engagement, allocate the needed resources and eliminate obstacles that may disrepute adoption and benefit that the new system will bring to supporting employees' tasks and the organization (Kinuthia, 2014).

#### 6.2.6 Uncertainty Avoidance (UA)

The role of uncertainty avoidance on technology adoption and usage has been examined in various research. The current study examined how uncertainty avoidance influenced employees' adoption and usage of internal social media for employee engagement within the workplace. The result of the structural model indicated a significant relationship between UA and AU in both Nigerian and UK airline companies; thus H6a ( $\beta=0.20$ ,  $p<.01$ ) and H6b ( $\beta=0.13$ ,  $p=.03$ ) were supported. This means that Uncertainty avoidance is an important factor that directly impact on employees' ability to adopt and use internal social media for employee engagement. Although the statistical correlation was similar in both countries, the relationship was stronger in the UK than in Nigeria. The result indicates that when employees see internal social media as uncertain and risky, they show concern, are less confident and feel uncomfortable towards using the platform to facilitate work-related activities. This finding is in line with previous research that supported the significant relationship between Uncertainty avoidance and Intention to use technology within the contexts of developing and developed countries (Usoro\_& Abiagam, 2018; Olasina & Mutula, 2015; Özbilen, 2017; Png et al, 2001; Sánchez-Franco et al, 2009). Authors argue the existence of a significant relationship between

uncertainty avoidance and technology adoption. It is acknowledged that the adoption of technology is linked with a heightened sense of initial risk and risky environment, which may lead to an individual's lower chance of technology adoption (Özbilen, 2017). The slight statistical difference found between Nigeria and the UK could be due to different underlying cultural values. It has been mentioned that countries with low uncertainty avoidance, such as the UK, have a higher rate of technology adoption and usage and willingness to try new things (Png et al, 2001; Sánchez-Franco et al, 2009); however, in such countries individuals do not like intensive rules and regulations, they feel restricted by rules (Frijns et al, 2013) which may increase uncertainty avoidance more especially in using new technologies. However, it is assumed that when internal social media used for employee engagement within the workplace are embedded with too many internal social media polices and guidelines, employees are less likely to use the platform for non-work activity, voice freely their opinion or help solve work-related problems (Pew Research Centre, 2016) which matters to them in freely and actively engaging with colleagues and may result in employees becoming more uncertainty avoidant.

Moreover, for employees to involve themselves in internal social media adoption and usage there should be a positive attitude towards the system which is proposed to give employees confidence to facilitate knowledge sharing and engagement. It is suggested that clear instructions, rules and regulations be spelled out so employees will know what is expected of them when using internal social media for engagement. Hancioglu (2014) claims that "individuals benefit from rules only when they need" (p.913). It can therefore be argued that for an internal social media platform to thrive, an organization must develop and maintain a favourable culture, develop clear and unambiguous rules, understand cultural difference in individual employees and allow variety of opinions, which will enable employees to feel free and motivated to nurture ideas through the internal social media (Usoro, 2018). This could help reduce uncertainty avoidance and make it easier for employees to adopt and use the internal social media platform for engagement.

### **6.3 RQ2 – Impact of internal social media usage on employee intellectual, affective, and social engagement**

#### **6.3.1 Actual use of internal social media (AU) and Affective engagement (AE)**

To understand the effect of Actual use of internal social media (AU) on Affective engagement (AE) in both Nigeria and the UK, the outcome of this study shows that actual use of internal

social media for employee engagement has a negative and significant relationship with affective engagement. This means that H7a ( $\beta=-0.18$ ,  $p=.02$ ) and H7b ( $\beta=-0.27$ ,  $p<.01$ ) were not supported in both countries. The findings indicate that actual use of internal social media for employee engagement has a negative effect on employee affective engagement. In this study, it is assumed that using internal social media has a negative impact on employees; and that employees may not develop excitement, interest and pleasure at being involved in different activities on internal social media or belong to a community or group on internal social media (Dessart et al, 2014). This finding provides preliminary evidence that usage of internal social media has negative relationship with employee affective engagement. This study contradicts the results of the research conducted by Bergami and Bagozzi (2000), Dessart et al (2014) and Neidlinger (2014), which state that a social media brand community is an environment where individuals develop strong emotional links among themselves and these aggregate into deep and long-lasting affective bonds. The authors also revealed that the emotions that an individual feel towards a social media brand community are strong and mainly positive and contain enjoyment and excitement. It is assumed that internal social media usage for employee engagement activities can only enhance employee experience and engagement if the activities on the internal social media can influence employees' deep feelings and thinking while interacting and collaborating with colleagues on work-related matters.

Although the relationship between Actual usage of internal social media and Affective engagement is negative and significant in both countries, the relationship is stronger in the UK than in Nigeria. The slight differences could be explained by cultural differences. In this study, assumptions of cultural differences were made based on individualism and collectivism in Hofstede's cultural model. Study supports that emotions in individualist countries (e.g., the UK) are interpersonal and subjective, while in collectivist countries (e.g., Nigeria) emotions are considered objective, relational and contextualized (Lutz, 1988). People in individualist cultures are more concerned with themselves than with the group. Therefore, opinions of the members of the group will not influence their decision to adopt the technology. On the other hand, people in a collective society are more concerned about maintaining a cohesive group; thus, they are expected to show more interest in adopting and using technology (Ebrahimi et al, 2010). Emotions have been proven to have essential effects in social media communication (Schreiner & Riedl, 2019). Previous studies have already shown that emotional content has the potential to grab attention and evoke the desired engagement (Teixeira et al, 2012; Schreiner & Riedl, 2018). Therefore, it is important for organizations to create internal social media

content with affective message in order to elicit emotions and subsequently to provoke engagement in social media” (Schreiner & Riedl 2019, p.198). Moreover, organizations need also to consider differences in culture; research has indicated that knowledge and belief are shaped by individual culture and environment (Harrison & Huntington, 2000); as individual perception and satisfaction level differ, differences in culture and environment play a vital function in shaping individual behaviour and group adoption of technology (Erumban & de Jong, 2006).

### 6.3.2 Actual usage of internal social media (AU) and Intellectual engagement (IE)

Part of this study’s conceptual model explores the effects of internal social media on intellectual engagement of employees within the contexts of Nigeria and the UK. The results showed that Actual usage of internal social media (AU) has a negative relationship with Intellectual engagement (IE) in both countries. This means that AU has a negative effect on employee intellectual engagement; therefore H8a ( $\beta=-0.11$   $p=.10$ ) and H8b ( $\beta=-0.36$   $p<.01$ ) are not supported. Findings of the study show that Actual usage of internal social media for employee engagement has a negative effect and insignificant on employee’s intellectual engagement in Nigeria and also has negative effect but significant on employee’s intellectual engagement in the UK. The findings further indicate that employees who use internal social media for employee engagement activities reported a low level of engagement in the intellectual dimension. This finding contradicts previous studies that found technology such as social media have a significant impact on individual intellectual engagement and improve cognitive function (Preciado-Babb et al, 2013; Sinclair & Grieve, 2017; Quinn, 2018). Also, the result finding contradicts other studies that indicated that social media satisfies intellectual needs of employees, and thus triggers their level of engagement (Reeve, 2012; Schindler et al, 2017; Naim & Lenka, 2017). This result means that if employees are unable to develop strong intellectual influence in using internal social media while interacting, sharing information, participating in deep processing of information and collaborating with colleagues, they are likely not to be engaged intellectually. Intellectual engagement is seen as a serious cognitive investment in doing an activity and may occur when an individual is involved in a specific task that deeply arouses their interest (Catherine et al, 2015). Therefore, it is important that employees go the extra mile and feel intensely curious when using internal social media to approach work-related tasks.

As indicated in the results above, the possible reason for the negative effect and the statistical differences in Nigeria and the UK may be due to the fact that different internal social media networks have different functional capabilities and collaborative features on offer (e.g., Facebook, Twitter and LinkedIn are used for connecting with people, building relationships, discussion forums, creating awareness and knowledge sharing; Instagram, Snapchat and YouTube are used for sharing photos, video and live video; while Reddit, Quora and Digg are used for discussion forums); as a result, different organizations use different internal social media platforms to engage employees. Thus, employee intellectual engagement can be influenced depending on the type of internal social media platform used, as well as the activities, information and interaction employees derive from using internal social media (O'Brien, 2016). Another possible reason could be whether employees have adequate skills in using internal social media or not. Tomas et al (2015) indicated that having inadequate skills in using technology can hinder individual intellectual engagement. Therefore, organizations may create contents or activities that appeal to employees' interest, arouse their curiosity and may even reflect their work objectives. The internal social media activities must be worthy of employee attention and time, and intellectually engaging. For example, organizations may allow employees to share various problems they encounter at work and let employees come up with various solutions for such problems in the future or encourage employees to produce short video or audio documentary on work-related matters.

Although this variation is in line with various research that indicated a non-significant relationship between social media and intellectual engagement, it has both practical and theoretical implications because the current study finding seems neither harmful nor helpful to organizations and practitioners. From a practical perspective, the study findings emphasized the need for organizations to find ways to intellectually engage employees on internal social media platforms; in theory, the study findings emphasize the importance of examining different kinds of internal social media platforms or activities that can influence employee intellectual engagement to prevent one-sided conclusion on the impact of actual use of internal social media on intellectual engagement.

### **6.3.3 Actual usage of internal social media (AU) and social engagement (SE)**

The statistical results reveal that the construct Actual usage of internal social media (AU) has positive relationship with Social engagement (SE) in Nigeria, H9a ( $\beta=0.29$ ,  $p<.01$ ), and negative effect in the UK, H9b ( $\beta=-0.20$ ,  $p<.01$ ). This means that Actual usage of internal social

media for employee engagement has a direct impact on employees in Nigeria and has negative impact on employees in the UK. This result indicates that actual usage of internal social media was found to be significant and a strong factor in forecasting social engagement for airline employees in Nigeria. The result for Nigeria further indicated that employees are socially engaged when they have a higher level of social relationship with colleagues, when they become part of online communities where they can comment and contribute useful and relevant content that solves work-related problems, thus feeling involved and valued among colleagues with similar interests. This means that the intra-organizational online community, such as the internal social media which provides opportunities for employees to transfer knowledge, share their opinions and new ideas, and provide feedback on organizational policies and processes plays a critical role in enabling employee social engagement within the organization (Sharma & Bhatnagar, 2016).

The result finding for Nigeria is consistent with past literature that found that use of technology may be correlated with social engagement in individual daily life (Chiu, 2019; Kearsley & Shneiderman, 1999). Czaja et al (2017) also found that using technology such as social media sites was associated with a high level of mental and physical wellbeing which is an important benefit of social engagement. Other authors also indicated that technology enabled shared values between people, and enhanced the intra-organizational relationships between peers, thus leading to social engagement (Moorman et al, 1993; Nohria & Eccles, 1992). However, this contradicts the result findings for the UK data. Moreover, from a practical viewpoint, the indicated correlation between the two constructs (AU and SE) may be relevant to organizations and practitioners in Nigerian and UK airline companies who want to successfully design and implement internal social media for employee social engagement within the workplace. It is suggested that when designing an internal social media, the platforms should contain activities that will enable employee involvement, participation, collaboration and interactive communication to engage them socially (Sharma & Bhatnagar, 2016). There is a growing need for organizations and practitioners to understand workforces and what kind of internal social media activities can actively deepen employees' social engagement level. In addition, the results of the study for H7, H8 and H9 have helped to successfully answer RQ2. Although the current study supports previous studies with mixed findings reported in the literature about significant and non-significant influence of social media platforms on affective, intellectual and social engagement, no study has reported the influence of internal social media on affective, intellectual and social engagement on individual employees within the contexts of

developing and developed countries. The results highlighted the impact of internal social media platforms and the extent to which internal social media can enhance affective, intellectual and social engagement of individual employees within the airline companies in two culturally different countries. The evaluation of effect of Actual use of internal social media on different dimensions of employee engagement in these airline sectors provides the aspect of originality of this thesis regarding the existing literature.

## 6.4 RQ3 – The impact of intellectual, affective, and social engagement on employee performance

### 6.4.1 Affective engagement (AE) and Employee performance (EP)

One of the objectives of this study is to analyse the effect of Affective engagement (AE) on Employee performance (EP). The result of the analysis revealed that Affective engagement has a positive impact on employee performance; thus, hypothesis H10a ( $\beta=0.22$ ,  $p<.1$ ) is supported. This means that Affective engagement is significant and has a direct influence on employee performance. In the literature, it was stated that social media content generates both positive and negative emotions. According to this study, positive content was mainly shared, as internal social media were only used for work purposes within the workplace, thus triggering employees' positive emotions, like happiness, satisfaction and admiration, which impact positively on their performance. The results further show that work practice that encourages employee involvement (for example, engaging activity on internal social media) makes employees feel positive, energized and enthusiastic about their work, and can create emotional attachment that results in improved employee performance. This means that employees become affectively engaged through enthusiasm and enjoyment of the interactions they have with colleagues. Both emotions and feelings are great forces that drive employee affective engagement which results in increased performance. Based on the higher individual employees are affectively engaged, the higher their performance; the less alert and disengaged they are, the lower their performance. The emotions that the employees feel towards communicating, collaborating and sharing knowledge may be strong and mostly positive, which could lead to positive employee performance. The result is consistent with numerous literature that confirm that affective engagement has a significant relationship with employee performance (Podsakoff et al, 2000; Meyer et al, 2004; Riketta, 2005; Zhang & Zheng, 2009). These authors state that affective engagement is an important dimension for employee performance, and that a sense of

belonging contributes to higher employee affective engagement, thus increasing employee performance.

However, the result indicates that the effect of Affective engagement on Employee performance in Nigeria and the UK were found to be statistically different. This means that H10b ( $\beta=-0.11$ ,  $p=.06$ ) is not supported. The result indicates negative and insignificant effect. This implies that employee affective engagement did not impact on employee performance in the case of using internal social media for engagement activities in the UK context. The result suggests that if employees' effort and personal initiatives are not supported, while engaging on internal social media activities, this will make them become less committed and less positive about doing their work, thus impacting negatively on employee affective engagement; this therefore indicates that negative emotions, lack of energy and apathy are factors that impact employee affective engagement, resulting in poor performance (Kurnia, 2016). The result of this study did not agree with the result of the research conducted by Riketta (2005) and Podsakoff et al (2000), which urged that the emotional attachment an employee has in the workplace while doing work-related activities using technology such as social media platforms has been indicated to be associated with increased employee performance. Moreover, the difference in result between Nigeria and the UK may be explained by differences in the individuals and work environments; it could be assumed that possessing emotional engagement alone cannot help enhance individual performance unless the emotions are used effectively to achieve goals and destiny (Kumar, 2014). This then means that when individual employees develop a high emotional engagement level, they can gather and regulate their emotions accurately and then use the information to make decisions and enhance their performance by changing their behaviours in a desired manner to achieve work-related goals. Therefore, the result of the study clearly reveals that emotions and feelings which are the catalyst of affective engagement are important to employees' performance. As a consequence, an organization using internal social media for employee engagement must be able to provide activities to influence employees' feelings, emotions and enthusiasm. Hence, this will help to improve employee performance.

#### **6.4.2 Intellectual engagement (IE) and Employee performance (EP)**

This current study confirms a significant relationship between Intellectual engagement and Employee performance in both Nigeria and the UK; thus H11a ( $\beta=0.32$ ,  $p<.01$ ) and H11b ( $\beta=0.17$ ,  $p<.01$ ) are supported, which means that employee intellectual engagement has a direct

impact on employee performance. When employees are intellectually engaged, they show better commitment to mastery of task, which motivates employees to perform at their highest potential at all times, therefore improving the overall performance. The finding further indicated that when airline employees in both countries dedicate their intellectual resources to their work by being involved in tasks or activities that develop their creative and critical thinking, it leads to high performance.

The results of this study are consistent with the previous studies conducted by Bircan and Sungur (2016), Paris and Paris (2001), Pintrich and Garcia (1991) and Pintrich and De Groot (1990), who argued that intellectual engagement is a strong predictor of performance, since it can lead to an individual's positive behaviour. This supports the notion that intellectual engagement is significantly associated with a number of catalysts, including dedication, vigour and positive emotion, which broaden an employee's thinking (Shantz et al, 2013). According to Arani (2013), organizations that enhance intellectual engagement can create enthusiastic employees, which in turn leads to a higher level of employee performance. In addition, it is evident that the commitment and dedication related to intellectual engagement allow employees to become fully engrossed and show more engaged behaviour in their work, leading to high performance outcome (Otieno et al, 2015). Moreover, the result shows that in order to improve employee intellectual engagement that can lead to good employee performance, it is important to design internal social media platforms that incorporate activities of mental strategy and deep processing. Bearing these points in mind, it is proposed that empowerment, training, question and answer sessions, contest, and giveaways, as well as encouraging employees to join in discussion, can make employees psychologically present at work, which may result in improved employee performance.

#### **6.4.3 Social engagement (SE) and employee performance (EP)**

The result presented shows that there is a significant relationship between Social engagement (SE) and Employee performance (EP) in Nigeria and the UK; thus hypotheses 12a ( $\beta=0.33$ ,  $p<.01$ ) and 12b ( $\beta=0.37$ ,  $p<.01$ ) are supported. This means that employee social engagement directly impacts on employee performance. The result indicates that if employees are socially engaged by associating and collaborating directly and indirectly with their colleagues through the effect of identity on goals, value and attitudes, their performance will increase. The result further indicates that employees who perceive positive social relationships or connections and

a high involvement level in social activities, where colleagues engage in productive activities that create goods or services of value, were more likely to show better performance.

This result supports previous studies that show that social engagement leads to increased employee performance (Khan, 1990; Rowe & Kahn, 1997; Joiner & Bakalis, 2006; Soane, 2012; Maha, 2015; Atambo & Momanyi, 2016). The positive effect of social engagement on employee performance is consistent with social identity theory (Tajfel & Turner, 1985). Social identity theory argues that being part of a team is suggested to be important to an individual's self-esteem, thus developing a greater motivation and satisfaction at work which result in increased employee performance. This gives further support to social identity theory, which states that when individuals perceive that they are part of a specific social group, and place high importance and pride in the people they belonged with, it contributes to positive employee performance. The current study emphasises the need for organizations to create an effectively communicating, collaborating and motivating internal social network where employees can bond with colleagues and enhance interorganizational relationships for transfer of personal and technical knowledge (Nohria & Eccles, 1992). This is to ensure better performance of the employee. Study has shown that shared values can help employees make better decisions; hence, this will help to improve employee performance (Titov & Umarova, 2017).

#### **6.5 RQ4 – Differences in the influence of internal social media usage on employee engagement and performance of airline employees in the UK and Nigeria**

From this study the three dimensions of engagement were operationalized, including Intellectual, Affective and Social engagement. The findings indicated differences between the UK and Nigeria in that Actual usage of internal social media has a negative influence on employee Intellectual engagement (IE) ( $\beta=-0.11$ ,  $p=.10$ ) and Affective engagement (AE) ( $\beta=-0.18$ ,  $p=.02$ ); and has a positive effect on Social engagement (SE) ( $\beta=0.29$ ,  $p=.01$ ) in Nigeria. While in the UK Actual usage of internal social media has a negative but statistically significant effect on employee Intellectual engagement (IE) ( $\beta=-0.36$ ,  $p=.01$ ); Affective engagement (AE) ( $\beta=-0.27$ ,  $p=.01$ ); and Social engagement (SE) ( $\beta=-0.20$ ,  $p=.01$ ). The analysis of the result indicated differences between Actual usage of internal social media and Social engagement in the UK and Nigeria. The result shows that there is a negative effect between Actual usage of internal social media on SE in the UK, while in Nigeria there is a positive effect between Actual usage of internal social media on Social engagement.

Additionally, the result also indicated that Intellectual, ( $\beta=0.32$ ,  $p<.01$ ), Affective ( $\beta=0.22$ ,  $p<.01$ ), and Social media engagement ( $\beta=0.33$ ,  $p<.01$ ), have positive effect and significant impact on Employee performance in Nigeria, while the model also showed positive effect between Intellectual ( $\beta=0.17$ ,  $p<.01$ ) and Social engagement ( $\beta=0.37$ ,  $p<.01$ ) on Employee performance, but indicated a negative effect between Affective engagement ( $\beta=-0.11$ ,  $p<0.06$ ) and Employee performance in the UK. This indicated that there is difference in the influence of Affective engagement on Employee performance in the UK and Nigeria. From the differences between Nigeria and the UK regarding influence of Actual usage of internal social media on employee Intellectual and Affective engagement, and Employee performance, it can be concluded that when employees engage with creating shareable and relevant content, they are more likely to engage intellectually. The result is consistent with other existing works in the literature: the examination of internal social media use on employees' intellectual engagement and employee performance has yielded mixed conclusions. For instance, Haddud et al (2016), Sievert and Scholz (2017), Ruck et al (2017), Ewing et al (2019) and Men et al (2020) found that use of internal social media has an effect on dimensions of employee engagement (i.e., intellectual, affective and social) which impact on employee performance, while the studies by Kraut et al (1998), Turban et al (2011) and Parker et al (2014) did not find any relationship. This means that internal social media drives intellectual, affective and social engagement by improving communication and collaboration, through reading and sharing the organizations and co-workers' posts and engaging in one-on-one or group conversations with management or colleagues which improve their understanding of the job and organization, reinforce connections with one another and offer alternate medium to voice their opinions (Ruck et al, 2017). "Such interactive processes can possibly improve employees' attentiveness, absorption and sense of purpose at work, which contributes to their increased level of engagement" (Men et al, 2020, p.3), which in turn impacts positively on their performance. The differences between Nigeria and the UK are expected because individuals actively use and engage with the various platforms differently based on distinctive characteristics that each platform offers regarding interface, functionalities, and content (Hilde et al, 2018).

## 6.6 Summary

This chapter provided a comprehensive examination of the main findings of this thesis in light of the current debate provided by the extant literature. The discussions accord with the study's main aim in explaining the factors influencing employee adoption and usage of internal social

media for employee engagement and impact on employee performance. The research shows that different aspects of factors that influence employee adoption and usage of internal social media for employee engagement and impact on employee performance are statistically and empirically variously significant and nonsignificant for employees in Nigerian and UK airline companies. In this regard, the implication for factors influencing employee adoption and usage of internal social media for employee engagement and the impact on employee performance have been determined. The result shows some similarities and differences between the countries. Within the Nigerian airline context, it was indicated that PEU and UA was statistically significant with Actual use of internal social media for employee engagement, while in the UK airline context PU and UA was statistically significant; this implies that these factors are important for adoption and usage of internal social media as a tool for employee engagement in these countries, respectively. On the other hand, the finding shows PU, PMS, PBC and PR to have a non-significant statistical correlation with Actual usage of internal social media for employee engagement in the Nigerian airline context, and PEU, PMS, PBC and PR in the UK airline context; this clearly reveals that these factors do not directly impact on employees' usage of internal social media for employee engagement. In addition, the result also indicated some differences and similarities regarding Actual usage of internal social media for employee engagement: in the Nigerian airline context Actual usage of internal social media has no direct influence on employee intellectual engagement, but directly influences employees' intellectual engagement in the UK airline context.

Moreover, the result indicated similarities in the relationship between Actual usage of internal social media on employee Affective and Social engagement in both Nigeria and the UK. This implies that employees in both Nigeria and the UK demonstrated the same aspect of engagement while using internal social media for work-related purposes. This finding is expected because employees in the airline sector using internal social media for employee engagement would prefer an internal social media platform that enables them to collaborate, create and share useful content, and connect with people outside of their immediate departments and teams. The intention and willingness of employees to use internal social media is influenced by the activities and information that help them to achieve work-related goals and enhance their performance.

These findings are in line with previous studies on internal social media and employee engagement in the organization context across various industry and country contexts. Thus, the study's main findings provide reliable explanations for the factors that influence employees to

use internal social media for employee engagement and for the impact on employee performance.

## CHAPTER SEVEN: CONCLUSIONS AND IMPLICATIONS

### 7.0 Introduction

This chapter provides an overview of the thesis in accordance with the research aim and objectives. The work aims to address the gap in the technology acceptance research by developing an enhanced technology acceptance model able to explain employees' use of internal social media for employee engagement, and its impact on employee performance in the airline sector within the contexts of Nigeria and the UK. The model developed consists of eleven variables, which can be divided into nine external variables and two TAM constructs. In addition, the research aimed to examine the effect these variables have on employees' adoption and actual usage of internal social media for employee engagement, and its impact on employee performance in both countries. Moreover, the chapter summarizes the main findings and the researcher's contribution to knowledge. It then presents the study's implications and limitations before concluding with recommendations for further research.

### 7.1 The Study's Main Conclusions (Research Overview)

Nowadays, organizations are using internal social media for employee engagement. With social media becoming a new communication medium for organizations, many organizations have started to adopt various social media platforms to communicate, connect and improve engagement internally. Factors such as Perceived usefulness (PU), Perceived ease of use (PEU), Perceived relevance (PR), Perceived management support (PMS), Perceived behavioural control (PBC), Uncertainty avoidance (UA), Actual use of internal social media (AU), Intellectual engagement (IE), Affective engagement (AE), Social engagement (SE) and Employee performance (EP) form the main question that this thesis answers. The result showed the significance of these variables towards employees' adoption and usage of internal social media for employee engagement in both Nigeria and the UK. Among the eight external variables, PU, PEU, PR, PMS, PBC, UA, IE, AE and SE, examination of these influencing factors of internal social media usage for employee engagement within the Nigerian and UK airline contexts revealed differences and similarities in employees' adoption behaviour. The examination indicated UA to be most influential factors affecting employees' decision to adopt and use internal social media for employee engagement in both Nigerian and UK airline companies. This indicates that incorporating the Uncertainty avoidance aspect, which hinders

employees' actual usage of internal social media for employee engagement, will directly motivate them to accept the system. In addition, PU directly influenced employee adoption and usage of internal social media for employee engagement in the Nigerian airline sector, while PEU influenced employees in the UK airline sector. Regarding AU on the dimension of employee engagement, AU impacts on IE, AE and SE of employees in the UK airline sector. Moreover, AU played a significant role in influencing AE and SE of employees in the Nigerian airline sector. The developed model results confirmed the importance of external variables to explain employees' adoption and usage of internal social media for employee engagement in the Nigerian and UK airline sectors. Finally, the multi-group analysis revealed that differences between the countries do exist in the developed model. The countries' differences were mainly between the external variables towards TAM constructs and the dimension of employee engagement.

## 7.2 Meeting the Aim and Objectives of this Thesis

The research aimed to develop an enhanced technology acceptance model to explain employees' Actual usage of internal social media for employee engagement and impact on employee performance in the Nigerian and UK airline sectors. Consequently, the research proposed four objectives to address the research aims. This section explains and summarizes each objective and how it was achieved.

### **To assess the factors that influence employee usage of internal social media in the workplace:**

In relation to the two adopted TAM constructs (PU and PUE) the examination revealed that PEU is consistent with TAM study in Nigeria but inconsistent in the UK, while PU is consistent with TAM study in the UK and contradicts TAM study in Nigeria. The current findings prove that PUE is important in internal social media adoption and usage in Nigerian airline companies, while perceived usefulness (PU) is important in internal social media adoption and usage in UK airline companies. This means that airline employees in Nigeria are more concerned about the ease of use of internal social media platforms and they are likely to use the platform when they find the platforms are easy to use, while in the UK, employees are willing to use internal social media platform for engagement activities depending on their need and perceived usefulness of the internal social media platform. As a consequence, when an internal social media platform meets the need of employees and the activities are likely to help

improve their work, there will be positive attitude towards its actual usage. The result also indicates that employees in Nigeria and the UK prefer more information, expectations, rules and regulations spelt out for them in order to help them overcome barriers and allay their uncertainties about the platforms. This allowed this researcher to identify the most influential factors impacting employees' adoption and usage of internal social media for employee engagement. The result indicates that the research model provided a good explanation of what factors affect employees to use internal social media for employee engagement within the UK and Nigerian contexts.

**To examine relationship between usage of internal social media and employees' affective, intellectual and social engagement:**

The second objective was to explore the extent to which adoption and usage of internal social media platforms drives employees' IE (Intellectual engagement), AE (Affective engagement) and SE (Social engagement) as part of the variables and to develop a theoretical model where the relationship between IE, AE, SE and AU can explain their links. To this effect, their direct relationship was argued in Chapter Two using the extant literature to hold that Affective, Intellectual and Social engagement had an impact on individual use of technology such as social media. Thus, the conceptual model was hypothesized on a significant relationship between the three variables, IE, AE and SE and their measurement indicators. There are differences and similarities regarding outcome of usage of internal social media for employee engagement in both countries. In the Nigerian context, there is no statistical evidence on the effect of internal social media usage on employee intellectual engagement, while in the UK, the usage of internal social media impacted on employee intellectual engagement. However, the examination shows that in the Nigerian context there is a gap between the possibility and actuality of employees using internal social media for work-related purposes to achieve their tasks. Additionally, based on the research model in Chapter Five, we can see that the airline companies in Nigeria and the UK have similar outcomes. Employees in both countries demonstrated Affective and Social engagement when using internal social media for employee engagement. Internal social media usage for employee engagement within the workplace can thus play a part in improving employee Affective and Social engagement, a potential which should be better understood by organizations in both developed and developing countries.

**To assess the relationship between employees affective, intellectual, and social engagement and employee performance:**

The third objective was to evaluate the impact of intellectual, affective and social engagement on employee performance within the context of this study. This began with a choice of appropriate methodology, where a realist ontological position was taken with a data analysis design technique using PLS-SEM, as covered in Chapter Four. An instrument of the research was developed from the measurement indicators of the variables as described in the conceptual model and was tested on the sample population. Different employees in airline companies in Nigeria and the UK responded to the survey. Descriptive statistics show that the 136 and 207 respondents in the Nigerian and the UK samples, respectively, were fully representative of the populations, and reliability and validity tests were all satisfactorily. Hypothesis testing confirmed that IE and SE have a direct effect on EP in both Nigeria and the UK, while the direct impact on AE and EP is different in both countries. In Nigeria AE has an impact on employee performance, while in the UK AE has no impact on employee performance. AE is seen as an important factor of employee performance in Nigeria. The finding also indicated that actual usage of internal social media has a profound effect on employees' affective and social engagement in Nigerian airline companies and that employee affective, intellectual and social engagement have influence on their performance, while in the UK, actual usage of internal social media has influence on employees' intellectual and social engagement and that intellectual and social engagement have a profound effect on employee performance.

In accordance with extent literature, employees who are emotionally engaged show greater dedication, feel excited and take pride in their work, are more likely to show greater employee performance. Additionally, this study indicates the mediating role of internal social media on employee performance through employee engagement, as highlighted in Chapter Three, when employees use work-oriented internal social media platforms and can achieve positive work-related outcomes such as greater work-related knowledge, building and maintaining social ties with colleagues over the platforms, obtaining meaningful information from knowledge communities and improving communication effectiveness, they become fulfilled and more engaged; hence, their job performance improves. Therefore, based on this phenomenon, organizations should provide internal social media activities that can impact on employee engagement; the amount of affective, intellectual and social engagement perceived as received from work-related activities influences employee performance.

**To understand differences between Nigeria and the UK regarding factors that influence internal social media use, and impact on employee engagement and employee performance**

The fourth and the final objective of this study is to understand differences between Nigeria and the UK regarding influence of internal social media adoption on their engagement and the impact on employee performance. A detailed examination of the results shows that there are differences regarding adoption of internal social media for employee engagement, with regards to influencing factors of adoption and usage of internal social media for employee engagement, as highlighted in the first objective, within the Nigerian airline context as covered in Chapter Six, focusing on factors that influence employees' actual usage of internal social in order to provide explanation towards the research aim and attain the study's main aim. Perceived ease of use (PEU) was indicated to have a direct impact on employee adoption of internal social media for employee engagement in Nigeria, while in the UK airline context perceived usefulness (PU) was indicated to have an impact on employees' adoption and usage of internal social media for employee engagement. In addition, the findings also differ in regard to the impact of actual usage of internal social media on employee engagement. Examination of the results shows that actual usage of internal social media for employee engagement has no direct impact on employee intellectual engagement (IE) in the Nigerian airline context, but has a direct impact in the UK airline context; this means that IE was an important factor in internal media usage for employee engagement. Furthermore, this study demonstrates differences in the impact of employee engagement on employee performance in both countries. The analysis also found that employee affective engagement has no direct impact on employee performance among airline employees in the UK, while there is a direct impact on three dimensions of employee engagement (Intellectual, Affective and Social) on employee performance in the Nigerian airline context. Moreover, the results further reveal that in Nigeria when employees perceived internal social media platform as engaging, they developed affective, intellectual and social engagement towards using them for their work, which in turn improves their performance; in regard to the UK, the results clearly reveal that actual usage of internal social media improves employee intellectual and social engagement and it is an important factor for employee positive performance.

Finally, this study reveals that the effect of internal social media on employee affective, intellectual and social engagement is heavily dependent on the kind of internal social media

platform, and the quality of content and activities on internal social media; by this means employees are empowered to boost their performance. This study also revealed that when employees use internal social media for employee engagement and feel comfortable interacting, and sharing information and knowledge, they obtain information necessary to do their work. Therefore, an organization needs a well-defined internal social media engagement strategy that incorporates quality and engaging and optimizing contents and activities in order to promote the adoption and usage of internal social media for employee engagement. For employees, using internal social media for employee engagement may be a challenging task, as some employees in Nigeria may not have the necessary skills and capabilities needed for the use of internal social media for engagement. In order to increase the level of possibility of internal social media engagement, adoption and usage, the platform should be easy and useful, the organization should eliminate barriers to efficient and effective use by giving training to employees to enable adoption and usage of internal social media for employee engagement. The organization must incorporate social media content with a deep understanding of individual affective, intellectual, and social engagement factors. Thus, successfully facilitating internal social media adoption must address intellectual, emotional, and social concerns. These factors have important influences on employee engagement and performance. The findings suggest a more prominent focus on factors that influence and directly impact on employees' ability to adopt and use internal social media for employee engagement by researchers and organizations in developed and developing countries, more especially in Nigeria where there are limited studies on the factors that impact employees' adoption and usage of internal social media or technology in general for employee engagement within the workplace.

### **7.3 Key Findings of this Thesis**

This thesis has attempted to examine factors influencing employee adoption and usage of internal social media for employee engagement and its impact on employee performance in the UK and Nigeria. The key findings from the fieldwork indicated that Perceived ease of use (PEU) plays a crucial role for the adoption and Usage of internal social media for employee engagement for airline employees in Nigeria and are the key acceptance factors: the finding supported the first hypothesis (H1) and agreed with existing literature that accessibility, flexible to interact with, being skilful at using internal social media and lower complexity had great impact on the adoption and usage of internal social media for employee engagement. However,

there was no similarly statistically significant relationship found in the UK (H2); the relationship between Ease of use and Actual usage of internal social media was non-significant.

Second, the findings indicated that perceived usefulness (PU) had a significantly greater relationship with Actual usage of internal social media within airline employees in the UK than in Nigeria: the factor reflects the general concern among airline employees in the UK about having the ability to improve their performance and increase their productivity by using internal social media and consider this factor as significant when they are concerned about whether using internal social media would enhance their effectiveness on the job. In other words, when Internal social media functions and its ability to engage employees with work-related activities, and to motivate and enhance their performance, employees would perceive the platform as being useful and sufficient for their needs. Hence the adoption and usage decision may be influenced by the usefulness of the internal social media. However, this finding was insignificant among airline employees in Nigeria: perception about the usefulness of internal social media was not significant to the employees and thus did not influence the adoption and usage decision. The significant finding for both the UK and Nigeria finds support within the original TAM framework and other existing literature, suggesting the significant relationship between Perceived ease of use and Perceived usefulness of technology usage.

Lastly, the third key finding indicted that Uncertainty avoidance has a statistically significant relationship with Actual usage of internal social media in both the UK and Nigeria. This means that Uncertainty avoidance has a significant relationship with Actual usage of internal social media: therefore, H6a and H6b were supported. The finding indicated concern about uncertainty associated with using internal social and suggest that the employees recognized the uncertainty and risk which may influence their decision to adopt and use internal social media for employee engagement. The similarities in adoption and usage behaviour among airline employees in both countries (the UK and Nigeria) shows the importance of trust, written rules and lower risk when using internal social media for employee engagement within the workplace. These findings provide valuable insights into the potential factors that may impact the current and future adoption and usage of internal social media for employee engagement among airline employees in the UK and Nigeria.

## 7.4 The Researcher's Contribution and Novelty

This study makes several contributions to the body of knowledge in the information technology and human resources management domain. The study has implications for the theoretical and practical understanding of the influencing factors of internal social media usage and understanding the effect of internal usage media on employee engagement and impact on employee performance.

### 7.4.1 Implications for theory

The study's conceptual model makes a significant step in explaining the relationship between predicated factors and actual usage of internal social media for employee engagement. This research proposes a framework based on an extended technology acceptance model. The research enhanced the technology acceptance model to explain employees' adoption and actual usage of internal social media for employee engagement and its impact on performance in Nigeria and the UK. The developed model accounted for variables to explain employees' usage. The results indicated the significance of the identified variables in a social media environment. The developed model was empirically validated by utilizing structural equation modelling via Smart-PLS, which allowed for an adequate assessment of the model. The structural equation modelling allowed the validation and examination of the developed model through confirmatory factor analysis and multiple regression analysis, respectively. The results of the confirmatory factor analysis confirmed the developed model's validity through goodness of fit and construct validity, and the standardised coefficient indicated the significance level and prediction value of each hypothesis.

Second, this study is important due to their limited research focused on the role of societal context in adoption of internal social media platforms within the workplace. A significant number of studies on individuals' use of technology have been carried out mostly in western countries and have assumed behavioural similarities in their findings (Vörös & Choudrie, 2011). While there is an increasing body of research on employee adoption of internal social media within the workplace in western countries, there remains a lack of investigation into the role of culture in acceptance and usage of social media within the workplace in developing countries (Tarhini et al, 2016; Chiemeké & Ewwiekpaefe, 2011; Licker & Motts, 2000). The relevant aspect of the societal context in adoption of social media platforms within the workplace is often overlooked; therefore, the behaviour of developing countries in technology

adoption is not known and remains under-researched, more especially within the workplace. Moreover, Nigeria, as a developing country, is greatly influenced by its multi-ethnic society and religious context, with over 250 ethnic groups, 520 languages spoken and population of over 140 million (Ethnologue, 2009; Gaye, 1999). However, given that differences in culture play a role in shaping individual behaviour and group adoption of technology (Erumban & de Jong, 2006), this study examine the role of culture in adopting and using internal social media platforms within the workplace; this was done by applying multi-group analysis to examine countries differences. Through the PLS the multi-group analysis between the two countries was performed for the measurement and developed model. The multi-group analysis for the measurement model identified if Nigeria and the UK have perceived the measured variables (questionnaire questions) in different ways, while the developed model identified if Nigeria and the UK perceived the research hypotheses differently. The multi-group analysis showed that country differences exist in the developed model over six hypotheses (H1, H2, H3, H4, H5 and H7a).

The third significant theoretical contribution of this thesis is in the methodology. The methodological approach combined various constructs that were assessed separately in past research. The research questionnaire was developed to measure variables at the individual level. The questions were created and validated for each variable in the research model. These questions were adapted from previous studies and adjusted to fit the research context. In addition, the questionnaire has gone through rigorous assessment to check for its validity and reliability. Additionally, the validated questionnaire can be adapted and used in future information system or technology acceptance research (see Appendix 2). The relationship between PU, PUE, PR, PMS, PBC and UA, and IE, AE and SE where AU plays a mediating role enables the measurement of direct and indirect effects and this is an important distinction for practical and management implications, particularly for airlines companies with a dispersed workforce. The measurement model used to develop relationships and evaluate the relationships between variables could contribute to other relationships.

Finally, another contribution was applying the developed model to explain the Nigerian and UK airline employees' use of internal social media for employee engagement. The model succeeded in explaining employees' use of internal social media for employee engagement and its impact on employee performance in the Nigerian and UK airline environments.

#### 7.4.2 Implications for practice /managers

The results indicated that Uncertainty avoidance was an important variable to explain the adoption and usage of internal social media in both the Nigerian and UK airline contexts. The main implication for academia and practitioners is to understand the importance of uncertainty avoidance by providing clear rules and regulations, and usefulness of the system, as well as performance enhancement features that will encourage employees to adopt and use the system. Moreover, based on the TAM constructs, Perceived ease of use directly influenced Actual usage of internal social media for employee engagement in Nigeria, while Perceived usefulness directly affected Actual usage of internal social media in the UK, which leads to implications based on the measured variables of functionality; firstly, in the Nigerian context, internal social media use for employee engagement should provide employees with ease of use the system. A good user interface design will reduce employees' disorientation and cognitive load, which allows them to use the system easily. In developing countries, users' perception of technology accessibility decreases, due to poor internet access and the lack of technical and organizational support. Therefore, organizations should provide employees with infrastructural support, software support and organizational support (Fan et al, 2012) to ensure easy access to Internal social media. The implication for organizations is to design a user-friendly interface and reflect employee characteristics in the system design by customizing features to build on employees' interest and preference usage behaviour (Cho et al, 2009). Also, the implementation of internal social media should be accompanied with training and technical support by the organizations directed towards employees.

Moreover, in the UK, Perceived usefulness directly affected actual usage of internal social media; internal social media should be suitable for the intended purposes and provide employees with engagement and work features to enable them to achieve their work-related roles. Therefore, organizations should provide internal social media that encourages employee work goals. Additionally, the results showed that Actual usage of internal social media directly affects employees' Affective and Social engagement (AE and SE) in both Nigeria and the UK. The main implication for stakeholders is to understand content quality that impacts on employee Affective and Social engagement. According to Straub (2009), a successfully enabled technology such as internal social media adoption for engagement purposes, must address emotional, cognitive, social and contextual issues. Therefore, organizations should provide content and information that can impact on employees' affective and social engagement level. Finally, the results also showed that Intellectual and Social engagement

impact on employee performance in both Nigeria and the UK. As a result, organizations should create internal social media content that drives employees' intellectual and social engagement to enhance their performance. Atambo and Momanyi (2016) pointed out that employees are engaged with content that can socially, intellectually and affectively affect their morale and performance. The implication for organization is to implement internal social media platforms with features (e.g., work-related content) that can intrinsically motivate employees and give them the liberty to make their work exciting and create an environment for having an engaged work life. Employee engagement using internal social media should be integrated in the culture of an organization. Companies should invest in the technology, time and resources to best design and manage internal social media, since employees' active use of internal social media leads to mindfulness, intrinsic motivation, creativity, authenticity, effective communication and ethical behaviour (Kahn 1990). Such positive attributes could promote employees' feeling of belongingness, attachment with the organization, and engagement, thus improving their performance.

Finally, it is widely acknowledged that internal media usage for engagement activities within the workplace is beneficial to employees and organizations, despite the fact that internal social media for employee engagement within the workplace can have its own drawbacks in terms of misuse, trust, security, unproductive behaviour, usage and implementation. However, it has potential in enhancing employee engagement (Men et al, 2020). As the study's main findings reveal the effect of Actual usage of internal social media on employee engagement (i.e., Affective, Intellectual and Social), the study adds to the extant literature on the conceptualization of internal social media usage and its association with the level of employee engagement and employee performance.

## 7.5 Research Limitations

The research presented interesting findings to explain employees' usage of internal social media for employee engagement and its impact on employee performance; however, the research has certain limitations First, the research findings may be limited to the research population; the research used a limited sample size in the Nigerian and UK contexts. Although it achieved the minimum sample size for PLS-SEM, future research can use larger sample sizes to provide a better representation of the whole population and produce a more accurate result. In addition, this research was limited in the type of technology examined, and internal social

media context. The study did not specify use of a particular internal social media platform, which may fail to shade light as the features of different internal social media platforms may influence employee engagement level differently. Hence, there should be caution when generalizing the research findings beyond the above aspects.

Second, the research population was airline employees in Nigeria and the UK; there was no inclusion for other employees in different sector in other countries. Researchers can refine and examine the developed model performance to explain different internal social media usage behaviour. Furthermore, researchers should give more attention to intrinsic variables in technology acceptance research, as they have the potential to directly influence users' acceptance of an information technology.

Third, this study focuses only on a quantitative approach as the main method of data collection and SEM analysis to test the theoretical model; without an experimental design, it will be difficult to determine the true causal links between the research variables. More insights could be generated if other forms of data collection were used, such as qualitative methods (case studies and in-depth interviews or focus groups) to provide a more complete and richer understanding the impact of internal social media use on employee engagement and influence on performance.

## **7.6 Future Research and Recommendations**

Considering the limitations of this study, some suggestions can be made for future research which could be useful to gather more data to increase the number of internal usage media usage in both countries, especially in Nigeria. A large sample size would be helpful to obtain a deeper understanding into the factors influencing internal social media usage for employee engagement and to be more accurate in representing the population. Demographic factors such as age, gender, job roles, education, ethnicity, and length of employment play a role in predicting employee attitude towards using technology in the workplace. Therefore, more investigation into the influencing factors of internal social media usage for employee engagement should be undertaken to develop specific recommendations. Additionally, to further understand the impact of internal social media in human resources information systems, further research should examine the impact of internal social media on employee motivation.

Moreover, the top key factors from the view of employees in both countries, such as ease of use, usefulness, uncertainty avoidance, should be taken into account when designing an internal

social media for employee engagement activities. Considering the growing usage of internal social media for employee engagement by airline companies in two different continents within the workplace, it will be worthwhile to carry out further studies with more emphasis on factors such as cost, availability of technology resources, time to adopt and learn the technology, organizational structure and culture; this will enable more understanding of factors influencing internal social media adoption and usage in the workplace and on the individual level, which in turn leads to increased adoption of internal social media for employee engagement by airline employees.

Additionally, employees in this research in both countries are looking at internal social media platforms for employee engagement consciously with respect to the importance of factors such as ease of use and usefulness when adopting and using the platform. As these two factors play a predominant role for employees to adopt and use internal social media, when designing internal social media platforms, we must ensure simplicity and avoid complexity, and management need to recognize the growing trend in making sure that internal social media for employee engagement are designed in a manner that meets the requirements of employees, so that the internal social media platform for engagement purposes and its associated services are perceived by employees in a positive light and in a way that would help them improve their job performance. Moreover, the results of the study showed the importance of the uncertainty avoidance factor in Nigeria. Being exposed to an uncertain or unknown situation, employees may feel anxiety; the degree of uncertainty could be reduced by managers and colleagues' supportive influence. Management should ensure the design and implementation of internal social media that could minimize any concern associated with an increased sense of risk or uncertainty. It is also useful to provide a clear usage policy and necessary to adapt to the requirement issues which often arise from using internal social media within the workplace; therefore management must ensure a clear code of conduct and what is required of employees when using the platform. The policies will help to indicate how employees should conduct themselves via internal social media, build and maintain individual and organizational online reputation, ensure security, and encourage individual employees to get involved in online activities of the company. Without the availability of these policies and relevant codes of conduct there may be low rate of adoption because of the level of uncertainty associated with technology adoption and usage, especially within the workplace.

In conclusion, this research has provided understanding of the factors influencing internal social media adoption and usage for employee engagement and impact on employee

performance. To this end, this research employed a technology acceptance model (TAM) and integrated some factors from the individual behavioural perceptives and the employee engagement dimension. The analysis of the research of 345 valid questionnaires from airline employees in the UK and Nigeria, provides revealing findings on the influence of six factors on the adoption and usage of internal social media usage for employee engagement, the relationship between Actual usage of internal social media on employee engagement, and the links between employee engagement and employee performance. From the analysis this research provides valuable insight into internal social media usage for employee engagement within the workplace, enabling better understanding of employees' adoption and usage behaviour, and thus to further improve employees' engagement levels. Accordingly, the research model was valid in understanding employees' adoption and usage of internal social media for employee engagement, and it adds to the TAM model a new dimension that benefits organizations, more especially in the airline sector, community, academia and the areas of information technology and social psychology.

## REFERENCES

'Motivating Employees with Today's Technology' (2015) TD: Talent Development, 69 (12), p.13. Available at:

<http://search.ebscohost.com.plymouth.idm.oclc.org/login.aspx?direct=true&AuthType=ip,url,shib&db=bth&AN=111215557&site=ehost-live> (Accessed: 18 /01/ 2021).

Abu Kassim, K., Arokiasamy, L., Isa, M. & Chieng Heng, P. (2017) Intention to Purchase Safer Car: An Application of Theory of Planned Behavior. *Global Business & Management Research*, 9, pp. 188-197.

African Business Magazine (2018) 'Fixing education system is key to solving Nigeria's problems'. Available on <https://africanbusinessmagazine.com/sectors/development/fixing-education-system-key-solving-nigerias-problems/> (Accessed on 21/01/2019).

Agarwal, R. & Karahanna, E. (2000) Time flies when you're having fun: Cognitive absorption and beliefs about information technology usage. *MIS Quarterly*, 24(4): 665-694.

Aguenza, B., Al-Kassem, A. H. & Som, A. P. M. (2012) Social Media and Productivity in the Workplace: Challenges and Constraints. *Interdisciplinary Journal of Research in Business* 2 (2), 22-26.

Ajzen, I. (1991) The theory of planned behavior, *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179-211.

Akinci, C. & Saunders, M. (2015) Using questionnaire surveys to gather data for within organisation HRD research. In M. Saunders & P. Tosey (eds), *Handbook of Research Methods on HRD*. Edward Elgar, Cheltenham, UK, pp. 217-30.

Akter, K. (2011) The Role of Non-Financial Factors in Measuring Organizational Performance. *Proceedings of International Conference on Business Management*, 8, 245.

Alambaigi, A. & Ahangari, I. (2015) Technology Acceptance Model (TAM) As a Predictor Model for Explaining Agricultural Experts Behavior in Acceptance of ICT. *International Journal of Agricultural Management and Development (IJAMAD)*, 235-247.

Albrecht, S. L. (2012) The Influence of Job, Team and Organizational Level Resources on Employee Well-Being, Engagement, Commitment and Extra-Role Performance: Test of a Model. *International Journal of Manpower, Special Issue Theme: Changing Work Environments and Employee Wellbeing*, 33, 840-853.

Alfes, K., Shantz, A. D., Truss, C. & Soane, E. C. (2013) The Link Between Perceived Human Resource Management Practices, Engagement and Employee Behaviour: A Moderated Mediation Model. *The International Journal of Human Resource Management*, 24, 330–351.

Alin, A. (2010) Multicollinearity. *WIREs Computational Statistics*. 2(3), 370-374.

Allen, N. J. & Meyer, J. P. (1996) Affective, continuance, and normative commitment to the organization: an examination of construct validity. *Journal of Vocational Behavior*, 49, 252–276.

Alshuaibi, A., Shamsudin, F. & Arshad, D. (2018) Use of social media, student engagement, and academic performance of business students in Malaysia. *International Journal of Educational Management*, 32, 4, pp. 625-640.

Al-Thunibat, A., Zin, N. & Sahari, N. (2011) The effect of social influence on mobile government adoption in Malaysia. *Journal of Theoretical and Applied Information Technology*, 25, 2, pp.103–110.

Andreassen, C., Torsheim, T. & Pallesen, S. (2014) Predictors of use of social network sites at work – A specific type of cyberloafing. *Journal of Computer-Mediated Communication*, 19, 906–921. doi: 10.1111/jcc4.12085.

Andrew, O. C. & S. Sofian, S. (2012) Individual Factors and Work Outcomes of Employee Engagement. *Procedia-Social and Behavioural Sciences*, 40: 498-508.

Anon (2018) Employee reward. Hewitt. Available at <http://www.modernsurvey.com/wp-content/uploads/2017/04/2017-Trends-in-Global-Employee-Engagement.pdf>. (Accessed on 23/09/2019).

Anon (2014) How to increase employee engagement: The impact of social media and organizational culture. *Development and Learning in Organizations*: 28(6), pp.24–26. <https://doi.org/10.1108/DLO-09-2014-0070>

Anon (2017) Travel & Tourism Economic Impact 2017 Nigeria. World Travel and Tourism Council. Available (<https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2017/nigeria2017.pdf>) accessed on 24/03/2018.

Appleton, J. J. (2012) Systems consultation: Developing the assessment to intervention link with the student engagement instrument. In S. Christenson, A. Reschly & K. Wylie (Eds.), *The handbook of research on student engagement* (pp. 725-741). NY: Springer.

Armitage, C. J. & Conner, M. (2001) Efficacy of the Theory of Planned Behaviour: A Meta-Analytic Review. *British Journal of Social Psychology*, 40: 471-499.

Armstrong, M. (2012) *Armstrong's Handbook of Human Resource Management Practice*. New York, NY: Kogan Page.

Armstrong, M. & Baron, A. (2002) *Strategic HRM: The key to improved business performance*, CIPD, London.

Arns, T., Bentele, M., Niemeier, J., Schütt, P. & Weber, M. (Eds.) (2014) *Zukunft der Wissensarbeit. 16. Kongress für Wissensmanagement, Social Media und Collaboration*. KnowTech, GITO Verlag, Berlin.

Aurigemma, S. & Mattson, T. (2017) Privilege or procedure: Evaluating the effect of employee status on intent to comply with socially interactive information security threats and controls. *Computers & Security*, 66, pp. 218-234.

Avery, D. R., McKay, P. F. & Wilson, D. C. (2007) Engaging the aging workforce: The relationship between perceived age similarity, satisfaction with co-workers, and employee engagement. *Journal of Applied Psychology*, 92(6), 1542–1556.

Bailey, A. & Ngwenyama, O. (2010) Bridging the generation gap in ICT use: interrogating identity, technology and interactions in community telecenters. *Information Technology Development*, Vol.16, pp. 62–82. doi: <https://doi.org/10.1080/02681100903566156>.

Bailey, C., Madden, A., Alfes, K., Fletcher, L., Robinson, D., Holmes, J., Buzzeo, J. & Currie, G. (2015) Evaluating the evidence on employee engagement and its potential benefits to NHS staff: a synthesis of the literature, NIHR Health Services and Delivery Research. Available at [https://www.researchgate.net/publication/280235309\\_Evaluating\\_the\\_evidence\\_on\\_employee\\_engagement\\_and\\_its\\_potential\\_benefits\\_to\\_NHS\\_staff\\_a\\_synthesis\\_of\\_the\\_literature](https://www.researchgate.net/publication/280235309_Evaluating_the_evidence_on_employee_engagement_and_its_potential_benefits_to_NHS_staff_a_synthesis_of_the_literature). Accessed on 18/01/2019.

Baker, W. & Schaufeli, W. B. (2008) Positive organizational behaviour: Engaged employees in thriving organizations. *Journal of Organizational Behaviour*; 29, 147-154.

Bakker, A., Van, E. H. & Euwema, M. (2006) Crossover of burnout and engagement in work teams. *Work and Occupations*, 33 (4), 464-489. <https://doi.org/10.1177/0730888406291310>

Bandura, A. (1997) *Self-efficacy: The exercise of control*. Worth Publishers, New York, NY.

Barclay, D., Higgins, C. & Thompson, R. (1995) The partial least squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology Studies*, 2 (2), 285-309.

Barger, V., James, W., Peltier, D. & Schultz, E. (2016) Social media and consumer engagement: a review and research agenda. *Journal of Research in Interactive Marketing*, 10(4), pp. 268-287. doi: <https://doi.org/10.1108/JRIM-06-2016-0065>.

Baron, R. M. & Kenny, D. A. (1986) The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.

Barroso Castro, C., Martín Armario, E. & Martín Ruiz, D. (2004) The influence of employee organizational citizenship behavior on customer loyalty. *International Journal of Service Industry Management*, 15(1): 27-53.

Bartelt, V. L. & Dennis, A. R. (2014) Nature and Nurture: The Impact of Automaticity and the Structuration of Communication on Virtual Team Behavior and Performance. *Mis Quarterly*, 38(2), 521-538.

Bashford, S. (2011) 'British Airways: building a brand, from the inside out'. Campaign. Available on (<https://www.campaignlive.co.uk/article/british-airways-building-brand-inside/1081775>) accessed 10/11/2019.

Başkarada, S. & Koronios, A. (2018) A philosophical discussion of qualitative, quantitative, and mixed methods research in social science. *Qualitative Research Journal*, Vol. 18 Issue: 1, pp.2-21. doi: <https://doi-org.plymouth.idm.oclc.org/10.1108/QRJ-D-17-00042>.

Belch, G., Belch, M., Kerr, G. & Powell, I. (2009) *Advertising and promotion: an integrated marketing communication perspective*, McGraw Hill Australia, Sydney.

Bente, G., Rüggenberg, S., Krämer, N. C. & Eschenburg, F. (2008) Avatar-mediated networking: Increasing social presence and interpersonal trust in net-based collaborations. *Human Communication Research*, 33, 287-318. doi:10.1111/j.1468-2958.2008.00322.

Bergami, M. & Bagozzi, R. P. (2000) Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology*, Vol. 39 No. 4, pp. 555-577.

Bingham, T. (2009) Learning Gets Social. *T+D*, 63(8), pp. 56–61. Available at: <http://content.ebscohost.com/ContentServer.asp?T=P&P=AN&K=43581683&S=R&D=bth&EbscoContent=dGJyMMv17ESep7Y4yNfsOLCmsEmep7NSr6q4TbKWxWXS&ContentCustomer=dGJyMPGqtUmzrLdOuePfgex44Dt6fIA> (Accessed: 18 January 2021).

Bingham, T. & Conner, M. (2010) *The new social learning: A guide to transforming organizations through social media*. San Francisco, CA: Berrett-Koehler. Available at [9781605097022.pdf](http://www.berrettkoehler.org/9781605097022.pdf) (d1wqtxts1xzle7.cloudfront.net) Accessed on 23/2/2018.

Binsardi, A. & Green, J. (2012) *Research methods for management*. In *Pedagogic Teaching Series* (Vol. 2). UK: Northwest Academic Publications.

Binsardi, A. P., Green, J. & Jackson, G. (2013) Exploring the impact of a company's web technological development on its innovation activity: a case study of small- and medium-sized enterprises (SMEs) in North Wales. *Global Business Perspective* 1, 488–514. doi: <https://doi.org/10.1007/s40196-013-0023-6>.

Bircan, H. & Sungur, S. (2016) The role of motivation and cognitive engagement in science achievement, *Science Education International* Vol. 27, Issue 4, 509-529. Available on <https://files.eric.ed.gov/fulltext/EJ1131144.pdf> (Accessed on 02/01/2018).

Blaskova, M., Bizik, M. & Jankal, R. (2015) Model of Decision Making in Motivating Employees and Managers. *Engineering Economics*, 26, 5, pp. 517-529.

Blok, M., van Ingen, E., de Boer, A. H. & Sloodman, M. (2020) The use of information and communication technologies by older people with cognitive impairments: from barriers to benefits. *Computers in Human Behaviour*, Vol. 104. 1-9 doi: <https://doi.org/10.1016/j.chb.2019.106173>.

Boakye, K., McGinnis, T. & Prybutok, V. R. (2014) Q-TAM: A quality technology acceptance model for technology operations managers. *Operations Management Research*. No 7, pp. 13–23 (2014). doi: <https://doi.org/10.1007/s12063-014-0085-x>.

Bokunewicz, J. F. (2013) Social Networking for Employee Engagement in the Hospitality Industry. Ph.D. thesis, Drexel University.

Bollen, K. & Lennox, R. (1991) Conventional Wisdom on Measurement - a Structural Equation Perspective. *Psychological Bulletin* 110 (2), 305-314.

Bondarouk, T. V. & Ruël, H. J. M. (2009) Electronic human resource management: challenges in the digital era. *International Journal of Human Resource Management*, Vol. 20 No. 3, pp. 505-514.

Boonstra, A. (2013) How do top managers support strategic information system projects and why do they sometimes withhold this support? *International Journal of Project Management*, 31 (4), pp. 498-512, doi: [10.1016/j.ijproman.2012.09.013](https://doi.org/10.1016/j.ijproman.2012.09.013).

Boyd, D. M. & Ellison, N. B. (2007) Social network sites: Definition, history, and scholarship, *Journal of Computer-Mediated Communication*. Vol. 13, 210–230, doi: <https://doi.org/10.1111/j.1083-6101.2007.00393.x>.

Breunig, K. J. (2016) Limitless learning: assessing social media use for global workplace learning. *Learning Organization*, 23, 4, pp. 249-270.

Briner, R. (2014) What is employee engagement, and does it matter? An evidence-based approach. Invited paper for Engage for Success. Engage for Success. Available at [https://www.researchgate.net/publication/265600647\\_What\\_is\\_employee\\_engagement\\_and\\_does\\_it\\_matter\\_An\\_evidence-based\\_approach](https://www.researchgate.net/publication/265600647_What_is_employee_engagement_and_does_it_matter_An_evidence-based_approach) (Accessed on 21/07/2018).

Brown, S. P. & Leigh, T. W. (1996) A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81, 358-368. doi: doi:10.1037/0021-9010.81.4.358.

Brubaker, D (2018) Yammer Helps Employee Involvement Take Off at KLM Royal Dutch Airlines. Available at <https://smbp.uwaterloo.ca/2018/05/yammer-helps-employee-involvement-take-off-at-klm-royal-dutch-airlines/> (Accessed on 21/01/2019)

Brumberg, R. (2018) 'American Airlines using podcasts to reach staff—and the public'. *Rogan PR Daily*. Available on <https://www.ragan.com/american-airlines-using-podcasts-to-reach-staff-and-the-public/> (Accessed 10/11/2019).

Bruque, S. & Moyano, J. (2007) Organisational determinants of information technology adoption and implementation in SMEs: The case of family and cooperative firms. *Technovation*, 27, 241–253.

Bryman, A. (2012) *Social research methods* (4th ed.). Oxford: Oxford University Press.

Bühler, J., Lauritzen, M. & Bick, M. (2014) Social Media communication in European airlines. In: *Proceedings of the 20th Americas Conference on Information Systems*, Savannah, GA.

Burke, M. & Kraut, R. E. (2016) The Relationship Between Facebook Use and Well-Being Depends on Communication Type and Tie Strength. *Journal of Computer-Mediated Communication*, 21: 265–281. doi:10.1111/jcc4.12162.

Cao, X., Guo, X., Vogel, D. & Zhang, X. (2016) Exploring the influence of social media on employee work performance. *Internet Research*, 26(2), 529-545.

Carlson, J. R., Zivnuska, S., Harris, R. B., Harris, K. J. & Carlson, D. S. (2016) Social Media Use in the Workplace: A Study of Dual Effects. *Journal of Organizational and End User Computing*, 28(1):15-31. doi: 10.4018/joeuc.2016010102.

Çetinkaya, A. Ş. & Rashid, M. (2018) The Effect of Social Media on Employees' Job Performance: The mediating Role of Organizational Structure. *Journal of Organizational Psychology*, 18(4), 94-116.

Cha, S. C. (2007) Research on structural modeling of enterprise employee engagement. Unpublished manuscript, Jinan University, Jinan, China.

Chandra, S. & Kumar, K. N. (2018) Exploring factors influencing organizational adoption of augmented reality in e-commerce: empirical analysis using technology–organization–environment model. *Journal of Electronic Commerce Research*, 19(3), 237-265.

Chao, C.-M. (2019) Factors Determining the Behavioral Intention to Use Mobile Learning: An Application and Extension of the UTAUT Model. *Frontiers in Psychology*, 10, 1652. Available. [https://www.researchgate.net/publication/334489319\\_Factors\\_Determining\\_the\\_Behavioral\\_Intention\\_to\\_Use\\_Mobile\\_Learning\\_An\\_Application\\_and\\_Extension\\_of\\_the\\_UTAUT\\_Model](https://www.researchgate.net/publication/334489319_Factors_Determining_the_Behavioral_Intention_to_Use_Mobile_Learning_An_Application_and_Extension_of_the_UTAUT_Model) (Accessed 20/3/2018).

Chen, H., Rong, W., Ma, X., Qu, Y., & Xiong, Z. (2017). An Extended Technology Acceptance Model for Mobile Social Gaming Service Popularity Analysis. *Mobile Information Systems*, 2017. doi: <https://doi.org/10.1155/2017/3906953>.

Chen, P. (2014) Metabolic growth theory: market-share competition, learning uncertainty, and technology wavelets. *Journal of Evolutionary Economics*, 24, 2, pp. 239-262.

Cheng, T. C. E., Lam, D. Y. C. & Yeung, A. C. L. (2006) Adoption of internet banking: An empirical study in Hong Kong; *Decision Support Systems*, 42 (3), pp. 1558-1572.

Cheung, S. F. & Chan, D. K. S. (2000) The Role of Perceived Behavioral Control in Predicting Human Behavior: A Meta-analytic Review of Studies on the Theory of Planned Behavior. Unpublished manuscript, Chinese University of Hong Kong. Available at [https://www.researchgate.net/publication/331113383\\_The\\_role\\_of\\_perceived\\_behavioral\\_control\\_in\\_predicting\\_human\\_behavior\\_A\\_meta-analytic\\_review\\_of\\_studies\\_on\\_the\\_theory\\_of\\_planned\\_behavior](https://www.researchgate.net/publication/331113383_The_role_of_perceived_behavioral_control_in_predicting_human_behavior_A_meta-analytic_review_of_studies_on_the_theory_of_planned_behavior) (Accessed on 20/4/2018).

Chiemeké, S. C. & Ewuekpáefe, A. E. (2011) A conceptual framework of a modified unified theory of acceptance and use of technology (UTAUT) Model with Nigerian factors in E-commerce adoption; *Educational Research* Vol. 2(12) pp. 1719-1726.

Chin, W. W. (1998) The partial least squares approach to structural equation modeling. In *Modern Methods for Business Research*, G. A. Marcoulides, Ed., pp. 295–336, Erlbaum, Mahwah, NJ.

Chiu, C. J. (2019) Relationship Between Internet Behaviors and Social Engagement in Middle-Aged and Older Adults in Taiwan. *International Journal of Environmental Research and Public Health*, 16(3), 1-13

Chiu, C. J. & Liu, C. W. (2017) Understanding Older Adults' Technology Adoption and Withdrawal for Elderly Care and Education: Mixed Method Analysis from National Survey. *Journal of Medical Internet Research*, 19(11), e374. doi: 10.2196/jmir.7401.

Chong, A. Y. L., Ooi, K. B., Lin, B. & Raman, M. (2009) Factors affecting the adoption level of C-commerce: an empirical study. *Journal of Computer Information Systems*, 50(2), 13-22

Chuang, T. T., Nakatani, K. & Zhou, D. (2009) An exploratory study of the extent of information technology adoption in SMEs: An application of upper echelon theory. *Journal of Enterprise Information Management*, Vol. 22, No. 1-2, pp. 183-196. doi: <https://doi.org/10.1108/17410390910932821>.

Chuttur, M. Y. (2009) Overview of the technology acceptance model: Origins, developments and future directions. *Working Papers on Information Systems*, vol. 9, no. 37, pp. 9-37.

Cleveland, S. (2016) Social Media Systems in the Workplace: Toward Understanding Employee Knowledge Creation via Microblogging within Shared Knowledge Domains. *Informatics (Basel)*, Vol.3(3), pp.11-14

Clutterbuck, D. (2005) Communication and Psychological Contract. *Journal of Communication Management*, 9(4) pp.359-364.

Coetzee, M. & de Villiers, M. (2010) Sources of job stress, work engagement and career orientations of employees in a South African financial institution. *Southern African Business Review*, 14(1), 27–57.

Coeurderoy, R., Guilmot, N. & Vas, A. (2014) Explaining factors affecting technological change adoption: A survival analysis of an information system implementation. *Management Decision*, Vol. 52 No. 6, pp. 1082-1100.

Cohen, J. (1988) *Statistical power analysis for the behavioral sciences*. (2nd ed.). Hillsdale, NJ: Erlbaum.

Colbert, A., Yee, N. & George, G. (2016) The digital workforce and the workplace of the future. *Academy of Management Journal*. 59, (3), 731-739.

Coltman, T., Devinney, T. M., Midgley, D. F. & Venaik, S. (2008) Formative versus reflective measurement models: Two applications of formative measurement, *Journal of Business Research*, 61(12), 1250-1262.

Compeau, D. R. & Higgins, C. A. (1995) Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, 19, 189-211.

Comrey, A. & Lee, H. (1992) *A first course in factor analysis*. Hillsdale, NJ: Erlbaum.

Cooper, D. R., Schindler, P. S. & Sun, J. (2003) *Business Research Methods*. Vol. 8. pp. 371-406.

Cornelissen, J. (2011) *Corporate communication. a guide to theory and praxis* (3rd ed.). London: Sage.

Costa, A. (2013) Using Yammer to engage Gatwick Airport staff during the London 2012 Olympic Games. *The Journal of Internal Communication*. Available on (<https://www.gatehouse.co.uk/using-yammer-to-engage-gatwick-airport-staff-during-the-london-2012-olympic-games/>) and [https://www.gatehouse.co.uk/knowledge\\_bank\\_resources/JOIC/02/JOIC2.pdf](https://www.gatehouse.co.uk/knowledge_bank_resources/JOIC/02/JOIC2.pdf)

Creswell, J. (2013) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage.

Creswell, J. W. & Clark, V. L. P. (2007) Designing and conducting mixed methods research. 31 no. 4, pp. 388-389. doi: 10.1111/j.1753-6405.2007.00096.x.

Cristea, M. & Gheorghiu, A. (2016) Attitude, perceived behavioral control, and intention to adopt risky behaviors. *Transportation Research: Part F*, 43, pp. 157-165.

Cropanzano, R. & Mitchell, M. S. (2005) Social exchange theory: an interdisciplinary review. *Journal of Management*, 31(6): 874-900.

Cui, T., Ye, H., Teo, H. H. & Li, J. (2015) Information technology and open innovation: A strategic alignment perspective. *Information and Management.*, 52, 348–358.

Czaja, S. J., Sharit, J., Boot, W. R., Charness, N. H. & Rogers, W. A. (2017) The Role of Technology in Supporting Social Engagement and Social Support among Older Adults. *Innovation in Aging*, 1(Suppl 1), 1026–1027. doi: <https://doi.org/10.1093/geroni/igx004.3737>.

Dahan, E. & Hauser, J. R. (2002) The virtual customer. *Journal of Production Innovation Management*, 19 (5), pp. 332–353.

Dalbec, B. (2016) ‘The Benefits of Internal Social Media? Engaged Employees’. Available on (<https://apcoworldwide.com/blog/the-benefits-of-internal-social-media-engaged-employees>) Accessed on 11/12/2019.

Davis, A. & Baldwin, G. (2012) DreamWorks, Mayo Clinic Leaders Share Social Media Strategies to Boost Engagement. *Health Data Management*, 20, 6, pp. 1-13.

Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1989) User acceptance of computer technology; a comparison of two theoretical models. *Management Science*, Vol. 35 No. 8, pp. 982-1003.

Davis, F D, Bagozzi R P, Warshaw P R. (1992) Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of Applied Social Psychology*, 22, 1111-1132. doi: <http://dx.doi.org/10.1111/j.1559-1816.1992.tb00945.x>.

Davison, C. & Argyriou, E. (2016) Gender Preferences in Technology Adoption: An Empirical Investigation of Technology Trends in Higher Education; *International Journal of Gender, Science and Technology*, Vol 8, No 3, 405–419.

Dessart, L. (2017) Social media engagement: a model of antecedents and relational outcomes, *Journal of Marketing Management* 33, 375–399.

Dessart, L., Veloutsou, C. & Morgan-Thomas, A. (2015) Consumer engagement in online brand communities: a social media perspective. *Journal of Product & Brand Management*, Vol. 24 Issue: 1, pp.28-42. doi: <https://doi.org/10.1108/JPBM-06-2014-0635>.

Dixit, R. V. & Prakash, G. (2018) Intentions to use social networking sites (SNS) using technology acceptance model (TAM). *Paradigm*, 22, 65-79.

Dolan, R., Conduit, J., Fahy, J. & Goodman, S. (2017) Social media: Communication strategies, engagement, and future research directions. *International Journal of Wine Business Research*, 29(1), 2-19.

Dolan, R., Conduit, J., Frethey-Bentham, C., Fahy, J. & Goodman, S. (2019) Social media engagement behavior. *European Journal of Marketing*, 53(10), 2213–2243.

Dolnicar, S. & Grun, B. (2007) Cross-cultural differences in survey response patterns. *International Marketing Review*, 24 (2), 127-143.

Dornyei, Z. (2003) *Questionnaires in Second Language Research: Construction, Administration and Processing*. New Jersey: Lawrence Erlbaum Associates.

Doulani, A. (2019) An assessment of effective factors in technology acceptance model: A meta-analysis study. *Journal of Scientometric Research*, 7, 153-166.

Dreher, S. (2014) Social media and the world of work. *Corporate Communications: An International Journal*, 19, 4, pp.344-356.

Drew, S. (2003) Strategic uses of e-commerce by SMEs in the east of England. *European Management Journal*, 21, 79–88. 36.

Drusendahl, R. (2014) ‘Cognitive Skills in the Workplace’. Available on. (<https://www.linkedin.com/pulse/20141111195027-1022043-cognitive-skills-in-the-workplace>) accessed on 22/10/2017.

Dunne, A., Lawlor, M.-A. & Rowley, J. (2010) Young People's Use of Online Social Networking Sites – A Uses and Gratifications Perspective. *Journal of Research in Interactive*, 4(1), 46-58.

Easterby-Smith, M., Thorpe, R. & Jackson, P. R. (2012) *Management research*. Los Angeles: Sage. Vol. 4, pp 348-359.

Engellant, K., Holland, D. & Piper, R. (2016) Assessing Convergent and Discriminant Validity of the Motivation Construct for the Technology Integration Education (TIE) Model. *Journal of Higher Education Theory and Practice* 16, 37-50.

Erumban, A. A. & de Jong, S. B. (2006) Cross-country differences in ICT adoption: A consequence of Culture? *Journal of World Business*, vol. 41, no. 4, pp. 302-314.

Ewing, M., Men, L. R. & O'Neil, J. (2019) Using Social Media to Engage Employees: Insights from Internal Communication Managers, *International Journal of Strategic Communication*, 13:2, 110-132.

Eze, C. (2018) 'Lagos May Lose Slot as Second Busiest Airport in Africa to Cape Town'. *This Day Online*, Available on <https://www.thisdaylive.com/index.php/2018/02/05/lagos-may-lose-slot-as-second-busiest-airport-in-africa-to-cape-town/> (Accessed 25/03/2018).

Fabre, M. (2015) Use of Social Media for Internal Communication: A Case Study in a Government Organisation. Available at [https://www.researchgate.net/publication/302535683\\_Use\\_of\\_Social\\_Media\\_for\\_Internal\\_Communication\\_A\\_Case\\_Study\\_in\\_a\\_Government\\_Organisation](https://www.researchgate.net/publication/302535683_Use_of_Social_Media_for_Internal_Communication_A_Case_Study_in_a_Government_Organisation) (Accessed on 6/6/2018).

Fila, S., & Smith, C. (2006). Applying the Theory of Planned Behavior to Healthy Eating Behaviors in Urban Native American Youth. *International Journal of Behavioral Nutrition and Physical Activity*, 3 (1), 11. doi: <https://doi.org/10.1186/1479-5868-3-11>.

Fitzgerald, D., Hockey, R., Jones, M., Mishra, G., Waller, M. & Dobson, A. (2019) Works citing "Use of Online or Paper Surveys by Australian Women: Longitudinal Study of Users, Devices, and Cohort Retention (Preprint). *Journal of Medical Internet Research*. Vol 21. Available at: [https://www.researchgate.net/publication/330007458\\_Use\\_of\\_online\\_or\\_paper\\_surveys\\_by\\_Australian\\_women\\_a\\_longitudinal\\_study\\_of\\_users\\_devices\\_and\\_cohort\\_retention\\_Preprint](https://www.researchgate.net/publication/330007458_Use_of_online_or_paper_surveys_by_Australian_women_a_longitudinal_study_of_users_devices_and_cohort_retention_Preprint) (Accessed on 9/8/2020).

Fornell, C. & Larcker, D. F. (1981) Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, Vol. 18, No. 1, pp. 39-50.

Forsgren, E. & Byström, K. (2018) Multiple social media in the workplace: Contradictions and congruencies. *Information Systems Journal*, 28(3), pp. 442–464.

Fredricks, J. A., Blumenfeld, P. C. & Paris, A. H. (2004) School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109. doi: <https://doi.org/10.3102/00346543074001059>.

Fredrickson, B. L. (2001) The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218–226.

Friessl, M. & Silberzahn, R. (2012) Challenges in establishing global collaboration: Temporal, strategic and operational decoupling. *Long Range Planning*. 45(2-3), 160-181.

Frijns, B., Gilbert, A., Lehnert, T. & Tourani-Rad, A. (2013) Uncertainty Avoidance, Risk Tolerance and Corporate Takeover Decisions, *Journal of Banking & Finance*, 37, pp.2457–2471.

Fuller, T. & Lewis, J. (2002) Relationships mean everything: A typology of small-business relationship strategies in a reflexive context. *British Journal of Management*, 13, 317–336.

Fuller-Love, N. (2006) Management development in small firms. *International Journal of Management Review*, 8, 175–190.

Fusi, F. & Feeney, M. K. (2018) Social Media in the Workplace: Information Exchange, Productivity, or Waste? *The American Review of Public Administration*, 48(5), 395–412.

Gaál, Z., Szabó, L., Obermayer-Kovács, N. & Csepregi, A. (2015) Exploring the role of social media in knowledge sharing. *Electronic Journal of Knowledge Management*, 13(3), 185-197.

Gibbons, J. M. (2006) Employee engagement: A review of current research and its implications. (p.4). New York, NY: The Conference Board Inc. [www.conferenceboard.org](http://www.conferenceboard.org).

Gode, H.E., Johansen, W. and Thomsen, C. (2019), Employee engagement in generating ideas on internal social media: A matter of meaningfulness, safety and availability, *Corporate Communications: An International Journal*, Vol. 25 No. 2, pp. 263-280. doi: <https://doi.org/10.1108/CCIJ-03-2019-0024>.

Goldstein, H., Lynn, P., Muniz-Terrera, G., Hardy, R., O’Muircheartaigh, C., Skinner, C. J. & Lehtonen, R. (2015) Population sampling in longitudinal surveys. *Longitudinal and Life Course Studies*, 6 (4), pp. 447-475.

Gómez Domingo, M. & Badia Gargante, A. (2016) Exploring the use of educational technology in primary education: teachers' perception of mobile technology learning impacts and applications' use in the classroom, *Computers in Human Behavior*, 56 (2016), pp. 21-28.

Goswami, A. & Dutta, S. (2016) Gender Differences in Technology Usage—A Literature Review. *Open Journal of Business and Management*, 4, 51-59.

Govender, I. & Naidoo, E. (2013) Perceived relevance of an introductory information systems course to prospective business students. *South African Computer Journal*, 51, 1–9.

Granić, A., & Marangunić, N. (2019). Technology acceptance model in educational context: A systematic literature review. *British Journal of Educational Technology*, 50(5), 2572–2593. doi: <https://bera-journals.onlinelibrary.wiley.com/doi/epdf/10.1111/bjet.12864>.

Grinnell Jr, R. M. & Unrau, Y. A. (2010) *Social work research and evaluation: Foundations of evidence-based practice*: Oxford University Press.

Guba, E. G. & Lincoln, Y. S. (1994) Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). London: Sage.

Guest, D. (2014) Employee engagement: a sceptical analysis. *Journal of Organizational Effectiveness: People and Performance*, Vol. 1 Issue: 2, pp.141-156.

Haddud, A., Dugger, J. & Gill, P. (2016) Exploring the impact of internal social media usage on employee engagement. *Journal of Social Media for Organizations*, 3(1), 1-23.

Haderi, S., Rahim, A. N. & Bamahros, H. (2018) Top management support Accelerates the acceptance of information technology. *Medwell Journal*, 13 (1):175-189.

Hair, J. F. (2003) *Essentials of Business Research Methods*. Hoboken, NJ : Wiley.

Hair, J. F., Hult, G. T. M., Ringle, C. M. & Sarstedt, M. (2014) *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* Thousand Oaks: Sage. Available at <https://digitalcommons.kennesaw.edu/facbooks2014/39> (Accessed on 1/6/2018).

Hair, JF, Risher, JJ, Sarstedt, M, & Ringle, C. (2018) When to use and how to report the results of PLS-SEM. *European Business Review*. Vol. 31, No 1, pp. 2-24. doi: <https://www.emeraldinsight.com/doi/abs/10.1108/EBR-11-2018-0203>.

Hair, J. F., William, C. B., Barry, J. B. & Anderson, R. E. (2010) *Multivariate Data Analysis*, Prentice Hall, Englewood Cliffs, NJ.

Hakanen, J. J. & Koivumäki, J. (2014) Engaged or exhausted—how does it affect dentists' clinical productivity. *Burnout Research* 1 (1): 12–18.

Hamid, A. A., Razak, F. Z. A., Bakar, A. A. & Abdullah, W. S. W. (2016) The Effects of Perceived Usefulness and Perceived Ease of Use on Continuance Intention to Use EGovernment. *Procedia Economics and Finance*, 35, 644-649.

Hammoud, G. A., Tawfik, H. F., Elseyoufi, T. S. (2017) Challenges Facing Airline's Social Innovation; *Journal of Tourism and Hospitality Management*, Vol. 5, No. 1, pp. 62-72.

Hancioglu, Y., Dogan, U. B. & Yildirim, S. S. (2014) Relationship between Uncertainty Avoidance Culture, Entrepreneurial Activity and Economic Development. *Procedia – Social and Behavioral Sciences* 150: 908–916.

Hardaker, S. & Fill, C. (2005) Corporate Services Brands: The Intellectual and Emotional Engagement of Employees. *Corporate Reputation Review*, 7, 4, pp. 365-376.

Hart, M. & Porter, G. (2004) The impact of cognitive and other factors on the perceived usefulness of OLAP. *Journal of Computer Information Systems*, vol. 45, no. 1, pp. 47-56.

Harter J. K., Schmidt F. L. & Hayes T. L. (2002) Business-unit-level relationship between employee satisfaction, employee engagement and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268–279.

Hasan, Y., Shamsuddin, A. & Aziati, N. (2013) The impact of management information systems adoption in managerial decision making: A review. *The International Scientific Journal of Management Information Systems*, Vol. 8 (4), pp. 010-017.

Hayes Jr., T. P. (2012) Predicting Information Technology Adoption in Small Businesses: An Extension of The Technology Acceptance Model. *Academy of Information & Management Sciences Journal*, 15, 1, pp. 37-46, Business Source Complete, EBSCOhost, viewed 14 December 2017.

Heller, D., Judge, T. A. & Waston, D. (2002) The confounding role of personality and trait affectivity in the relationship between job and life satisfaction. *Journal of Organizational Behavior*, 23(7), 815-835.

Henseler, J., Hubona, G. & Ray, P. A. (2016) Using PLS Path Modeling in New Technology Research: Updated Guidelines. *Industrial Management & Data Systems*, Vol.116, No1, 2–20.

Henseler, J., Ringle, C. & Sinkovics, R. (2009) The use of partial least squares path modeling in international marketing. *Advances in International Marketing (AIM)*, 20, 277-320).

Henseler, J. & Sarstedt, M. (2013) Goodness-of-Fit Indices for Partial Least Squares Path Modeling, *Computational Statistics*, 28(2): 565-580.

Herlle, M. & Astray-Caneda, V. (2012) The impact of social media in the workplace. In M. S. Plakhotnik, S. M. Nielsen & D. M. Pane (Eds.), *COERC 2012. Proceedings of the 11th Annual College of Education & Graduate Student Network Research Conference* (pp. 67-73). Miami, FL: Florida International University.

Ho, V., Wong, S.-S. & Lee, C. H. (2011) A Tale of Passion: Linking Job Passion and Cognitive Engagement to Employee Work Performance. Management Faculty Publications. Available at <https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=1044&context=management-faculty-publications> (Accessed on 22/8/2019).

Hogg, M. A. & Vaughan, G. M. (2002) Social Psychology (3rd ed.) London: Prentice Hall.

Holland, P., Cooper, B. & Hecker, R. (2016) Use of social media at work: a new form of employee voice? *International Journal of Human Resource Management*, 27, 21, pp. 2621-2634.

Hromei, A. (2014) Non-Financial Factors That Influence the Success of a Merger Transaction. *Economic and Management*, Vol., 504-511. Available at ([http://www.academia.edu/28782267/Adoption\\_of\\_Internet\\_Banking\\_in\\_Public\\_and\\_Private\\_Sector\\_Banks\\_with\\_special\\_reference\\_to\\_Chennai](http://www.academia.edu/28782267/Adoption_of_Internet_Banking_in_Public_and_Private_Sector_Banks_with_special_reference_to_Chennai)) Accessed on 4/11/2018.

Hsu, H., Liu, F., Tsou, H. & Chen, L. (2019) Openness of technology adoption, top management support and service innovation: a social innovation perspective. *Journal of Business & Industrial Marketing*, Vol. 34 No. 3, pp. 575-590. doi: <https://doi.org/10.1108/JBIM-03-2017-0068>.

Huang, C.-Y. & Kao, Y.-S. (2015) UTAUT2 Based Predictions of Factors Influencing the Technology Acceptance of Phablets by DNP. *Mathematical Problems in Engineering*. (1):1-23 doi: 10.1155/2015/603747.

Huang, L., Lu, M. T. & Wong, B. K. (2003) The Impact of Power Distance on Email Acceptance: Evidence from the PRC. *Journal of Computer Information Systems*, vol. 44, no. 1, pp. 93-101.

Huang, Z. Q. & Wang, H. X. (2017) Improving the agility of employees through enterprise social media: The mediating role of psychological conditions. *International Journal of Information Management*. 38, Issue 1, February 2018, pp. 52-63.

Hubert, M., Blut, M., Brock, C., Zhang, R. W., Koch, V. & Riedl, R. (2019) The influence of acceptance and adoption drivers on smart home usage, *European Journal of Marketing*, Vol. 53 No. 6, pp. 1073-1098.

Hyde, K. F. (2000) Recognising deductive processes in qualitative research. *Qualitative Market Research: An International Journal*, Vol. 3 Issue: 2, pp. 82-90,

Ifinedo, P. (2015) The Moderating Effects of Age and Computer Knowledge on Nurses' Acceptance of Information Systems: A Canadian Study. *International Conference on Information Resources Management*. Available at <https://aisel.aisnet.org/confirm2015/29/> (Accessed on 19/01/2019).

International Trade Administration (2020) Nigeria – Country Commercial Guide – Aviation/Defense. Available on <https://www.trade.gov/country-commercial-guides/nigeria-aviation-defense>. Accessed on 21/10/2020.

Ishaq, K., Zaki, F., Abid, A., Abid, K. & Ijaz, M. (2019) Impact of Social Media on Students' Academic Performance & Generation Gap: A Study of Public Sector University in Punjab. 2019 International Conference on Innovative Computing (ICIC), Lahore, Pakistan, 2019, pp. 1-9.

Jackson, C. L., Colquitt, J. A., Wesson, M. J. & Zapata-Phelan, C. P. (2006) Psychological collectivism: A measurement validation and linkage to group member performance. *Journal of Applied Psychology*, 91, 884-899.

Jackson, L. A., Ervin, K. S., Gardner, P. D. & Schmitt, N. (2001) Gender and the Internet: Women Communicating and Men Searching. *Sex Roles: A Journal of Research*, 44, 363-379.

Jackson, R. (2019) Social media and social service workers, Available at <https://www.iriss.org.uk/resources/insights/social-media-and-social-service-workers>. (Accessed 24/2/2020).

Jarvis, C. B., MacKenzie, S. B. & Podsakoff, P. M. (2003) A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research* 30 (2), 199-218.

Jenkins, S. & Delbridge, R. (2013) Context matters: examining ‘soft’ and ‘hard’ approaches to employee engagement in two workplaces. *International Journal of Human Resource Managing*; 24: 2670–91. Available at [https://www.researchgate.net/publication/263616725\\_Context\\_matters\\_Examining\\_%27soft%27\\_and\\_%27hard%27\\_approaches\\_to\\_employee\\_engagement\\_in\\_two\\_workplaces](https://www.researchgate.net/publication/263616725_Context_matters_Examining_%27soft%27_and_%27hard%27_approaches_to_employee_engagement_in_two_workplaces) (Accessed on 23/09/2018).

Jensen, D. R. & Ramirez, D. E. (2013) Variance Inflation in Regression, *Advances in Decision Sciences*, 1-15. Available at [https://www.researchgate.net/publication/258396931\\_Revision\\_Variance\\_Inflation\\_in\\_Regression](https://www.researchgate.net/publication/258396931_Revision_Variance_Inflation_in_Regression). (Accessed on 2/3/2019).

Jones, C. M., McCarthy, R. V., Halawi, L. & Mujtaba, B. (2010) Utilizing the Technology Acceptance Model to Assess the Employee Adoption of Information Systems Security Measures. *Issues in Information Systems*, 11 (1). Retrieved from <https://commons.erau.edu/publication/310>

Jones, P. (1996) British Airways’ internal communication programme. *Journal of Communication Management*, Vol. 1 Issue: 2, pp. 181-184. doi: <https://doi.org/10.1108/eb026044>.

Kahn, W. A. (1990) Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692–724.

Kahn, W. A. (1992) To be full there: Psychological presence at work. *Human Relations*, 45, 321–349.

Kang, H., Hahn, M., Fortin, D., Hyun, Y. & Eom, Y. (2006) Effects of perceived behavioral control on the consumer usage intention of e-coupons. *Psychology and Marketing*. 23. 841-864. doi: 10.1002/mar.20136.

Karahanna, E., Evaristo, J. R. & Srire, M. (2002) Methodological Issues in MIS Cross-Cultural Research. *Journal of Global Information Management*, vol. 10, no. 1, pp. 48-55.

Karanika-Murray, M., Duncan, N., Pontes, H. & Griffiths, M. (2015) Organizational identification, work engagement, and job satisfaction. *Journal of Managerial Psychology*, 30, 8, pp. 1019-1033.

Karatepe, O. M. (2012) High-performance work practices and hotel employee performance: The mediation of work engagement, *International Journal of Hospitality Management*. 32, pp. 132-140. doi: <https://doi.org/10.1016/j.ijhm.2012.05.003>.

Kelly, C. (2019) 'Other Voices: Driving Employee Engagement in a Flight Department'. *AIN Online: Business Aviation*. Available on <https://www.ainonline.com/aviation-news/business-aviation/2019-04-12/other-voices-driving-employee-engagement-flight-department>. Accessed (10/11/2019).

Khare, A., Khare, A. & Singh, S. (2012) Factors affecting credit card use in India, *Asia Pacific Journal of Marketing and Logistics*, Vol. 24 No. 2, pp. 236-256.

Kim, H. & Sung-Choon, K. (2013) Strategic HR functions and firm performance: The moderating effects of high-involvement work practices. *Asia Pacific Journal of Management*, 30, 1, pp. 91-113.

Kim, J. H., Kim, M.-S. & Nam, Y. (2010) An analysis of self-construals, motivations, Facebook use, and user satisfaction. *International Journal of Human-Computer Interaction*, 26(11-12), 1077-1099.

Kim, J. S. & Chung, G. H. (2017) Implementing innovations within organizations: a systematic review and research agenda, *Innovation*, 19:3, 372-399.

Kim, K.-S., Sin, S.-C. J. & Yoo-Lee, E. (2014) Undergraduates' use of social media as information sources. *College & Research Libraries*, 75(4), 442-457.

Kim, S. H. (2008) Moderating effects of job relevance and experience on mobile wireless technology acceptance: Adoption of a smartphone by individuals. *Information & Management*, 45, 387-393.

Kinuthia, J. N. (2014) 'Technological, Organizational, and Environmental Factors Affecting the Adoption of Cloud Enterprise Resource Planning (ERP) Systems. Available at <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1510&context=amcis2015> (Accessed on 23/10/2019).

Kiriakidis, S. (2017) Perceived Behavioural Control in the Theory of Planned Behaviour: Variability of Conceptualization and Operationalization and Implications for Measurement. doi: 10.1007/978-3-319-33865-1\_25.

Koch, S. & Tritscher, F. (2017) Social media in the airline industry: acceptance of social seating, *Journal of Hospitality and Tourism Technology*, Vol. 8 No. 2, pp. 256-279.

Kongsved, S. M., Basnov, M., Holm-Christensen, K. & Hjollund, N. H. (2007) Response rate and completeness of questionnaires: a randomized study of Internet versus paper-and-pencil versions. *Journal of Medical Internet Research*, 9(3). Available at <https://www.jmir.org/2007/3/e25/>

Konrad, A. M. (2006) Engaging Employees Through High-Involvement Work Practices. *Ivey Business Journal*, Online. Available (<https://iveybusinessjournal.com/publication/engaging-employees-through-high-involvement-work-practices/>) Accessed on 29/10/2017.

Koodamara, N. K., Thomas, B. & Kademani, P. (2016) Job satisfaction and employee engagement as an antecedent of organizational commitment. *The International Journal of Humanities and Social Studies*, 4(10), 118-123.

Koster, K. (2013) '5 ways to connect through social technology', *Employee Benefit News*, 27, 10, pp. 28-30.

Koul, S. & Eydgahi, A. (2018) Utilizing Technology Acceptance Model (TAM) for driverless car technology adoption. *Journal of Technology Management & Innovation*, 13, 37-46.

Kraft, P., Rise, J., Sutton, S. & Røysamb, E. (2005) Perceived difficulty in the theory of planned behaviour: Perceived behavioural control or affective attitude? *British Journal of Social Psychology* 44:479-49.

Krauss, S. I., Frese, M., Friedrich, C. & Unger, J. M (2005) Entrepreneurial orientation: A psychological model of success among southern African small business owners. *European Journal of Work & Organizational Psychology*, 14, 315-344.

Kuegler, M., Smolnik, S. & Kane, G. (2015) What's in IT for employees? Understanding the relationship between use and performance in enterprise social software. *Journal of Strategic Information Systems*, 24 (2), pp. 90-112.

Kumar, R. (2014) Impact of Emotional Intelligence on Employees' Performance: A Study of Employees Working in Himachal Pradesh University Shimla. <http://dx.doi.org/10.2139/ssrn.2451027>

Kurnia, F. & Noor, M. (2016). 'Employee emotional engagement and impact on organizational performance after acquisition'. Conference paper at the 17th International Conference on Human Resource Development Research and Practice across Europe, Manchester, UK. Vol. 17. Available on [https://www.ufhrd.co.uk/wordpress/wp-content/uploads/2016/10/paper\\_129.pdf](https://www.ufhrd.co.uk/wordpress/wp-content/uploads/2016/10/paper_129.pdf). Accessed on 23/7/2019.

Kwak, S. K. & Kim, J. H. (2017) Statistical data preparation: management of missing values and outliers. *Korean Journal of Anesthesiology*, 70(4), 407–411.

Landers, R. N. & Callan, R. C. (2014) Validation of the beneficial and harmful work-related social media behavioral taxonomies: Development of the Work-related Social Media Questionnaire (WSMQ). *Social Science Computer Review*, 32, 628–646.

Law, S (2009) Learning from employee communication during technological change. *Journal of Workplace Learning*, Vol. 21 Issue: 5, pp. 384-397. doi: <https://doi.org/10.1108/13665620910966794>.

Lebans M. & Euske, K. A. (2006) Conceptual and operational delineation of performance. *Business Performance Measurement*, Cambridge University Press.

Lee, C. & Coughlin, J. F. (2014) PERSPECTIVE: Older adults' adoption of technology: an integrated approach to identifying determinants and barriers. *Journal of Product Innovation Management*. 03;32(5):747–759.

Lee, C., Myrick, R., D'Ambrosio, L., Coughlin, J. & de Weck, O. L. (2013) Older adults' experiences with technology: learning from their voices. In: *Communications in Computer and Information Science*. Berlin: Springer; :251-255.

Lee, J. W., Jones, P. S., Mineyama, Y. & Zhang, X. E. (2002) Cultural differences in responses to a Likert scale. *Research in Nursing & Health*, 25(4), 295-306.

Leftheriotis, I. & Giannakos M. N. (2014) Using social media for work: Losing your time or improving your work? *Computers in Human Behavior*, 31, pp. 134-142.

Leon, A. C., Davis, L. L. & Kraemer, H. C. (2010) The role and interpretation of pilot studies in clinical research. *Journal of Psychiatric Research*, 45(5), 626-9.

Leonardi, P. M., Huysman, M. & Steinfield, C. (2013) Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*. Vol 19, No1. <https://doi.org/10.1111/jcc4.12029>

Lescevica, M., Ginters, E., & Mazza, R. (2013). Unified theory of acceptance and use of technology (UTAUT) for market analysis of FP7 CHOReOS products. *Procedia Computer Science*, 26(1), 51–68.

Li, L., Grimshaw, J., Nielsen, C., Judd, M., Coyte, P. & Graham, I. (2009) Evolution of Wenger's concept of community of practice. *Implementation Science*, 4(1), 11. 1-8 doi: <https://doi.org/10.1186/1748-5908-4-11>.

Li, N. & Kirkup, G. (2007) Gender and Cultural Differences in Internet Use: A Study of China and the UK. *Computers and Education*, 48, 301-317.

Li, S., Glass, R. & Records, H. (2008) The Influence of Gender on New Technology Adoption and Use—Mobile Commerce, *Journal of Internet Commerce*, 7:2, 270-289, doi: 10.1080/15332860802067748.

Li, Y., Tan, C. H. Teo, H. H. & Tan, B. C. Y. (2006) Innovative usage of information technology in Singapore organizations: Do CIO characteristics make a difference? *IEEE transactions on engineering management*. 53, 177–190.

Lian, J. W., Liu, H. M. & Liu, I. L. (2012) Applying innovation resistance theory to understand user acceptance of online shopping: The moderating effect of different product types. *Computer Technology and Application*, 3 (2), pp. 188-193.

Lian, J. W. & Yen, D. C. (2013) To buy or not to buy experience goods online: Perspective of innovation adoption barriers *Computers in Human Behavior*, 29 (3), pp. 665-672.

Licker, P. & Motts, N. (2000) Extending the benefits of e-commerce in Africa: Exploratory phase. *Proceedings of the First Annual Conference of the Global IT Management Association*, Memphis, TN, pp. 115-118.

Lim, W. M., & Ting, D. H. (2012). E-shopping: An analysis of the technology acceptance model. *Modern Applied Science*, 6(4), 49 - 62. doi: <https://doi.org/10.5539/mas.v6n4p49>.

Lorenzo-Romero, C., Efthymios C. & Alarcón-del-Amo, M.-del-C. (2011) Consumer adoption of social networking sites: implications for theory and practice. *Journal of Research in Interactive Marketing*, Vol. 5 Issue: 2/3, pp. 170-188. doi: <https://doi.org/10.1108/17505931111187794.A>

Louwers, S. (2016) 'Employee engagement at KLM reaches new heights as crew share expertise on enterprise social platform'. Available at <https://blogs.office.com/en-us/2016/01/13/employee-engagement-at-klm-reaches-new-heights-as-crew-share-expertise-on-enterprise-social-platform> (Accessed on 15/12/2018).

Lubienski, C. & Lee, J. (2016) Competitive incentives and the education market: How charter schools define themselves in metropolitan Detroit. *Peabody Journal of Education*, 91(1), 64–80.

Lucas, H. & Sylla, R. (2003) The Global Impact of the Internet: Widening the Economic Gap Between Wealthy and Poor Nations? *Prometheus*, 21:1, 1-22, Available at [https://www.researchgate.net/publication/227623331\\_The\\_Global\\_Impact\\_of\\_the\\_Internet\\_Widening\\_the\\_Economic\\_Gap\\_Between\\_Wealthy\\_and\\_Poor\\_Nations](https://www.researchgate.net/publication/227623331_The_Global_Impact_of_the_Internet_Widening_the_Economic_Gap_Between_Wealthy_and_Poor_Nations) (Accessed on 23/7/2018).

Lutz, C. (1988) *Unnatural emotions: Everyday sentiments on a Micronesian atoll and their challenge to western theory*. Chicago: University of Chicago Press.

MacCallum, R. C. & Browne, M. W. (1993) The use of causal indicators in covariance structure models: Some practical issues. *Psychological Bulletin*, 114 (3), 533-541.

Macey, W. H., Schneider, B., Barbera, K. M. & Young, S. A. (2009) *Employee engagement: Tools for analysis, practice, and competitive advantage*. Malden, WA: Wiley Blackwell.

MacKenzie, S. B., Podsakoff, P. M. & Jarvis, C. B. (2005) The problem of measurement model misspecification in behavioral and organizational research and some recommended solutions. *Journal of Applied Psychology* 90 (4), 710-730.

MacKinnon, D. P. & Fairchild, A. J. (2009) Current directions in mediation analysis. *Current Directions in Psychological Science*, 18, 16-20.

MacLeod, D. & Clarke, N. (2009) *Engaging for success: Enhancing performance through employee engagement: a report to government*. Department for Business, Innovation and Skills: London. Retrieved from <http://www.berr.gov.uk/files/file52215.pdf>.

MacLeod, D. & Clarke, N. (2012) *The Evidence: Employee Engagement Task Force: Nailing the Evidence*. Engage for Success, London.

Madsen, V. T. (2017) The challenges of introducing internal social media – the coordinators' roles and perceptions. *Journal of Communication Management*, Vol. 21 No. 1, pp. 2-16.

Madsen, V. T. (2018) Internal Social Media. In R. L. Heath & W. Johansen (Eds.), *The International Encyclopedia of Strategic Communication* (pp. 784-792). Boston, MA: Wiley Blackwell.

Maha, A. Z. D. (2015) The Impact of Employee Engagement on Job Performance and Organisational Commitment in the Egyptian Banking Sector. *Journal of Business and Management Sciences*. 2015; 3(5):138-147. doi: 10.12691/jbms-3-5-1.

Malhotra, N. K. & Birks, D. F. (2007) *Marketing research: An applied approach*. Harlow, UK. Pearson Education, 835pp.

Marikyan, D. & Papagiannidis, S. (2020) *Technology Acceptance Model*, Business School, Newcastle University. Available on <https://open.ncl.ac.uk/theory-library/technology-acceptance-model.pdf>. Accessed 21/12/2020.

Mark, S., Philip, L. & Adrian, T. (2009) Research methods for business students. Harlow: Prentice Hall.

Marketo (2010) The Definitive Guide to B2B Social Media: A Marketo Workbook. San Mateo, CA. Available at <http://docs.cdn.marketo.com/Guide-B2B-Social-Media-Part2.pdf>. (Accessed on 12/02/2019).

Markos, S. & Sridevi, S. M. (2010) Employee Engagement: The Key to Improving Performance, *International Journal of Business and Management* Vol. 5, No. 12. 89-96

Martin, G., Parry, E. & Flowers, P. (2015) Do social media enhance constructive employee voice all of the time or just some of the time? *Human Resource Management Journal*, 25, 4, pp. 541-562,

Martinez, L. S. & Lewis, N. (2016) The Moderated Influence of Perceived Behavioral Control on Intentions Among the General U.S. Population: Implications for Public Communication Campaigns. *Journal of Health Communication*, 21(9).1006-1015

Massumi, B. (2002) *Parables for the Virtual: Movement, Affect, Sensation*. Duke University Press.

Masterson, S. S., Lewis, K., Goldman, B. M. & Taylor, M. S. (2000) Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *The Academy of Management Journal*, 43 (4), 738-748.

May, D. R., Gilson, R. L. & Harter, L. M. (2004) The Psychological Conditions of Meaningfulness, Safety and Availability and the Engagement of the Human Spirit at Work. *Journal of Occupational & Organizational Psychology*. Vol 77, No 1. pp. 11–37. <https://doi.org/10.1348/096317904322915892>

McClendon, M. J. (2002) *Multiple regression and causal analysis*. Prospect Heights, IL: Waveland Press.

Mehrnoosh, N. & Dolatabadi, H. R. (2016) Analysing the Impact of Attitudes, Subjective Norms and Perceived Behavioural Control on Information Technology Adoption and Employee Performance. *International Business Management*, 10: 611-618.

Men, L. R., O'Neil, J. & Ewing, M. (2020) Examining the effects of internal social media usage on employee engagement. *Public Relations Review*, 46(2). doi: 10.1177/2329488420975832

Menant, L., Gilibert, D. & Sauvezon, C. (2021) The Application of Acceptance Models to Human Resource Information Systems: A Literature Review. *Frontiers in Psychology*, 12, 659421. <https://doi.org/10.3389/fpsyg.2021.659421>

Mergel, I. (2013) Social media adoption and resulting tactics in the U.S. federal government. *Government Information Quarterly*, 30, 2, pp. 123-130.

Meyer, J. P., Allen, N. J. & Smith, C. A. (1993) Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Social Psychology*, 78: 538–551.

Meyers, M. D. & Tan, F. (2002) Beyond models of national culture in information systems research. *Journal of Global Information Management*, vol. 10, no. 1, pp. 24-33.

Miller, R. (2013) 'How Gatwick Airport uses Yammer'. Available at <https://www.allthingsic.com/gatwickyamme/> (Accessed on 22/03/2019).

Mills, J. (2014) Methodology and methods. In J. Mills & M. Birks (Eds.), *Qualitative methodology: A practical guide* (pp.31-47). Thousand Oaks, CA: Sage.

Mills, M. J., Culbertson, S. S. & Fullagar, C. J. (2012) Conceptualizing and Measuring Engagement: An Analysis of the Utrecht Work Engagement Scale, *Journal of Happiness Studies* 13: 519–545. doi: 10.1007/s10902-011-9277-3.

Mishra, K. & Walker, K. & Mishra, A. (2014) Using Social Media in the Workplace: How 'Lenovo Central' Brings Employees Together. doi:10.4018/978-1-4666-6182-0.ch008.

Monalisa, M., Daim, T., Mirani, F., Dash, P., Khamis, R. & Bhusari, V. (2008) Managing global design teams. *Research Technology Management*, 51(4), 48-59. Retrieved from <http://www.jstor.org/stable/24135907>.

Mone, E. M. & London, M. (2010) *Employee engagement through effective performance management: A practical guide for managers*. New York: Routledge.

Money, W. & Turner, A. (2005) Assessing knowledge management system user acceptance with the technology acceptance model. *International Journal of Knowledge Management (IJKM)*, vol. 1, no. 1, pp. 8-26.

Moore, D. S., Notz, W. I. & Flinger, M. A. (2013) *The basic practice of statistics* (6th ed.). New York, NY: W. H. Freeman.

Moqbel, M. & Kock, N. (2018) Unveiling the dark side of social networking sites: Personal and work-related consequences of social networking site addiction. *Information & Management*, 55(1):109-19. doi: 10.1016/j.im.2017.05.001.

Mørch, A. I. (2015) Social media in the workplace. In J. Spector (Ed.), *The SAGE encyclopedia of educational technology*. Thousand Oaks, CA: Sage, pp. 667-669.

Moro, S. & Rita, P. (2018) Brand strategies in social media in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, Vol. 30 No. 1, pp. 343-364. doi: <https://doi.org/10.1108/IJCHM-07-2016-0340>.

Morris, M. G., Venkatesh, V. & Ackerman, P. L. (2005) Gender and age differences in employee decisions about new technology: An extension of the theory of planned behaviour. *IEEE Transactions on Engineering Management*, 52, 1, 69–84.

Naik, D. A. (2015) *Organizational Use of Social Media: The Shift in Communication, Collaboration and Decision Making*. James Madison University. Available at <https://commons.lib.jmu.edu/master201019/54>. (Accessed on 2/10/2018).

Naim, M. & Lenka, U. (2017) The impact of social media and collaboration on Gen Y employees' engagement. *International Journal of Development Issues*, Vol. 16 No. 3, pp. 289-299. doi: <https://www.emerald.com/insight/content/doi/10.1108/IJDI-04-2017-0041/full/html>.

Nascimento, A. M. & DaSilveira, D. S. (2017) A systematic mapping study on using social media for business process improvement; *Computers in Human Behaviour*; Vol. 73, pp. 670-675.

Nawaz, M. S., Hassan. M., Saad Hassan, Shaukat. S. & Asadullah, M. A. (2014) Impact of employee training and empowerment on employee creativity through employee engagement: Empirical evidence from the manufacturing sector of Pakistan. *International Journal of Business and Management* Vol. 5, No. 12. 593-601 [http://www.idosi.org/wasj/wasj32\(5\)14/25.pdf](http://www.idosi.org/wasj/wasj32(5)14/25.pdf).

Neidlinger, J. (2014) 'Your Guide to Connecting with Customers Emotionally using Social Media'. Available on (<https://coschedule.com/blog/connecting-customers-emotionally-using-social-media/>) Accessed on 10/11/2017.

Nelson, L., Convertino, G., Chi, E. H. & Nairn, R. (2011) Studying the Adoption of Mail2Tag: an enterprise 2.0 tool for sharing. *Proceedings of the 12th European Conference on Computer Supported Cooperative Work, Aarhus Denmark*. London: Springer. doi: [https://doi.org/10.1007/978-0-85729-913-0\\_3](https://doi.org/10.1007/978-0-85729-913-0_3).

Nguyen, T. U. H. (2009) Information technology adoption in SMEs: An integrated framework. *International Journal of Entrepreneurial Behavior & Research*, 15, 162–186.

Nima, A. A., Rosenberg, P., Archer, T. & Garcia, D. (2013) Correction: Anxiety, Affect, Self-Esteem, and Stress: Mediation and Moderation Effects on Depression. *PLoS ONE* 8(9). doi: <https://doi.org/10.1371/annotation/49e2c5c8-e8a8-4011-80fc-02c6724b2acc>.

Nink, M. (2015) Engagement Index Deutschland. An examination of construct validity. *Journal of Vocational Behavior*, 49, 252–27. Available online: <http://www.gallup.com/de-de/181871/engagement-index-deutschland.aspx> (Accessed on 17/12/2019).

Nistor, G. C. (2019) An extended technology acceptance model for marketing strategies in social media. *Review of Economic and Business Studies*, Vol.12, 127-136.

Obioma, N. R., Wokili, H., Omoke, V. & Asiegbu, B. (2013) An Analysis of the Impact of Air Transport Sector to Economic Development in Nigeria, *IOSR Journal of Business and Management (IOSR-JBM)*. Volume 14, Issue 5, pp. 41-48.

Ogunlade, B. O. & Bello, L. K. (2019) Pre-Service Teachers' Perceived Relevance of Educational Technology Course, Digital Performance: Teacher Perceived of Educational Technology. *International Journal of Technology Enabled Student Support Services*, Vol.9, 41-54.

Oksa, R., Kaakinen, M., Savela, N., Ellonen, N. & Oksanen, A. (2020) Professional social media usage: Work engagement perspective. *New Media & Society*. 1461444820921938. <https://doi.org/10.1177/1461444820921938>.

Oksa, R., Savela, N., Kaakinen, M., Ellonen, N. & Oksanen, A. (2020) Professional social media usage: Work engagement perspective. *New Media & Society*, online first. doi: <https://doi.org/10.1177/1461444820921938>.

Olasina, G. & Mutula, S. (2015) The influence of national culture on the performance expectancy of e-parliament adoption. *Behaviour & Information Technology*, vol. 34, no. 5, pp. 492-505.

Oxford Economics (2014) Economic Benefits from Air Transport in the UK. UK country report. Available at <https://www.oxfordeconomics.com/my-oxford/projects/281929> Accessed on 24/03/2018.

Parekh, R. (2012) Internal Affairs: Social Media at the Office. *Advertising Age*, 83, 33, pp. 54.

Paris, S. G. & Paris, A. H. (2001) Classroom applications of research on self-regulated learning. *Educational Psychologist*, 36(2), 89-101.

Parker, D., Manstead, A. S. R., Stradling, S. G., Reason, J. T. & Baxter, J. S. (1992) Intention to commit driving violations: An application of the theory of planned behavior. *Journal of Applied Psychology*, 77(1), 94-101.

Parry, E. (2011) An examination of e-HRM as a means to increase the value of the HR function. *International Journal of Human Resource Management*, Vol. 22 No. 5, pp. 1146-1162.

Parveen, F. (2012) Impact of Social Media Usage on Organizations (2012). PACIS 2012 Proceedings. Paper 192. Available at <http://aisel.aisnet.org/pacis2012/192> (Accessed on 3/8/2018).

Pascagoula, D. (2011) Analysis of ERP Usage with Technology Acceptance Model. *Global Business and Management Research*, vol. 3, no.2, pp. 157-165.

Patton, M. (1990) *Qualitative evaluation and research methods*. Beverly Hills: Sage.

Pauleen, D. J. (2003) Lessons learned crossing boundaries in an ICT-supported distributed team. *Journal of Global Information Management*. Vol. 11, no. 4, pp. 1-19.

Pech, R. & Slade, B. (2006) Employee Disengagement: is there evidence of a growing problem? *Handbook of Business Strategy*. 7. 21-25. doi: 10.1108/10775730610618585.

Pendry, L. F. & Salvatore, J. (2015) Individual and social benefits of online discussion forums, *Computers in Human Behaviour*, Vol 50, pp. 211-220.

Perez, C. (2010) Uncertainty Avoidance, IT Perceptions, Use and Adoption: Distributed Teams in Two Cultures. *Journal of Academics and Business Ethics*, 8, 1-9.

Peterson, R. A. & Kim, Y. (2013) On the relationship between coefficient alpha and composite reliability. *Journal of Applied Psychology*, 98(1), 194-198.

Pfannenber, J. & Zerfaß, A. (2004) *Wertschöpfung durch Kommunikation*. (Thesis paper). Available on <http://www.communicationcontrolling.de/fileadmin/communicationcontrolling/pdf-fachbeitraege/DPRG-AK-Thesenpapier-2004.pdf>. Accessed on 12/3/2018.

Pinsonneault, A. & Kraemer, K. (1993) Survey research methodology in management information systems: an assessment. *Journal of Management Information Systems* 10: 75-105.

Pintrich, P. R. & De Groot, E. V. (1990) Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33-40.

Pintrich, P. R. & Garcia, T. (1991) Student goal orientation and self-regulation in the college classroom. In M. Maehr & P. R. Pintrich (Eds.) *Advances in motivation and achievement: Goals and self-regulatory processes*, vol. 7. (pp. 371-402). Greenwich, CT: JAI Press.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y. & Podsakoff, N. P. (2003) Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>.

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B. & Bachrach, D. G. (2000) Organizational citizenship behaviour: a critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, vol. 26, no. 3, 513-563.

Podsakoff, P. M., MacKenzie, S. B. & Podsakoff, N. P. (2012) Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539-569.

Preciado-Babb, A., Saar, C., Brandon, J. & Friesen, S. (2013) Using Mobile Technology for Fostering Intellectual Engagement. Available at ([https://www.researchgate.net/publication/268217294\\_Using\\_Mobile\\_Technology\\_for\\_Fostering\\_Intellectual\\_Engagement](https://www.researchgate.net/publication/268217294_Using_Mobile_Technology_for_Fostering_Intellectual_Engagement)) Accessed on 6/9/2019.

Premkumar, G. A. (2003) meta-analysis of research on information technology implementation in small business. *Journal of Organizational Computing and Electronic Commerce*. 13, 91–121.

Purcell, J., Kinnie, N., Hutchinson, S., Rayton, B. & Swart, J. (2003) Understanding the People and Performance Link: Unlocking the Black Box. London: CIPD.

Quinn, K. (2018) Cognitive effects of social media use: A case of older adults. *Social Media + Society*, 4(3), 1–9. doi:10.1177/2056305118787203.

Quintero, E. (2014) Feeling Socially Connected Fuels Intrinsic Motivation and Engagement. Available on (<http://www.shankerinstitute.org/blog/feeling-socially-connected-fuels-intrinsic-motivation-and-engagement>) Accessed on 14/11/2017.

Qureshi, S. & York, A. S. (2008) Information technology adoption by small businesses in minority and ethnic communities. In *Proceedings of the Annual Hawaii International Conference on System Sciences*, Big Island, HI, January 2008; pp. 1530–1605.

Rahi, S. (2017) Research Design and Methods: A Systematic Review of Research Paradigms, Sampling Issues and Instruments Development. *International Journal of Economics & Management Sciences*, 6: 403. doi: 10.4172/2162-6359.1000403.

Rauniar, R., Rawski, G., Yang, J. & Johnson, B. (2014) Technology acceptance model (TAM) and social media usage: An empirical study on Facebook. *Journal of Enterprise Information Management* 27(1): 6-30. doi: <https://doi-org.plymouth.idm.oclc.org/10.1108/JEIM-04-2012-0011>.

Rees, C., Alfes, K. & Gatenby, M. (2013) Employee voice and engagement: connections and consequences, *International Journal of Human Resource Management*, 24:14, 2780-2798.

Reid, M. F., Riemenschneider, C. K., Allen, M. W. & Armstrong, D. J. (2008) Information Technology Employees in State Government: A Study of Affective Organizational Commitment, Job Involvement, and Job Satisfaction. *American Review of Public Administration*, 38: 41-61.

Roberts, G. (2013) 'The 411 on the 140'. *Employee Benefit News*, 27, 4, p. 19.

Robinson, I. (2006) *Human Resource Management in Organisations*. London, CIPD.

Robinson, R. S. (2014) Purposive Sampling. In: Michalos, A. C. (ed) *Encyclopedia of Quality of Life and Well-Being Research*. Springer, Dordrecht.

Robson, C. (2011) *Real World Research: A Resource for Users of Social Research Methods in Applied Settings*. Chichester, John Wiley. No.3, pp. 586 -608

Rodríguez-Aceves, L, Valerio-Ureña, G. & Madero, S. (2018) Perceptions about the usefulness of online social networks in the workplace; *Journal of Management and Economics for Iberoamerica*, vol. 34, N° 147, 2018, 149-157. Available on

(<https://pdfs.semanticscholar.org/9765/c2fd2e5d9f6941ee94dd6822605e6d4125e5.pdf>)

Accessed on 10/03/2019.

Rotgans, J. & Schmidt, H. (2011) Cognitive engagement in the problem-based learning classroom. *Advances in Health Sciences Education*, 16(4), 465-479.

Rothbard, N. P. (2016) Social Media Strategies for Better Work-Life Engagement. *IESE Insight*, no. 29, pp. 23-30.

Ruck, K. & Welch, M. (2012) Valuing internal communication; management and employee perspectives. *Vol. 38, No. 2*, 294-302

Ruck, K., Welch, M. & Menara, B. (2017) Employee voice: An antecedent to organisational engagement? *Public Relations Review*, 43(5), 904–914.

Sabato, L. A., Barone, C. & McKinney, K. (2017) Use of social media to engage membership of a state health-system pharmacy organization. *American Journal of Health-System Pharmacy*, vol. 74, no. 1, pp.72-75.

Saks, A. M. (2006) Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7): 600-619.

Saleem, A. & Mengyan, M. (2017) A Tale of Four Platforms: Motivations and Uses of Facebook, Twitter, Instagram, and Snapchat among College Students? *Social Media + Society*. Vol. 3(1), p.205630511769154. doi: <http://journals.sagepub.com/doi/pdf/10.1177/2056305117691544>.

Sánchez, R. L. (2015) High Involvement Work Practices and Engagement the Case of Brico Dépôt. Available at [http://repositori.uji.es/xmlui/bitstream/handle/10234/132462/TFG\\_2014\\_sanchezL.pdf?sequence=1](http://repositori.uji.es/xmlui/bitstream/handle/10234/132462/TFG_2014_sanchezL.pdf?sequence=1) (Accessed on 29/10/2017).

Sánchez-Franco, M. J., Martínez-López, F. J. & Martín-Velicia, F. A. (2009) Exploring the impact of individualism and uncertainty avoidance in Web-based electronic learning: An empirical analysis in European higher education. *Computers & Education*, 52(3), 588–598.

Sanchez-Mena, A., Marti-Parreño, J. & Aldás-Manzano, J. (2017) The Role of Perceived Relevance and Attention in Teachers' Attitude and Intention to Use Educational Video Games. *International Journal of Emerging Technologies in Learning*, 12(03), 154–168.

Sanda, H. U. & Kurfi, M. H. (2013) Gender and Information Communication Technologies (ICTs) in Nigeria: Challenges and Prospects. *Global Journal of Human Social Science, Sociology and Culture*. Vol. 13, issue 6. Available at

[https://globaljournals.org/GJHSS\\_Volume13/7-Gender-and-Information.pdf](https://globaljournals.org/GJHSS_Volume13/7-Gender-and-Information.pdf) (Access on 4/10/2019).

Sargent, K. Hyland, P. & Sawang, S. (2012) Factors influencing the adoption of information technology in a construction business. *Australasian Journal of Construction Economics and Building*, vol 12, no. 2, pp. 72-86. doi: <https://dx.doi.org/10.5130/AJCEB.v12i2.2448>.

Schaufeli, W. B. (2013) What is engagement? In C. Truss, K. Alfes, R. Delbridge, A. Shantz & E. Soane (Eds.), *Employee Engagement in Theory and Practice*. London: Routledge.

Schindler, L. A., Burkholder, G. J., Morad, O. A. & Marsh, C. (2017) Computer-based technology and student engagement: A critical review of literature. *International Journal of Technology in Higher Education*. Vol.14

Schlachter, S., McDowall, A., Cropley, M. & Inceoglu, I. (2017) Voluntary Work-Related Technology Use during Non-Work Time: A Narrative Synthesis of Empirical Research and Research Agenda *International Journal of Management Reviews*. 20 (4). pp. 825-846.

Schraeder, M., Swamidass, P. M. & Morrison, R. (2006) Employee involvement, attitudes and reactions to technology changes. *Journal of Leadership & Organizational Studies*, 12(3), 85-100.

Schreiner, M. & Riedl, R. (2019) Effect of Emotion on Content Engagement in Social Media Communication: A Short Review of Current Methods and a Call for Neurophysiological Methods, *Information Systems and Neuroscience*, 4 (2), 195- 202.

Schultz, M., Koehler, J., Philippe, T. & Coronel, R. (2015) Managing the Effects of Social Media in Organizations. *SAM Advanced Management Journal*, 80, 2, pp. 42-47, Business Source Complete, EBSCOhost, viewed 21 December 2017.

Seo, E.-J. & Park, J.-W. (2018) A study on the effects of social media marketing activities on brand equity and customer response in the airline industry. *Journal of Air Transport Management*, 66, 36-41.

Shadar, W. (2017) 'Aviation contributed \$0.3bn to Nigeria's GDP in 2016', New Telegraph. Available <https://newtelegraphonline.com/2017/10/aviation-contributed-0-3bn-nigerias-gdp-2016/> (Accessed on 24/03/2017).

Sharma, A. & Bhatnagar, J. (2016) Enterprise social media at work: web-based solutions for employee engagement. *Human Resource Management International Digest*, Vol. 24 Issue: 7, pp. 16-19, <https://doi.org/10.1108/HRMID-04-2016-0055>.

Sheeran, P., Trafimow, D. & Armitage, C. J. (2003) Predicting behaviour from perceived behavioural control: Tests of the accuracy assumption of the theory of planned behaviour. *British Journal of Social Psychology*, 42, 393–410.

Shin, Y. & Hancer, M. (2016) The role of attitude, subjective norm, perceived behavioral control, and moral norm in the intention to purchase local food products. *Journal of Foodservice Business Research*, 19, 4, pp. 338-351.

Shmueli, G., Ray, S., Velasquez Estrada, J. M. & Shatla, S. B. (2016) The elephant in the room: evaluating the predictive performance of PLS models. *Journal of Business Research*, Vol. 69 No.10, pp.4552-4564.

Shutan, B. (2017) Social Media Friend or Foe? *Employee Benefit News*, 31, 2, pp. 26-28.

Sievert, H. & Scholz, C. (2017) Engaging employees in (at least partly) disengaged companies. Results of an interview survey within about 500 German corporations on the growing importance of digital engagement via internal social media. *Public Relations Review*, 43, 894–903.

Singh, S. & Srivastava, P. (2019) Social media for outbound leisure travel: A framework based on technology acceptance model (TAM). *Journal of Tourism Futures*, Vol. 5 No. 1, pp. 43-61. <https://doi.org/10.1108/JTF-10-2018-0058>.

Skoumpopoulou, D., Wong, A. K., Ng, P. M. & Lo, M. F. (2018) Factors that affect the acceptance of new technologies in the workplace: a cross case analysis between UK and Hong Kong. Paper presented at 23rd UK Academy for Information Systems International Conference, Oxford.

Smith, B., Stumberger, N., Guild, J. & Dugan, A. (2017) What's at stake? An analysis of employee social media engagement and the influence of power and social stake. *Public Relations Review*. doi: 10.1016/j.pubrev.2017.04.010

Smith, D., Cain, M., Mann, J., Lundy, J., Bradley, A., Dulany, K. & Basso, M. (2009) Predicts 2010: Social Software Is an Enterprise Reality. Gartner.

Smith, P. B. (2004) Acquiescent response bias as an aspect of cultural communication style. *Journal of Cross-Cultural Psychology*, 35, 50-61.

Snow, C. Fjeldstad, Ø. & Langer, A. (2017) Designing the digital organization. *Journal of Organization Design*, vol. 6, no. 1, pp. 1-13. doi: 10.1186/s41469-017-0017-y.

So, K. K. F., Wu, L. & Xiong, L. (2017) Brand Management in the Era of Social Media: Social Visibility of Consumption and Customer Brand Identification; *Journal of Travel Research* <http://journals.sagepub.com/doi/abs/10.1177/0047287517718354>.

Soane, E., Truss, C., Alfes, K., Shantz, A., Rees, C. & Gatenby, M. (2012) Development and application of a new measure of employee engagement: the ISA Engagement Scale. *Human Resource Development International*, 15 (5), pp. 529-547.

Son, J., Jin, B. & George, B. (2013) Consumers' purchase intention toward foreign brand goods. *Management Decision*, 51, 2, pp. 434-450.

Sonnentag, S. (2003) Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology*, 88, 518-528.

Stam, K. R. & Stanton, J. M. (2010) Events, emotions, and technology: Examining acceptance of workplace technology changes. *Information Technology & People*, 23(1), 23-53. doi:10.1108/09593841011022537.

Stehle, H. & Huck-Sandhu, S. (2016) Discussion, dialogue, discourse| dialog in public relations roles: AQ study among young professionals. *International Journal of Communication*, 10, 4119-4140. <http://ijoc.org/index.php/ijoc/article/view/4575/1760>.

Stempniak, M. (2014) Technology key to engagement at the individual level. *Hospitals & Health Networks*, 88, 6, pp. 40-44.

Straub, E. (2009) Understanding technology adoption: Theory and future directions for informal learning. *Review of Educational Research*, 79, 625–649.

Sujatavani, G., Tamilsalvi, M., Sucharita, S. & Sivaraman, K. (2019) Adoption of Social Media by Architecture Students in Fostering Community Service Initiative using Technology Acceptance Model. *IOP Conference Series: Materials Science and Engineering*, 636, p. 012015.

Surowiec, S. & Bansal, G. (2016) Job Relevance and IT Usage by Child Welfare Professionals in Wisconsin Counties. Available at <http://aisel.aisnet.org/mwais2016/18> (Accessed on 2/3/2018).

Sustainable Aviation (2016) UK aviation industry generates £60 billion revenue and exports £26 billion. UK Aviation Industry Socio-Economic Report. Available at <http://www.sustainableaviation.co.uk/uk-aviation-industry-generates-60-billion-revenue-and-exports-26-billion/> (Accessed on 27/05/2018).

Taherdoost, H. (2016a) Sampling Method, Sampling Technique, Research Methodology, Probability Sampling, and Non-Probability Sampling, *International Journal of Academic Research in Management (IJARM)* Vol. 5, No. 2, pp. 18-27.

Taherdoost, H. (2016b) Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *International Journal of Academic Research in Management*, 5 (3), pp. 28-36.

Taman, T. (2014) Social Media in the Workplace – Are We Nearly There? *Workforce Solutions Review*, 5, 4, pp. 8-10.

Tan, P. J. B. (2019) An Empirical Study of How the Learning Attitudes of College Students toward English E-Tutoring Websites Affect Site Sustainability. *Sustainability* 2019, 11, 1748.

Tarhini, A., Hone, K., Liu, X. & Tarhini, T. (2016) Examining the moderating effect of individual-level cultural values on users' acceptance of E-learning in developing countries: a structural equation modeling of an extended technology acceptance model, *Interactive Learning Environments*, Vol. 25:3 306-328, doi: 10.1080/10494820.2015.1122635.

Teixeira, T., Wedel, M. & Pieters, R. (2012) Emotion-Induced Engagement in Internet Video Advertisements. *Journal of Marketing Research*, 49(April), 144–145.

Tenzer, H., Pudelko, M. & Harzing, A.-W. (2014) The impact of language barriers on trust formation in multinational teams. *Journal of International Business Studies*, 45(5), 508-535.

Teo, T. & Lee, C. B. (2010) Examining the efficacy of the Theory of Planned Behavior (TPB) to understand pre-service teachers' intention to use technology. 27(2), 60-67

Teo, T., Lee, C. B. & Chai, C. S. (2008) Understanding pre-service teachers' computer attitudes: Applying and extending the technology acceptance model. *Journal of Computer-Assisted Learning*, 24(2), 128-143.

Thatcher, J. B., Gundlach, M. J., McKnight, D. H. & Srite, M. (2007) Individual and human-assisted computer self-efficacy: An empirical examination. *Wirtschaftsinformatik*, Vol.55, pp. 841-848.

Thomas, M. & Thomas, H. (2012) Using new social media and Web 2.0 technologies in business school teaching and learning. *Journal of Management Development*, 31, 4, pp. 358-367.

Thong, J. Y. L. (1999) An integrated model of information systems adoption in small businesses. *Journal of Management Information Systems*, 15, 187–214.

Thong, J. Y. L., Yap, C.-S. & Raman, K. S. (1993) Top management support in small business information systems implementation: How important is it? In *Proceedings of the 1993 conference on Computer personnel research*. 416–425. <https://doi.org/10.1145/158011.158256>

Thong, J. Y. L., Yap, C. & Raman, K. S. (1996) Top Management Support, External Expertise and Information Systems Implementation in Small Businesses. *Information Systems Research*, 7(2): 248-267.

Titov, E. & Umarova, L. (2017) Impact of Real and Propagated Values on Organisational Success. Available on

[https://www.researchgate.net/publication/321393042\\_Impact\\_of\\_Real\\_and\\_Propagated\\_Values\\_on\\_Organisational\\_Success](https://www.researchgate.net/publication/321393042_Impact_of_Real_and_Propagated_Values_on_Organisational_Success) Accessed on 1/11/2019.

Tomas, L., Lasen, M., Field, E. & Skamp, K. (2015) Promoting Online Students' Engagement and Learning in Science and Sustainability Preservice Teacher Education. *Australian Journal of Teacher Education*, 40(11). <http://dx.doi.org/10.14221/ajte.2015v40n11.5>

Tomaskovic-Devey, D., Leiter, J. & Thompson, S. (1994) Organizational Survey Nonresponse. *Administrative Science Quarterly*, 39, pp. 439–457.

Treem, J. W., Dailey, S. L., Pierce, C. S. & Leonardi, P. M. (2015) Bringing technological frames to work: How previous experience with social media shapes the technology's meaning in an organization. *Journal of Communication*, 65 (2), pp. 396–422.

Trinh, H. N., Tran, H. H. & Vuong, D. H. Q. (2020) Determinants of consumers' intention to use credit card: a perspective of multifaceted perceived risk. *Asian Journal of Economics and Banking*, Vol. 4 No. 3, pp. 105-120. <https://doi.org/10.1108/AJEB-06-2020-0018>

Truss, C., Alfes, K., Delbridge, R., Shantz, A. & Soane, E. (2013) *Employee Engagement in Theory and Practice*. Taylor and Francis, Florence. Available from: ProQuest Ebook Central. [30 October 2017].

Truss, C., Alfes K., Delbridge, R., Shantz, A. & Soane, E. (2014) *Employee Engagement in Theory and Practice*. London: Routledge.

Truss, C., Soane, E., Shantz, A., Alfes, K. & Delbridge, R. (2013) Employee engagement, organisational performance and individual wellbeing: exploring the evidence, developing the theory. Editorial introduction to special issue. *International Journal of Human Resource Management*; 24:2657–69. doi:10.1080/09585192.2013.798921.

Tudu, P. N. & Pathak, P. (2015) Social Network Sites: Can they enhance Employee Productivity in an organization? *International Journal of Management Science & Technology Information*, 17, pp. 23-35, Business Source Complete, EBSCOhost, viewed 21 December 2017.

Turel, O. & Serenko, A. (2012) The benefits and dangers of enjoyment with social networking websites. *European Journal of Information Systems*, 21 (2012), pp. 512-528.

Turulja, L. & Bajgoric, N. (2016) human resources and information technology: what is more important to companies in digital era? *Business System Research*, 7(1), 35-45.

Umeh, K. & Patel, R. (2004) Theory of planned behaviour and ecstasy use: An analysis of moderator-interactions. *British Journal of Health Psychology*, 9 (2004), pp. 25-38.

Usoro, A. & Abiagam, B. (2018) Culture effect on knowledge management adoption in Nigerian hospitality industry. *VINE Journal of Information and Knowledge Management Systems*, Vol. 48 No. 3, pp. 314-332.

van Zoonen, W. & Banghart, S. (2018) Talking Engagement into Being: A Three-Wave Panel Study Linking Boundary Management Preferences, Work Communication on Social Media, and Employee Engagement, *Journal of Computer-Mediated Communication*, Vol 23, Issue 5, pp. 278–293.

van Zoonen, W., van der Meer, T. & Verhoeven, J. (2014) Employees work-related social-media use: His master's voice. *Public Relations Review*, Vol 40, pp. 850-852.

Vitak, J. (2012) The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcasting & Electronic Media*, 56, 451–470.

Vitak, J., Lampe, C., Gray, R. & Ellison, N. B. (2012) Why won't you be my Facebook friend? Strategies for managing context collapse in the workplace. In *Proceedings of the 2012 iConference* (pp. 555–557). New York, NY: ACM Press.

Voorveld, H. A. M., van Noort, G., Muntinga, D. G. & Bronner, F. (2018) Engagement with Social Media and Social Media Advertising: The Differentiating Role of Platform Type. *Journal of Advertising*, 47:1, 38-54,

Vörös, T. & Choudrie, J. (2011) Uncertainty Avoidance and Technology Acceptance in Emerging Economies: A Comparative Study. Paper presented at the SIG GlobDev 4th Annual conference Shanghai, China. December 3, 2011 <http://aisel.aisnet.org/globdev2011/12>.

Wake, M. & Green, W. (2019) Relationship between employee engagement scores and service quality ratings: Analysis of the National Health Service Staff Survey across 97 acute NHS Trusts in England and concurrent Care Quality Commission outcomes (2012–2016). *BMJ Open* 9(7): 2018–026472.

Walden, A. (2016) Integrating Social Media into the Workplace: A Study of Shifting Technology Use Repertoires, *Journal of Broadcasting & Electronic Media*, 60:2, 347-363, doi: 10.1080/08838151.2016.1164163.

Wang, E. T. G., Tai, J. C. F. & Grover, V. (2013) Examining the Relational Benefits of Improved Interfirm Information Processing Capability in Buyer–Supplier Dyads. *MIS Quarterly*, 37(1), 149–173.

Wang, G. & Song, J. (2017) The relation of perceived benefits and organizational supports to user satisfaction with building information model (BIM). *Computers in Human Behavior*, 68, 493-500.

Wang, M. & YangHu, S. (2017) An Exploration of Company's Internal Social Media on Social Constructs and Organizational Values; *International Journal of e-Education, e-Business, eManagement and e-Learning*, Available on (<https://pdfs.semanticscholar.org/cc32/f48c326e35df5374b5ef779c2962b60beee6.pdf>) accessed 09/11/2019.

Wang, Y. M., Wang, Y. S. & Yang, Y. F. (2010) Understanding the determinants of RFID adoption in the manufacturing industry. *Technological Forecasting and Social Change*, Vol. 77, pp. 803-815.

Wang, Z. (2016) Interactions Between Social Media Marketing and Service Quality in the Airline Industry of the United States. *Journal of International Business and Law*, Vol. 15: Iss. 2, Article 8. Available at: <http://scholarlycommons.law.hofstra.edu/jibl/vol15/iss2/8>

Weerasinghe, S. (2017) Technology Acceptance Model in the Domains of LIS and Education: A Review of Selected Literature, *Library Philosophy & Practice*, vol 2017 pp. 1 -26.

Wellins, R. & Concelman, K. (2005) Creating a culture for engagement. *Workforce Performance Solutions*, 4, 1-5.

Wenger, E. (2000) Communities of practice social learning systems. *Organization*, 7, 225– 56.

Whittington, J. L. & Galpin, T. J. (2010) The Engagement Factor: Building a High-Commitment Organization in a Low-Commitment World. *Journal of Business Strategy*, vol. 31 (5) pp. 14-24.

Wilms, J. D., Friesen, S. & Milton, P. (2009) What did you do in school today? Transforming classrooms through social, academic and intellectual engagement. (First National Report). Toronto: Canadian Education Association.

Wilson, J. (2010) *Essentials of Business Research: A Guide to Doing Your Research Project*. Sage, London.

Winarto, S. A. & Hadiprajinto, P. B. (2011) Analysis Effect of External Variables on System Usage and User Satisfaction Using Technology Acceptance Model (Empirical Study on Bank Pekreditan Rakyat in Semarang City Region). Faculty of Economics, Diponegoro University Semarang. Available at [http://eprints.undip.ac.id/27410/1/Analysis\\_Effect\\_of\\_External\\_Variables\\_on\\_System\\_Usage\\_and\\_Us.pdf](http://eprints.undip.ac.id/27410/1/Analysis_Effect_of_External_Variables_on_System_Usage_and_Us.pdf)

Wong, L. H. M., Ou, C. X. J., Davison, R. M., Zhu, H. & Zhang, C. (2016) Web 2.0 and Communication Processes at Work: Evidence from China. *IEEE Transactions on Professional Communication*, 59(3), 230-244.

Wook, M., Yusof, Z. M. & Nazri, M. Z. A. (2015) The Acceptance of Educational Data Mining Technology among Students in Public Institutions of Higher Learning in Malaysia. *International Journal of Future Computer and Communication*, vol. 4, no. 2, pp. 112-117

Wu, J. & Wang, S. (2005) What drives mobile commerce? An empirical evaluation of the revised technology acceptance. *Information & Management*, vol. 42, no.5, pp. 719-729,

Wynen, J., van Dooren, W., Mattijs, J. & Deschamps, C. (2018) Linking turnover to organizational performance: the role of process conformance. *Public Management Review*, vol.21, 1–17.

Xiaojun, Z. (2017) Knowledge Management System Use and Job Performance: A Multilevel Contingency Model. *MIS Quarterly*, 41, 3, pp. 811-A5,

Yildirim, O. (2014) The Impact of Organizational Communication on Organizational Citizenship Behavior: Research Findings. *Procedia - Social and Behavioral Sciences*. 150, 15, pp. 1095-1100. Available at (<http://www.sciencedirect.com/science/article/pii/S1877042814051738>) Accessed on 15/11/2017.

Yin, R. (1994) *Case study research: Design and methods*. Beverly Hills, CA: Sage.

Yousafzai, S. Y., Foxall, G. R. & Pallister, J. G. (2007) Technology acceptance: a metaanalysis of the TAM. *Journal of Modelling in Management*. Vol. 2 (3). 251 – 280.

Yu, C. & Tao, Y. (2009) Understanding business-level innovation technology adoption. *Technovation*, 29, 2, pp. 92-109, Business Source Complete, EBSCOhost, viewed 14 December 2017.

Zaichkowsky, J. L. (1985) Measuring the involvement construct. *Journal of Consumer Research*, 12 (3, December 1985), pp. 341–352, <https://doi.org/10.1086/208520>.

Zaw, A. Y. & Fernando, M. S. (ND) Leveraging Employee Engagement and Employee Performance Towards Excellent Service Quality: An Action Research on TMD Hair Dressing and Beauty Salon Services in Yangon, Myanmar. Available at <https://core.ac.uk/download/pdf/233620814.pdf> (Accessed on 17/10/2020).

Zhang, S. Zhao, J. & Tan, W.W. (2008) Extending TAM for Online Learning Systems: An Intrinsic Motivation Perspective. *Tsinghua Science and Technology*, 13 (3), 312-317. [http://dx.doi.org/10.1016/S1007-0214\(08\)70050-6](http://dx.doi.org/10.1016/S1007-0214(08)70050-6).

Zikmund, W. G. (2000) *Business research methods*. Fort Worth: Dryden Press.

Zimoto, P. (2016) Employee Engagement and Organizational Performance of Retails Enterprises. *American Journal of Industrial and Business Management*, 06, 516-525. <https://doi: 10.4236/ajibm.2016.64047>

Zolait, A. H. S. (2014) The nature and components of perceived behavioural control as an element of theory of planned behaviour. *Behaviour & Information Technology*, 33:1, 65-85, <https://doi.org/10.1080/0144929X.2011.630419>

Zuidgeest, M., Hendriks, M., Koopman, L., Spreeuwenberg, P. & Rademakers, J. J. (2011) A comparison of a postal survey and mixed-mode survey using a questionnaire on patients experiences with breast care. *Journal of Medical Internet Research*, 13 (3): e68.

Zyngier, D. (2008) (Re)conceptualizing student engagement: Doing education not doing time. *Teaching and Teacher Education*, 24, 1765-1776.

# APPENDICES

## Appendix 1: Ethical Approval Form

	<b>Faculty of Business Academic Partnerships</b>		<b>Faculty Research Ethics Committee</b>		<b>APPLICATION FOR ETHICAL APPROVAL OF RESEARCH</b>		<b>(For FREC use only)</b> Application No:												
							Chairs action (expedited)	Yes/ No											
							Risk level -if high refer to UREC chair immediately Cont. Review Date	High/low  / /											
							Outcome (delete)	Approved/ Declined/ Amend/ Withdrawn											
1.	<b>Investigator</b> *Note:1 Uju Ugochukwu			Supervisor – Dr Mohamed Haddoud															
Contact Address: Desk 29, Room 510. Cookworthy building, Plymouth University																			
Tel: Ext.				Email: Uju.Ugochukwu@plymouth.ac.uk															
2.	<b>Title of Research:</b> Organizational Adoption Of Social Media For Employee Engagement And Its Influences On Employee Performance. A Case Of UK And Nigeria Airline Companies.																		
3.	<b>Nature of approval sought</b> (Please tick relevant boxes) *Note:2 a) PROJECT: <input type="checkbox"/> b) PROGRAMME <input type="checkbox"/> (max 3 years) If a) then please indicate which category: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Funded/unfunded Research (staff)</td> <td style="width: 50%; text-align: center;"><input type="checkbox"/></td> <td style="width: 50%;">Undergraduate</td> <td style="width: 50%; text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>MPhil/PhD, ResM, BClIn Sci</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Or Other (please state)</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Masters</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Research for module -</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>							Funded/unfunded Research (staff)	<input type="checkbox"/>	Undergraduate	<input type="checkbox"/>	MPhil/PhD, ResM, BClIn Sci	<input checked="" type="checkbox"/>	Or Other (please state)	<input type="checkbox"/>	Masters	<input type="checkbox"/>	Research for module -	<input type="checkbox"/>
Funded/unfunded Research (staff)	<input type="checkbox"/>	Undergraduate	<input type="checkbox"/>																
MPhil/PhD, ResM, BClIn Sci	<input checked="" type="checkbox"/>	Or Other (please state)	<input type="checkbox"/>																
Masters	<input type="checkbox"/>	Research for module -	<input type="checkbox"/>																
4.	<b>Funding:</b> a) Funding body (if any): N/A b) If funded, please state any ethical implications of the source of funding, including any reputational risks for the university and how they have been addressed. *Note: 3																		
5.	a) Duration of project/programme: *Note: 4			b) Dates: Oct 2015 – Sept 2019															
6.	Has this project received ethical approval from another Ethics Committee? No a) Please write committee name: b) Are you therefore only applying for Chair's action now? Yes																		
7.	<b>Attachments</b> (if required) <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">a) Application/Clearance Form</td> <td style="width: 30%; text-align: center;">No</td> </tr> <tr> <td>b) Information sheets for participants</td> <td style="text-align: center;">Yes</td> </tr> </table>							a) Application/Clearance Form	No	b) Information sheets for participants	Yes								
a) Application/Clearance Form	No																		
b) Information sheets for participants	Yes																		

	c) Consent forms d) Continuing review approval (if requested) e) Other, please state: The Survey Questionnaire is attached as Appendix 2, which provides a concise summary of information for participants.	Yes No
--	---	-----------

- \*1. Principal Investigators are responsible for ensuring that all staff employed on projects (including research assistants, technicians and clerical staff) act in accordance with the University's ethical principles, the design of the research described in this proposal and any conditions attached to its approval.*
- \*2. In most cases, approval should be sought individually for each project. Programme approval is granted for research which comprises an ongoing set of studies or investigations utilising the same methods and methodology and where the precise number and timing of such studies cannot be specified in advance. Such approval is normally appropriate only for ongoing, and typically unfunded, scholarly research activity.*
- \*3. If there is a difference in ethical standards between the University's policy and those of the relevant professional body or research sponsor, Committees shall apply whichever is considered the highest standard of ethical practice.*
- \*4. Approval is granted for the duration of projects or for a maximum of three years in the case of programmes. Further approval is necessary for any extension of programmes.*

<b>8.</b>	<p><b>Aims and Objectives of Research Project/Programme:</b></p> <p>Advances in social media technologies have transformed the way organizations use, distributes and share information within the workplace (Parry and Solidoro, 2013; Haddud, 2016). Social media has moved from a niche phenomenon to mass adoption (Wang, 2009). From the business context, effective networking is an essential component to success (Kelley, 2010). It is obvious that social media network is transforming the way a company connects, communicates, engages employees, and achieves its business goals (Lee, 2013). Employer and employee use of social media has been on increasing recently due to the proliferation of different social media platforms (Chivee et al, 2008). While many companies focus on engaging with their own employees using social media, some are focusing more on using social media to improve their business processes (Nascimento and DaSilveira, 2017). The airline industry is no exception to this growing trend: social media has also served as an excellent live, go-to platform for airlines to not only connect, but also engage with their stakeholders (McEleny, 2016, Zechen, 2016).</p> <p>Even though there is research evidence on the use of social media generally in organisations, most of this existing research relates to how organisations use them to boost their profits and to engage employees (Sabato, et al, 2017). There is little or no evidence on successful use of social media platforms with respect to employee engagement and how this social media strategy for internal communication targets employees' intellectual, affective and social engagement. Moreover, implementing social media in the organization or expecting employees to use social media platforms in the workplace to boost their engagement level, does not mean employees will consider it useful or relevant. Such social media platforms succeed in an organization only if the employee is using it appropriately. Many factors impact on the employee's perception to successfully adopt social media for employee engagement (Haddud et al, 2016, Constantin and Baiasa, 2014, Leftheriotis and Giannakos, 2014). Rauniar et al (2014) states that if an individual use of social media is primarily voluntary, then the causes of these behaviour have to be rooted in the individual personal intentions and motives. According to various authors, such emotional attitudes and intention leads to actual usage of the technology (Rauniar et al, 2014). Therefore, to explain user social media behaviour within the context of this study, Technology acceptance</p>
-----------	--

	<p>model (TAM) is adopted and modified to explain individual employee's intention to adopt social media platforms for engagement within the workplace. The rationale for modifying TAM is that the theory only focus on cognitive attributes, ignoring other behavioural components/responses, thus TAM is modified by incorporating external variables including conative and affective attributes to determine how important the effect of cognitive, conative and affective attributes is in explaining adoption and usage of social media platform for engagement within the workplace.</p> <p>However, the aim of this research is in two folds, first to examine the external factors influencing employee intention and usage of company's internal social media for engagement within the workplace. Second to examine the influence of usage of internal social media on employee's intellectual, affective and social engagement and its impact on their performance.</p> <p><b>Research Objectives</b></p> <ul style="list-style-type: none"> <li>❖ To assess the factors that influence employee adoption of internal social media in the workplace</li> <li>❖ To examine relationship between internal social media and employee's affective, intellectual, and social engagement</li> <li>❖ To assess the relationship between employees affective, intellectual, and social engagement and employee performance</li> <li>❖ To understand differences between Nigeria and UK regarding internal social media adoption, to engagement and the impact on employee performance.</li> </ul>
9.	<p><b>Brief Description of Research Methods and Procedures:</b></p> <p>A quantitative method approach is adopted in conducting this research. Quantitative information would be obtained from full-time and part-time employees of selected airline companies in the UK and Nigeria. A hard copy survey questionnaire which comprises of close ended questions and a demographic question like gender, age and job role will be used. Data collection method is proposed to be obtained via hard copy by self-collection and third party.</p> <p>The rationale for using hard copy questionnaires is that paper based questionnaires has been reported to have a higher total response than web-based questionnaires (Zeitgeist et al, 2011; Kongsved et al, 2007; Nulty, 2008). Additionally, hardcopy questionnaires are more anonymous than soft copy questionnaires, which is of the view that respondents may be truthful on hard copy questionnaires. According to international survey associates (2016) "hard copy questionnaires have formatting that look standard for all respondents, and the environment in which the survey is taken is relatively uniform" therefore, using hard copy questionnaire will ensure that all employees in both UK and Nigeria receive the same questionnaires in the same format and the same setting. In terms of third-party method of data collection, the rationale for using third party is to ensure research quality and rigor by making this research non -constrive.</p>

Rahi (2017) states that in a non- contrived research, the influence of researcher is minimized unlike contrive research.

The rationale for choosing these two methods of data collection is to collect as many data as possible and to ensure that appropriate data are collected in order to answer the research questions. Additionally, in order to ensure that deadline for submission of my PHD thesis is met, this method of data collection is relatively quicker and save time. And it will also reduce the likelihood of errors occurring in the research.

In addition, variables will be adapted from the literature, and a conceptual model grounded in the literature has been developed to. A brief measure of the research scale are provided in the table below.

Variable names	Items	Sources
<b>Perceived usefulness (PU)</b>	<ul style="list-style-type: none"> <li>❖ Using internal social media makes it easier to stay in touch with colleagues</li> <li>❖ I find social media useful in my professional life</li> </ul>	Davis (1993)
<b>Perceived ease of use (PEU)</b>	<ul style="list-style-type: none"> <li>❖ Social media platforms are user friendly</li> <li>❖ Social media is flexible to communicate and interact with</li> </ul>	Davis (1993)
<b>Perceived management support (PMS)</b>	<ul style="list-style-type: none"> <li>❖ Management is highly interested in using social media platforms within the workplace</li> <li>❖ Management believes the cost of social media is a long investment and may pose risk to the organization</li> </ul>	Lin (2010)
<b>Perceived behavioural control (PBC)</b>	<ul style="list-style-type: none"> <li>❖ I think it's easy for me to join in conversation on company's internal social media during discussion or debate</li> <li>❖ I am confident that I can use internal social media to interact, share contents and network with colleagues and managers if I want to</li> </ul>	Zhao et al (2016)
<b>Perceived relevance (PR)</b>	<ul style="list-style-type: none"> <li>❖ When I saw work related information on internal social media, I felt that it might be of value to me</li> <li>❖ When I saw work related information on internal social media, I felt that it might be relevant to my needs</li> </ul>	Kim & Huh (2017)
<b>Uncertainty avoidance (UA)</b>	<ul style="list-style-type: none"> <li>❖ I internationally ignore any social media platforms use within the workplace</li> <li>❖ I dislike using any internal social media platforms for communication and interaction within the workplace</li> </ul>	Baek and Morimoto (2012)
<b>Actual use of social media in the workplace (AUS)</b>	<ul style="list-style-type: none"> <li>❖ I often per week do visit company's internal social media platforms</li> <li>❖ In a week I spend one to two hours on average on company's internal social media platforms for communication and interaction</li> </ul>	Venkatesh and Davis (2000)
<b>Intellectual engagement (IE)</b>	<ul style="list-style-type: none"> <li>❖ I focus hard on my work</li> <li>❖ I concentrate on my work</li> </ul>	Soane, et al (2012)
<b>Affective engagement (AE)</b>	<ul style="list-style-type: none"> <li>❖ I feel positive about my work</li> <li>❖ I feel full of energy and strength in my work</li> </ul>	Soane, et al (2012)
<b>Social engagement (SE)</b>	<ul style="list-style-type: none"> <li>❖ I share the same work values as my colleagues</li> <li>❖ I share the same work goals as my colleagues</li> </ul>	Soane, et al (2012)
<b>Employee Performance (EP)</b>	<ul style="list-style-type: none"> <li>❖ I carried out the core parts of my job well</li> <li>❖ I initiated better ways of doing my core tasks</li> </ul>	Drewery (2016)
<b>Intention to use (IU)</b>	<ul style="list-style-type: none"> <li>❖ I tend to use internal social media for communicating and engaging with my colleagues</li> <li>❖ I tend to use internal social media to connect to colleagues that matters to me and can help me achieve my task</li> </ul>	Al-Rahimi et al (2013).

In addition, the construct will be tested using structural equation modelling (using the SmartPLS software). SmartPLS software is a powerful statistical tool to analyze the path analysis with multiple dependents.

The interest in using Smart PLS is stimulated by the increase need in modelling formative constructs in organization/management research (MacKenzie et al, 2005, Diamantopoulos and Winklhofer, 2001), and its appropriateness in analysing a research model that has a number of constructs and links (Pavlou and Fygenson, 2006). Marcoulides and Saunders (2006) state that PLS-SEM is widely used in information systems research; its ability to model both factors and composites is appreciated by researchers across disciplines and makes it a promising method particularly for new technology research and information systems research. However, as this research aims to analyse employee perceptions and intention to adopt social media, Smart PLS path modelling is an appropriate statistical tool for this research compared to other structural equation modelling tools.

In addition, a convenience sample of 500 respondents will be drawn from across various airlines companies in the UK and Nigeria: 250 questionnaires for each country. Five hundred questionnaires will be randomly administered on employees and management of selected airlines in each country. Respondents are selected on the basis of the knowledge, expertise, and relationship in terms of research topic (Freedman et al, 2007). Moreover, Selection of the right sample size was based on the useful suggestions and arguments in academic literature (Comrey and Lee, 1992, Hair, 2003), thus, the sample size for this research is selected by following the important guidance mentioned in academic literature.

Furthermore, for the purpose of this research, the respondents who were selected will have a relationship with the subject being studied, adequate and relevant work experience in the use of social media, active involvement in several engagement initiatives within the organization and respondents with customers or client-facing roles, administrative roles or managerial positions. Within this context, the respondents of this study are customer/passenger service agents, ground handlers, pilots, cabin crew members, call centre agents, ramp agent, managers etc. No incentive shall be offered, and employees will be advised of their right not to participate in the survey and withdraw stop participating at any time after they start.

The use of questionnaires will enable scales to be rated and also quantify employees' behaviour and intention towards adopting and using social media for engagement in the workplace. Moreover, the choice of using questionnaires ahead of other methods is that it would help to contact a large number of respondents at a low cost and at a short period of time.

The statistical data would be calculated and analyzed using Smart PLS. All the sources for this research are chosen carefully to answer the research question, and to test the validity and reliability of the study, a pretesting would be undertaken with 50 employees from airlines in both countries.

	<p>Furthermore, the results will be published in my project work and subsequent journal article in such a way to preserve the anonymity of airlines companies.</p> <p><i>Specify subject populations and recruitment method. Please indicate also any ethically sensitive aspects of the methods. Continue on attached sheets if required.</i></p>
10.	<p><b>Ethical Protocol:</b></p> <p>Please indicate how you will ensure this research conforms with each clause of the University of Plymouth's <i>Principles for Research Involving Human Participants</i>. Please attach a statement which addresses each of the ethical principles set out below.</p> <p>(a) Informed Consent: Yes</p> <p>Informed consent is needed to carry out this research because the research involves human participation. In addition, respondents will be clarified on the purpose of the research, by providing an information sheet that will show the nature of the study. The first question in the questionnaire will contain a question asking respondents to indicate if they are happy to answer the questionnaires. Adequate verbal information will be given to respondents to enable them decide whether to take part in filling the research questionnaire or not,</p> <p>(b) Openness and Honesty:</p> <p>The researcher is aware of the University policy regarding honesty and openness. The research will foster and support honesty and openness, ensuring that research design, methodologies, data, findings and results are open to examination. There will be a fair agreement between the researcher and the participants before the collection of data can commence. Participants will acknowledge that they understand the situation and they are willing to participate. Additionally, this research will take into consideration any information that could be considered personal or information that could implicate participants to ensure fairness and openness for all participants</p> <p><i>Note that deception is permissible only where it can be shown that all three conditions specified in Section 2 of the University of Plymouth's Ethical Principles have been made in full. Proposers are required to provide a detailed justification and to supply the names of two independent assessors whom the Sub-Committee can approach for advice.</i></p> <p>(c) Right to Withdraw:</p> <p>In the case of this research, it is important to disclose the full purpose of the study to the respondents, so they are aware of what they are accepting in regards of their voluntary participation. Respondents will be advised of their right not to participate in the survey and to withdraw at any time after they start.</p> <p><i>Note that this section should also clarify that participant's data will be destroyed should they withdraw, in accordance with best practice.</i></p>
	<p>(d) Protection From Harm:</p> <p>N/A</p>

(e) Debriefing:

The respondents will be informed of the nature and aims of the research, ensuring that all form of deceptive practices will be avoided. The study will prevent bias which can lead to a false conclusion by ensuring that the data collected are not misinterpreted or encourage one answer over others. Additionally, respondents will also be informed about the confidentiality of the data storage. They will be given the chance to receive follow-up information to have full understanding about the research. For example, through post or publication.

(f) Confidentiality:

Confidentiality will be ensured throughout the research, the data collected would be protected. An important consideration will be made to safeguard privacy of the collected and stored data in my personal password locked computer, and ensure that data are not disclosed to any third party. However, if the work is to be published, adjustments would be made to protect the anonymity and confidentiality of the name of the companies used in this research.

(g) Professional Bodies Whose Ethical Policies Apply to this Research:

The research will comply with the ethical guidelines of the British Education Research Association (BERA).

*The committee strongly recommends that prior to application, applicants consult an appropriate professional code of ethics regardless of whether or not they are members of that body (for example, Social Research Association. <http://www.the-sra.org.uk/ethical.htm> Market Research Society <http://www.mrs.org.uk/standards/codeconduct.htm> British Sociological Association <http://www.britisoc.co.uk/equality/>). Applicants **MAY** choose to write "not applicable" in the "Relevant Professional Bodies" section of the Ethical Application Form. However, it is very rare that there would be no professional/academic code of ethics relevant to a given research project. If based on the information written in other sections of the form, FREC considers a particular professional code to be of relevance, then the Committee may make its consultation and adherence a condition of acceptance.*

11. **Declaration\*:**

To the best of our knowledge and belief, this research conforms to the ethical principles laid down by Plymouth University and by the professional body specified in 6 (g).

	<b>Name</b>	<b>E-mail (s)</b>	<b>Date</b>
Principal Investigator:	Uju Ugochukwu	uju.ugochukwu@plymouth.ac.uk	13/06/2018
Other Staff Investigators:			
Director of Studies (only where Principal Investigator is a postgraduate student):	Dr Mohamed Haddoud Dr Lise Hunter	Mohamed.Haddoud@plymouth.ac.uk lise.hunter@plymouth.ac.uk	13/06/2018 13/06/2018

\*You will be notified by the Research Ethical Approval Committee once your application is approved.  
**This process normally takes around 3-4 weeks.**

Please Answer Either YES or NO to ALL Questions Below.

If you answer YES, please provide further details.

**Do You Plan To Do:**

- Research involving vulnerable groups – for example, children and young people, those with a learning disability or cognitive impairment, or individuals in a dependent or unequal relationship

**Answer: No**

- Research involving sensitive topics – for example participants' sexual behaviour, their illegal or political behaviour, their experience of violence, their abuse or exploitation, their mental health, or their gender or ethnic status

**Answer: No**

- Research involving groups where permission of a gatekeeper is normally required for initial access to members – for example, ethnic or cultural groups, native peoples or indigenous communities

**Answer: No**

- Research involving deception or which is conducted without participants' full and informed consent at the time the study is carried out

**Answer: No**

- Research involving access to records of personal or confidential information, including genetic or other biological information, concerning identifiable individuals

**Answer: No**

- Research which would induce psychological stress, anxiety or humiliation or cause more than minimal pain

**Answer: No**

- Research involving intrusive interventions – for example, the administration of drugs or other substances, vigorous physical exercise, or techniques such as hypnotherapy. Participants would not encounter such interventions, which may cause them to reveal information which causes concern, in the course of their everyday life.

**Answer: No**

**Completed Forms should be forwarded BY E-MAIL to Cher Cressey, Secretary of the FREC at: [ccressey@plymouth.ac.uk](mailto:ccressey@plymouth.ac.uk)**

Please forward any questions/comments or complaints to:

Cher Cressey, DTC Administrator

Graduate School (Link Building), Plymouth University, Drake Circus, Plymouth, PL4 8AA

Tel: 01752 585540

Updated: 03/07/14

**Declaration:**

To the best of our knowledge and belief, this research confirms to the ethical principles laid down by the Plymouth University

Student Name:	Uju Ugochukwu	Lead Supervisor Name:	<b>Dr Mohamed Haddoud</b>
Signature:	<i>Uju ugochukwu</i>	Signature:	

## Appendix 2: Survey Questionnaire

### Social Media Employee Engagement Survey Questionnaire

This study is being conducted as part of the requirements for a Doctor of Philosophy (Ph.D.) degree at the University of Plymouth, United Kingdom. The administration of this survey is important to examine the extent to which employees adopt internal social media for employee engagement within the workplace and its impact on performance. Internal social media is the company's use of social media platforms internally, to improve and facilitate employee communication and collaboration, and align goals within the organisation. These platforms are used within safe and secure hosting and developed specifically to be used only for work purpose. Examples of these internal company social media platforms are: Facebook (e.g. Workplace by Facebook), Twitter, LinkedIn, YouTube, Whats-app, Yammer, Google+ and other employer's internal social media platforms. This survey should take about 12-15 minutes to complete.

You have the right not to participate in this survey and to withdraw at any time after you start. Your answers will remain confidential and will be used only for the purposes of this research. Adjustments would be made to protect the anonymity and confidentiality of organisations and individuals that participated in this research.

Thank you for your participation, and I look forward to a speedy response.

#### **Instructions:**

Please put a tick in the space corresponding to the answer of your choice or write in the space provided as the case may be.

An internal social media is the company's use of social media platforms internally, to improve and facilitate employee communication and collaboration, by helping employees to connect, learn, share and grow. These platforms are used within safe and secure hosting and developed specifically to be used only for work purpose. Examples of these internal company social media platforms are: Facebook (e.g. Workplace by Facebook), Twitter, LinkedIn, YouTube, Whats-app, Yammer, Google+ and other employer's internal social media platforms.

**1. To what extent – on average per week – would you say you use your company’s internal social media platforms for work purpose within the organization?**

	Very strongly agree	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Very strongly disagree
Less than 1 hour							
1 to 3 hours							
3.5 to 5 hours							
5.5 to 7 hours							
7.5 hours or more							
We have internal SM, but I don’t use it							
I’m not aware that my company has internal social media.							

**2. To what extent do you agree or disagree with the following statements?**

	Very strongly agree	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Very strongly disagree
Using internal social media makes it easier to stay in touch with colleagues							
Using internal social media makes it easier to stay in touch with managers							
I find social media useful in my professional life							
Using social media makes it easier to stay informed with my colleagues							
Using social media makes it easier to stay informed with my managers							
Using social media would help me communicate and interact with my colleagues							
I can use internal social media if I found it improve my work							
Internal social media allows me to accomplish my task more quickly							

**3. To what extent do you agree or disagree with the following statements?**

	Very important	Moderately important	Slightly important	Neutral	Slightly unimportant	Moderately unimportant	Very unimportant
I find my company's Internal social media platforms easy to use							
Interaction with my company's internal social media is clear and understandable							
My company's internal social media is a flexible technology to interact with							
With minimal effort, I find it easy to use my company internal social media platform to obtain information that is of relevant to me							
With minimal effort, I find it easy to use my company's internal social media platform to disseminate information that is of interest to me							
It could be easy for me to become skilful at using my company's internal social media platform							

**4. To what extent do you agree or disagree with the following statements?**

	Very strongly agree	Agree strongly	Agree	Neither agree/disagree	Disagree	Strongly disagree	Very strongly disagree
Management is aware of the benefits that can be achieved with using internal social media platforms							
Management Supports and encourages the use of internal social media platforms							
Management provides most of the necessary resources and help to support the use of internal social media platforms							
Management is keen to see people happy with using internal social media platforms							
Management provides adequate resources, technical support and training for effective utilization of internal social media platforms							

**5. To what extent do these statements match your ability to use company's internal social media platforms**

	Very strongly agree	Strongly agree	Agree	Neither agree/disagree	Disagree	Strongly disagree	Very strongly disagree
I think it's easy for me to join in conversations on my company's internal social media during discussion or debate							
I am confident that I can use my company's internal social media to interact, share contents and network with colleagues if I want to							

I am confident that I can use my company's internal social media to interact, share contents and network with managers if I want to							
I feel I have the time, skills, resources and knowledge to communicate and interact on my company's internal social media with colleagues							
I feel I have the time, skills, resources and knowledge to communicate and interact on my company's internal social media with managers							
It is mostly up to me whether or not to use my company's internal social media in my daily job task							

**6. To what extent do you agree or disagree with the following statements in relation to your need to use company's internal social media**

	Very strongly agree	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Very strongly disagree
When I see work related information on my company's internal social media, I feel that it might be of value to me							
When I see work related information on my company's internal social media, I feel that it might be relevant to my needs							
Using my company's internal social media is important to me							
Using my company's internal social media is likely to give me new ideas							
Using my company's internal social media is interesting to me							

**7. To what extent do these statements match your thinking and feelings about using company's internal social media?**

	Very strongly agree	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Very strongly disagree
I intentionally ignore any company's internal social media platform use within the workplace							
I dislike using any company's internal social media platforms for communication and interaction within the workplace							
I discard or ignore information on my company's internal social media							
It is important to have instruction, rules and regulations spelled out, so I will know what is expected of me when using my company's internal social media to interact and communicate with colleagues and managers							

**8. To what extent do you agree with the following statements that relate to your experience in your work role?**

	Very strongly agree	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Very strongly disagree
I focus hard on my work							
I concentrate hard on my work							
I pay a lot of attention to my work							

**9. To what extent do you agree with the following statements that matches your feelings and emotion relating to your work role?**

	Very strongly agree	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Very strongly disagree
I feel positive about my work							
I feel full of energy and involved in my work							
I am enthusiastic about my work							

**10. To what extent do you agree with the following statements that matches your feelings and experiences of connecting with your work environment?**

	Very strongly agree	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Very strongly disagree
I share the same organizational values as my colleagues							
I share the same work goals as my colleagues							
I share the same work attitudes as my colleagues							
I often do connect with my colleagues							

**11. To what extent do you agree with the following statements about carrying out your work role and accomplishing your mission based on the expectations of your organisation?**

	Very strongly agree	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Very strongly disagree
I often carry out the core parts of my job well							
I always initiate better ways of doing my core tasks today							
I always fulfil all the responsibilities specified in my job description							
I consistently meet the formal performance requirements of my job							
My competency (knowledge, skill and ability) improves through internal social media activities							
My performance has been getting better through company internal social media activities							

**12. To what extent do you intend to use internal social media to engage with your colleagues and Managers in the future?**

	Very strongly agree	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree	Very strongly disagree
I tend to use internal social media for communicating and engaging with my colleagues							
I tend to use internal social media for communicating and engaging with my managers							
I tend to use internal social media to connect to colleagues that matter to me and can help me achieve my task							

I would use internal social media for engagement and any work-related activities							
Given that I have access to internal social media, I predict that I would use it							
I intend to use internal social media platforms for engagement in the future							

**Additional questions- Please fill in the details below**

**What is your gender**

- Male
- Female
- Others

**What is your age**

- 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- 65 or more

**What is your Job role?**

- Passengers services agent
- Flight/ Cabin crew
- Flight dispatcher
- Pilot
- Baggage handlers
- Management/Admin
- Customer services/call centre
- IT
- Others \_\_\_\_\_

**What is your highest qualification?**

- GCSE
- WAEC
- Diploma
- Professional degree
- Bachelor's degree
- Master's degree
- Doctorate
- Others \_\_\_\_\_

**Length of employment with the current organization**

- Less than one year
- 1-5 years
- 6-10 years
- 11-15 years
- 16- 20 years
- More than 20 years

**How would you describe yourself?**

- White
- Asian
- Asian British
- Black British
- African
- Caribbean
- Mixed/ Multiple ethnic group
- Others \_\_\_\_\_

**What is your current employment status?**

- Employed full time
- Employed part time
- Flexible/contract hours
- Others \_\_\_\_\_

**Please check that you have answered all questions.**

Thank you for completing this questionnaire. If you have any questions on this survey, you can contact me by sending an email to: [uju.ugochukwu@plymouth.ac.uk](mailto:uju.ugochukwu@plymouth.ac.uk) or contact my director of study on: [mohamed.haddoud@plymouth.ac.uk](mailto:mohamed.haddoud@plymouth.ac.uk)

### Appendix 3: Total Variance Explained

Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.167	29.168	29.168	<b>15.167</b>	<b>29.168</b>	<b>29.168</b>
2	3.966	7.626	36.794			
3	2.842	5.466	42.260			
4	2.540	4.884	47.144			
5	2.359	4.537	51.680			
6	2.139	4.114	55.794			
7	2.018	3.880	59.675			
8	1.688	3.247	62.921			
9	1.615	3.105	66.027			
10	1.482	2.850	68.876			
11	1.368	2.631	71.508			
12	1.136	2.185	73.693			
13	1.073	2.063	75.756			
14	.911	1.752	77.508			
15	.885	1.701	79.209			
16	.866	1.665	80.874			
17	.730	1.403	82.277			
18	.712	1.368	83.646			
19	.653	1.256	84.902			
20	.631	1.213	86.115			
21	.581	1.116	87.232			
22	.553	1.064	88.295			
23	.480	.923	89.219			
24	.465	.893	90.112			
25	.448	.862	90.975			
26	.416	.801	91.775			
27	.378	.726	92.501			
28	.342	.659	93.160			
29	.324	.623	93.783			
30	.287	.552	94.336			
31	.280	.538	94.874			
32	.264	.507	95.381			
33	.259	.498	95.879			
34	.226	.434	96.313			
35	.221	.425	96.738			
36	.207	.398	97.136			

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
37	.188	.362	97.497			
38	.178	.342	97.839			
39	.175	.336	98.175			
40	.131	.253	98.428			
41	.122	.234	98.662			
42	.105	.201	98.864			
43	.100	.192	99.056			
44	.090	.173	99.228			
45	.083	.160	99.388			
46	.074	.142	99.531			
47	.068	.130	99.661			
48	.053	.103	99.763			
49	.048	.092	99.856			
50	.042	.080	99.936			
51	.033	.064	100.000			
52	-6.434E-17	-1.237E-16	100.000			

Extraction Method: Principal Component Analysis.

## Appendix 4: Z-Score for Assessing Outliers (UK)

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Zscore(Gender)	207	-1.13742	.87494	0E-7	1.00000000
Zscore(Age)	207	-.94155	3.62644	0E-7	1.00000000
Zscore(Job_Role)	207	-.88797	1.76633	0E-7	1.00000000
Zscore(Qulif)	207	-1.39910	2.36212	0E-7	1.00000000
Zscore(Lent_Emp)	207	-.95962	4.43542	0E-7	1.00000000
Zscore(Race)	207	-1.17644	2.54553	0E-7	1.00000000
Zscore(Emplo_Sta)	207	-.93496	3.46362	0E-7	1.00000000
Zscore(AU1)	207	-1.19861	1.93543	0E-7	1.00000000
Zscore(AU2)	207	-1.61215	1.07910	0E-7	1.00000000
Zscore(AU3)	207	-1.78076	.96670	0E-7	1.00000000
Zscore(AU4)	207	-1.95125	.91674	0E-7	1.00000000
Zscore(AU5)	207	-1.91501	.90952	0E-7	1.00000000
Zscore(AU6)	207	-1.70711	.99794	0E-7	1.00000000
Zscore(AU7)	207	-1.80901	.94461	0E-7	1.00000000
Zscore(PU1)	207	-1.43123	2.66459	0E-7	1.00000000
Zscore(PU2)	207	-1.45758	2.73212	0E-7	1.00000000
Zscore(PU3)	207	-1.60593	2.64875	0E-7	1.00000000
Zscore(PU4)	207	-1.47306	2.70287	0E-7	1.00000000
Zscore(PU5)	207	-1.53714	2.46008	0E-7	1.00000000
Zscore(PU6)	207	-1.55194	2.72022	0E-7	1.00000000
Zscore(PU7)	207	-1.41384	2.71738	0E-7	1.00000000
Zscore(PU8)	207	-1.62175	2.38144	0E-7	1.00000000
Zscore(PEU1)	207	-1.30721	3.05015	0E-7	1.00000000
Zscore(PEU2)	207	-1.49753	3.26346	0E-7	1.00000000
Zscore(PEU3)	207	-1.53355	3.28275	0E-7	1.00000000
Zscore(PEU4)	207	-1.47077	3.15704	0E-7	1.00000000
Zscore(PEU5)	207	-1.58419	3.19167	0E-7	1.00000000
Zscore(PEU6)	207	-1.67831	3.16751	0E-7	1.00000000
Zscore(PMS1)	207	-1.62604	3.17059	0E-7	1.00000000
Zscore(PMS2)	207	-1.63896	2.99534	0E-7	1.00000000
Zscore(PMS3)	207	-.90640	12.18313	0E-7	1.00000000
Zscore(PMS4)	207	-1.83423	2.71820	0E-7	1.00000000
Zscore(PMS5)	207	-1.80499	2.63529	0E-7	1.00000000
Zscore(PBC1)	207	-1.43554	2.54130	0E-7	1.00000000
Zscore(PBC2)	207	-1.53486	3.77244	0E-7	1.00000000
Zscore(PBC3)	207	-1.55790	3.24466	0E-7	1.00000000
Zscore(PBC4)	207	-1.50733	3.27106	0E-7	1.00000000
Zscore(PBC5)	207	-1.51222	2.80133	0E-7	1.00000000
Zscore(PBC6)	207	-1.35313	2.92768	0E-7	1.00000000

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Zscore(PR1)	207	-1.55760	3.25679	0E-7	1.00000000
Zscore(PR2)	207	-1.39356	3.24154	0E-7	1.00000000
Zscore(PR3)	207	-1.58128	3.01538	0E-7	1.00000000
Zscore(PR4)	207	-1.66007	2.90040	0E-7	1.00000000
Zscore(PR5)	207	-.95239	12.10248	0E-7	1.00000000
Zscore(UA1)	207	-1.65412	2.39151	0E-7	1.00000000
Zscore(UA2)	207	-1.72027	2.13137	0E-7	1.00000000
Zscore(UA3)	207	-1.68649	2.11989	0E-7	1.00000000
Zscore(UA4)	207	-1.56976	3.03739	0E-7	1.00000000
Zscore(IE1)	207	-1.15021	3.74825	0E-7	1.00000000
Zscore(IE2)	207	-1.17941	3.68263	0E-7	1.00000000
Zscore(IE3)	207	-1.11419	3.61432	0E-7	1.00000000
Zscore(AE1)	207	-1.20633	3.48112	0E-7	1.00000000
Zscore(AE2)	207	-1.29864	2.56320	0E-7	1.00000000
Zscore(AE3)	207	-1.33089	2.91708	0E-7	1.00000000
Zscore(SE1)	207	-1.59449	3.37063	0E-7	1.00000000
Zscore(SE2)	207	-1.50356	2.94175	0E-7	1.00000000
Zscore(SE3)	207	-1.51317	2.70723	0E-7	1.00000000
Zscore(SE4)	207	-1.27625	3.17980	0E-7	1.00000000
Zscore(EP1)	207	-1.21795	3.39979	0E-7	1.00000000
Zscore(EP2)	207	-1.27806	2.87463	0E-7	1.00000000
Zscore(EP4)	207	-1.32083	3.33826	0E-7	1.00000000
Zscore(EP6)	207	-1.32462	3.38007	0E-7	1.00000000
Zscore(IU1)	207	-1.51321	3.31969	0E-7	1.00000000
Zscore(IU3)	207	-1.57163	3.37474	0E-7	1.00000000
Zscore(IU6)	207	-1.46056	3.19498	0E-7	1.00000000
Valid N (listwise)	207				

## Appendix 5: Z-Score for Assessing Outliers (Nigeria)

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Zscore(GENDER)	136	-.88608	3.00123	0E-7	1.00000000
Zscore(AGE)	135	-2.02855	3.06642	0E-7	1.00000000
Zscore(JOB_ROLE)	133	-1.20134	1.21497	0E-7	1.00000000
Zscore(QULIF)	136	-3.57795	2.66052	0E-7	1.00000000
Zscore(LENT_EMP)	136	-1.54353	4.55374	0E-7	1.00000000
Zscore(RACE)	136	-3.90473	4.23387	0E-7	1.00000000
Zscore(EMPLO_STA)	136	-.35741	5.19780	0E-7	1.00000000
Zscore(AU1)	136	-.69057	2.54796	0E-7	1.00000000
Zscore(AU2)	136	-1.25177	1.84352	0E-7	1.00000000
Zscore(AU3)	136	-2.40592	1.88999	0E-7	1.00000000
Zscore(AU4)	136	-2.61953	1.88054	0E-7	1.00000000
Zscore(AU5)	136	-2.36150	1.85510	0E-7	1.00000000
Zscore(AU6)	136	-1.19244	11.12800	0E-7	1.00000000
Zscore(AU7)	136	-3.67664	2.19447	0E-7	1.00000000
Zscore(PU1)	136	-1.11142	2.74032	0E-7	1.00000000
Zscore(PU2)	136	-1.40642	2.58910	0E-7	1.00000000
Zscore(PU3)	136	-1.38793	3.09892	0E-7	1.00000000
Zscore(PU4)	136	-1.13828	4.19097	0E-7	1.00000000
Zscore(PU5)	136	-1.31002	2.88649	0E-7	1.00000000
Zscore(PU6)	136	-1.18358	3.08280	0E-7	1.00000000
Zscore(PU7)	136	-1.24497	2.96193	0E-7	1.00000000
Zscore(PU8)	119	-1.26111	2.70554	0E-7	1.00000000
Zscore(PEU1)	136	-.87197	3.68361	0E-7	1.00000000
Zscore(PEU2)	136	-1.12016	3.98280	0E-7	1.00000000
Zscore(PEU3)	136	-1.03961	3.55458	0E-7	1.00000000
Zscore(PEU4)	136	-.87948	4.04562	0E-7	1.00000000
Zscore(PEU5)	136	-1.06641	3.62085	0E-7	1.00000000
Zscore(PEU6)	136	-1.13823	3.16427	0E-7	1.00000000
Zscore(PMS1)	130	-1.01840	3.20689	0E-7	1.00000000
Zscore(PMS2)	136	-1.19334	2.86615	0E-7	1.00000000
Zscore(PMS3)	136	-1.29050	2.33992	0E-7	1.00000000
Zscore(PMS4)	136	-1.34387	2.43296	0E-7	1.00000000
Zscore(PMS5)	136	-1.38584	2.13519	0E-7	1.00000000
Zscore(PBC1)	127	-.32365	10.97182	0E-7	1.00000000
Zscore(PBC2)	136	-1.31613	1.94889	0E-7	1.00000000
Zscore(PBC3)	136	-1.32557	2.76383	0E-7	1.00000000
Zscore(PBC4)	136	-1.34387	2.43296	0E-7	1.00000000
Zscore(PBC5)	136	-1.39734	2.96648	0E-7	1.00000000
Zscore(PBC6)	136	-1.44352	2.35677	0E-7	1.00000000

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Zscore(PR1)	136	-1.16282	2.66765	0E-7	1.00000000
Zscore(PR2)	136	-1.25990	2.36408	0E-7	1.00000000
Zscore(PR3)	136	-1.26797	3.89735	0E-7	1.00000000
Zscore(PR4)	136	-1.19668	3.66725	0E-7	1.00000000
Zscore(PR5)	136	-1.32748	3.28183	0E-7	1.00000000
Zscore(UA1)	136	-.88352	10.49556	0E-7	1.00000000
Zscore(UA2)	136	-1.82773	1.73352	0E-7	1.00000000
Zscore(UA3)	136	-1.94474	1.49841	0E-7	1.00000000
Zscore(UA4)	128	-1.19559	2.76906	0E-7	1.00000000
Zscore(IE1)	127	-.35163	10.54033	0E-7	1.00000000
Zscore(IE2)	123	-.92721	2.83256	0E-7	1.00000000
Zscore(IE3)	129	-.76512	5.74261	0E-7	1.00000000
Zscore(AE1)	130	-.82357	4.37372	0E-7	1.00000000
Zscore(AE2)	136	-1.01156	4.20811	0E-7	1.00000000
Zscore(AE3)	136	-.92178	2.91401	0E-7	1.00000000
Zscore(SE1)	136	-1.12552	3.28467	0E-7	1.00000000
Zscore(SE2)	136	-1.30607	2.81159	0E-7	1.00000000
Zscore(SE3)	136	-.82186	5.22333	0E-7	1.00000000
Zscore(SE4)	136	-1.29385	3.47761	0E-7	1.00000000
Zscore(EP1)	136	-.78238	5.44372	0E-7	1.00000000
Zscore(EP2)	136	-1.03650	3.77062	0E-7	1.00000000
Zscore(EP3)	136	-1.00773	2.52403	0E-7	1.00000000
Zscore(EP4)	136	-1.09644	3.39807	0E-7	1.00000000
Zscore(EP5)	127	-1.21546	1.90299	0E-7	1.00000000
Zscore(EP6)	136	-1.32391	3.37341	0E-7	1.00000000
Zscore(IU1)	136	-1.26791	6.06953	0E-7	1.00000000
Zscore(IU2)	136	-1.46799	2.43825	0E-7	1.00000000
Zscore(IU3)	136	-1.33974	2.18662	0E-7	1.00000000
Zscore(IU4)	125	-1.32099	1.94879	0E-7	1.00000000
Zscore(IU5)	136	-1.39493	2.15051	0E-7	1.00000000
Zscore(IU6)	136	-1.38016	2.20238	0E-7	1.00000000
Valid N (listwise)	104				

## Appendix 6: Item Multicollinearity

Constructs	VIF	
	Nigeria	UK
AU1	1.185	1.034
AU2	1.417	1.534
AU3	1.809	2.589
AU4	1.681	2.724
PU1	1.643	1.423
PU3	2.038	1.773
PU5	1.823	1.778
PU6	2.391	2.009
PU7	1.519	1.952
PU8	1.864	1.953
PEU1	1.817	2.123
PEU2	2.778	2.249
PEU3	2.439	1.861
PEU4	2.656	1.921
PEU5	2.595	2.077
PEU6	1.625	1.923
PMS1	1.597	1.637
PMS2	2.056	1.774
PMS3	3.413	1.200
PMS4	2.706	2.399
PMS5	2.608	1.844
PBC2	2.072	1.674
PBC3	3.081	2.109
PBC4	1.535	2.148
PBC5	1.965	2.264
PBC6	1.613	1.394

Constructs	VIF	
	Nigeria	UK
PR1	2.215	1.673
PR2	2.576	1.894
PR3	2.107	2.221
PR4	2.540	1.857
PR5	2.574	1.152
UA2	1.758	1.856
UA3	1.757	1.755
UA4	1.006	1.094
IE2	1.709	2.390
IE3	1.709	2.390
AE2	3.255	2.464
AE3	2.546	1.907
AE1	2.583	1.889
SE1	2.151	2.576
SE2	2.666	2.878
SE3	1.005	1.966
SE4	1.761	1.372
EP1	1.666	1.272
EP2	1.909	1.641
EP3	2.112	1.782
EP4	1.769	1.365
EP5	2.306	1.959
EP6	2.245	2.003