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Luthuli, Menelisi Minenhle

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School of Economic and Business Sciences

Marketing Department

DATA CHARGES, DELIVERY DEPENDABILITY, GEOGRAPHICAL DISTANCE, PRODUCT RISK AND INFORMATION QUALITY AS PREDICTORS OF ONLINE PURCHASE INTENTION IN THE SOUTH AFRICAN RETAIL SECTOR.

By

Menelisi Luthuli

A THESIS

Submitted in full fulfilment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Under the Supervision of

Professor Richard Chinomona

ABSTRACT

The continuous growth of e-commerce has led to a keen interest in the uptake of online shopping. This phenomenon is even more prevalent in developed western countries. However, penetration has taken place at a lessor rate in developing countries in most parts of Africa including South Africa. Apart from infrastructural capability and adequate online store reputation, the success of online shopping fundamentally rests upon e-tailers who are able to capture consumers by understanding what variables drive them to shop online. Although several studies have explored factors that drive online purchase intention, few have explored variables of interest as done in this present study. More specifically, this sort of research is scarce within the South African general merchandise online retail sector. This study aims to determine whether data charges, delivery dependability, geographical distance, product risk and information quality have any influence on consumers' online purchase intention. The conceptual model adopted in this study selected data charges, delivery dependability, geographical distance, product risk and information quality as predictor variables, online shopping satisfaction and trust as mediating variables and online purchase intention as the outcome variable. This is a quantitative study whereby 20 000 online survey questionnaires were distributed to a base of two renowned South African online retailers who predominately specialize in general merchandise. Of those distributed, 924 were complete and thus deemed useable by the researcher. The findings support all eight proposed hypotheses, therefore indicating that the aforementioned variables indeed influence online purchase intention at varying levels of significance. The study seeks to contribute new contextual knowledge, adding to the existing literature linked to online retailing and to contribute new empirical and theoretical findings. The research findings highlight new insights to marketing practitioners who, with better understanding of consumer decision making theory, will be able to create strategies that can be employed to influence consumers' online purchase intention in the South African general merchandise online retail sector.

Keywords: E-commerce, online shopping, purchase intention, general merchandise retail.

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DECLARATION

I, Menelisi Luthuli, hereby declare that the work presented in this thesis is based on my own research, except where otherwise acknowledged. I have not submitted this thesis to any other institution of higher education to obtain an academic qualification.

Menelisi Luthuli Signature .....Date.....

Prof. R. Chinonona Signature .....Date.....

TABLE OF CONTENTS

1.1 Introduction 1

1.2 Problem Statement 4

1.3 Purpose of the Study 5

1.4 Objectives of the Study 6

1.4.1 Theoretical Objectives 6

1.4.2 Empirical Objectives 6

1.5 Research Questions 6

1.6 Research Gap and Justification of the Study 7

1.7 Contribution of Study 9

1.8 Ethical Considerations 10

1.9 Structure of Thesis 11

1.10 Chapter Summary 13

CHAPTER 2: RESEARCH CONTEXT 15

2.1 Introduction 15

2.2 The History of the Internet 15

2.3 The Internet Defined 17

2.4 The Internet in South Africa 18

2.5 The Internet as an Enabler of Electronic Commerce 21

2.6 Emergence of Online Retailing 22

2.7 Chapter Summary 23

CHAPTER 3: THOERETICAL GROUNDINGS AND EMPIRICAL LITERATURE 25

3.1 Introduction 25

3.2 Theoretical Groundings of the Study 25

3.2.1 Background of the Technology Acceptance Model (TAM) 26

3.2.2 Background of the Theory of Planning Behaviour (TPB) 30
3.2.3 Background of the Innovation Diffusion Theory (IDT) 33
3.2.4 Background of the E-Service Quality Model (SERVQUAL) 35
3.2.5 Background of the E-commerce Success Model (ECS) 42
3.3 Empirical Literature 50
3.3.1 Data Charges 50
3.3.1.1 Operational definition of Data Charges 51
3.3.1.2 Antecedents of Data Charges 52
3.3.1.3 Competition amongst Broadband Network Providers 55
3.3.1.3.1 A Global Perspective 55
3.3.1.3.2 A South African Perspective 58
3.3.1.4 Conceptualization of Data Charges 61
3.3.2 Delivery Dependability 62
3.3.2.1 Delivery Dependability versus Free Delivery/Shipping 62
3.3.2.2 Operational Definition of Delivery Dependability 63
3.3.2.3 Antecedents and Outcomes of Delivery Dependability 64
3.3.2.4 Conceptualization of Delivery Dependability 71
3.3.3 Geographical Distance 72
3.3.3.1 Definition of Geographical Distance versus Operational Definition 74
3.3.3.2 Antecedents and Outcomes of Geographical Distance 75
3.3.3.3 Conceptualization of Geographical Distance 80
3.3.4 Product Risk 81
3.3.4.1 Definition of Product Risk versus Operational Definition 84
3.3.4.2 Antecedents and Outcomes of Product Risk 87
3.3.4.3 Conceptualization of Product Risk 93
3.3.5 Information Quality 93
3.3.5.1 Product Type 95

3.3.5.2 Definition of Information Quality versus Operational 97
3.3.5.3 The Importance of Online Information Sources on Information Quality 97
3.3.5.3.1 eWOM Sources 98
3.3.5.3.2 Neutral/Third Party Sources 99
3.3.5.3.3 Manufacturer/Retailer Sources 100
3.3.5.4 Antecedents and Outcomes of Information Quality 101
3.3.5.4.1 Information Processing Theory (IPT) 102
3.3.5.4.2 Unconscious Thought Theory (UTT) 103
3.3.5.4. Antecedents of Information Quality Continued 104
3.3.5.5 Conceptualization of Information Quality 105
3.3.6 Online Shopper Satisfaction 106
3.3.6.1 Importance of Online Shopping Satisfaction 108
3.3.6.2 Definition of Online Shopping Satisfaction versus Operational Definition 109
3.3.6.3 Antecedents and Outcomes of Online Shopping Satisfaction 111
3.3.6.4 Conceptualization of Online Shopping Satisfaction 125
3.3.7 Trust 125
3.3.7.1 Importance of Trust in Online Shopping 129
3.3.7.2 Online Trust versus Offline Trust 131
3.3.7.3 Definition of Online Trust versus Operational Definition 131
3.3.7.4 Characteristics of Online Trust 133
3.3.7.5 Antecedents and Outcomes of Online Trust 137
3.3.7.5.1 Trustworthiness of Internet Vendor 139
3.3.7.5.2 External Environment 140
3.3.7.5.3 Propensity to Trust (PTT) 140
3.3.7.6 Antecedents and Outcomes of Online Trust Continued 141
3.3.7.7 Conceptualization of Trust 144
3.3.8 Online Purchase Intention 146

3.3.8.1 Definition of Online Purchase Intention versus Operational Definition 146
3.3.8.2 The Importance of Online Purchase Intention 147
3.3.8.3 Antecedents and Outcomes of Online Purchase Intention 148
3.3.8.4 Conceptualization of Online Purchase Intention 150
3.4 Chapter Summary 151

CHAPTER FOUR – CONCEPTUAL MODEL AND HYPOTHESIS DEVELOPMENT 153
4.1 Introduction 153
4.2 Conceptual Model 153
4.3 Hypotheses Development 155
4.3.1 Data Charges and Online Shopping Satisfaction 155
4.3.2 Delivery Dependability and Online Shopping Satisfaction 157
4.3.3 Geographical Distance and Online Shopping Satisfaction 159
4.3.4 Product Risk and Trust 161
4.3.5 Information quality and Trust 163
4.3.6 Online Shopping Satisfaction and Trust 165
4.3.7 Online Shopping Satisfaction and Online Purchase Intention 167
4.3.8 Trust and Online Purchase Intention 169
4.4 Chapter Summary 171

CHAPTER 5: RESEARCH METHODOLOGY 173
5.1 Introduction 173
5.2 Research Strategy 174
5.2.1 Research Philosophy 175
5.2.2 Research Design 179
5.2.2.1 Causal-Comparative Research 180
5.2.2.2 Correlational Research 180

5.2.2.3 Explanatory Research 181
5.2.2.4 Descriptive Research 181
5.2.2.5 Exploratory Research 182
5.2.3.1 Qualitative Research 183
5.2.3.1.1 Advantages of Qualitative Research Methods 184
5.2.3.1.2 Disadvantages of Qualitative Research Methods 184
5.2.3.2 Quantitative Research 185
5.2.3.2.1 Advantages of Quantitative Research Methods 186
5.2.3.2.2 Disadvantages of Quantitative Research Methods 186
5.2.4 Differences between Qualitative and Quantitative Research 187
5.2.5 Rationale for Quantitative Research 188
5.3 Sample Design 188
5.4 Target Population 189
5.5 Sampling Frame 189
5.6 Sample Size 190
5.7 Sampling Method 190
5.7.1 Probability Sampling 190
5.7.1.1 Unrestricted or Simple Random Sampling 191
5.7.1.2 Restricted or Complex Probability Sampling 191
5.7.1.2.1 Systematic Sampling 191
5.7.1.2.2 Stratified Random Sampling 192
5.7.1.2.3 Cluster Sampling 192
5.7.1.2.4 Single-stage Multistage Cluster Sampling 192
5.7.1.2.5 Double Sampling 193
5.7.2 Non-probability Sampling 193
5.7.2.1 Convenience Sampling 193
5.7.2.2 Quota Sampling 194

5.7.2.3 Purpose Sampling 194
5.7.2.4 Snowball Sampling 195
5.7.2.5 Rationale for Sampling Method 195
5.8 Ethical Considerations 195
5.9 The Measurement Instrument 196
5.9.1 Personally Administered Questionnaires 196
5.9.2 Interviewer Administered Questionnaires 197
5.9.3 Rationale for Measurement Instrument 197
5.10 Questionnaire Design 198
5.10.1 A Comparison of Qualitative and Quantitative Questionnaire Design 198
5.10.1.1 Open-Ended Questions – (Qualitative) 198
5.10.1.2 Close-Ended Questions – (Quantitative) 199
Table 5.3: Advantages and Disadvantages of Questionnaires 200
5.10.2 Rationale for Questionnaire Design 201
5.11 Measurement Scales 201
5.12 Pilot Test 207
5.13 Data Collection Technique 208
5.14 Data Analysis Approach 210
5.14.1 Regression Analysis 211
5.14.2 Structural Equation Modelling (SEM) 211
5.14.3 Approach for the Study 214
5.14.4 Measurement Model Assessment 215
5.14.4.1 Confirmatory Factor Analysis 215
5.14.4.2 Reliability 215
5.14.4.3 Cronbach Alpha Coefficient 216
5.14.4.4 Composite Reliability 216
5.14.4.5 Validity 217

5.14.4.6 Convergent Validity 218
5.14.4.7 Item to Total Correlation 218
5.14.4.8 Factor Loadings (Standardised Regression Weights) 218
5.14.4.9 Discriminant Validity 219
5.14.4.10 Correlation Matrix 219
5.14.4.11 Average Variance Extracted (AVE) 219
5.14.4.12 Average Variance Extracted (AVE) Versus Shared Variance (SV) 220
5.14.4.13 Model Fit 220
5.14.4.14 Chi-square 220
5.14.4.15 Comparative Fit Index (CFI) 221
5.14.4.16 Goodness of fit Index (GFI) 221
5.14.4.17 Incremental Fit Index (IFI) 222
5.14.4.18 Normed Fit Index (NFI) 222
5.14.4.19 Tucker Lewis Index (TLI) 223
5.14.4.20 Root Mean Square Error of Approximation (RMSEA) 223
5.14.5 Structural/Path Modelling 224
5.14.5.1 Path Coefficients 224
5.14.5.2 Significance Level 224
5.14.5.3 Model Fit 225

CHAPTER 6: DATA ANALYSIS 229
6.1 Introduction 229
6.2 Descriptive Statistics 229
6.2.1 Gender Composition of the Sample 230
6.2.2 Age Distribution of the Respondents 231
6.2.3 Ethnic Group Profile 232
6.2.4 Frequency of online shopping 233

6.2.5 Device Used for Internet Log In 234
6.2.6 Marital status of the respondents 235
6.2.7 Monthly Income of the Respondents 236
6.2.8 Academic level 237
6.3.1 Data Charges 238
6.3.2 Delivery Dependability 239
6.3.3 Geographical Distance 243
6.3.4 Product Risk 245
6.3.5 Information Quality 247
6.3.6 Online Shopping Satisfaction 249
6.3.7 Trust 251
6.3.8 Online Purchase Intention 254
6.4 Assessment of the Measurement Model 256
6.4.1 Testing for Reliability 256
6.4.1.1 Cronbach's Coefficient Alpha Test 256
6.4.1.2 Composite reliability (CR) 257
6.4.2 Testing for Validity 260
6.4.2.1 Convergent validity 260
6.4.2.1.1 The Item-to-Total Correlation 262
6.4.2.1.1 Factor Loadings Estimates 262
6.4.2.2 Discriminant Validity 262
6.4.2.2.1 Inter-construct Correlation Matrix 263
6.4.2.2.2 Average Variance Extracted (AVE) 264
6.5 Model Fit Measurement 265
6.5.1 Incremental Fit Index (IFI) 267
6.5.2 Chi-Square Index 267
6.5.3 Baseline Comparison Index 267

6.5.4 The Root Mean Square Error of Approximation (RMSEA) 268
6.5.5 Summary of Model Fit Indices for CFA 269
6.5.6 Model Fit (Path Modelling) 270
6.6 Path Modelling: Hypothesis Testing and its Significance Levels 271
6.7 Summary of the Hypothesised Relationships 273
6.7.1 Data charges and Online Shopping Satisfaction 273
6.7.2 Delivery Dependability and Online Shopping Satisfaction 273
6.7.3 Geographical Distance and Online Shopping Satisfaction 274
6.7.4 Product Risk and Trust 274
6.7.5 Information Quality and Trust 274
6.7.6 Online Shopping Satisfaction and Trust 275
6.7.7 Online Shopping Satisfaction and Online Purchase Intention 275
6.7.8 Trust and online Shopping Satisfaction 276
6.8 Chapter Summary 276

CHAPTER 7: DISCUSSION OF FINDINGS AND IMPLICATIONS 277
7.1 Introduction 277
7.2 Data Charges and Online Shopping Satisfaction 277
7.3 Delivery Dependability and Online Shopping Satisfaction 279
7.4 Geographical Distance and Online Shopping Satisfaction 281
7.5 Product Risk and Trust 282
7.6 Information Quality and Trust 284
7.7 Online Shopping Satisfaction and Trust 286
7.8 Online Shopping Satisfaction and Online Purchase Intention 288
7.9 Trust and Online Purchase Intention 290
7.10 Summary of Findings 291
7.11 Chapter Summary 293

CHAPTER 8: CONCLUSION, RECOMMENDATIONS, LIMITATIONS AND AREAS OF FUTURE RESEARCH 294
8.1 Introduction 294
8.2 Conclusion of Main Findings 294
8.2.1 Conclusions on the Influence of High Data Charges on Online Shopping Satisfaction 294
8.2.2 Conclusions on the Influence of Delivery Dependability on Online Shopping Satisfaction 295
8.2.3 Conclusions on the Influence of Geographical Distance on Online Shopping Satisfaction 295
8.2.4 Conclusions on the Influence of Product Risk on Trust 296
8.2.5 Conclusions on the Influence of Information Quality on Trust 296
8.2.6 Conclusions on the Influence of Online Shopping Satisfaction on Trust 296
8.2.7 Conclusions on the Influence of Online Shopping Satisfaction on Online Purchase Intention 297
8.2.8 Conclusions on the Influence of Trust on Online Purchase Intention 297
8.3 Managerial Implications 297
8.4 Recommendations 298
8.4.1 Recommendations on Data Charges and Online Shopping Satisfaction 298
8.4.2 Recommendations on Delivery Dependability and Online Shopping Satisfaction 299
8.4.3 Recommendations on Geographical Distance and Online Shopping Satisfaction 299
8.4.4 Recommendations on Product Risk and Trust 300
8.4.5 Recommendations on Information Quality and Trust 300
8.4.6 Recommendations on Online Shopping Satisfaction on Trust 301
8.4.7 Recommendations on Online Shopping Satisfaction on Online Purchase Intention 301
8.4.8 Recommendations on Trust on Online Purchase Intention 302
8.4.9 Overall Recommendations 303
8.5 Contributions 303

8.5.1 Conceptual Contribution 303
8.5.2 Theoretical Contribution 304
8.5.3 Marketing Contribution 305
8.6 Limitations and Future Studies 306
8.7 Chapter Summary 307
REFERENCES 309

LIST OF TABLES

Table 3.1: Broadband pricing strategies (a summary of the main pricing strategies practiced by operators, with advantages and disadvantages)…….56

Table 3.2: The effects of spatial attributes on online buying…….76

Table 3.3: Types of perceived risk…….84

Table 3.4: Selected studies on online-customer shopping satisfaction……....123

Table 3.5: Expected influence of underlying website category factors on the effects of drivers of online trust on online trust……...136

Table 5.1: Features of the different research strategies……...172

Table 5.2: Differences between the Research Paradigms……....175

Table 5.3: Advantages and Disadvantages of Questionnaires……198

Table 5.4: Data charges……200

Table 5.5: Delivery dependability……201

Table 5.6: Geographical distance…….201

Table 5.7: Product risk…….202

Table 5.8: Information quality…….202

Table 5.9: Online shopping satisfaction……...203

Table 5.10: Trust…….....204

Table 5.11: Online purchase intention…….204

Table 5.12: Advantages and disadvantages of various data collection techniques…….207

Table 6.1: Internet fees being high……..236

Table 6.2: The extent to which internet fees are reasonable……....236

Table 6.3: The extent to which a respondent is pleased with the fee they pay for the internet.237

Table 6.4: Online stores deliver the kind of products I need……..……237

Table 6.5: Online stores deliver my orders on time……238

Table 6.6: Online stores provide dependable delivery…….……..…….239

Table 6.7 Online stores deliver the kind of products I need…….……..……239

Table 6.8: Online stores deliver my orders on time……..…..240

Table 6.9: It's not worth travelling the distance when I can rather shop online…….....241

Table 6.10: With travelling costs constantly increasing, I prefer shopping online…….241

Table 6.11: I prefer to shop online as the nearest physical store is too far away……242

Table 6.12: I find it difficult to judge the quality of the product over Internet……..….243

Table 6.13: I want to see and touch products before I buy them……..……..243

Table 6.14: I place more trust in products that can be touched before purchase…….……244

Table 6.15: Online stores offer more useful information about the different choices…….245

Table 6.16: I like to browse the various categories on a site when doing my shopping……..…245

Table 6.17: When searching for something to buy, I like to examine several search results even if the first one is exactly what I want……..246

Table 6.18: I am satisfied with the pre-purchase experience of online shopping websites.....247

Table 6.19: I am satisfied with the purchase experience of Internet shopping websites……..…248

Table 6.20: Online shopping is reliable…….……..248

Table 6.21: In general I can rely on online stores to keep the promises that they make…….249

Table 6.22: Online stores can be trusted, there are no uncertainties……250

Table 6.23: Online shopping is a trustworthy experience……...…….250

Table 6.24: I intend to buy online frequently……..……251

Table 6.25: I anticipate repurchasing from online stores in the near future……...252

Table 6.26: Cronbach's coefficient alpha test……..……252

Table 6.27: Assessment of accuracy analysis…….…..……255

Table 6.28: Assessment of item-to-total correlation and Factor Loadings……..257

Table 6.29: Correlations between constructs……..….259

Table 6.30: Assessment of average variance extracted (AVE)……261

Table 6.31: CMIN Index……..263

Table 6.32: Baseline comparison index…….……..265

Table 6.33: RMSEA Index……..266

Table 6.34: Fit Indices of the measurement model…….…….267

Table 6.35: Path modelling assessment…….…..268

Table 6.36: Outcome from the structural model testing……..269

Table 7.1: Results from Research Hypotheses……292

LIST OF FIGURES

Figure 1.1: Thesis structure……13

Figure 1.2: Diagrammatic representation of Chapter One……..…14

Figure 2.1: Internet users as a percentage of population…….…..18

Figure 2.2: South African internet access market value: $ million, 2010 – 2014……..…..19

Figure 2.3: South African internet access market value forecast: $ million, 2014 – 2019…..…20

Figure 2.4: Diagrammatic representation of Chapter Two……23

Figure 3.1: TAM……27

Figure 3.2: Theory of Planned Behaviour……..……..…..31

Figure 3.3: The SERVQUAL Model…….……36

Figure 3.4: Revised SERVQUAL Model …….40

Figure 3.5: IS Success Model……41

Figure 3.6: Augmented IS Success Model……44

Figure 3.7: Updated DeLone and McLean IS Success Model……..……45

Figure 3.8: Satisfaction with Aspects of online shipping…….…….……66

Figure 3.9: Days willing to wait for most purchases……..……67

Figure 3.10: Most important shipment tracking service…….……..68

Figure 3.11: Conceptual model for the effect of types of risk and demographics on online shopping behaviour……87

Figure 3.12: Conceptual model of the effect of perceived risks (financial risk, product risk, time risk, delivery risk, social risk and information security) on online shopping of Jordanian consumers…….….91

Figure 3.13: The antecedents of online customer satisfaction and customer loyalty research model……112

Figure 3.14: Antecedents of online customer satisfaction in China proposed conceptual framework……113

Figure 3.15: The relationship among customer satisfaction, customer attitude, and customer loyalty towards online shopping…….….114

Figure 3.16: A research model for the antecedents and customer satisfaction of CSS……..…..116

Figure 3.17: A schematic diagram of the research model…….…..119

Figure 3.18: Satisfaction determinants in the Greek online shopping context……...….120

Figure 3.19: Repeat purchase intentions in online shopping: the role of satisfaction, attitude, and online retailers' performance……...121

Figure 3.20: A conceptual model of trust in internet shopping……...137

Figure 3.21: Diagrammatic representation of Chapter Three……..151

Figure 4.1: Conceptual model……..152

Figure 4.2: Data charges and online shopping satisfaction……..……155

Figure 4.3: Delivery dependability and online shopping satisfaction……..157

Figure 4.4: Geographical distance and online shopping satisfaction…….…..159

Figure 4.5: Product risk and trust…….....161

Figure 4.6: Information quality and trust…….…163

Figure 4.7: Online shopping satisfaction and trust…….…….165

Figure 4.8: Online shopping satisfaction and online purchase intention……166

Figure 4.9: Trust and online purchase intention……..……169

Figure 4.10: Diagrammatic representation of Chapter Four……170

Figure 5.1: Why SEM?.....211

Figure 5.2: Statistical modelling……..224

Figure 5.3: Diagrammatic representation of Chapter Five…….…….226

Figure 6.1: Respondents' gender…….228

Figure 6.2: Age distribution of respondents……229

Figure 6.3: Ethnic group profile…….……..230

Figure 6.4: Frequency of online shopping…….…..231

Figure 6.5: Device used for internet login…….……..232

Figure 6.6: Marital status of the respondents…….…....233

Figure 6.7: Monthly income……234

Figure 6.8: Academic level of the respondents……235

Figure 6.9: The initial confirmatory factor analysis (CFA)…….……264

Figure 6.10: A Diagram for the Study's Path Modelling…….……270

Figure 8.1: Diagrammatic representation of Chapter Eight…….306

CHAPTER 1: INTRODUCTION AND BACKGROUND OF THE STDUY

1.1 Introduction

The 21st century has brought about considerable changes in the way in which businesses fundamentally trade and collaborate. The proliferation of internet-based electronic commerce, commonly known as e-commerce, is among the forces that are at the forefront of changing the rules on how to build companies, marketplaces and value (Al-Fadhli, 2011; Chen, Rungruengsamrit, Rajkumar, & Yen, 2013; Dillon & Reif, 2004). The internet presents a medley of benefits such as convenience, and the ability to create an environment where buyers and sellers meet to exchange goods and services without the hindrance of geographical boundaries or barriers (Mayayise & Osunmakinde, 2014). As a result, the use of the internet is becoming more common in communications and transactions between consumers and retailers (Al-Bakri & Katsioloudes, 2015).

There are multiple definitions of the term e-commerce which include the following; it is a means for the distribution, sale, marketing or delivery of goods and services by electronic means (Al-Fadhli, 2011). Yasin, Alavi, Czuchry and Shafieyoun (2014) expanded on this definition and described e-commerce as an emerging area that encompasses processes directly and indirectly related to the buying, selling, and trading of products and services and information electronically. In simpler terms, electronic commerce is defined as any transaction that takes place via the internet (Al-Fadhli, 2011; Bellman, Lohse, & Johnson, 1999; Lu, Fan & Zhou, 2016). E-commerce not only permits consumers to make purchases at their own leisure time with no physical effort, but it also enables the transfer of information between computer systems and allows users to integrate their functions, activities and procedures with unprecedented accuracy and speed (Al-Bakri & Katsioloudes, 2015; Alam & Yasin, 2010; Li & Xie, 2012). This advantage is particularly beneficial when purchasing large and heavy items (Colla & Lapoule, 2012). The use of e-commerce by organisations has advanced rapidly since its genesis, to the extent that that according to Al-Fadhli (2011) who refers to Nilsen (2008), there are already over 875 million consumers who have shopped online through e-commerce. Consequently, academics

have shown an increasingly greater interest in the internet because of its potential to influence the nature of businesses, markets and the economy. Bonera (2011) citing Biswas and Krishnan (2004) affirms the interest taken on this subject. These authors further add that there has been a noticeable proliferation of commercial web sites that offer products or services for purchase online. The internet's power, scope and interactivity provides retailers with a unique opportunity to transform their customers' shopping experience (O'Keefe, O'Connor, & Kung, 1998). Moreover, the ability of the internet to provide information, compare market research data, facilitate real-time two-way communication with customers, promote goods and services and ultimately to support the online ordering of merchandise, provides an extremely rich and flexible new retail channel (Basu & Muylle, 2003; Gudigantala, Bicen & Eom, 2016).

The internet, which enables e-commerce, has grown at a rapid rate so much so that by December 2014 there were approximately 3 billion internet users worldwide of which it was estimated that 25 million were made up of South African users (Internetworldstats, 2015). While this may seem like a considerable amount of South African users, it is approximately 0.8% of the world's internet users. Internet usage in South Africa has not grown at the pace that it has in more developed countries such as the United States of America (USA), Canada and the United Kingdom (UK) (Internetworldstats, 2015). Similarly, the growth of e-commerce has been slower in the South African business environment relative to first world markets and is therefore a lucrative growth opportunity for companies who can exploit this trade opportunity. Yasin, Alavi, Czuchry and Shafieyoun (2014) also affirm that organisations in the USA have more e-commerce experience than their counterparts in developing countries and that there are two fundamental reasons why this is the case. Firstly, organisations in the USA operate in a business environment that can be described as more e-culture ready as compared to their counter parts with more traditional business cultures. Secondly and perhaps more evidently, organisations in the USA have better access to modern technology (Yasin et al., 2014). According to Mohanlal (2006), citing Pattinson and Brown (1996) and Hoffman (1996), the internet promises a number of benefits to both businesses and consumers. From a business perspective, the internet can be a powerful medium to establish a unique relationship with consumers. For consumers, the internet can be a valuable communication medium to facilitate a controlled, non-linear search for up-to-date information and provide assistance with comparison-shopping and decision making. The internet unifies markets and thereby enables consumers to increase their product search and

product reach. Mohanlal (2006), citing Dunlap (2000) stated that people are starting to see greater logic in dealing with the global market as a unified market. With the continued upsurge of internet users, businesses that have adopted this upward trend timeously have seen the benefits of trading online.

With such an enticing opportunity of luring retailers, e-commerce has the potential to innovate the space of commercial transactions and the delivery of goods and services (Al-Fadhli, 2011). At a time of global economic and financial difficulties, even the best of organisations are struggling to maintain customer focus at an affordable cost. E-commerce offers these organizations an efficient business model to respond to increasing customer demands (Yasin et al., 2014). E-commerce is significantly reforming conventional business models presented by manufacturing organisations internationally and reshaping them from mass production to demand driven, possibly customised, just in time manufacturing systems (Yasin et al., 2014).

The rich potential of rewards has driven the uptake of online shopping from both organisations and customers to the extent that it is estimated to be the fastest growing area of internet usage (Forsythe & Shi, 2003). It is therefore no coincidence that with the rapid growth of e-commerce, businesses at the forefront of change want to gain a competitive advantage by using e-commerce to interact with customers. E-commerce improves the flow of organisational information. It is especially useful for gathering intelligence on customers, competitors, and potential markets (Lichtenthal & Eliaz, 2003; Pappas, Pateli, Giannakos & Chrissikopoulos, 2014). It is for this reason that the use of the internet for electronic commerce continues to expand rapidly. As a result, both researchers and electronic retailers, also known as e-tailers are becoming increasingly interested in identifying factors that influence the propensity of consumers to shop online.

With a keen interest in the variety of potential rewards driven by a fast growing e-commerce platform at an early age, Forsythe and Shi (2003) estimated online shopping to be the fastest growing reason for internet usage. However, it is important to note a point that was raised by Evanschitzky, Iyer, Hesse, and Ahlert (2004) who mentioned that for many retailers e-commerce

success is proving to be rather elusive as web traffic does not always readily translate into improved turnover and increased profitability. In addition, due to South Africa's diversity and unique economic situation (commonly referred to as the digital divide), the factors that influence South African internet users' online purchase intention may not be the same as those influencing internet users from other countries purchasing online (Du Toit, 2013; Pavon & Brown, 2010). Global studies have been conducted on why internet users purchase online, but scant information is available on why South African internet users purchase online (Mohanlal, 2006; Bothun, 2016). Furthermore, this study also takes a particularly interesting approach in that the scope of product encompasses both local and globally available branded products. This study is thus unique as previous research generally focused on locally available products.

Against this backdrop, there is a dire need for empirical studies – such as the one presented in this paper, that shed light on the factors that predict online purchase intention of branded products in the general merchandise retail sector, and perhaps most importantly the relationship between the stated predictors. In tackling this issue, the managerially actionable factors that predict online purchase intention of branded products will be identified.

1.2 Problem Statement

Despite the organisational potential of e-commerce, operational and strategic benefits remain beyond the reach of many organisations. Organisations that approach the notion of e-commerce from a mere technological perspective may end up with isolated islands of automated marketing related activities (Yasin et al., 2014; Weiss, Gulati, Yates & Yates, 2015). To this end, marketers are spending more time in an attempt to better understand what drives/influences consumers to engage in online activity, more specifically online shopping. However, previous studies centred in this area of research have exceedingly focused on more commonly studied variables such as time saving, convenience, security, ease of payment and ease of use (Bonera, 2011; Gong, Stump, & Maddox, 2013; Hui & Wan, 2007; Liebermann & Stashevsky, 2009; Lim, Osman, Salahuddin, Romle, Abdullah, 2016)). Previous research also focused little or not at all on variables such as data charges, product availability, information quality and others that are the

focus of this paper. The research paper written by Mohanlal (2006) entitled; *Factors Influencing South African Internet Users Purchasing a Product Or Service Online* affirms the aforementioned variables as potential areas of further research.

Companies that want to compete on an e-tailing front need to spend more time uncovering what drives their potential customers in order to gain a sustainable competitive advantage (Du Toit, 2013; Javadi, Dolatabadi, Nourbakhsh, & Poursaeedi, 2012; Swinyard & Smith, 2003). This growing need to understand consumer behaviour is of even greater necessity to the South African business environment because of its diverse population, complex background and different business climate as compared to that of the USA and the European Union. Information on how people in South Africa perceive the trend of e-tailing is limited and therefore needs more exploring (Du Toit, 2013). Thus, in order for cyber marketers to appreciate the factors affecting the purchase decision of consumers, they need to understand what drives consumers to make these decisions. Once this is understood, they can adjust their marketing strategies to fit this new way of electronic trading in order to convert potential consumers into actual purchasers.

Failure to accurately establish the driving factors of online purchase intention of branded products bears irrevocable growth risks to companies that wish to expand their footprint in the world of e-commerce and e-tailing (Kim & Jones, 2009; Young, Kim & Kim, 2004). Hence, it is vital that research as such this one delivers not only on marketing insights but more importantly on business opportunities from a South African perspective.

1.3 Purpose of the Study

The purpose of the study is to investigate the predictors of Data Charges (DC), Geographical Distance (GD), Product Risk (PR), Delivery Dependability (DD) and Information Quality (IQ) on Online Purchase Intention (OPI) of consumers; and the mediating role of Online Shopping Satisfaction (OSS) and Trust (T) in the South African general merchandise retail sector.

1.4 Objectives of the Study

1.4.1 Theoretical Objectives

1. To review the literature on data charges.
2. To review the literature on delivery dependability.
3. To review the literature on product risk.
4. To review the literature on geographical distance.
5. To review the literature on information quality.
6. To review the literature on online shopping satisfaction.
7. To review the literature on trust.
8. To review the literature on online purchase intention.

1.4.2 Empirical Objectives

1. To investigate the influence of data charges on online shopping satisfaction.
2. To investigate the influence of delivery dependability on online shopping satisfaction.
3. To investigate the influence of geographical distance on online shopping satisfaction.
4. To investigate the influence of product risk on trust.
5. To investigate the influence of information quality on trust.
6. To investigate the influence of online shopping satisfaction on trust.
7. To investigate the influence of online shopping satisfaction on online purchase intention.
8. To investigate the influence of trust on online purchase intention.

1.5 Research Questions

1. To what extent do data charges influence online shopping satisfaction?
2. To what extent does delivery dependability influence online shopping satisfaction?
3. To what extent does geographical distance influence online shopping satisfaction?
4. To what extent does product risk influence trust?

5. To what extent does information quality influence trust?
6. To what extent does online shopping satisfaction influence trust?
7. To what extent does online shopping satisfaction influence online purchase intention?
8. To what extent does trust influence online purchase intention?

1.6 Research Gap and Justification of the Study

A review of existing literature identified the following notable limitations and gaps; firstly, the majority of the studies focused on the internet users of developed countries or technologically advanced/enabled countries and thereby neglected to include developing countries such as South Africa. For instance, Yasmeen and Tufail (2015) reflects on the impact of internet technology in South Asia with special reference to Pakistan. On the other hand, Kongaut and Bohlin (2016) and Lu, Yu, and Yao (2014) studied the influence of mobile commerce on internet use from the perspective of Sweden and China respectively. Yasin et al (2014) make reference to internet users in Iran in a study on the drivers of e-commerce success. Other scholars, Liat and Wuan (2014) researched the drivers of online purchase intention from the view of Malaysian internet users. Chen, Ling, Ying, and Meng (2012) and Gong et al. (2013) also made a strong reference of research from the perspective of the Chinese internet users. However, though a few authors Bothun (2016), Mariama, Mpho, and Christoph (2013), Stork, Calandro, and Gamage (2014) have written about this subject in the context of Africa, the focus has not been on the same variables of interest such as those that are analysed in this study.

Secondly, in the context of South Africa by and large, internet user studies have focused on aspects such as internet censorship (Bitso, 2014), broadband policy (Chigona, Willem, Andile, & Metfula, 2012), factors considered in strategic marketing in e-tailing (Du Toit, 2013), e-commerce success (Jaykody, 2004) and a very broad overview of e-commerce (Deheus, 2002; Kruger, 2007; Petkar, 2002). In addition, the scant literature based on the South African internet user has generally only focused on the following factors, deemed to be of importance when purchasing products and services online: the price of the product or service being purchased, the convenience to the internet user (Biggs & Kelly, 2006; Mohanlal, 2006), the experience of an

internet user, the web site layout, the ease of use of the web site (Mpofu, Milne, & Watkins-Mathys, 2013), the brand of the product or service, the type of product or service (Du Toit, 2013; Pavon & Brown, 2010), the availability of online information on the product or service, and the method of payment (Mohanlal, 2006).

Thirdly, the study is unique due to the fact that it investigates the relationships between Data Charges, Geographical Distance, Product Risk, Delivery Dependability and Information Quality as predictors of Online Purchase Intention of consumers; and the mediating role of Online Shopping Satisfaction and Trust in the South African general merchandise retail sector. This unique arrangement of variable has not been presented in existing literature in the manner in which the current study does. Hence this study aims to fill the gap concerning the relationship between the variables in the specified and unique research context.

There are essentially three key points as to why this researcher finds this topic particularly different, and of relevance and significance to South African literature. The first of these points is that this study is contemporary and of interest because unlike previous studies, the research focuses on newly developing variables that perhaps were not as relevant in the earlier developing stages of e-commerce. The subject of decision making theory, consumer behaviour and its drivers is dynamic by nature (Javadi et al., 2012). Therefore it is imperative that research in this regard remains up to date and relevant.

Secondly, a study like one has not been undertaken in developing countries such as South Africa. As previously mentioned, past studies have primarily focused on the first world and developed economies many of which reside in the Eastern parts of the world, where levels of infrastructure are far more superior than those of South Africa (Pan, Chaipoopirutana, & Combs, 2010; Shih-Ming & Sangruang, 2011; Yasmeen & Tufail, 2015; Zhang & Srisutto, 2015). Comline, (2008), citing Murillo (2001) identifies the following six foundational structures as those that need to be in place in order for an economy to effectively grow in e-commerce:

- Electrical network infrastructure
- Transport infrastructure

- Institutional infrastructure
- Cultural, educational and demographic factors
- Commercial, banking and accounting infrastructure
- Minimum disposable income

With the aforementioned structures being of profound interest in South Africa, particularly to the South African government, this study seeks to highlight new insights into research. It is vital that marketers understand the perceptions of South African internet users on retail e-commerce. This research highlights areas of focus, so that the perceptions of e-commerce can be improved in future to broaden the market place for more open trade.

Finally, as South Africa is a member of the BRICS (Brazil, Russia, India, China, South Africa) group of nations, this research will be an invaluable resource to countries which share similar economic and development sentiments to South Africa. The findings of this research can be generalised to stimulate further studies in these countries.

1.7 Contribution of Study

The performance of organisations, especially retailers, depends on access to accurate and up-to-date information, especially the flow of data between the organisation/retailer and its customers (Al-Bakri & Katsioloudes, 2015; Milan, Bebber, Toni, & LucieneEberle, 2015; Zheng, Zhao, & Stylianou, 2013). To this researcher's knowledge, until now, there has been no systematic examination of the variables that are presented in this study, especially in the unique way in which they have been modelled and in the South African context. The findings of this research are therefore important because organisations in South Africa need to know the influence of the variables researched here to purchase intention. This research will also add significant value to numerous stakeholders including academics, professionals and organisations. Academic benefits include additional research being conducted in this area. This will be achieved through the testing of a new conceptual model that will add new knowledge and provide a base upon which

further research on this topic can be done. Value to professionals will be added through increased empirical insights that will invariably assist in the development of new marketing strategies. Organisational value will be added by the trial and implementation of these strategies in an effort to optimise the ability of retailers to effectively leverage successful e-commerce models.

This study will also contribute to literature that further develops understanding on the relationships between Data Charges and Online Shopping Satisfaction, Delivery Dependability and Online Shopping Satisfaction, Geographical Distance and Online Shopping Satisfaction, Product Risk and Trust, Information Quality and Trust, Online Shopping Satisfaction and Trust, Online Shopping Satisfaction and Online Purchase Intention as well as Trust and Online Purchase Intention. In addition to the limited research that has been done in relation to the above mentioned variables; many studies that have been conducted thus far are based on developed countries that have been mentioned in this chapter. Studies of a similar nature are very limited in the South African context. By understanding these variables, marketers would be in a better position to develop adequate marketing strategies that exploit the valuable insights that this research will uncover. In doing so, this paper aims to add greater knowledge to the domain of e-commerce, specifically focusing on drivers that predict consumers' purchase intention of branded products. This study could significantly contribute to the future of the strategic marketing of many businesses that desire to increase their online presence, or those businesses that want to focus solely on e- tailing. Perhaps most importantly, the real world benefits of this study will arise through online vendors/retailers that glean the insights provided here and are able to utilise them to attract more customers to their online businesses.

1.8 Ethical Considerations

Research that involves human participants raises several concerns relating to principles such as privacy, dignity, bodily integrity and autonomy (Bell, 2003). The decision by participants to be involved in the research was completely voluntary and each respondent was required to sign a consent form. All respondents were informed that all the information provided will be kept confidential and that the findings from the research will only be utilised for academic purposes and will not be given or sold to third parties. As recommended by Saunders et al. (2009), the

research was conducted in an ethical manner to ensure that it did not infringe the rights of the respondents or bring them harm and/or loss and disrepute in any way.

1.9 Structure of Thesis

The thesis is presented as follows; chapter one provides an overview of the entire study. This included an introduction, followed by a clearly defined problem statement and purpose of the study and a discussion of both theoretical and empirical objectives of the study. This was followed by research questions, discussion on the research gap and justification of the study. Finally the first chapter made reference to contribution of the study and a brief overview to the ethical considerations the study.

Chapter two discusses the research context. This is achieved by firstly unpacking the history of the internet. This is followed by a comprehensive definition of the internet and a deep-dive discussion of the internet in South Africa. Finally, the chapter discusses the internet as an enabler of electronic commerce and the subsequent emergency of electronic commerce. A brief summary of the chapter is provided.

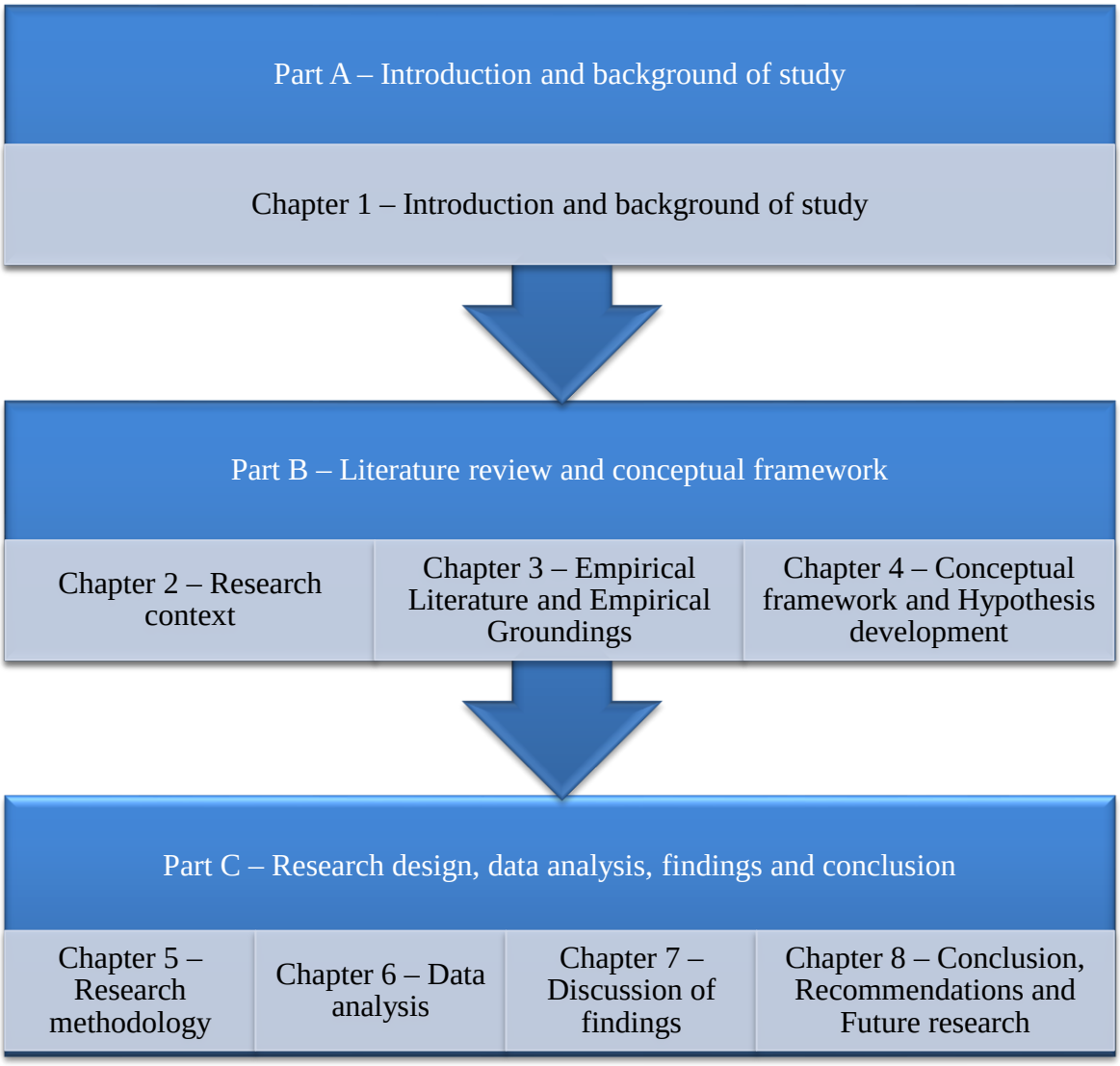
Chapter three expands on the theoretical groundings and literature relating to each variable presented in the study. The research is grounded on five research model/theories that are discussed in greater detail, these include; The Technology Acceptance Model, The Theory of Planned Behaviour, The Innovation Diffusion Theory, The E-Service Quality Model and The E-commerce Success Model. The chapter then proceeds with an elaboration of the individual variables of interest, namely; data charges, delivery dependability, geographical distance, product risk, information quality, online shopping satisfaction, trust and online purchase intention. In doing so, the researcher defines each variable whilst providing context as to the antecedents and outcomes of each variable.

This is followed by chapter four that discusses the conceptual model and hypothesis development of the study. The conceptual model provides an illustrative depiction of the proposed relationships amongst hypotheses, whilst literature on the rationale of the development of each hypothesis is shared thereafter.

Chapter five outlines the research methodology and design of the study. The current study is based on a positivist research style and assumes a deductive approach to test the proposed hypotheses. In addition, the present study gathers empirical data through the administration of online questionnaires that were distributed to a pre-selected sample using a quantitative method to collect the data. Simple random probability sampling is used where random selection ensures that there is no scope for the researcher to influence the sample in any way and thus introduce bias (Denscombe, 2010). The individual measurement instruments are adapted from existing scales and are modified to fit the context of the present study. A five point Likert scale (strongly agree to strongly disagree) is consistently used throughout all measurement items and are customised from the following pre-existing scales: Data Charges is inspired from a scale by B. Kim, Choi and Han (2009), while Delivery Dependability is adapted from a scale presented by Li et al (2005). Geographical Distance and Information Quality are both measured by scales adapted from Du Toit (2013). Product risk on the other hand is adapted from a scale that was recently developed by Overmars & Poels (2015). Online shopping satisfaction, trust and online purchase intention are respectively measured using scales initially developed by Rose, Clark, Samouel, & Hair (2012) with some minor contributions from Khalifa and Liu; Lee and Turban (2001). Structural equation modelling is used as the data analysis approach. The data is analysed in SPSS, while AMOS is used for the structural modelling. Firstly a measurement model assessment was done where reliability of the individual measurement instruments is tested using Cronbach Alpha Coefficient and Composite Reliability Index. In order to ensure validity, Discriminant Validity and the Convergent Validity are assessed by the researcher. In addition, model fit is established by measuring the Chi-Square, the Normed Fit Index (NFI), Comparative Fit Index (CFI), Incremental Fit Index (IFI), Goodness of Fit Index (GFI), and the Root Mean Square Error of Approximation (RMSEA). Secondly, structural modelling was done where path coefficients, significance level and model fit are tested. The research design and methodology are also discussed in Chapter Five.

Chapter six provides data analysis, where all the results from the descriptive and inferential statistics are shared. Thereafter a detailed discussion of the findings and implications is provided in Chapter seven, and finally the study concludes with a full discussion of the remarks and recommendations for scholar and industry that are provided in Chapter Eight.

Figure 1.1: Thesis structure



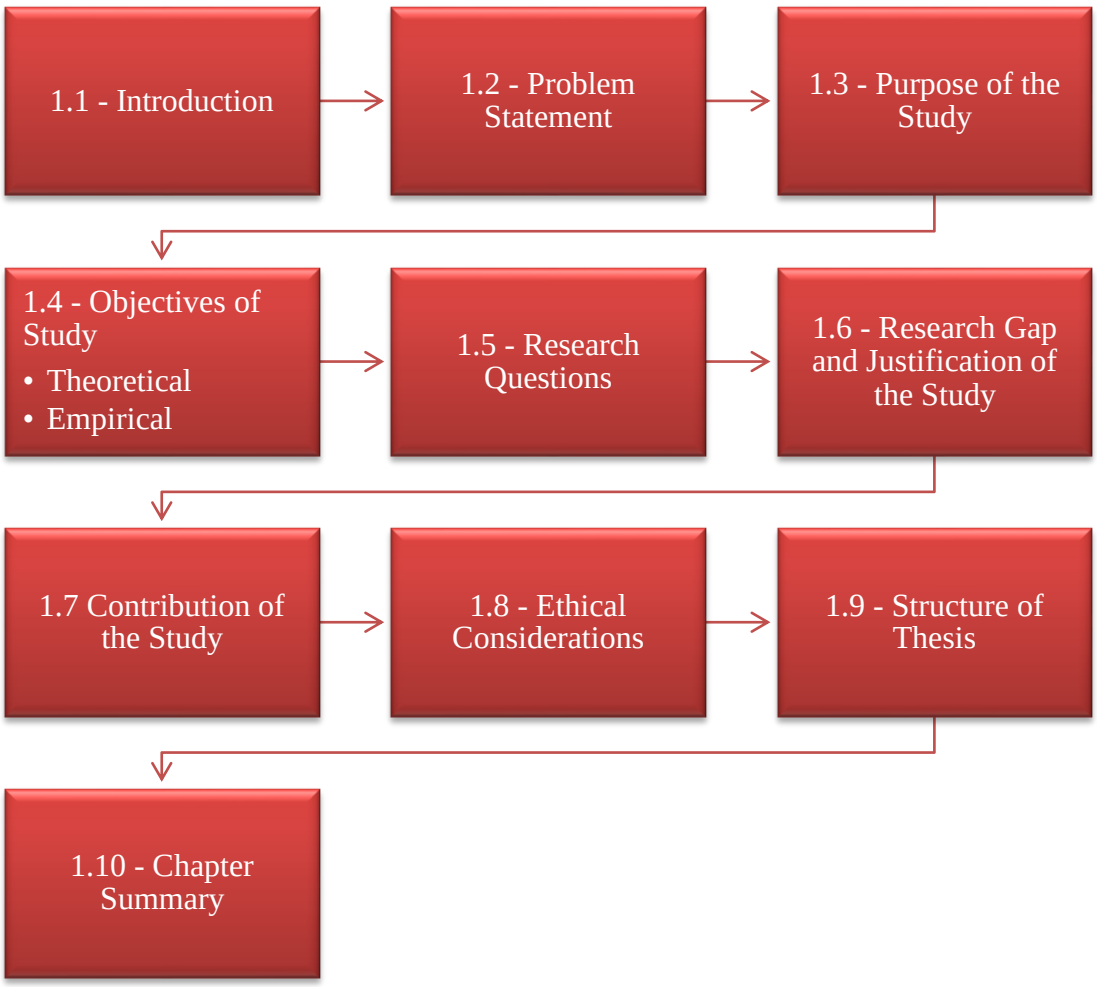
Source: Author (2016).

1.10 Chapter Summary

Chapter one is made up of 10 sections. Section one provided the preamble of the thesis. This section was followed and augmented by defining a problem statement that affected online retailers operating in South Africa. The third section discussed the purpose of the study whilst the objectives of the study, both theoretical and empirical, were discussed afterwards. The

research gap was also highlighted as well as the justification of the study. The seventh section discusses the contribution of the study and the ethical considerations are discussed thereafter. Section nine highlights the structure of the thesis while the final section summarizes chapter one. Below is a diagrammatic representation of chapter one.

Figure 1.2: Diagrammatic representation of Chapter One



Source: Author (2016).

CHAPTER 2: RESEARCH CONTEXT

2.1 Introduction

This section provides the context of this study. This is done by briefly discussing the origin of the internet and how it has subsequently grown over the years as a convenient means of communication and sharing information. This is followed by an elaboration on the definition of the internet, and an overview of the growth of the internet in South Africa is then provided. Thereafter, the internet as an enabler of electronic commerce is discussed and finally, the chapter provides foresight into the emergency of online retailing

2.2 The History of the Internet

According to Mohanlal (2006) it was in 1970 that computer scientist, Vinton Cerf, a man who the *New York Times* called the father of the internet, began to take the forefront in the development of the internet. Cerf, along with Robert Khan, established a set of software "protocols" to allow different types of computers to exchange packets (formatted units of data), despite variable packet sizes and computer clock speeds (Leiner, Cerf, Clark, Kahn, Kleinrock, Lynch, Postal, Roberts, Wolff 2009). This newly developed protocol could meet the needs of an open architecture network environment and was subsequently termed Transmission Control/Internet Protocol or TCP/IP (Leiner et al., 2009).

By 1985, the Internet was already well established as a technology supporting a broad community of researchers and developers and was beginning to be used by other communities for daily computer communications (Leiner et al., 2009). However, it was in 1986 that the American National Science Foundation, an organization which promotes advanced research and education networking in the United States, funded The National Science Foundation Network (NSFNet) as a cross-country 56 Kbps backbone for the Internet (Brousseau, 2011; Weis, 2010). The funding accelerated improvements in the academic computing infrastructure and not only

that, but it was also open to all academic users and not restricted to supercomputer researchers (Zakon, 2016). In 1989, another significant event took place in making the internet easier to use and more accessible (Zakon, 2016). Tim Berners-Lee and others at the European Laboratory for Particle Physics, more popularly known as CERN, proposed a new protocol for information distribution (Segal, 1995). This protocol, which became the World Wide Web in 1991, was based on hypertext, which is a system of embedding links in text to link other text (Howe, 2007).

In the early 1990s, when independent commercial networks began to grow, it became possible to route internet traffic from one commercial site to another without passing through the American government funded NSFNet internet backbone (Howe, 2007). Delphi was the first national commercial service to offer internet access to its subscribers (Weis, 2010). It opened up an email connection in July 1992 and full internet service in November 1992 (Zakon, 2016). Microsoft's full-scale entry into the browser, server and internet service provider market completed the major shift over to a commercially based internet and the release of Microsoft Windows 98 in June 1998 with the Microsoft browser well integrated into the desktop showed the determination of Bill Gates to capitalize on the enormous growth of the internet (Howe, 2007).

By virtue of the aforementioned, the internet is arguably the single most significant technology advancement to occur at the end of the twentieth and the beginning of the twenty-first centuries (Leiner et al., 2009; Namachchivaya, 2012). It has allowed for the opening of new vistas of firms' which enable global expansion by minimizing entry barriers and providing access to valuable information about markets Porter (2001), thus enabling firms to identify target markets and cater for the needs of the specific clients. In addition, with the use of the internet, firms are better able to find the most suitable partners regardless of their physical location and are able to develop better network coordination (Akhtar, Azeem, & Mir, 2014).

2.3 The Internet Defined

The term "internet" is used in several different ways, including referring to a paradigm for free and opening communication; to a broad collection of protocols, services, and applications; and to set interconnected networks that share a common transport protocol (Hill, 2014). The term "internet" is sometimes used as a paradigm for creativity, flexibility and freedom to develop and evolve, freedom of information, freedom of expression, and free flow of information (Liddicoat & Doria, 2012). This paradigm is sometimes referred to as "free and open internet" (Donthu & Garcia, 1999; Howe, 2007). The English term "free" suggests two notions: to describe a situation in which there are no constraints or to describe something that costs nothing (or very little). Thus the term is used interchangeably when describing the internet (Hill, 2014). In the absence of an agreed definition of the "internet" and in order to discuss the internet as something other than a paradigm, the following definitions are presented: The Russian Federation, in its submission to the World Conference on International Telecommunications (WCIT), defined the Internet as follows:

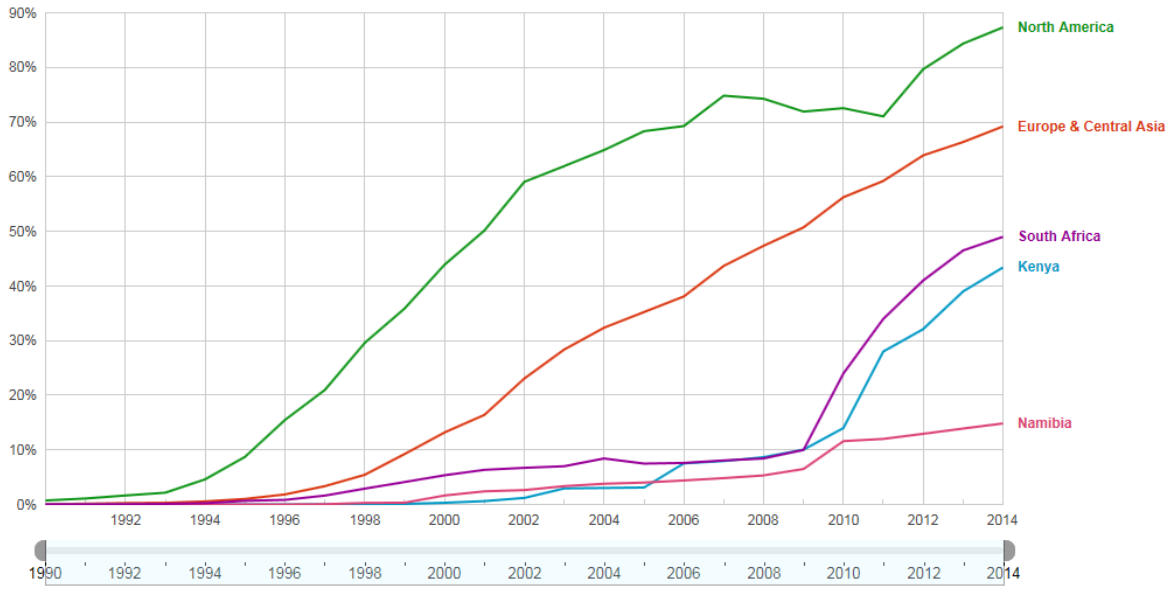
> An international conglomeration of interconnected telecommunication networks which provides for the interaction of connected information systems and their users, by carrying their traffic using a single system of numbering, naming, addressing, identification, protocols and procedures that is defined by Internet Standards.
>
> (Russian Federation, 2012)

This definition was never openly discussed at WCIT, much less agreed. It falls short in that it only refers to the network itself and not to the services and applications offered on top of the network (Hill, 2014). Whilst these definitions are generally acceptable, they can be classified as narrow because the worldwide web is just one of the many services running on the Internet (Hill, 2014). However they are accepted as definitive enough to guide the reader's understanding of the internet within the context of this paper here onwards.

2.4 The Internet in South Africa

It must be noted that during the time that sanctions were imposed against South Africa by other democratic countries, South African academic researchers could not readily obtain information on internet technologies that were readily available in more developed countries (Lawrie, 1997). This, amongst other infrastructural challenges, was some of the issues that South Africa faced as a developing country (De Swardt, 2008; Mpofu et al., 2013). Lawrie (1997) further noted that it was not until 1992 when sanctions were lifted against South Africa by America that the internet in South Africa began to rapidly develop and grow. However, the internet penetration gap in South Africa versus first world economies such as those found in North America, Europe and Central Asia is largely significant. Figure 2.1 below illustrates Internet users as a percentage of population.

Figure 2.1: Internet users as a percentage of population

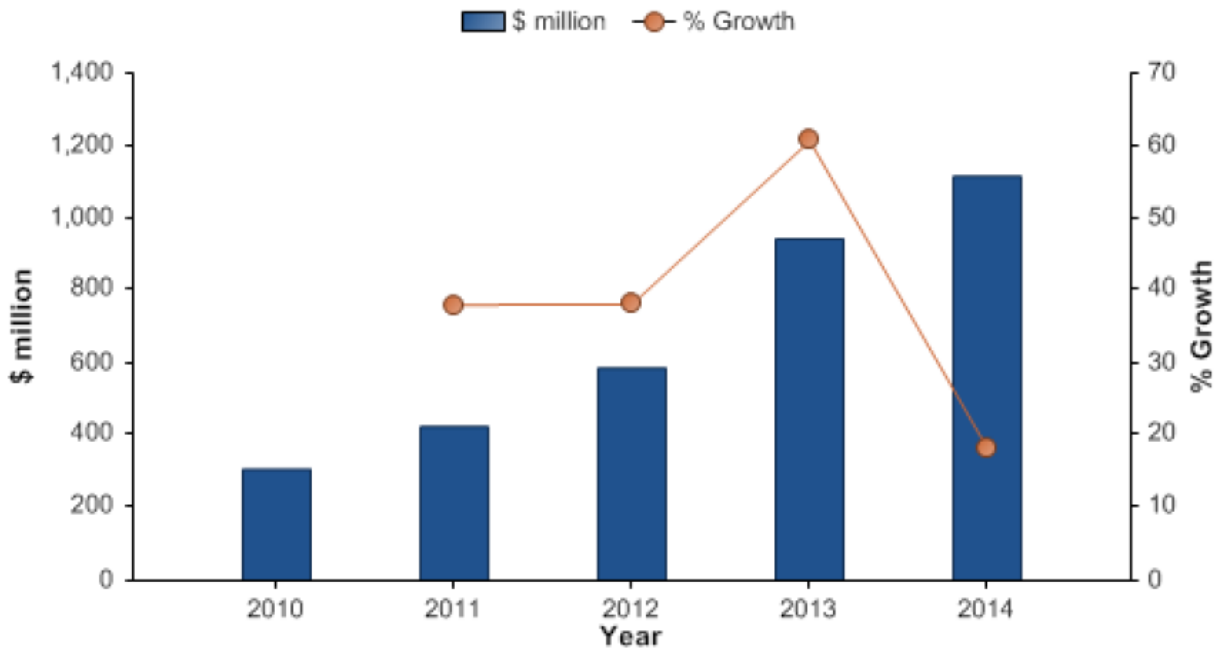


Source: (WorldBank, 2014)

In Africa, only South Africa, Kenya and Namibia have a sizable share of households with internet access (Stork et al., 2014). Namibia saw the share of internet households more than quadruple from 3.3 percent to 11.9 percent however, from a relatively low base. This was mostly due to the influence of mobile internet access by households. Similarly, Kenya experienced

significant increases in household internet connections from 2.2 per cent in 2007/2008 to 12.7 percent in 2011 (Stork et al., 2014). South Africa's higher penetration rate relative to other African countries is swayed by the prevalent and growing ADSL household internet connections, where 22 per cent of households with a working Internet connection use ADSL (Stork et al., 2014). Research compiled by Marketline (2015) shows that from 2010 – 2014, the South African internet access market demonstrated very strong growth. In same period, the South African internet access market had total revenues of $1.1bn, which represented a compound annual growth rate (CAGR) of 38% between 2010 and 2014. Refer to figure 2.2 below.

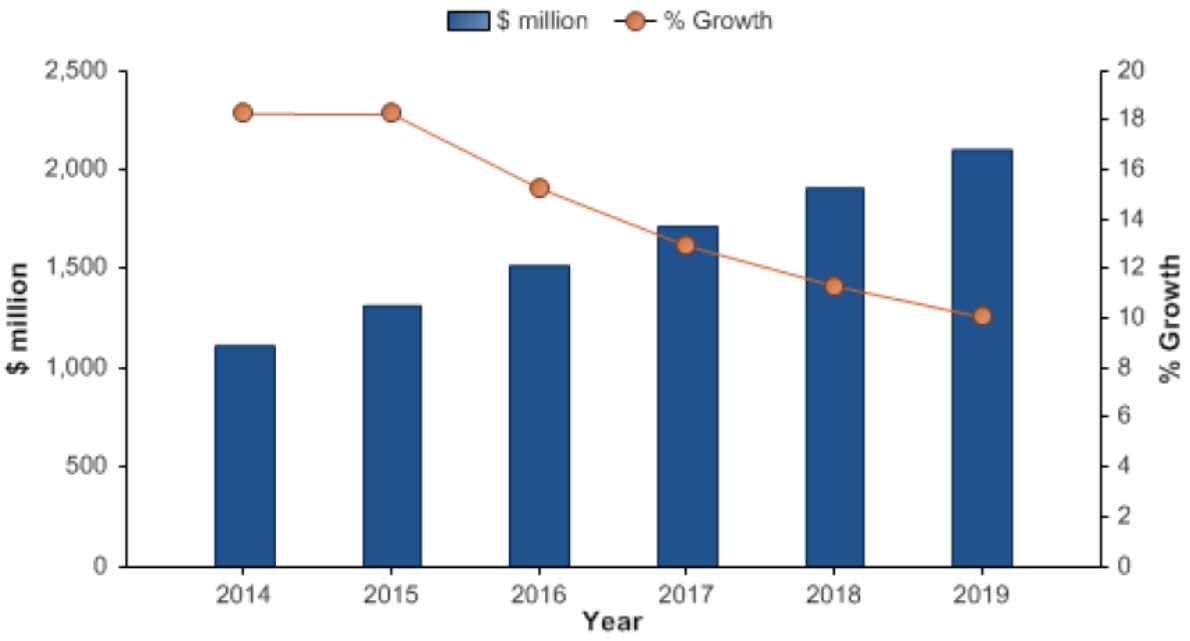
Figure 2.2: South African internet access market value: $ million, 2010 – 2014



Source: (Marketline, 2015)

This accelerated growth is projected to continue right through to 2019, though at a more conservative rate, with an anticipated CAGR of 13.5% for the five year period 2014 – 2019. This result is expected to drive the market to a value of $2.1bn by the end of 2019 (Marketline, 2015). Refer to Figure 2.3 below.

Figure 2.3: South African internet access market value forecast: $ million, 2014 – 2019



Source: Marketline (2015).

The anticipated growth from 2014 – 2019 is believed to be a function of increased internet traffic as a result of more people switching to smart phones and other smart devices that enable them to access the internet (Mohammed, 2017, Bohlin & Kongaut, 2016). According to Marketline (2015) who make reference to the World Bank, less than half of the South African population accessed the Internet during the course of 2014. This untouched potential, alone supports the forecasted market growth rates, but also suggests the need for increased infrastructure (Mpofu et al., 2013; Pavon & Brown, 2010). The first wave of internet adoption in South Africa manifested on the back of desktop computers at the workplace, schools and universities, or public access facilities such as internet cafes and sustained its growth thereof (Lawrie, 1997); the second wave will be swept away by the era and usage of smart mobile phones (Bitso, 2014; Lin, 2013). In addition, the competitive landscape of the South African telecommunications industry make internet service providers' data pricing strategies even more appealing for consumers (Biggs & Kelly, 2006). Indeed, the internet in South Africa, its growth potential and how both business and consumers will benefit from it will be of significant impact to online retailing.

2.5 The Internet as an Enabler of Electronic Commerce

It was in the mid-1990s when technologically savvy and innovative companies responded to the opportunities and challenges posed by the internet, to develop sophisticated web sites to serve customers in their homes (Ellis-Chadwick, 2010). However, in reflection, almost two decades ago, when this radically growing electronic business environment was just starting to manifest, its ultimate success must have looked far less appealing (Jayokody, 2004; Mayayise & Osunmakinde, 2014). Ellis-Chadwick (2010) citing Angelides, (1997); Peterson et al., (1997); Jones and Vijayasarathy, (1998) and Burke, (1997) all shared their countless expectations, many of them very optimistic, about the scope, scale and impact of the internet as a virtual business world. It was evident to these scholars that the internet would become a radical player in the years to come when answers were to be provided to the following questions:

- Will internet retailing radically reconfigure, or eventually replace the high street?
- How will retailers create strategies that are appropriate for an online environment, in terms of segmentation, co-ordination, pricing and promotional strategies?
- What type of people in terms of their attitudes and demographics will be regular internet shoppers?
- To what extent will the virtual world change the scope and principals of retailing? Will it serve as a natural complement to existing marketing practices or displace current retail formats?

Over the past 15 – 20 years, such questions have been regularly address and revisited, with a host of literature now evolved, that provides readers with far clearer understanding of the role and impact of the internet and online trading which is more familiarly referred to as e-commerce (J. V. Chen et al., 2013; K. Chen, Chen, Chiu, & Wang, 2015; Dillon & Reif, 2004; J. Kim & Lee, 2002; Liebermann & Stashevsky, 2009; O'Keefe et al., 1998). It should be noted that when researching and writing this thesis, the terms "e-retailing", "internet shopping", "internet retailing", "electronic shopping", and so on are used interchangeably as a result of how they are employed in the wider literature. Thus, it is clear that the growth in the internet gave birth to the growth of e-commerce.

2.6 Emergence of Online Retailing

From the onset, the potential of the internet as a profoundly diverse and a highly effective communications channel appeared obvious (Ying-Hueih Chen, Hsu, & Lin, 2010; Joines, Scherer, & Scheufele, 2003). The benefits seemed endless and included flexibility and speed, enhanced interactivity, ease of access, global reach, ease of maintenance, cost efficiency, and ability to communicate large amounts of information (Biswas & Krishnan, 2004; Ellis-Chadwick, 2010). Such capabilities were soon to be leveraged by various industries such as banking, manufacturing, defence, education and healthcare (Giovanis, Binioris, & Polychronopoulos, 2012). However, it was anticipated that the biggest impact as a result of the internet would be in the retail space.

Although online retailing did not emerge in any substantive or organized way until the mid-1990s, its arrival had been widely signalled several years beforehand (Kleinman, 2012). Retailers soon realized the internet's potential as a strong vehicle for promoting goods and capturing sales (Dharmesti & Nugroho, 2013; Ellis-Chadwick, 2010; Rozekhi, Hussin, & Noor, 2014). Subsequently, there was a great deal of overemphasis delivered from consultant reports, media articles and management journals suggesting that online retailing presented opportunity for new virtual businesses to dominate existing businesses in established trading environments (Benjamin and Wigand, 1995; Anderson, 1995; Ettoree, 1996). As early excitement grew around this unconventional retail environment, which is free from restrictions of time and space Jones and Bisasiotto (1999); Field (1996), speculation increased that it would invariably be able to achieve a position of superiority in global markets (Evens, 1996; van Tassel and Weitz, 1997).

According to an online shopper study that was conducted by UPS Pulse (2017), a record 47% of US online consumers said they have made at least one online purchase from an international retailer this year, up from 43% in 2016. The study surveyed more than 5,000 US online shoppers who've made at least two web purchases in three months. The results from the study revealed a trend that many shoppers said they bought from an overseas seller because the products didn't seem available from local merchants: more than one-third of those who bought from an international seller said they did so because they couldn't find those products at home. More than

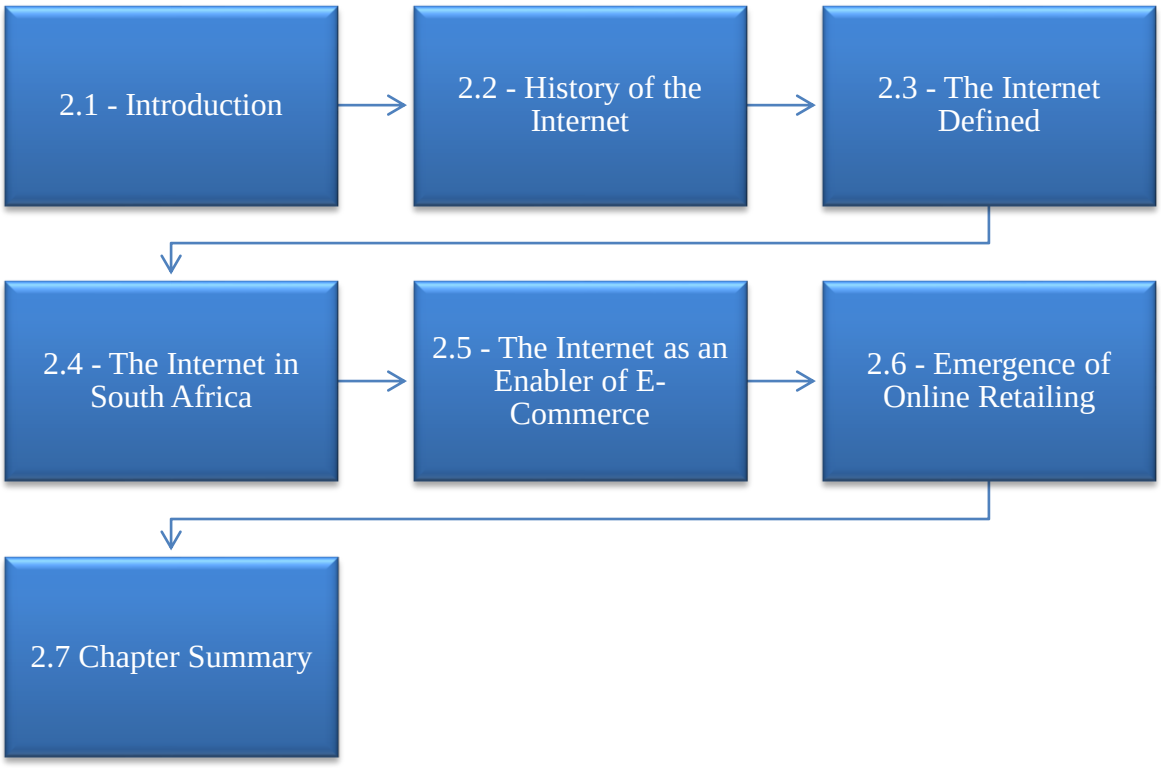
two-fifths of the respondents, or 43%, said they made that purchase not only because they found a lower price but because those sellers are on a US marketplace like Amazon (www.eMarker.com). Of interest to the present study is how this trend, which in the context the current study is classified as geographical distance, plays a part in driving online purchase intention, particularly from a South African online shopping perspective.

eMarketer has raised its projections for worldwide internet users for 2016 to 2021, mainly because of increases in China and other countries in Asia-Pacific, Central and Eastern Europe and Western Europe. eMarketer further estimates that internet adoption will surpass the halfway mark in 2019, when 50.6% of the worldwide population will use the internet, equating to 3.82 billion people. In addition, eMarketer estimates internet adoption will surpass the halfway mark in 2019, when 50.6% of the worldwide population will use the internet, equating to 3.82 billion people. A majority of growth in the number of internet users will come from low-income and rural areas across Asia-Pacific, Central and Eastern Europe, Latin America and the Middle East and Africa. Growth in mobile internet usage will be bolstered by improving Wi-Fi coverage and expanded 3G/4G availability (www.eMarker.com). Smartphones are becoming more widespread due to cheaper handsets and increasingly affordable data plans (Hill, 2014). Today, online shopping is still considered to be the fastest growing area of internet usage, and its growth rates, over the past decade, have continued to rise and have far exceeded those achieved through traditional channels (Ellis-Chadwick, 2010; Marketline, 2014; Yasmeen & Tufail, 2015).

2.7 Chapter Summary

This chapter provided the context of the study. This was done by firstly discussing the history and emergence of the internet. This was followed by a clear definition of the internet and subsequently an elaboration on the internet and its evolvement in South Africa. The chapter then discussed the internet as an enabler of electronic commerce and how this sequence of events laid the formal groundwork for the emergence of online retailing. Below is a diagrammatic representation of chapter two.

Figure 2.4: Diagrammatic representation of Chapter Two



Source: Author (2016).

CHAPTER 3: THOERETICAL GROUNDINGS AND EMPIRICAL LITERATURE

3.1 Introduction

In this chapter, the theoretical grounds that set the context of the study are discussed. This includes the theoretical assumptions and literature review on each of the variables that relate to this study. The respective sections are discussed below.

3.2 Theoretical Groundings of the Study

According to Creswell (2009), the theoretical framework is literature that aids the comprehension of the concepts surrounding the research more broadly. This section briefly alludes to the theoretical groundings that will be discussed in further detail in the chapter so as to give context to previous schools of thought on the said research areas in this study. The models and frameworks presented herein will serve as a guideline in shaping the research structure.

The academic theories presented are discussed in terms of their history, followed by an elaboration of how the theories have been evolved and further developed with respect to e-commerce. Finally the researcher makes reference to these theories and their subsequent relevance to this study. The Technology Acceptance Model (Davis, 1989) is discussed first, followed by the Theory of Planned Behaviour (Ajzen, 1991); the Innovation Diffusion Theory (Rogers, 1962); the E-Service Quality Model (Parasuraman, Zeithaml, & Berry, 1988); and the E-Commerce Success Model (W. Delone & McLean, 1992) respectively.

3.2.1 Background of the Technology Acceptance Model (TAM)

The Technology acceptance model was developed by Davis (1989) to hypothesize the usage behaviour of computer technology (Rauniar, Rawski, Yang, & Johnson, 2014). In its origin TAM is an adaptation of the theory of reasoned action (TRA) was derived from previous research that began as the theory of attitude (Al-Jabri & Sohail, 2012). Both TAM and TRA have strong behavioural views and assume that when someone forms an intention to act, they will be free to act without limitation (Al-Bakri & Katsioloudes, 2015). Intention in turn is determined by two constructs; individual attitudes toward the behaviour and social norms or the belief that specific individuals or a specific group would approve or disprove of the behaviour. Whilst TRA was fundamentally theorized to explain general human behaviour, TAM specifically explained the determinants of computer acceptance across a wide range of end-user computing technologies and the user population (Davis, 1989).

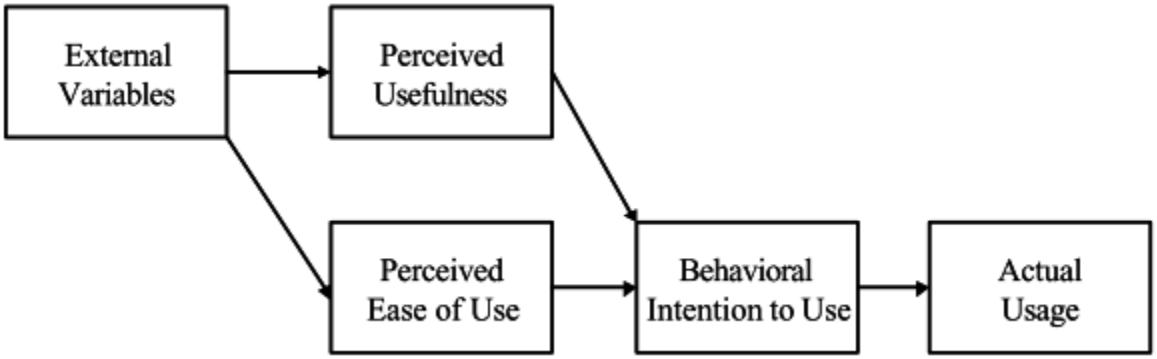
The Technology Acceptance Model is a long standing research model that over the years has been used effectively to understand people's perceptions and willingness to utilise information systems. According to Rauniar (2014) citing Lee, Kozar and Larsen (2003), TAM has become very popular as a result of fulfilling the theoretical characteristics of being simple whilst having the benefit of being supported by data, and being acceptable to predict acceptance and usage of new technologies in various fields. Originally this model was taken in the context of the work environment Comline (2008), citing Davis (1989). At this early developmental stage, the model was concerned with gaining insights on individuals decision to make use of a system based on perceived usefulness and perceived ease of use (Comline, 2008; Kim et al., 2009). However, as the world approached the millennia and with it saw the increased development of internet accessibility, Lederer, Maupin and Sena (2000) saw an opportunity to further develop this model to focus on the overall use of the internet. The model sought to identify the intrinsic dimensions that deal with the availability of information and navigation within a web site. Similar to the propositions of Davis (1989), the intrinsic dimensions nominated by Lederer et al. (2000) were found to correlate with the perceived ease of use. Thus the research concluded that if a user was able to easily navigate and retrieve information online, they would be more prone to make a purchase decision (Comline, 2008). Research by Van der Heijden (2004) extended the original

TAM model by integrating perceived enjoyment as an intrinsic variable that influences the online purchase intentions of consumers.

According to Comline (2008), purchasing products through the internet (e-commerce) embraces extrinsic factors. As such, other authors D Gefen and Straub (2000); Rauniar et al. (2014) developed the TAM model by studying the extrinsic characteristics that drive the usefulness of technology. These authors studied variables such as security of payment systems and the reliability of delivery systems and how these variables impact the online purchase intentions of consumers. In contrast, Liu and Wei (2003) used the TAM model to illustrate that e-commerce is in actual fact adopted through different criteria. These authors identified that perceived risk affects online purchase intention and in comparison, that ease of use was a determining factor for the adoption of e-commerce.

However, even as a well-established conceptual framework, TAM fails to take into account some salient features of e-commerce as it was originally developed with an emphasis on the design of system characteristics (Giovanis et al., 2012). TAM originally implied that information systems are used in organizational environments to increase the efficiency of workers (Hyun-Hwa, Marie Fiore, & Jihyun, 2006). TAM excluded the fact that information systems could be used outside the work environment by individual users, and that such usage could be for the personal gain of such users (Rauniar et al., 2014; Venkatesh & Bala, 2008). The original TAM suggests that two principles – perceived use (PU) and perceived ease of use (PEOU) – are instrumental in explaining the variance in customer's attitude towards information technology (Giovanis et al., 2012). Refer to figure 3.1 below.

Figure 3.1: TAM



Source: Davis & Venkatesh (1996).

Perceived usefulness measures the extent to which a person or an organization believes that using a particular technology enhances operational outcomes which will directly or indirectly lead to the financial (for example, sales) and non-financial (for example, customer loyalty) benefits (Bagozzi, 2007). Whereas perceived ease of use measures the extent to which a person or an organization believes that investment in e-commerce/information technology attracts mental effortlessness (Awa, Nwibere, & Inyang, 2010; Davis, 1989). Perceived use and perceived ease of use both influence an individual's attitude toward using technology which is also characterized as their intention. According to TAM, intentions to use technology will determine whether a person will use the technology or not which is otherwise considered their behaviour (Klopping & McKinney, 2004).

Whilst TAM has received empirical validation, application, and replication in terms of its use to explain and predict e-commerce (EC)/information technology (IT) use Bagozzi (2007); Davis (1989); Pavlou (2003); Venkatesh and Davis, (2000), the model has been vigorously criticized of falling short on more substantial information on users' opinions about specific systems (Venkatesh & Bala, 2008). Agarwal and Prasad (1998); Hu, Chau, Liu Sheng, and Kar Yan, (1999) suggest that TAM needs to incorporate additional factors or integrate with other IT acceptance models to make for more improvement in its explanatory and predictive utilities. On the other hand, Yu-Bin, Chieh-Peng, and Ling-Lang (2005) were able to incorporate two additional variables to TAM with the view to enhance its ability to explain the attitude of

consumers towards online shopping. The new model suggested that perceived usefulness, perceived ease of use, personal awareness of security and personal innovativeness influence both online purchase intention and attitudes towards online shopping (Shrivastava & Lanjewar, 2011). Moreover, Hyun-Hwa et al. (2006) found perceived usefulness, perceived ease of use and perceived enjoyment to be very important in predicting a consumer's intention to shop from a particular online retailer. Regarding perceived ease of use, Hernández, Jiménez, and Martín (2010) have found it to have a weak effect on potential online customers and it was rejected when examining experienced online shoppers. Later studies by Pan et al. (2010) built a model that included individual perceptions, subjective norms, incentive programs, personal characteristics and demographics in order to explain the customers' online purchase intention. Their results varied their model, with perceived usefulness being the most important factor (Shrivastava & Lanjewar, 2011). Therefore, over the past two decades, literature that has been presented on TAM is varying yet consistently evolving as more authors share different opinions and interpretation of the initial model set out by Davis (1989).

Business to consumer e-commerce allows internet users to purchase products and services online using internet technologies and associated infrastructure. As with most information systems, internet technology can be partially explained by the technology acceptance model. Although it is evident in previous literature that this model initially focused on system usage in the work place, recent research has applied it to understand web site use (Pavlou, 2003; Venkatesh & Davis, 2000). Therefore, intention to use the internet for e-commerce should consider the major TAM constructs, which theorize that perceived usefulness and perceived ease of use determine actual system use.

The research presented in this study relies on TAM and other relevant models and frameworks as the theoretical grounds for the study. Through integration with TAM, the proposed e-commerce model will determine the influence or lack thereof, of the stated variables (data charges, delivery dependability, geographical distance, product risk, information quality, trust and online shopping satisfaction) on purchase intention, thus setting relevance of this model in this study. Many authors, Al-Bakri & Katsioloudes (2015); Bonera (2011); Chen et al. (2013); and Dillon and Reif (2004) have relied on TAM to ground countless studies that test various external variables and

this study is no different barring that it will test newly sort variables. As previously mentioned, TAM fundamentally suggests that when a system is perceived useful and easy to use, then it will drive a positive user attitude. The resultant attitude will determine the behavioural intention/usage of the system. The external variables data charges, delivery dependability and geographical distance all relate to the TAM construct of perceived usefulness, while product risk and information quality relate to perceived ease of use. Further grounding in the study can be made between the TAM and the proposed research model in that the suggested mediating variable of trust and online shopping satisfaction can collectively and similarly be viewed as the resultant attitude of users based on the stated predictor variables. As the relationship between trust and online shopping satisfaction is regarded as the user's attitude, this attitude (positive or negative) is hypothesized just as in the TAM to drive usage and/or purchase intention.

In addition, the proposed e-commerce model also draws from the theory of reason action, which has been widely endorsed on its ability to theorize on consumer intentions (Douglass, 1977; Sheppard, Hartwick, & Warshaw, 1988). TRA has been applied practically and successfully in consumer behaviour, technology acceptance and system use, as well as a variety of instances of human behaviour (Pavlou, 2003). By closely adhering to the nomological structure of TRA, the proposed e-commerce model integrates a set of salient beliefs, drawing upon TAM and supplementary literature which are jointly proposed to influence consumer online purchase intentions (Paul A. Pavlou, 2003).

3.2.2 Background of the Theory of Planning Behaviour (TPB)

It was Fishbein (1967) who first introduced the Theory of Reasoned Action and from this stemmed the Theory of Planned Behaviour (TPB) that was later developed by Ajzen in 1988. Thus, the Theory of Planned Behaviour originated by Ajzen (1991) is an extension of the theory of reasoned action. As a consequence, the revised TRA propounded by Ajzen and Fishbein (1980), paved the path for the TPB by (Ajzen, 1991). Fundamentally, Ajzen's Theory of Planned Behaviour is based on consumers' attitudes toward the behaviour (AAct), perceived behavioural control (PBC) and subjective norms (SN) as predictors of intention. The theory assumes that a

person's intention, when combined with perceived behavioural control, will assist in predicting behaviour with relatively high accuracy than preceding models (Ajzen, 1991). Thus The Theory of Planned Behaviour can be broken down into three conceptually independent antecedents leading to behavioural intention (BI): AAct, PBC and SN (Ajzen, 1991). Attitude towards the behaviour refers to the extent to which an individual has a positive or negative evaluation toward his/her performance of the behaviour. Perceived Behavioural Control measures an individual's perceptions of whether or not they can execute that particular behaviour and how easy it is to accomplish. Subjective norms relates to what people believe other key individuals in their lives think about whether or not the person should perform the behaviour (Crespo & del Bosque, 2008).

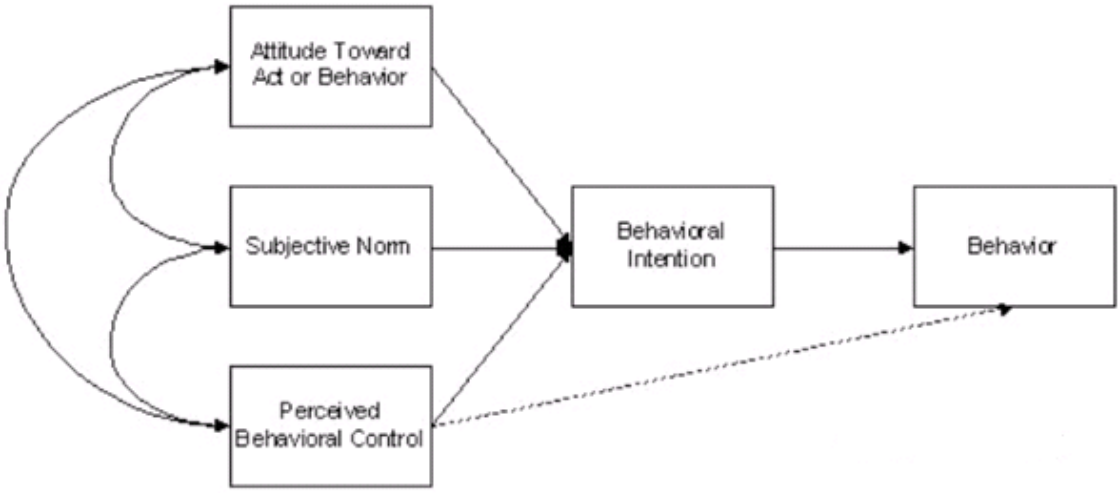
The TPB has proven to be a popular model in a myriad of behavioural studies to empirically predict and understand behaviour in various contexts (Barnett & Presley, 2004; Bosnjak, Tuten, & Wittmann, 2005; Kang, Hahn, Fortin, Hyun, & Eom, 2006). Thus, whilst the Theory of Planned Behaviour has some known limitations, for example, Richard P Bagozzi (1992); Eagly & Chaiken (1993), and has been vastly scrutinized over the years, more so with the enunciation of new IT adoption and behavioural models, for example,. Bagozzi (1992); Davis (1989); Taylor & Todd (1995); and Venkatesh and Davis (2000), it is still widely used in this day and age. In addition, it must be mentioned that none of these alternate models have succeeded in attaining worldwide acceptance, as each one has its flaws refer (Bosnjak, Obermeier, & Tuten, 2006; Gentry & Calantone, 2002; Venkatesh & Bala, 2008). In fact, many of the varying models Bosnjak et al. (2005); Hsu, Yen, Chiu, & Chang (2006); Mannetti, Pierro, & Livi 2002), which have been established include constructs derived from the Theory of Planned Behaviour.

In addition, the TPB has been used in online research to examine different behaviour such as the acceptance of the internet Klobas & Clyde (2000), the adoption of mobile technology Luarn and Lin (2005); Pedersen and Nysveen (2002) or the use of online services (Bosnjak et al., 2006; Lee, Kang, & Kim, 2007; Liao, Chen, & Yen, 2007). Likewise, a number of authors have considered this approach to explain online shopping behaviour. Following these approaches, the TPB seems to be principally well fitted to be used as the theoretical grounding for studying the influence of additional variables such as those proposed in this study.

The TPB develops the TRA in that it mitigates the original model's limitation to deal with incomplete volitional control (Ajzen, 1991). TPB encompasses a third variable identified as

perceived behavioural control (PBC) which specifies a person's ability to undertake the behaviour under consideration, under the assumption that individual behaves in a rational manner considering ramification of his or her actions (Ramayah, Lee & Lim, 2012). Refer to figure 3.2 below.

Figure 3.2: Theory of Planned Behaviour



Source: Ajzen (1991).

Effectively, the Theory of Planned Behaviour proposed that an individual's behaviour is best predicted by one's intentions; intentions are, in turn, predicted by attitudes about the behaviour, the subjective norms (a person's perception driven by social pressure of whether he or she should or shouldn't perform the behaviour) encasing the execution of the behaviour, and the individuals perception of their control over the behaviour (Cameron, 2010). Therefore, behavioural intention is an indication of an individual's readiness to perform a given behaviour (Shi-Wee, Ariff, Zakuan, & Tajudin, 2014).

In the context of the present study, the TPB is used to examine consumers' behavioural intention and purchasing behaviour towards shopping online. These behaviours are examined through understanding the stated predictor variables. The research model hypothesizes that data charges,

delivery dependability, geographical distance, product risk and information quality all have significant, yet varying rolls in influencing consumer behaviour towards online purchase intention. In some form or another, these variables shape consumers' attitudes in so far as online purchase intention is concerned. For this reason, the TPB qualifies, and is used as part of the theoretical assumption of this study. In terms of explaining the e-commerce factors influencing consumers purchase intentions through the TPB, subjective norms and perceived behavioural control have less of a meaningful role. Therefore their involvement in this study is disregarded.

3.2.3 Background of the Innovation Diffusion Theory (IDT)

The Innovation Diffusion Theory was proposed by Rogers (1962), to explain how an innovation is accepted and diffused within a social system (Everett, 1995). IDT posits that innovation adoption or rejection begins with consumer awareness of the innovation and that diffusion is a process via which an innovation is communicated through specific channels over time amongst affiliates of a social system (Giovanis et al., 2012). Zaltman and Stiff (2011) added that diffusion is achieved through user adoption, which is defined as "the acceptance into use and the continued use of a new idea or thing." IDT has been extensively used in information technology and information system (IS) research frameworks Karahanna, Straub and Chervany (1999), and as a result has been widely applied in predicting IT adoption theory in various disciplines such as sociology, anthropology, education, marketing and communication (Rogers, 1962, 1983, 1995). IDT attempts to describe the innovation decision process, the determining factors of rate of adoption, and the different categories of adopters (Chen, Gillenson, & Sherrell, 2002). It therefore assists in predicting the likelihood and rate of adoption of an innovation.

Innovation diffusion theory has received extensive empirical backing in explaining consumer acceptance in several disciplines, particularly online shopping, for example (Amaro & Duarte, 2015; Hung, Yang, Yang, & Chuang, 2011; Jensen, 2009; Lee, Hsieh, & Hsu, 2011). The Innovation diffusion theory further states that "potential users make decisions to adopt or reject an innovation based on beliefs that they form about the innovation" (Agarwal, 2000). IDT presents a set of broad variables that influence a consumer's intention to adopt new technologies.

These factors are visibility, trialability, compatibility, complexity and relative advantage. However, in terms of online shopping, many other factors also have an influence in increased adoption. Since online shopping is considered a relatively new technology in South Africa, the ideas generated by the Innovation diffusion theory Rogers (1962) are likely to give an improved understanding of adoption of a new technology (Eastin, 2002; Medlin, 2001). Thus, this study makes reference to the IDT because people in the selected geographical area consider online shopping as an innovation.

The theory suggests that the five innovation attributes (complexity, visibility, relative advantage, trialability, and compatibility (Chen et al., 2002), explain the rates of adoption by users. These authors further elaborate that these five attributes have been advanced to explain roughly between 49% – 87% of the variance in adoption rate. More specifically Everett (1995) hypothesized that an innovation is more likely to succeed and be more readily adopted if its relative advantage, as a consequence of its introduction, is evident; if it is compatible with the potential customers' past experiences, beliefs and the way they are accustomed to work; if it is easy to understand and to use; and if it is trialable and observable prior to adoption (Giovanis et al., 2012).

Agarwal and Prasad (1998); Kolodinsky, Hogarth, and Hilgert (2004); Phuangthong and Malisuwan (2008); Zolait and Sulaiman (2008) combined with the findings of a meta-analysis of 75 diffusion articles conducted by Tornatzky and Klein (1982); found that only complexity, compatibility, and relative advantage were consistently related to innovation adoption. Based on these outcomes, only these three attributes can be used in the predicting and explaining of customers online purchase intention in the retail sector. Most online shoppers are considered as early adopters of virtual stores. Virtual stores or e-tailers in the context of this research, are innovations because they have fundamentally changed the traditional bricks and mortar retail business model (Chen et al., 2002). Thus, e-tailers also represent a hybrid of business processes and modern technologies and are exerting a bigger impact on people's daily lives.

Although originated from different disciplines, there is an important complementary relationship between TAM and IDT that necessitates further discussion. Moore and Benbasat (1991)

established that the relative advantage construct in IDT is often considered to be the PU construct in TAM, and that the complexity construct in IDT is very much similar to the PEOU construct in TAM. Likewise, the proposed research model categorizes data charges, delivery dependability and geographical distance as external variables that determine the relative advantage for customers engaging with e-tailers for their shopping needs. Equally, product risk and information quality can be viewed as the complexity involved in the decision making process for e-shoppers. Thus, by understanding these constructs and their role in predicting online purchase intention, this researcher attempts to fulfil the objectives of the study. In addition, the consistencies found between the two theories suggest that TAM and IDT not only reconfirm each other's findings and as a result raises the researchers confidence in the validity and reliability of these theories (Chen et al., 2002), but simultaneously validates the application of IDT as theoretical grounding of this study. Therefore, the only other significant innovation characteristic that is not included in TAM reasoning is compatibility. According to Rogers and Everett (1995), compatibility is evaluated by assessing the innovation's compatibility with existing values and beliefs, previously introduced ideas and potential adopters' needs. Although compatibility does not directly exist as a standalone construct in the proposed research model, in order for innovation to take place, the external predictor variables must be compatible and of benefit to the user. Jin and Robey (1999) further add that online retailers persist as legitimate social institutions because they conform to society's regulative and normative expectations, and understanding the cyber-culture and using it for their objectives are believed to be the primary tasks of virtual stores. Therefore the inclusion of compatibility in the proposed research model is plausible. Chen et al. (2002) in later research consequently combined the original TAM with the compatibility construct of IDT to close this research gap and explain consumer behaviour in the online store context.

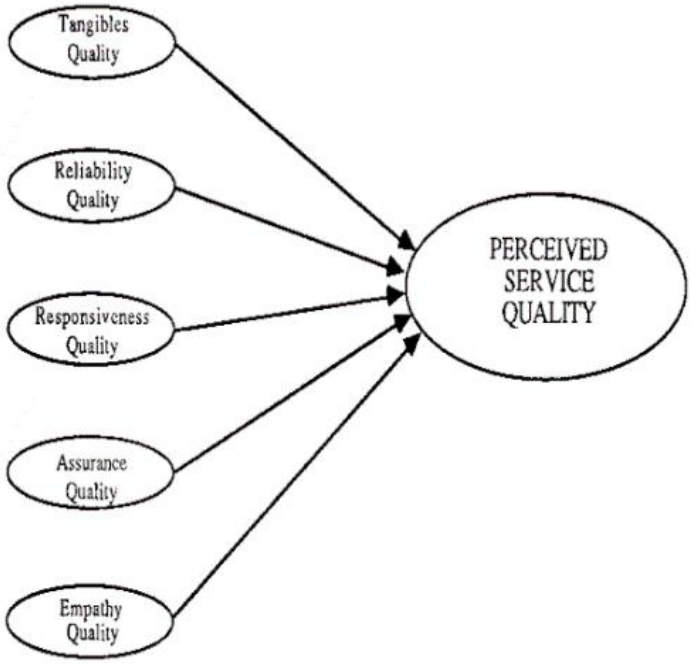
3.2.4 Background of the E-Service Quality Model (SERVQUAL)

With the growing importance of online retailing, service quality in the e-tailing environment has been acknowledged as a key success factor in determining the triumph or failure of e-commerce ventures (Santos, 2003; Yang, 2001; Zeithaml, Parasuraman, & Malhotra, 2002). However, service quality is an abstract and elusive construct that is difficult to explain and measure

(Cronin & Taylor, 1992). Online shopping is a complex process that involves various sub-processes such as searching for information, navigation, online transaction or customer interactions (Lee & Lin, 2005). Yet, customers are still unlikely to evaluate each sub-process in detail during a single visit to an online store, but rather will perceive the service as an overall process and outcome (Riel, Liljander, & Jurriëns, 2001). Moreover, for online customers, an e-tailer's ability to deliver on high standard e-service quality is the means by which the potential advantages of the internet can be realized (Yang, 2001). Benefits such as the ability to easily compare products technical features and prices online than through traditional channels, necessitates e-service quality as a key factor for customers (Santos, 2003). Online customers thus expect equal or higher levels of service quality than traditional channels customers (Lee & Lin, 2005).

In its origin, Parasuraman et al. (1988) theorized service quality as the relative perceptual distance between customers' expectations and evaluations of service experiences and service quality using a multi-item scale called the SERVQUAL model. Refer to figure 3.3 below.

Figure 3.3: The SERVQUAL Model



Source: Parasuraman, Zeithaml, & Berry (1985).

The SERVQUAL model includes five dimensions, namely tangibles (physical facilities and the appearance of personnel), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customers and provide prompt service), assurance (employee knowledge base which includes customer trust and confidence), and empathy (caring and individualizing attention provided to customers by the service provider) (Pitt, Watson, & Kavan, 1995; Stamenkov & Dika, 2015). Although the above mentioned dimensions are the fundamental constructs of the SERVQUAL model, in the case of e-tailing, due to the intrinsic borderless nature of the internet, it may be assumed that e-service quality measures are equally applicable internationally, when, in fact, they are not (Rafiq, Lu, & Fulford, 2012). Therefore, the application of this model in this study will establish a cross-national context in order to identify limitations that it may have with respect to its generalizability. The South African context of this study helps to assess the robustness of the SERVQUAL model in an international context and hence its generalizability beyond the original United States context. The South African general merchandise retail space is very competitive and is largely dominated

by a few set of dominant retailers. Hence, as more retailers become more active online, online service quality is likely to be even more important as an element of competitive advantage.

Organisations with even the greatest experience and success using e-commerce are beginning to realise that the key determinants of success or failure are not merely web site presence and low prices but also include electronic service quality (e-service quality). Santos (2003) further defines e-service quality as the overall customer assessment and judgement of e-service delivery in the virtual marketplace. In summary, e-service quality is characterised as the extent to which a web site facilitates efficient and effective purchasing, shopping and delivery of services and products (Jiradilok, Malisuwan, Madan, & Sivaraks, 2014; Stamenkov & Dika, 2015).

As more information and product becomes easily accessible through a rapidly growing e-commerce environment, e-tailers have to be cognisant of customer touch points such as delivering on online shopping satisfaction and establishing consumer trust (Comline, 2008; Kuo, 2012). In order to differentiate themselves, e-tailers will need to compete through service quality rather than price (Wolfinbarger, 2003). Companies that solely compete on price have very little strategic advantage and run the risk of being easily exposed by their competitors when copied (Chevalier & Goolsbee, 2003; Venkatesan, Mehta, & Bapna, 2006). This emphasises the dire need for a strong e-service quality. Research over the past two decades has demonstrated that service quality positively influences purchase intention decisions, however only recent findings have been applied to e-commerce (Yang & Jun 2002; Wolfinbarger & Gilly, 2003).

Parasuraman et al. (1985) were amongst the first authors to research service quality and its effects on brick and mortar retailers. As a result of their findings and through the review of significant literature they subsequently derived the following criteria for the measurement of service quality for traditional stores:

1. Credibility
2. Reliability
3. Access
4. Communication

5. Responsiveness
6. Security
7. Courtesy
8. Competence
9. Understanding and knowing the customer
10. Tangibles

These earlier proposed indicators were later reviewed by Zeithaml et al. (2002) to relate specifically to e-commerce. The outcome was the following components for e-commerce service quality:

1. Efficiency
2. Reliability
3. Site aesthetics
4. Price knowledge
5. Responsiveness
6. Security/privacy
7. Flexibility
8. Customization or personalization
9. Assurance or Trust

Santos (2003) built on the work that was presented by Zeithaml et al. (2002) and further refined the factors to e-service quality components which the author presented as follows:

1. Communication
2. Support
3. Efficiency
4. Reliability
5. Incentive
6. Security

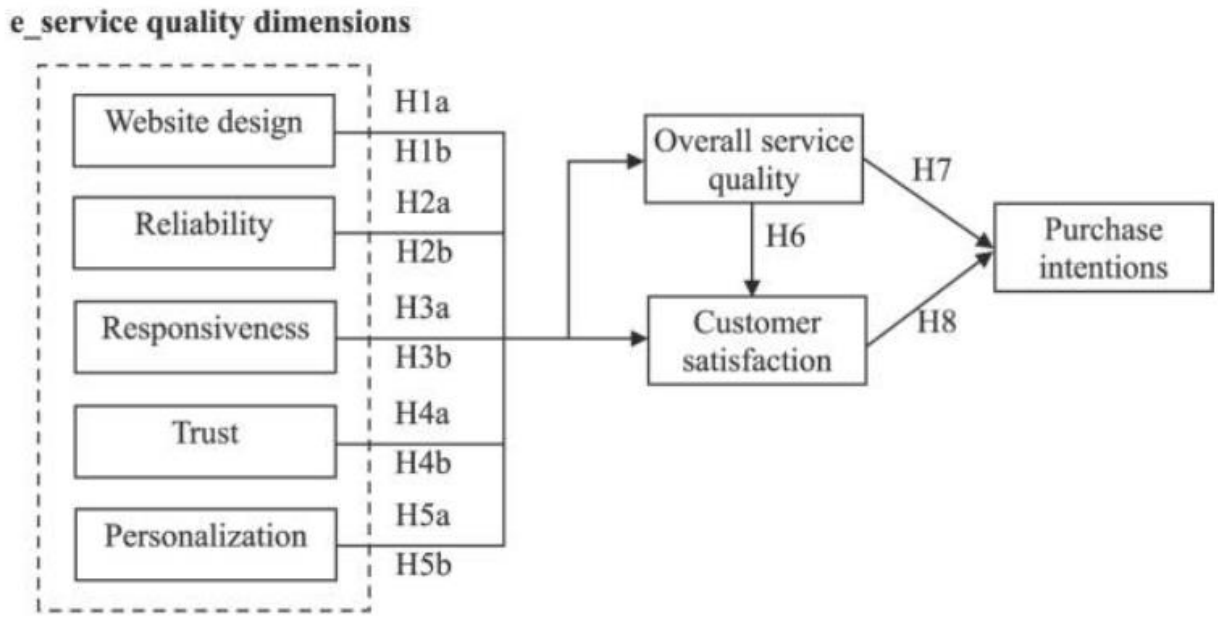
Finally and most recently, Wolfinbarger (2003) was able to summarise the findings of all these authors and consolidate e-service quality to the following four variables:

1. Website design
2. Privacy and security
3. Fulfilments or reliability
4. Customer service

It is evident through the various debates posited by different authors Parasuraman et al. (1988); Santos (2003); Wolfinbarger (2003); Zeithaml et al. (2002) that e-service quality is a growing interest within the field of e-commerce. Whilst there is vast array of variables presented, some have been studied at length through numerous studies. This study takes the findings and conclusions presented by previous authors as a point of reference to ascertain which variables influence consumers' online shopping satisfaction in the context of the study.

The SERVQUAL model has more recently been used to measure e-commerce systems service quality (Devaraj, Ming, & Kohli, 2002; Kim & Lee, 2002). Other studies that have tested the SERVQUAL model used it to measure service in various contexts, including web-based service Negash, Ryan, and Igbaria (2003) and internet retail (Barnes & Vidgen, 2001; Kaynama & Black, 2000). This study however, will make use of the revised SERVQUAL model presented by Lee and Lin (2005) that establishes e-service quality through web site design, reliability, responsiveness, trust and personalization as bases for theoretical grounding for the present study. Refer to figure 3.4 below.

Figure 3.4: Revised SERVQUAL Model



Source: Lee and Lin (2005).

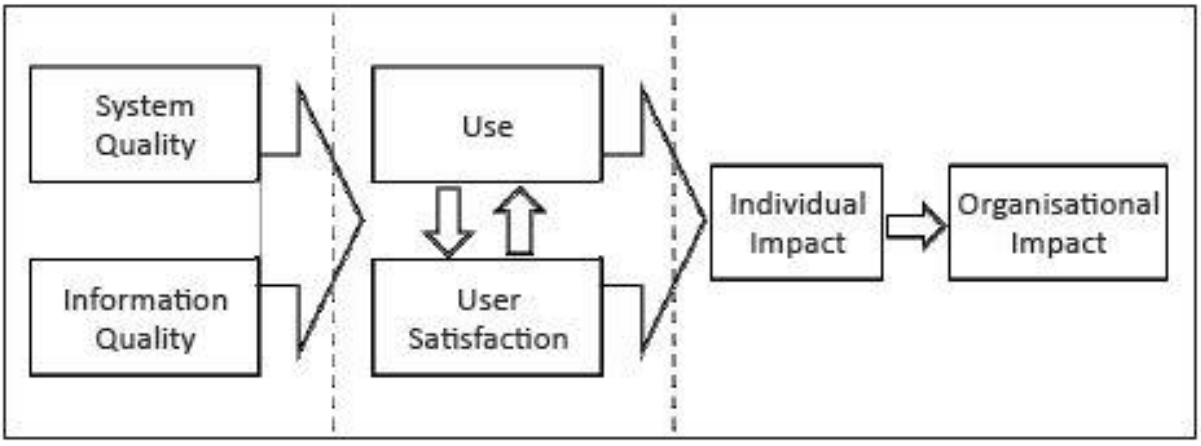
This adapted model encompasses some key elements that are consistent with proposed research model and thus qualifies itself as a suitable theoretical grounding for this study. Previous research suggests that service quality positively influences customer satisfaction and purchase intentions Lee and Lin (2005) who cites (Rust & Zahorik, 1993; Martensen *et al*., 2000). The researcher thus poses that delivering and exceeding e-service quality leads to user satisfaction which results in trust and invariably transposes to purchase intention. Hence, in the context of this study, e-service quality will be interpreted parallel to online shopping satisfaction. Data charges and product risk are external variables which are not directly influenced by e-tailers. Therefore these variables can be excluded when assessing service quality and the influence on customer satisfaction/purchase intention. However, delivery dependability, geographical distance and information quality can be viewed as individual scale items that influence e-service quality. As such, they are considered as unique constructs that impact overall service quality and customer satisfaction. It is evident that the dimensions that are expressed in the revised SERVQUAL model are closely related to the proposed constructs in the current research model. Whilst both models do not share the exact same predictor variables (e-service dimensions) the flow and conception of the revised SERVQUAL model and the proposed research model follow

relatively the same rational. Henceforth, in both models the e-service dimensions act as predictors variables that, when fulfilled to customers' expectations, deliver customer satisfaction. Consequently, satisfied customers are most likely to engage through positive purchase intention. Thus, the researcher further grounds the proposed research model against Lee and Lin's revised SERVQUAL Model.

3.2.5 Background of the E-commerce Success Model (ECS)

The E-commerce Success Model originated from profound works that were done by Shannon (1948) and Mason (1978) on the subject of communication theory. The former research on communication theory was later expanded by Delone and McLean who, based on the research done by Shannon and Weaver and Mason, developed an information systems success model that was grounded on six constructs. These constructs would later govern the bases of what is today better understood as the E-commerce Success Model. The model consisted of the following constructs; system quality, information quality, use, user satisfaction, individual impact and organizational impact. See below figure 3.5.

Figure 3.5: IS Success Model



Source: Delone and McLean (1992).

Since its introduction in 1992, DeLone and McLean's information system success model has been widely used in many studies and viewed as an important framework for evaluating the success of an information system (DeLone & McLean, 2003). The development and advancement in e-commerce is the factor behind the efforts to measure the success of e-commerce (Brown et al., 2008). Delone and McLean (1992) presented an Information Systems Model (ISM) which is solidly suggested to be applicable to e-commerce success. This model was initially based on the classic communication model of Shannon and Weaver (1949) and Mason (1978) to measure the information systems (IS) impact (Chen et al., 2015). The model studied the relationships between information quality, system quality, service quality, intention to use and user satisfaction as predictors of net benefits. However, since its development, the model presented by Delone and McLean (1992) has been improved upon by Molla and Licker (2001) who have made additional propositions. In doing so, these authors have transformed the previously IS based model into a more refined e-commerce success model. The main differences between these two models are listed below.

1. User satisfaction Delone and McLean (1992) is replaced by customer e-commerce satisfaction (Molla & Licker, 2001).
2. Information and system quality Delone and McLean (1992) are replaced by content and e-commerce system quality (Molla & Licker, 2001).
3. Trust, Support and Service have been included as factors (Molla & Licker, 2001)
4. Use as opposed to Usefulness is retained. Molla and Licker (2001) posit that since online shopping is completely voluntary, use is appropriate.

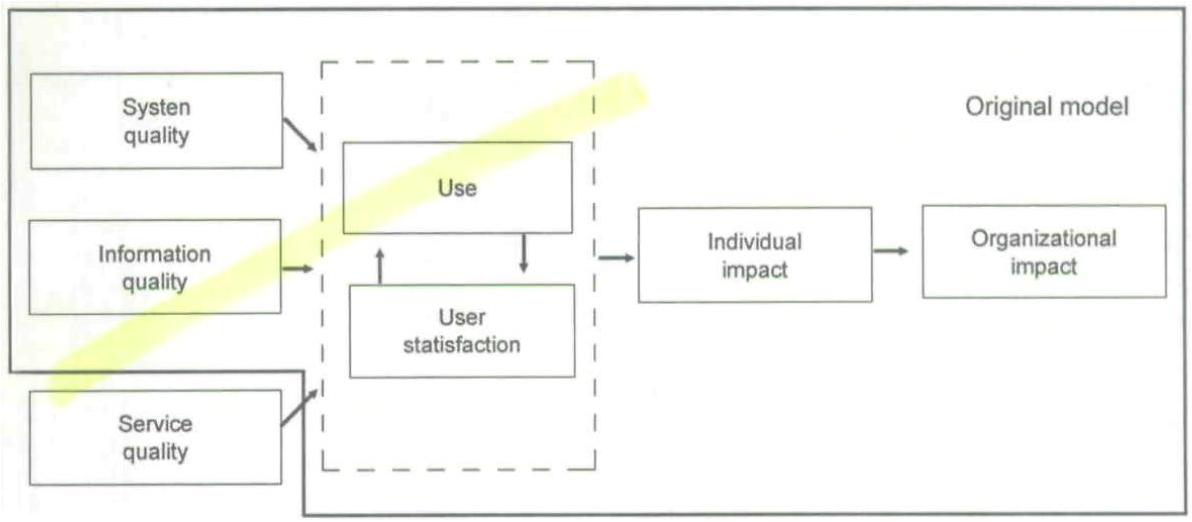
More recently, Fang et al. (2011) further developed the initial IS success model set by Delone and McLean (1992) by introducing trust and justice into a theoretical model for studying the repurchase intentions of customers in the context of online shopping (Chen et al., 2015). The research results showed that net benefits, trust and satisfaction are strong positive predictors of customer repurchase intentions towards online shopping. Furthermore, system quality, information quality, net benefits and trust are also significant determinants of customer satisfaction (Chen et al., 2015). Illustrations of these models and further discussions will be shared later in this study. It is evident that e-commerce success literature draws heavily from IS success literature (Jayokody, 2004). It is noteworthy that whilst both models go far in proposing a framework for e-commerce success, the models are yet to be validated (Jayokody, 2004).

Hence, one of the aims of this research is to conduct empirical tests that validate some of the variables that are shared by the e-commerce success model with those presented in the conceptual framework of the study.

The following paragraphs explain how these constructs relate to the context of the current study and thus serve as additional theoretical grounding for the overall study. In doing so, this researcher illustrates how IS can similarly be viewed as ECS. However, before this, it is equally important to briefly visit other interpretations of the IS Model that have been proposed by other authors, for example, Pitt et al. (1995); Seddon and Kiew (1996); Skok, Kophamel and Richardson (2001) on this subject.

Pitt, Watson and Kavan as well as Skok, Kophamel and Richardson share similar views in that service quality needs to be considered as an additional measure of IS success. In the original formulation of the DeLone and McLean model, the dual dimensions of system and information quality seemed sufficient to capture the essential characteristics of information systems being delivered to users (DeLone & McLean, 2004). However, in the intervening decade, it became apparent that a third dimension was needed, service quality. Hence, it was decided by these authors that DeLone and McLean's original model needed to be augmented to reflect the IS department service role (Pitt et al., 1995; Skok et al., 2001). Below, figure 3.6 shows the additional construct of service quality and how it is proposed to affect both use and user satisfaction.

Figure 3.6: Augmented IS Success Model



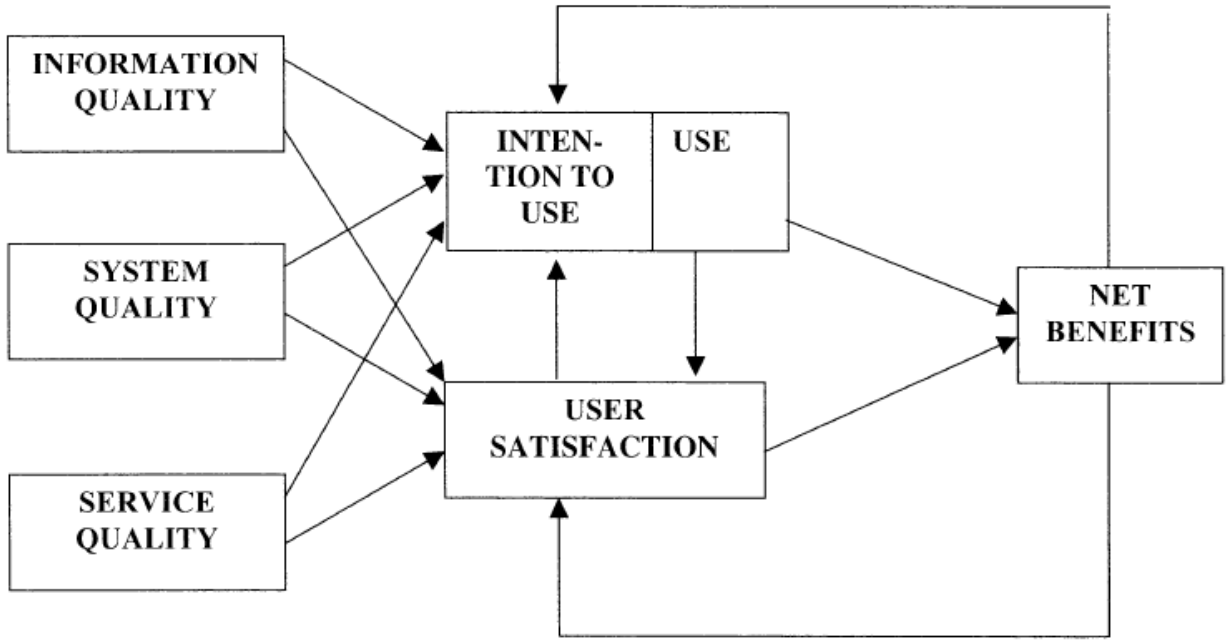
Source: Delone and McLean (1992.

As previously mentioned, the SERVQUAL Model highlights the importance of considering e-service quality in the measuring of e-commerce systems. Consistent with this school of thought, Pitt et al. (1995) concur that service quality is required as an additional construct to better assess IS effectiveness. Previous studies ignored service which has become a progressively more important facet of the IS function. If researchers disregard service quality, they may gain an inaccurate reading of overall IS effectiveness (DeLone & McLean, 2003).

Whilst various authors have made varying additions and interpretations to the IS Success Model, Molla and Licker (2001) were first to propose that the original DeLone and McLean model could be extended to measure ECS (DeLone & McLean, 2003). In addition, Molla and Licker were able to successfully link system quality to e-commerce system quality, information quality to content quality and, use and user satisfaction to customer e-commerce satisfaction. They also stressed that user satisfaction could be affected by trust and service quality with the transaction process in the ECS (Chen et al., 2015). Building on this, (DeLone & McLean, 2003) later proposed enhancements to their original IS Success Model and in doing so included the principal constructs of information quality, system quality, use, user satisfaction, intentions to use, net benefits, and service quality. Subsequently, DeLone & McLean (2004) illustrated how the

updated model could without modification be used to evaluate e-commerce success. See figure 3.7 below.

Figure 3.7: Updated DeLone and McLean IS Success Model



Source: DeLone and McLean (2004).

The primary improvements to the original model are twofold; (a) the already discussed addition of service quality to reflect the importance of service and support in successful IS systems, and (b) the collapsing of individual impacts and organizational impacts into a more parsimonious net benefits construct (DeLone & McLean, 2004). Still, this revised IS Success Model within the e-commerce context was challenged by Chen et al. (2013) and Wang (2008) for its inconsistency with IS acceptance and marketing literature. It is nevertheless credible and will be used to interpret and consequently theoretically ground the research model presented in this study.

Service quality has been discussed at length above; as such the research subsequently focuses on elaborating on the new net benefits construct. According to DeLone and McLean (2004) the net benefits construct raises three questions that must be addressed. What qualifies as a "benefit"?

for whom? and at what level of analysis? Whist the original formulation of the DeLone and McLean model used the term "impact" Seddon & Kiew (1996), on the other hand used "consequences" and "net benefits" in their description of outcomes (Seddon & Kiew, 1996). In answering the first of the three questions raised, the current study uses "net benefits" in the characterization of the outcome because the original term "impacts" may be interpreted as positive or negative, thus possibly leading to confusion as to whether the results are good or bad. Furthermore, the inclusion of "net" in "net benefits" is essential because no outcome is completely positive without any negative consequences. Accordingly, "net benefits" is most likely the most accurate descriptor of the final success variable (DeLone & McLean, 2004).

The second question raised is benefits for whom – the individual user, the e-tailer, or others? Different stakeholders may have varying views of what constitutes a benefit. Thus, it is impossible to define net benefits without first defining the context frame of reference (DeLone & McLean, 2004). Although the focus of any study must be defined, the DeLone and McLean model does not define the context. As a result the model may be useful to individual users and e-tailers, but each may have a very different definition of what constitutes net benefits. The context of this paper is taken from the perspective of e-tailers through the sampling of individual users and thus, ECS is taken from this perspective.

Finally, the level of analysis must be addressed. In other words, are the benefits to be measured from the users' perspective, the e-tailer, or that of the industry or of the nation? (DeLone & McLean, 2004). The challenge for the researcher is to clearly and carefully define the stakeholders and the context in which net benefits are to be measured. To overcome this requirement, this researcher defines e-tailers as the primary stakeholder and the individual consumers are the primary EC system users.

Having discussed the origin of the Information Systems Success Model and its subsequent development and adaptation into the E-commerce Success Model, the next logical question that this researcher addresses is how this model relates to the proposed research model? The six

success dimensions of the DeLone and McLean IS success model can be applied to e-commerce as well as the proposed research model in the following way:

1. System quality, in the context of the internet, measures the desired features of an e-commerce system. Availability, usability, response time and adaptability are just a few examples of qualities that are valued by users of an e-commerce system. The proposed research model encompasses deliver dependability and geographical distance as two constructs that are hypothesized to influence users' trust and online shopping satisfaction. These two constructs can also be viewed as elements of service quality. The ability of an e-tailer to deliver the right product within a reasonable time is a service function. Similarly, the real time and anytime accessibility of e-tailers is also a function of user service quality. In this way the validity of these two constructs is theoretically grounded through the ECS Model.
2. Information quality relates to the subject of e-commerce content. According to W. H. DeLone and McLean (2004), web content should be personalized, easy to understand, complete, relevant, and secure if prospective buyers and suppliers are to initiate transactions via the internet and return to the site on a regular basis. Thus, just as the research model presented in the study hypothesizes, information quality can be viewed a worthy predictor of online purchase intention. As illustrated in figure 3.7, DeLone and McLean's updated IS Success Model similarly recognizes information quality as a construct that influences intention to use. The consistencies raised between the researcher's proposed model and DeLone and McLean's updated IS Model further reinforce the theoretical grounding of the current research against the works of (DeLone & McLean 2004).
3. Service quality refers to the overall support delivered by the service provider. In the context of this study this would directly pertain to the service delivered by the e-tailer. Service in this respect should apply regardless of whether the support is delivered by the IS department or an outsourced internet service provider. This dimension is even more important in an e-commerce environment where users are now in actual fact customers rather than in traditional information systems environment where they are most likely employees. Invariably, poor user support will translate into lost customers and lost sales. DeLone and McLean's updated IS model identifies service quality as a key variable in ascertaining user intention to purchase as well as user satisfaction. Although service quality is not directly raised as a unique construct in the proposed research model, the

notion of service quality exists within the proposed model through other service dependent variables, delivery dependability and geographical distance. Both these constructs can be viewed as service items that e-tailers offer to their customers. As such, it is important to understand their quality component and the resultant effect they have on user purchase intention. This is yet another example of how the updated DeLone and McLean IS success model relates to and effectively theoretically grounds the proposed e-commerce success model.

4. Usage measures everything from a web site visit and navigation thereof, to the information retrieval and execution of a transaction. DeLone and McLean's updated IS Success Model categorizes "use" and "intention to use" into one construct. The model suggests that predictor variables information quality, system quality and service quality affects/determine users intention to use and/or usage. Similarly, the proposed research model in the present study relies on the same rational in that, a set of defined variables, through the mediation of online shopper satisfaction and trust, are proposed to lead to online purchase intention. This illustrated consistency between DeLone and McLean's updated IS success model and the proposed e-commerce success model, makes for sufficient theoretical grounding of the study.
5. User satisfaction is an important means of measuring a customer's overall experience with an e-commerce system (DeLone & McLean, 2004). The measuring of user satisfaction should encompass the entire e-tailing customer interaction process from retrieval, through purchase, payment, receipt and service. Parallel to DeLone and McLean's updated IS model, the proposed research model acknowledges user satisfaction as an influential variable that drives online purchase intention. Chen et al. (2013) posit that satisfied customers are likely to engage positively in a sale. As such, it can be concluded that user satisfaction is a vital element that needs to be fulfilled in order to encourage customers/users to purchase online.
6. Lastly, net benefits can be explained through the positive and negative effects of e-commerce on organizations, customers, suppliers, employees, industries, markets, economies, and even society as a whole. Whilst this variable is raised by DeLone and McLean, it is not featured in the proposed research model. Therefore it bears no relevance and can be omitted in the context of this study.

3.3 Empirical Literature

The forthcoming section discusses the empirical literature for the individual constructs under study. Firstly, the 5 key predictor variables that form the foundation of the present study are discussed, namely; data charges, delivery dependability, geographical distance, product risk and information quality, followed by the mediator variables, online shopping satisfaction and trust and finally the outcome variable online purchase intention.

3.3.1 Data Charges

Data is what internet users' purchase in order to access the internet. Internet speed is measured by broadband width (Crandall, 2005). Consequently, in the context of internet access, the word broadband is used to describe internet speed as well as the data that is purchased by internet users in order to enable them to go online (Pereira, 2016). Consumers generally speak of "data speed" and "broadband speed" interchangeably. Hence, the researcher makes no difference from the phrase "data charges" and "broadband charges". Broadband technologies are separated into fixed line technologies, fixed wireless technologies and wire mobile technologies (Corning, 2005). Fixed line technologies consist of digital subscriber lines (DSL), fibre optics such as fire to the home (FTTH), cable modems, and broadband over power lines (BPL). Fixed wireless technologies include worldwide interoperability for microwave access (WiMAX) and satellite, wireless fidelity (Wi-Fi). Wireless mobile technologies include 3G and its evolutionary paths 3.5G, high speed data packet access (HSDPA), high speed packet access plus (HSPA+) and 4G or long term evolution (LTE). ADSL is the most regularly used of the fixed line technologies while WiFi and 3G are the most used of the fixed wireless and mobile wireless technologies (Corning, 2005). The proliferation of mobile broadband along with its rapid increase in accessibility and speed, has allowed mobile broadband and fixed broadband to be viewed as interchangeable notions (Tsai & Bauer, 2014).

Increased developments in information and communication technologies have afforded people more opportunity to access digital content with little restriction to time or place (Kim et al.,

2009). Whilst the ease of access to the internet has increased, the cost has not decreased at a proportionate rate (Paltridge & Matsui, 2004; Weiss, Gulati, Yates, & Yates, 2015). In fact internet service providers continue to monopolise profits through exorbitant data charges (Götz, 2013). Data charges refers to the capital amount that must be sacrificed in order to obtain internet services (Lichtenstein, Ridgway, & Netemeyer, 1993). Thus data which is provided by internet service providers is an enabler of e-commerce. Since data charges are paid by users, the monetary expense of data potentially plays an influential role in consumer purchase intention of online products (Kim et al., 2009). This study suggests that high data charges would negatively affect consumers' online purchase intention. Similar to the propositions set out by Kim et al. (2009), this study proposes that consumers would be discouraged by high data charges and that unfavourable data charges could be somewhat of a barrier to consumers engaging in e-commerce. Literature presented by Zeithaml (1988) suggests that monetary cost exerts a negative effect on user engagement with e-commerce. In light of the above discussion this study will build on the already existing yet scant literature and contextualise the research to a South African perspective.

According to Francis (2010), the South African government has stated that the Information and Communication Technologies (ICT) industry is key to the country's development; however, cumbersome policies and regulations have not necessarily supported this stance. In addition, once considered as an African telecommunications tycoon, South Africa is slowly losing ground to its African counterparts such as Kenya, Zambia, Nigeria and Botswana due to stagnant inland infrastructure (Balancing-Act, 2010).

3.3.1.1 Operational definition of Data Charges

The term broadband also implies internet access that is always on and is faster than the traditional dial up access (Ooi, Sim, Yew, & Lin, 2011). Although definitions differ from market to market, according to the International Telecommunications Union, online data speeds are defined as broadband if they offer speeds of over 256kbps in at least one direction (Biggs & Kelly, 2006). Since the data speed that is provided by either fixed broadband, mobile broadband

and wireless broadband generally surpasses 256kbps, although these alternative internet access technologies allow for some degree of product differentiation, there seems to be little differentiation (Höffler, 2007). Therefore the respective technologies are treated as homogenous with respect to the broadband offer and this is how it has become a norm to qualify the term data (what is purchased/consumed to enable internet access) as broadband (how internet access is measured) (Denni & Gruber, 2005; Zickuhr & Smith, 2013). More specifically, the BusinessDictionary.com (2016) defines data or broadband as the digital communication technology in which (in contrast to baseband) the bandwidth (data carrying capacity) of a single medium such as a wire, cable, or channel is divided into several independent pathways. Using techniques such as frequency division multiplexing, broadband enables fast and simultaneous transmission of different signals (data, audio, video), and interconnection of different devices on a network (Götz, 2013; Rosston, Savage, & Waldman, 2011).

Essentially, rapid technological advancement in the telecommunications space has allowed consumers to enjoy the internet at virtually the same speed and cost irrespective of whether they access the internet at the comfort of their home through an ADSL line (fixed broadband), wirelessly (hotspot of Wi-Fi zone) or through their mobile device (mobile broadband) (Shin, 2007). Thus, in the context of this study, data charges is operationally defined to encompass fixed broadband, wireless connectivity and mobile broadband (which may also be referred to as mobile data or more simply, data).

3.3.1.2 Antecedents of Data Charges

In order to understand the adoption and usage of data in South Africa, it is worth considering previous literature related to the adoption of new technology, especially in terms of broadband, mobile internet, smartphones and data charges. The growth of data markets is being driven by growing consumer demand for multimedia services, competitive pricing strategies and higher speeds possible through infrastructure roll out (Biggs & Kelly, 2006). Madden and Simpson (1997) were amongst some of the first authors to study the effect of data cost on internet usage and online shopping in earlier years. In their research, they found that household income and the

installation fee are important determinants of data usage in Australia. In the subsequent years to come, early 2000s, several scholars proceeded to conduct broadband adoption studies in different countries as data become more regularly available (Kongaut & Bohlin, 2016). It is not unusual that their results varied, though slightly, depending on the area and characteristics of the variables on which they focused. For example, in a study conducted by Cerno and Perez Amaral (2006), a binary probit model that was applied with selection bias suggested that technological attributes and income had positive effects on access to data while habitat and age had negative impacts. This finding suggests that wealthier and technologically enabled consumers are less price-sensitive to data charges.

Savage and Waldman (2005) led a nationwide America based mail survey and proposed that households with a higher level of education and a higher level of income had a liking for access to high speed internet. As higher internet speeds command higher prices, this finding is also in agreement with Cerno, Perez, Amaral (2006) in that higher income customer groups are less affected by the cost of data. Flamm and Chaudhuri (2007) concluded that living area, both urban and suburban, had a significant effect on broadband price while price also had a significant impact on data demand. Interestingly, in a turn of events, location has become less of a barrier for consumers with the increased power of the mobile smartphone that acts as a dual function device that either uses data to access the internet or allows the creation of mobile hotspots to other smart devices through wireless connectivity (Molnar, Savage, & Sicker, 2014).

Equally, in the last decade, many scholars have conducted studies not only on internet/broadband adoption but also on internet/data usage (Kongaut & Bohlin, 2016). As an illustration, Goldfarb and Prince (2008), through the use of an American survey, established that internet usage and adoption have different patterns. The authors went on to further uncover that whilst education and income have a positive effect on internet adoption, they have a negative effect on the time people spend online. More recently, Srinuan and Bohlin (2013) examined fixed broadband usage and adoption in Thailand. In their findings, the authors' advocated that income and the availability of infrastructure have a significant impact on data charges while the advancement of content plays a major role in driving data usage, especially for low and mid-income users. Certainly the literature presented thus far suggests two distinct points of view; that consumers

with higher income are generally less sensitive to the cost of data, whereas there are also recognisable consistencies in that consumers who are less affluent are more price sensitive to the cost of data. The notion is of great interest in the South African context because of the myriad of challenges that face the country's online consumer. This consumer is value driven and seeks service in the midst of facing subpar internet infrastructure that puts pressure on pricing and is governed by a very small competitive market of internet service providers (Lawal, Ahmed-Rufai, Chatwin, & Young, 2013; Naidoo & Seymour, 2012).

The development of 3G technology increased the transmission speed for commercial 3G mobile internet services and as a result, mobile internet, turned into mobile broadband (Kongaut & Bohlin, 2016). With increased reach driving increased demand which results in greater competition, prices of mobile data have since become more affordable (Höffler, 2007). Historically, fixed line broadband has always been at the forefront of enabling internet access up until recent times when mobile broadband became more viable with the continuous improvements in internet service for mobile phones (Kongaut & Bohlin, 2016). At the early stage, one of the obstacles to mobile internet adoption was the transmission speed compared with fixed broadband speed, especially in developed countries (Westlund & Bohlin, 2008). However, since the development of 3G technologies in the past decade and the recent introduction of 4G and LTE technology in the last few years, mobile internet can now provide faster speeds that qualify as mobile broadband (Weiss et al., 2015). Additionally, mobile broadband adoption has grown significantly in recent years due to the massive increase in smartphone use (Shin, 2007; Weiss et al., 2015). In essence, the mobile phone has transformed into a so-called smartphone that can be used for many purposes, including accessing the internet through mobile data and providing broadband service to other smart devices through wireless connectivity (Christensen & Raynor, 2013). According to the Swedish Post and Telecom Authority (PTS), a smartphone, which is used for both calls and mobile broadband, is referred to as a mobile broadband add-on service (Kongaut & Bohlin, 2016). Data is the term generally used to classify broadband for mobile devices. Generally, mobile data may be a substitute for fixed broadband (Stork et al., 2014).

Since then, the number of broadband subscriptions has continued to grow every year, particularly with the introduction of LTE technology for 4G networks (Kongaut & Bohlin, 2016; Ooi et al., 2011). More specifically, with regards to mobile internet or mobile data adoption studies, Japan is among the countries with early use and immense growth of mobile internet. Consequently, early mobile internet literature is mainly on Japanese mobile internet (Denni & Gruber, 2005; Kongaut & Bohlin, 2016; Pavon & Brown, 2010). For example, by applying technological trajectories, Funk (2005), led user concepts to forecast an evolution of mobile internet while Okazaki (2006), applied cluster analysis to identify the determinants of mobile internet adoption in Japan. Since then, further mobile internet research has also been conducted in other countries. In contrast and unlike Japan, in the case of developing countries, Srinuan et al (2012) examined mobile internet access and the associated data charges in Thailand by using binomial logit regression. These authors found that availability of fixed telephone; age and living area are amongst the most prominent determinants of mobile internet access in Thailand. In Sweden, Westlund and Bohlin (2008) analysed mobile internet adoption and found that user-friendliness, such as slower transmission speed compared to fixed broadband, is a crucial obstacle to mobile internet adoption.

3.3.1.3 Competition amongst Broadband Network Providers

The following sub section sheds light on the competition amongst the various internet service providers in the global space followed by a more concise view of the South African market.

3.3.1.3.1 A Global Perspective

The global internet access market has continued to deliver excellent growth in recent years (Yasmeen & Tufail, 2015). This, among other developing sectors such as mobile broadband, has been predominantly powered by the rapid growth in the wireless segment (Zickuhr & Smith, 2013). Although the market is anticipated to decelerate, good growth is still forecasted through to the end of the period 2019 (Marketline, 2014).

Porter's Five Forces Model will be used to analyse the internet access market where internet service providers will be depicted as players, key buyers will be taken as end-users, and network owners and manufactures of hardware and software reflected as the key suppliers. Porter stated that the essence of an organization's competition strategy relies on relating the firm to the environment in which it conducts its business. Porter identifies five forces that shape an industry: (1) rivalry among existing competitors, (2) threat of new entrants, (3) bargaining power of suppliers, (4) bargaining power of buyers and (5) the threat of substitute products (Grigore, 2014). In a technologically advanced environment, the ability to possess technical infrastructure stems the competition between limited numbers of market players in providing services (Agamya, 2012). According to Kadam, Troproni, Edupuganti (2015) buyers in this market place have fairly low switching costs and are unlikely to be swayed by brand, which as a result, strengthens their power to an extent. Equally, there are a vast number of potential customers which demand a particular level of customer satisfaction, thus preventing service providers from being complacent (Foros & Kind, 2003). Marketline (2014) further suggests that this market place is characterized by increased supplier power in a densely traded environment that vastly relies on the quality of service delivery. The constant, as well as projected growth of the online segment continues to encourage potential new entrants. However, the established internet service providers within the market have strong market share and can, as a result, compete aggressively on price to deter newcomers (Molnar et al., 2014; Paltridge & Matsui, 2004). Substitutes are, currently, virtually non-existent (Du Toit, 2013). Where substitutes do exist, they are usually not much of a threat to the internet as a whole. Overall, the degree of rivalry is accessed as moderate in the global internet access market (Reddy, 2015).

Thus, increased competition through innovation, liberalization and convergence has led internet service providers to respond with differentiated pricing strategies based on technology and speed of connection (Höffler, 2007). Pricing strategy has vast implications on the development of markets in terms of online behaviour, subscriber growth, market transparency, and choice of provider (Biggs & Kelly, 2006). There are various possibilities available to broadband providers to differentiate their service offerings. The scope of these opportunities is limited to the imagination of the service provider. Biggs and Kelly (2006) and Kim et al. (2009) shed light on some options that are commonly used by internet service providers:

- An installation fee (usually waivered on inception)

- Equipment charges (free router or simcard)
- Monthly access fees (discount on promotional packages)
- Additional threshold, by megabyte or time limits (special access during set hours)
- Additional service fees may also be levied (free or inclusive email account with broadband subscription)

These are just some of the ways in which internet providers compete amongst themselves in the marketplace. In addition to positioning themselves appropriately through employing the abovementioned points of differentiation, internet service providers must also decide on a pricing strategy that will appeal to their customers (all which have obvious data charge implications) (Götz, 2013). Being competitively priced and offering superior service is paramount to the success of internet service providers (Prieger, 2013). Table 3.1 summaries the three main pricing strategies employed by operators (flat-rate or uncapped pricing, time based pricing and volume based pricing), along with their main advantages and disadvantages (Biggs & Kelly, 2006).

Table 3.1: Broadband pricing strategies (a summary of the main pricing strategies practiced by operators, with advantages and disadvantages)

Pricing strategy	*Advantages*	*Disadvantages*	*Examples*
1. Flat-rate or unmetered pricing: customers are billed a fixed amount, irrespective of use.	Simple to use and bill Easy for customers to understand, so they can make direct comparisons Has driven market growth and proved successful in building market share early on	Risk of consumption and network overload remains with service providers May harm the long-term development of the market, where operators are drained of resources Average cost pricing argued to cross-subsidise heavy users at the expense of entry-level users	Telecom New Zealand's Xtra Broadband plans at: www.telecom.co.nz/chm/0,5123,203071-202469,00.html Korea Telecom, at: www.megapass.net/v_support/prd_lite.php Hanaro Telecom, at: http://service.hanaro.com/harafos/lite/vne_vlite2.asp
2. Time-based pricing: customers are billed according to the time spent online	Customers trust transparent pricing for easily measurable access Uses traditional billing method	Does not represent broadband in its truest sense of an "always-on" connection	Telecom Italia's Alice Free offer www.virgilio.it/aliceadsl/index.html www.alice.it/alice/ AT&T's Worldnet Service Plus Plan: http://download.att.net/plans/index.html Telekom Austria at www.aon.at/
3. Volume-based pricing: customers are billed according to the data content downloaded.	Helps ensure that revenues match costs Burden of consumption remains with consumers Consumers consume according to the utility they derive from the service	Where marginal costs are negligible, consumer pays excessive revenues Argued to hold back market development by moderating consumer demand	FastADSL in New Zealand: www.fastadsl.net.nz/ Telstra's ADSL offers at: www.bigpond.com/internet-plans/broadband/adsl/

Source: Biggs and Kelly (2006).

3.3.1.3.2 A South African Perspective

In the following section, the study elaborates on the rivalry and pricing strategies employed by internet service providers in greater detail and does so in the context of South Africa. The South African market, which generally mirrors other markets in the world, is a technologically complex environment in that competition amongst organisations is positively affected by the scarce number of market players that poses the technical infrastructure to provide services (Mohanlal, 2006; Naidoo & Seymour, 2012). This apparent gap in technical infrastructure is commonly attested to the digital divide prevalent in the country (Du Toit, 2013). According to Romelia (2003) the term digital divide refers to that disparity between individuals and/or communities who can use electronic information and communication tools, such as the internet, to better the quality of their lives and those who cannot. In short, individuals and/or communities can be divided into the "haves" and "have-nots". The research again uses Porter's Five Force Model to interpret the attractiveness of the internet access market, but the perspective of South Africa in this case. Each of Porter's individual five forces is discussed in greater detail.

Drivers of buyer power in the internet access market in South Africa will be discussed first. It is important to note that customers within this market range from large corporations to individuals (Ooi et al., 2011). Due to the fact that there are a large number of buyers, buyer power is weakened (Le, Cruz, Bosman, Herbreteau, Laraki & Parackal 2011). Switching costs are reasonable, and can include costs such as fee cancellation and the time required to leave one service provider and to move to a competing (Marketline, 2015). In reality, customers are prone to change internet service providers (ISPs) when they stand a chance to get better value for their money (Rosston et al., 2011). Although brand plays a significant role to the South African customer, price is just as an important consideration for buyers, along with factors such as quality of service and connection and speed of access (Reddy, 2015). There are various options for customers to choose between technology and segments, but it is a common trend to have fixed broadband at home and even a range of wireless services for different devices which makes buyers more dependent (Armstrong, 2001). Overall, buyer power is assessed as weak in the South African internet access market (Kadam et al., 2015; Le et al., 2011).

Next, drivers of supplier power in the internet access market in South Africa will be discussed. ISPs act as agents between telecommunications infrastructure that underpins the internet technology and their customers (Brousseau, 2011). For some, generally more long established ISPs, such as Telkom and Neotel, own and operate an extensive physical network themselves (Naidoo & Seymour, 2012). For these companies, key suppliers are manufacturers of software and hardware involved, such as Cisco Systems (Marketline, 2015).

On the other hand, there are also ISPs that do not own a network and purchase wholesale access to the necessary infrastructure from an owner operator, and then offer it at retail to end-users (Leiner et al., 2009). For internet service providers using this model, key suppliers are network owners. Examples of more recently established ISPs who have successfully adopted this model include the likes of Vox Telecom, Axxess and Afrihost to mention a few. Overall, due to the broad range of supply, reasonable switching costs and general high level of quality, supplier power is assessed as moderate (Reddy, 2015).

Thirdly, the factors influencing the likelihood of new entrants in the South African internet access market are shared. Potential new entrants are drawn into market by the healthy growth over the recent years, the rapidly developing infrastructure, and with the density of the South African population (Stamenkov & Dika, 2015). Players that do not have access to their own infrastructure can buy access to telecom networks (Namachchivaya, 2012; Zhou, Dai, & Zhang, 2007). The benefit of this is that it reduces the capital requirements needed for market entry. However, customers' continued demand for increased bandwidth may mean that additional investment in infrastructure will be needed in the near future (Biggs & Kelly, 2006). A key characteristic of the South African internet market is the high possibility of price retaliation by established ISPs (Mpofu et al., 2013). Over time, it is envisioned that most markets will develop in the way that Europe has, where consumers want both fixed and wireless access (Mariama et al., 2013).

Due to the density of mobile penetration all over the world in the form of smartphones and tablets, the wireless segment has rapidly grown in short space of time (Hill, 2014). Players such

as Vodafone and MTN South Africa that control telecoms and hardware put themselves in an excellent position as internet industry tycoons (Pavon & Brown, 2010). It is important that potential new entrants understand that in order to gain new clients, they need to differentiate themselves from incumbents, which is not a feverous task especially when selling a commodity that can only be specified within a few parameters, such as down/upload time and bandwidth (De Swardt, 2008). Overall, the likelihood of new entrants is perceived as moderate (Grigore, 2014).

Fourth, factors that influence the threat of substitutes in the South African internet access market are discussed. The internet is such a powerful and diverse tool that can be used for a whole spectrum of everyday activities that there are virtually no real alternatives that can match its range (Calzada & Martínez-Santos, 2014). The success and growth of the internet in itself is based on its ability to substitute many other products and services (Gruen, Osmonbekov, & Czaplewski, 2007; Heidemann, Klier, & Probst, 2012; Urban, Sultan, & Qualls, 2000). These include bricks and mortar outlets for supplying goods and services, traditional forms of advertising and communication services such as mail. It is generally agreed that the benefits of some older substitutes assessed are not significant, as the alternatives that the internet provides have out popularized them with both consumers and corporate customers (Overmars & Poels, 2015; Porter, 2001). However, there are two older substitutes that still maintain an advantage over the internet; that is, consumers concerns over the security of online financial transactions (Hsu & Wang, 2008; Li & Xie, 2012) and businesses that wish to advertise to segments of the market that are not prevalent online (Chen et al., 2013). Thus, even in South Africa, the overall threat of substitute to the internet is weak (Kadam et al., 2015).

Finally, the drivers of degree of rivalry in the South African internet access market are reviewed. It is important to identify them as well as understand how they impact each other. The South African internet access market has seen incredible competition increase in recent years with brands such as Neotel taking significant market share from previous industry leaders Telkom (Chigona et al., 2012). However, the landscape and balance of power could very well shift in the near future as Vodacom (a subsidiary of Vodafone) have gained approval for the acquisition of Neotel, a move that opponents argue could give them control of an unfair share of the mobile broadband spectrum (Mpofu et al., 2013; Naidoo & Seymour, 2012). As a technologically

growing environment, it is likely that new technologies will further increase the number of players for high-speed internet connections (Bothun, 2016). In addition, strong market growth means that competitors are forced to fight for share of a static market with their counterparts, although this growth is forecasted to decrease as the market becomes increasingly saturated (Götz, 2013). Therefore, the rivalry in the South African market is assessed as moderate (Kadam et al., 2015).

3.3.1.4 Conceptualization of Data Charges

Convenience comes at a premium and this is applicable to e-commerce as well. To utilize e-commerce, consumers are required to have not only suitable mobile handsets but also wireless services. Given that there are associated data charges for accessing mobile and wireless service (subscription, service charge, and communication fees), financial considerations may influence consumers' behavioural intentions (Kuo & Yen, 2009; Luarn & Lin, 2005; Wu & Wang, 2005). That mentioned, this researcher was unable to identify a specific academic dimension for data charges due to the lack of development around this particular construct. Therefore, in the context of this study, the construct of data charges is derived from the construct of perceived fee. The construct instruments were adapted based on a broad literature review Luarn and Lin (2005); Pedersen (2005); Sripalawat, Thongmak and Ngarmyarn (2011); Wu and Wang (2005); Yang, (2005) to ensure content validity. The wording of the individual instruments within perceived fee as suggested by Kim et al. (2009), were then modified to suit the context of data charges. The respondents were asked to confirm the response which best describe their level of agreements with the statements. Each question is measured on a five-point Likert scale, ranging from (1) strongly disagree to (5) strongly agree. Similar to perceived fee, data charges is classified as a uni-dimensional construct which means that it can be measured using a single set of instruments and does encompass sub constructs.

3.3.2 Delivery Dependability

Delivery dependability can increase customers' responsiveness and satisfaction. Some global e-commerce organisations such as Amazon.com have built their reputation on the ability to service global customers in a timeous and dependable manner (Power, Sohal, & Rahman, 2001). These companies use supply chain strategies such as delivery postponement to enhance their flexibility and balance global efficiencies whilst increasing customer responsiveness (Li, Rao, Ragu-Nathan, & Ragu-Nathan, 2005). According to Liao & Keng (2013), the nature of online shopping as a remote transaction makes the immediate consumption of an item impossible and therefore forces consumers to wait for the delivery thereof. Uncertainty of something going wrong in the delivery process is substantially reduced in the offline environment where consumption or collection of goods often occurs at the same time as the purchase, whereas the safe and timely delivery of an item purchased online is of far greater importance to consumer who shop in the online environment (Du Toit, 2013). Javadi et al. (2012) posit that the level of uncertainty, that is, the fear of non-delivery has a negative effect on the consumers' attitude toward online shopping. Liao & Keng (2013) reaffirm this statement and also suggest that a delivery delay is an online shopping service failure and may well reduce service satisfaction. These authors cite literature by Cho and Park (2002); Diaz and Ruiz (2002); Kim (2005) and Chang and Wang (2012) who add that excessive waiting and a delivery delay negatively affects customer satisfaction and repurchase intention (Du Toit, 2013) and that "on-time" delivery time positively influences consumer satisfaction levels and purchase intention of online products. Thus, delivery dependability is crucial in influencing positive consumer satisfaction levels and retaining valuable customers Schaupp and Belanger (2005); Chen et al., (2010) as cited by (Du Toit, 2013).

3.3.2.1 Delivery Dependability versus Free Delivery/Shipping

Delivery dependability ought not to be confused with free delivery. Delivery dependability refers to the ratio of the number of deliveries made without any error (regarding time, place, price, quantity, and/or quality) to the total number of deliveries in a period (Durand, Mahjoub & Senkel, 2013). Whereas free delivery refers to a marketing tactic used mostly by online retailers

as a sales strategy to attract customers. More specifically, free shipping can be defined as the cost free benefit of transporting an item, usually through mail (Hill, 2014).

Various studies have sought to understand the notion of free delivery and its influence on online shopping (Bonera, 2011; Gong et al., 2013; Mohanlal, 2006). Many of these authors drew similar findings in that "free shipping" has a positive influence on online shopping satisfaction and strengthened consumers online purchase intention. There are, conversely, very scant studies undertaken that have sought to understand the relationship between delivery dependability and online shopping satisfaction. Hence one of the objectives of this paper is to uncover this very association amongst variables and its overall influence, or lack thereof, on consumers purchase intention.

3.3.2.2 Operational Definition of Delivery Dependability

Delivery dependability is defined as the extent to which an organisation can timeously provide the type and volume of a product sourced by a customer (Li et al., 2005). However, the operational definition of delivery dependability that is adopted in this study is that which is aforementioned in the previous stanza. Thus, in the context of this study, delivery dependability refers to the ability of an online retailer to complete a delivery without any error. Delivery dependability and delivery reliability ought to be seen in the same light and will be used interchangeably to describe similar concepts. This effectively means that the right product will arrive at the right place, at the right time, in the right quantity and in the right quality. In addition, the term delivery dependability will be used to express related terms such as delivery delay or failure which are common experiences in online retailing (Chang & Wang, 2012). Delivery dependability will used to describe different scenarios that positively impacts online shoppers purchase intention. In broader terms, online tracking ability, discounted shipping, number of shipping options, clear returns policy, ease of making exchanges, flexibility to choose delivery date and flexibility to re-route packages all impact an e-retailers ability to deliver dependably (Hyunwoo Lim & Shiode, 2011). In essence, delivery dependability is a service

provided by online retailers and service failure (delivery dependability) may occur during the process of service delivery (Thai, 2013).

3.3.2.3 Antecedents and Outcomes of Delivery Dependability

Delivery dependability in the online retail space is affected in many ways. Delivery is a service option offered by e-retailers, as such, delivery dependability can therefore be seen as the reliability in the e-retailer to deliver a service (Liu, 2013). Service failure in terms of online delivery dependability occurs in various ways. Cho, Im, and Hiltz (2003) found that of eight common online service failures, the second-most frequent that negatively affected delivery dependability was excessively long delivery time. These authors further added that delayed delivery is a common occurrence in e-retailing and e-retailers must pay careful attention to this issue. Though poor delivery dependability causes customers to have a negative perception of online retailers, researchers have found that e-tailers can dramatically reduce customer dissatisfaction through appropriate service recovery measures Swanson and Kelley (2001), thereby rescuing the company's confidence in the eyes of the customer. Díaz & Ruíz (2002) proposed that waiting time positively influences anger and negatively influence repurchase intention. Hsu (2008) stated that delivery time is a key driver of online consumers' repurchases behaviour. Marimon, Vidgen, Barnes and Cristobal (2010) added that delivery time positively influences repurchase intention. Ahmad (2002) and Holloway and Beauty (2003) pointed out that delivery delay causes customer complaints. Ryan and Valverde (2005) posit that e-consumers usually complain regarding the delivery delay of a product purchased online. Other studies have also suggested that untimely delivery positively influences customer complaint intention (Chang & Wang, 2012).

In the unfortunate event of untimely delivery, an effective service recovery plan can help build and maintain a relationship of trust, commitment, loyalty and satisfaction between the customer and the online retailer, and increase repurchase intentions Chang and Wang (2012) who cites (Bejou & Palmer, 1998; Blodgett, Hill & Tax, 1997; Berry & Yadav, 2000). Many e-retailers have subsequently relied on service recovery strategies to mitigate risk and limit business

exposure in the event of delivery dependability being compromised (Kuo, 2012). Previous literature reveals that various authors have attempted to group service recovery strategies into predetermined classifications. For example, Bitner et al. (1990) and Hart, Heskett, & Sasser. (1990) classified service recovery into three categories; compensation, assistance and apology. Whilst Smith, Bolton and Wagner (1999) acknowledged four service recovery strategies namely; response speed, apology, compensation and proactive recovery systems. Other authors like Miller, Craighead and Karwan (2000) took an alternate approach and reviewed research on service recovery measures from the perspective of tangibility and concluded that these measures could be divided into two categories: firstly, mental recovery strategies, which involve the online retailer explaining the reasons behind the error, acknowledging error, and apologizing for it in a polite, empathetic, respectful, and carry manner; secondly, physical recover strategies, involving free service, discounts, coupons and refunds (Chang & Wang, 2012). Holloway and Beauty (2003) and Forbes, Kelley and Hoffman (2005) later discovered that recovery measures implemented by retailers included repairing the damaged goods, refunds, discounts, replacements, paying for return of goods, and apologies. Forbes et al. did not quote any significant difference between the recovery measures of online retailers and traditional bricks and mortar retailers; their approach only differed in terms of medium or content. Kuo, Yen, & Chen (2011) further developed the research by Forbes et al. (2005) and classified 10 recovery strategies of online service failure: failure escalation, discount replacement, correction, correction plus, unsatisfactory correction, apology, store credit, refund, and nothing. Chang and Wang (2012) concluded that contact channels, apologies, response speed and compensation are key drivers of service recovery. Kuo and Wu (2012) applied the Justice Theory to explain the recovery strategy effects of an online shopping service failure. Additional studies by Goodwin & Ross (1992); Mohr and Bitner (1995); Blodgett, Hill and Tax (1997); Bejou and Palmer (1998); and McCollough, Berry and Yadav (2000) have also highlighted the importance of recovery strategies for online shopping service failures.

In essence, service recovery strategies are put into place by online retailers to affirm their capability in service delivery, and where fault should occur; they are well equipped with remedial strategies. Thus, e-retailers that can build consumer confidence in their ability to delivery dependably strengthen their value proposition and can quickly form a sustainable competitive advantage within industry.

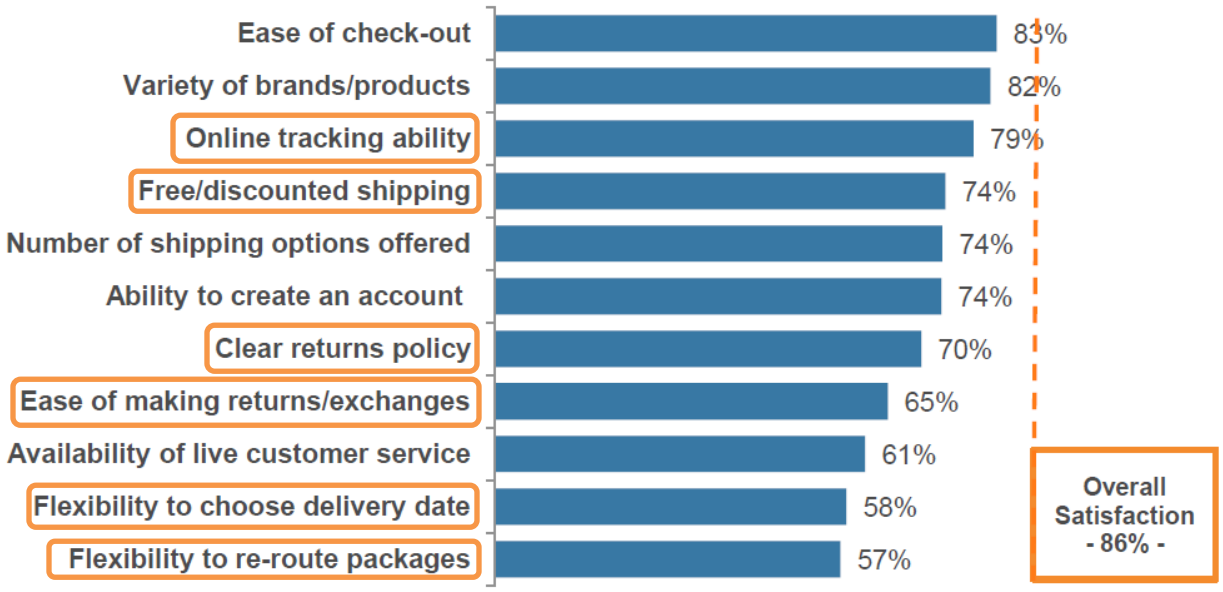
Zeithaml et al. (2002) makes reference to earlier research by Zeithaml and Berry (1988) who, in the offline context, defined delivery reliability as the ability to perform the promised service dependably and accurately. This, in the online context, translates into accurate and on-time delivery, accurate product representation, and other fulfilment issues (Davis-Sramek, Germain, & Stank, 2010). It is in the interest of online retailers to prioritize the delivery of goods to customers in their advertised condition at a rate of transfer that customers deem satisfactory (Lin & Lee, 2009). These authors further denote that online retailers should ensure that their projected customer base will accept the convenience of receiving the chosen goods from the delivery service providers. For this reason, e-tailers go through rigorous criteria when selecting courier service providers which invariably impact their delivery dependability (Jie, Subramanian, Ning, & Edwards, 2015).

Several researchers have tried pinpointing factors and their relative importance to help online retailers evaluate criteria for selecting delivery partners (Lin & Lee, 2009). Ding, Liang, Yeh & Yeh (2005) proposed a vague multi-criteria decision making model for selecting delivery service providers. These authors suggested six evaluation criteria; freight rates, speed and reliability, safety, service and convenience, salesman factor and carrier considerations. Subsequently, Voss, Page, Keller and Ozment (2006) suggested a more robust multi-criteria decision making model which included; security, complaint follow-up, driver quality, billing accuracy, response, equipment availability, carrier reputation, delivery reliability and rate charged. There are many unexploited opportunities that exist for carriers to achieve a sustainable competitive advantage, thus positively affecting delivery dependability. However, success in terms of delivery dependability is strongly influenced by the criteria used by e-retailers to select carriers (Jie et al., 2015).

Consumer confidence in online delivery dependability is positively affected by e-retailers ability to effectively communicate delivery lead times to customers (Frongillo, Isaacman, Horan, Wethington, & Pillemer, 2010). According to Kleinman (2012) there are several supplementary things that online retailers can do to improve the experience for their online shoppers. Amongst these is communication of expected delivery date of order; customers are willing to wait for their order but want to know just how long that might be. Timely delivery of orders encourages

shoppers to endorse an online retailer (Ansary & Roushdy, 2013). Kleinman (2012) further mentioned that consumers like having delivery notifications and tracking updates to understand when their packaging is coming. Delivery dependability is encouraged by e-tailers shipping flexibility, particularly the ability to select an alternate delivery location or schedule a delivery or give special delivery instructions. Below figure 3.8 illustrates key customer satisfaction aspects with regards to online shipping.

Figure 3.8: Satisfaction with Aspects of online shipping.



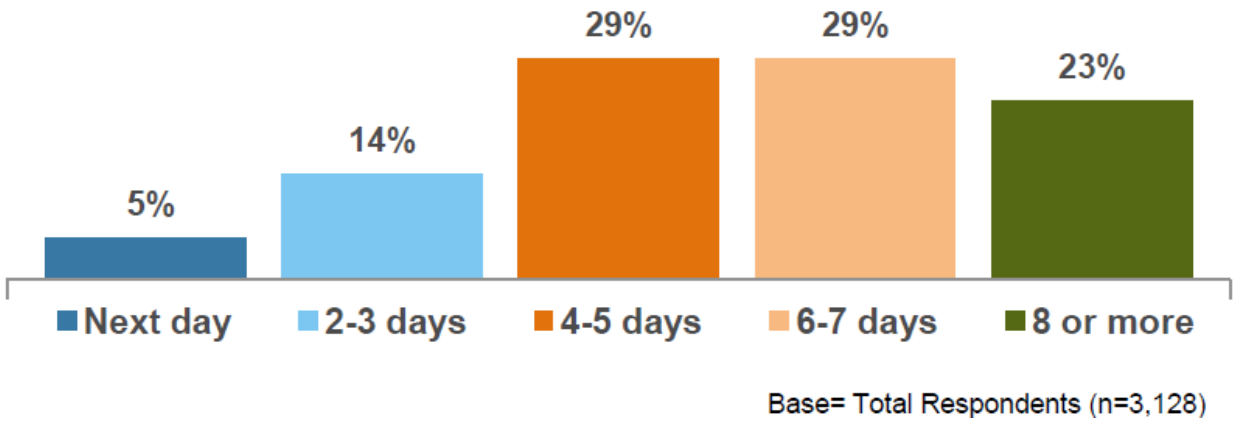
Source: Kleinman (2012).

According to the variables studied by Kleinman (2012), customer satisfaction with online shopping is generally high, at 86%. Logistics, which directly affects delivery dependability is impacted by 6 out of 11 aspects that influence a customer's shopping experience namely; online tracking ability, free/discount shipping, number of shipping options offered, clear returns policy, ease of making returns/exchange, flexibility to choose delivery date and flexibility to re-route packages. Customer satisfaction not only leads to positive word of mouth but it also drives purchase intention. In the same study, Kleinman (2012) also found that 41% of shoppers said "receiving my product when expected" led them to recommend a retailer. Hence, both proactive

communication regarding delivery time and reliable delivery are critical aspects to a positive customer experience.

60% of online shoppers say that a guaranteed or estimated delivery date is important when shopping online (Kleinman, 2012). Online shoppers generally have a range of time they are prepared to wait for the delivery of their orders. Retailers that accommodate a range of delivery time options allow themselves to appeal to a wider range of customers (Kleinman, 2012). Figure 3.9 below shows various delivery time ranges customers are willing to wait and the percentage of customers willing to do so.

Figure 3.9: Days willing to wait for most purchases.



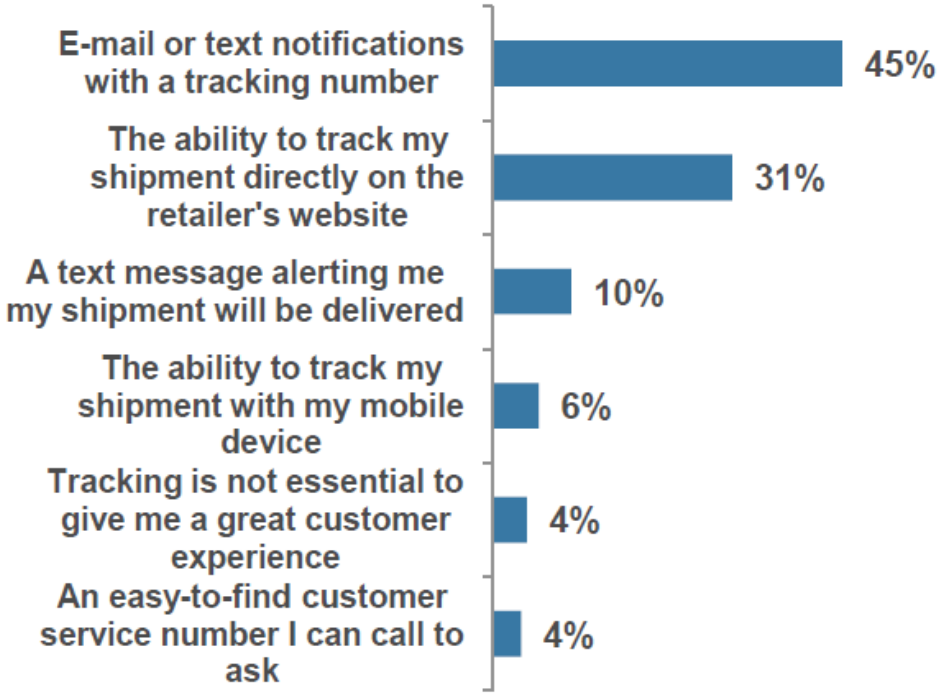
Source: Kleinman (2012).

48% of customers specified that they are not willing to wait more than 5 days for most of their purchases, while 23% said that they would be willing to wait 8 days or more (Kleinman, 2012). Delivery turnaround time evidently plays a highly influential role in customers overall perception of e-retailers delivery dependability.

Finally, Kleinman (2012) established that product tracking is a statistically significant factor in online shopping satisfaction. The author posits that 79% of online shoppers agree that the ability

to track a product is important. Tracking via text notifications/e-mail or directly on the retailer's website are the most important tracking services for online consumers. Figure 3.10 depicts the most important shipment tracking service.

Figure 3.10: Most important shipment tracking service



Source: Kleinman (2012).

The strength and importance of mobile phones is evident in customer preferences for tracking, with more and more consumers wanting text alerts when their package is delivered, text message notification with their tracking number, and the ability to track their shipment on their mobile device (Rose et al., 2012).

The aforementioned literature around delivery dependability points to one key aspect, that in essence, delivery dependability is significantly dependent on e-retailers logistics capabilities. Research carried out by Durand, Mahjoub and Senkel (2013) resulted in findings that enabled the authors to define the different ways of overcoming the obstacles inherent in delivering parcels to

individual households. 3 distinct logistics scenarios were identified which, when implemented successfully can help overcome the obstacle of the last mile[1] namely; "0-pooling", partial pooling through nearby pickup points, and pooling via a local delivery depot guaranteeing an "all-in-one" solution with either a single home delivery or collection (Durand et al., 2013).

- The first scenario, 0-pooling relies on its own distribution network. That being, there is no collaboration at all among different operators (Fulconis, Hiesse, & Paché, 2011). "0-pooling" is also referred to as "no pooling" and entails delivery companies looking to improve their delivery dependability by trying to reduce the rate of failure to deliver first time to online shoppers (Ducret & Delaître, 2013). According to research, carried out in particular through logistics service providers (LSPs), this failure rate currently stands between 10% - 40% to total households to be delivered (Durand et al., 2013). The ideal scenario would be to get that figure to zero. That means delivering to all online shoppers at the first attempt, which represents an enormous challenge (Ducret & Delaître, 2013). LSPs that are successful in achieving this are doing so by only delivering to consumers when they are sure they are available, this is generally following a confirmation phone call. However, various expert interviews carried out by Durand et al. (2013) found that the main reason for failure to deliver was because of poor customer information. These authors estimated that in 50% of cases, the failure of home delivery is more likely to be because of having no number or e-mail address or these being wrong, the wrong or incomplete address, or no entry code to a gated community, rather than the customer not being there.
- The second scenario, pooling via nearby pickup points is when parcels are collected directly by consumers at bricks and mortar outlets (Patier & Routhier, 2009). The option bypasses the tricky problem associated with home delivery, that of absent customers when there is a need for their presence, especially when there is a need to sign for delivery of oversized parcels (Durand et al., 2013). In effect, failure to deliver is eliminated because the parcel is deposited at a local retail unit, which effectively also plays the role of a near pickup point insomuch as it is situated in an area already frequented by the online shopper with fairly accommodating opening hours (Thai, 2013).

[1] Term used in supply chain management and transportation management to describe the movement of goods from a transportation hub to a final destination in the home.

- The third scenario that increases delivery dependability is described as pooling via a local delivery depot. The idea behind this logistics solution is to load pool amongst LSPs to optimize supply chain efficiencies (Fulconis et al., 2011). Goods ordered online by shoppers living in the same geographical location can effectively, be quite easily be grouped together in a single local delivery depot (LDD). It is important to note that although in this specific scenario LSPs rely on each other, they are still very much remain in competition (Fulconis et al., 2011). The more portent question is whether online shoppers are willing to be troubled at untimely hours in the same evening by several delivery services (Durand et al., 2013). It must also be stressed that the success in practice of these operations of consolidation and the efficient processing of parcels imply the availability of information to all operators (Kuo & Wu, 2012). As a result, pooling of physical flows requires a partial consolidation of informational flows. The main challenge for LSPs is once loads are consolidated from either one or several LDDs, delivery is attempted to be completed "all-in-one" delivery, that is, the delivery of all parcels in one go (Durand et al., 2013).

Delivery dependability is affected by various touch points within the consumer order deliver process which not only necessitate online retailers to have strategies in place to build consumer confidence but also relies on supply chain efficiencies. The abovementioned literature evidently suggests that a well thought online delivery process that encompasses customer-centric "moments of truth" such as online tracking ability, clear returns policy, flexibility to choose delivery date and/or time slot and definitive lead times positively influences consumers online shopping satisfaction, this in turn plays a significant role in encouraging consumer online purchase intention.

3.3.2.4 Conceptualization of Delivery Dependability

The construct of delivery dependability is adapted from the original construct of safe and timely delivery presented by Du Toit (2013); Li, Rao, Ragu-Nathan and Ragu-Nathan (2005) to ensure content validity. The main reason an instrument has content validity is if there is a general

agreement among the subjects and researchers that the instrument has measurement items that cover all important aspects of the variable being measured (Li et al., 2005).

Du Toit et al. (2013) describe safe and timely delivery as a multi-dimensional construct that is a function of two significant dimensions, namely: delivery accuracy and delivery speed. The two dimensions are made up of five individual measurement instruments. In order to measure delivery assurance, Du Toit et al. (2013) identified four instruments with varying factor loads that suggest that respondents were fairly confident that they would receive what they ordered in a given time. The remaining measurement instrument was identified for delivery speed and indicates that respondents are inclined to shop online more if faster delivery is possible. Javadi et al. (2012) found that measuring non-delivery risk was a good indicator of whether an online retailer was dependable in their said delivery. In other words, this refers to same construct of delivery assurance that is presented by Du Toit et al. (2013) barring that Javadi et al. (2012) present the construct in reverse where they talk of non-delivery risk as appose to delivery assurance. Consequently, these authors suggest that non-delivery will have a negative influence on the attitude towards online shopping. They used two measurement instruments for the construct that were based on a seven-point Likert scale. However, in the context of the current study, all questions were adapted to using a five-point Likert scale, ranging from (1) strongly disagree to (5) strongly agree.

3.3.3 Geographical Distance

Geographical distance refers to the distance between a consumer and the nearest physical store where he/she can purchase a particular product (Du Toit, 2013). One of the main advantages of shopping online is the fact that consumers from all around the world have the ability to engage online to shop for almost anything from virtually anywhere. Advancements in technology as well as increased globalisation have made this possible (Chocarro, Cortiñas, & Villanueva, 2013). For these very reasons, consumers who are far away from the closest brick and mortar store are able to leverage online purchase alternatives. Thus, product availability refers to the ease of access to a product. There is a growing number of consumers who revert to shopping in an online environment rather than travelling the distance (Du Toit, 2013). Furthermore, research by

Chintagunta, Chu and Cebollada (2012) and Van Nierop, Leeflang, Teerling and Huizingh (2011) suggests that this phenomena is more evident in the context of the purchase of larger domestic products. As this study is set in the context of online general-merchandise retailers that sell large appliances, it will be interesting if the conclusions presented by the above mentioned authors can be generalised to fit the South African context.

Online shopping remains a lesser portion of retail sales despite the renowned benefits of electronic commerce to consumers, including greater convenience by eliminating travel costs and enabling 24 x 7 purchases irrespective of geographical location, Carincross (1997) in (Forman, Ghose and Goldfarb, 2009). Equally, there are many barriers that influence consumers to not buy online; some of these have been noted briefly in the aforementioned literature. For example, returning products can be challenging and shipping can be slow and expensive. That is, there appears to be a set of fixed disutility costs of buying online (Forman et al., 2009). Hence one of the most noticeable differences between e-shopping and store shopping is attributed to travel. Specifically, if a consumer decides to go to physical stores to gather information on a product, that is to conduct pre-shopping activity, he/she has to spend travel time and travel cost to reach the shopping places. Conversely, this is not the case, if he/she chooses to shop online (Hsiao, 2009). In essence, money (cost of) and time (distance to) are two essential factors consumers need to consider when assessing the impact of geographical distance on online/offline purchase intention (Anderson, Chatterjee, & Lakshmanan, 2003).

Wastes on travel time and travel cost directly impact consumer resources and thus diminishes consumers' utility (Anderson et al., 2003; Gould & Golob, 1997). Costs, in terms of buying online, vary across products and retailers and in some markets have created significant hurdles to the continued diffusion of electronic commerce (Forman et al., 2009). It is therefore important to understand the trade-offs consumers' debate when deciding whether geographical distance influences their online purchase intention. In light of this, previous research has explored consumer channel choice in commodity markets, modelling the decision as a trade-off between fixed disutility costs and the lower search and transportation costs of buying online, in addition to any price differences across the two channels (Balasubramanian, 1997) cited in Forman et al. (2009). However, there is no systematic evidence on the trade-off between offline transportation

costs and online disutility costs. In summary, while the benefits of buying online are generally based on where you live relative to the physical store environment (geographical distance), there is no clarity on how much this matters.

Other authors, Sinai and Waldfogel (2004) found that consumers connect to the internet to overcome spatial isolation such as distance to retail stores. Edwards, Jin Kyun, and La Ferle (2009) make reference to psychological distance and posit that the proximity of a store and the perceptions of similarity in geographical locations should influence online purchase decisions by altering feelings of psychological distance. These authors further write that consumers may associate less risk with purchases from local companies than from distant companies due to their proximity. If a problem arises, consumers can easily return items to a store that is close to their location. Similarly, yet stated in the converse, Chocarro et al. (2013) suggests that the further the store, the greater the utility and the higher the probability of online purchase. This has been confirmed by the other study by Chintagunta et al. (2012). Earlier works by Zaichkowsky (1985) as cited by Chocarro et al. (2013) postulates that when it comes to distance-to-store, the purchase process for high-involvement products takes longer and consumers are willing to travel further to ensure the correct choice. It can therefore be assumed that distance-to-store is less important than it would be for a low-involvement product.

3.3.3.1 Definition of Geographical Distance versus Operational Definition

Distance is defined as a multidimensional concept that can convey a sense of space between objects in a three-dimensional physical world, a psychological distance between people, or even the time between events (Edwards et al., 2009). More specifically, in the context of this study, geographical distance is operational defined as per (Du Toit, 2013) who denotes it as the physical distance a consumer finds between him/herself and the nearest physical store where he/she can purchase a particular need.

3.3.3.2 Antecedents and Outcomes of Geographical Distance

Recently, a numbers of planners and geographers have paid attention to the connections among online shopping, personal travel and geographical distance (Cao, Douma, Cleaveland, & Xu, 2010). Various works and subsequent findings from different authors are discussed below.

In their research to analyse the influence of geographical distance on the shopping behaviour of consumer, Van Nierop et al. (2011) found that "distance to the store has a significant negative effect on the amount of shopping trips as well as the purchase decision and amount spent in several categories." This is perhaps one of the stronger conclusions that consistently prevail in previous literature as it shall be noted in this section. Chintagunta et al. (2012) suggested that the intention to shop online become more significant when consumers take travel distance into account. This is also endorsed by research conducted by Chocarro et al. (2013) when they proved that an increase in a distance-to-store variable positively correlated with an increase in the probability of the intent to shop online. Meuter et al. (2000) reports, in agreement with the aforementioned authors, that one of the main advantages on online shopping is the ability to purchase goods from any location. This effectively eliminates distance as a hindrance, making the internet a worthwhile substitute for purchases that would otherwise involve a long trip. The easy accessibility of online purchase channels saves the consumer effort, time and money Akaah et al. (1995) in Chocarro et al. (2013), thus offering greater convenience than bricks and mortar stores. However, in some instances authors found that people substitute from online purchasing toward offline purchasing when a store opens locally, people appear to respond to increased convenience in the offline channel (Forman et al., 2009). It is evident that geographical distance certainly does play an influential role in determining consumers online purchase intention.

Monsuwe, Dellaert, and Ruyter (2004) found that in cases where consumers are drawn by the attractiveness of a particular store in their neighbourhood that, for example, sells the same product as that of the online store, the relationship between attitude and intention will be weakened. According to these authors, the reason for this is that the consumer, whilst may have a positive attitude toward online shopping; are more led by the strong attractiveness of the brick and mortar alternative. As a result, he/she will choose to shop offline, despite their positive

attitude toward shopping on the internet. In fact, after a discount retailer such as Wal-Mart/Target or a category killer retailer such as Barnes and Noble/Boaders enters a market, local online purchases of the nationally most popular products decline relative to purchases of products unlikely to be prominent, or even available, offline (Forman et al., 2009). These negative effects on online shopping are substantially large, suggesting significant disutility costs of purchasing online.

Forman et al. (2009) also attest that as more bricks and mortar retailers enter a market, consumers' sensitivity to online price discounts is decreased. However, these authors were not able to find consistent evidence that the range width at a local retail store affects purchases. Instead, they found that although Barnes and Noble have a wider product selection than Wal-Mart, entry by either retailer has the same primary effect: that is, the most popular products become less likely to be bought on line. This is attributed to high offline transportations costs due to uncertain availability of less popular products at offline stores and limited consumer demand for less popular products (Forman et al., 2009).

Other academics have taken a different view in attempting to understand the relationship between geographical distance and online/offline purchase intention. Anderson and Simester (2004) proposed two competing assertions namely; innovation-diffusion hypothesis and efficiency hypothesis. The first hypothesis assumes people in urban areas are innovative and facilitate creative thinking. In addition, people in urban areas are open to new ideas and technologies than those in remote areas (Edwards, 2009; Gould & Golob, 1997). As a result, with online shopping being an innovative shopping channel, the innovation diffusion hypothesis states that urban residents are more likely to be online buyers (Cao et al., 2010). Further, the well-established internet services in metropolitan areas also provide support for this hypothesis (Tonn & Hemrick, 2004). In contrast, one of the benefits of online shopping is that it removes the limitation of having to consider geographical distance or spatial constraints such as low shopping accessibility (Mokhtarian, 2004). Consequently, the efficiency hypothesis suggests that people with low shopping accessibility are more inclined to shop online. According to Cao et al. (2010), these two hypotheses are equivalent to the contradictory assertions regarding the diffusion of the internet technology industry which posits that firms in small cities and rural

areas adopt the internet faster than urban firms because the marginal returns from the use communications capabilities of the internet are higher in remote areas (Forman et al., 2005) as well as the urban density theory which postulates that the internet diffuses first through urban areas with complementary technical and knowledge resources that lower the cost of investing in new frontier technology (Forman et al., 2005). Several studies have attempted to empirically test the efficiency hypothesis and innovation-diffusion for online shopping (refer to table 3.2 below). Generally, spatial attributes have been operationalized in two ways; geographical distance and shopping accessibility.

Table 3.2: The effects of spatial attributes on online buying.

Study	Sample	Method	Shopping Var.	Spatial Var.	Results	Conclusions
Farag et al. 2005	826 respondents in four municipalities in the Netherlands, 2003	Path analysis	Frequencies of online searching and online buying	Urban vs. suburban	The direct effects of residential environment on online searching and online buying were insignificant.	Frequency: N
Farag et al. 2006a	2,190 users collected by Multiscope, The Netherlands, 2001	Binary logit model and linear regression	Online searching adoption; online buying adoption; and frequency of online buying	Five dummy variables indicating levels of street address density; shops in 10 (20, 30) minutes by car	People living in a (very) strongly urbanized area had a higher likelihood of buying online; people with a low shop accessibility buy more often online. Spatial location affects the likelihood of online buying for different types of products differently.	Adoption: ID Frequency: E
Farag et al. 2006b	360 individuals from Minnesota, U.S., 2002; 634 individuals from Utrecht, the Netherlands, 2003	Binary logit model	Online buying adoption; online buying frequency	U.S.: shops within walking distance; Dutch: travel time to shops	Shopping accessibility was positively associated with online buying adoption for the Dutch.	Frequency: N Dutch Adoption: ID American Adoption: N
Farag et al. 2007	826 respondents to a shopping survey sent to residents of four municipalities in the Netherlands, 2003	Structure equations model (SEM)	Frequencies of online searching and online buying	Shops in 10 minutes by bike; an indicator of street address density	Street address density and shopping accessibility had direct effects on online buying frequency.	Frequency; ID
Ferrell 2005	the 2000 San Francisco Bay Area Travel Survey	SEM	Teleshopping duration	Gravity-based employment accessibility	Retail employment accessibility had a positive influence on teleshopping duration.	Duration: ID
Krezek et al. 2005	About 740 adults from Seattle, Kansas City, and Pittsburg, 2003	Chi-square and binary logit model	Online buying adoption; online buying frequency	City/suburban; distance to CBD; retail accessibility; metropolitan dummy	The observed bivariate difference in online buying within (and among) metropolitan areas resulted from confounding factors.	Frequency: N
Ren and Kwan 2009	392 Internet users in Columbus, OH	Binary logit model	Online buying adoption	The number (area) of shops in 6.25 (10, 12.5, 15, 20, 25) minutes by car	Shopping accessibility had a negative influence on the adoption of online buying.	Adoption: E
Weltevreden and van Rietbergen 2007	3,074 Internet users that shopped at eight city center in the Netherlands, 2004	Multinomia l logit model	The adoption of online buying	The number of shops within 5-45 minutes by car and by bike	There is no significant difference in shopping accessibility among online buyers, online searchers, and non-e-shoppers.	Adoption: N

Notes
1. In the conclusions column, ID represents that findings support the innovation-diffusion hypothesis; E denotes that results favor the efficiency hypothesis; N means that no effects were found.
2. Farag et al. (2006a), Krizek et al. (2005), and Ren and Kwan (2009) were explicitly designed to test the hypotheses

Source: Cao et al. (2010).

To test these phenomena, Krizek et al. (2005) conducted a test that involved 740 adults from three cities in the United States. Through extensive chi-square tests, their research found that people living away from the CBD were more inclined to shop online. In other words, as people

were located further away from densely populated urban areas which by and large have a higher physical store count, so they were more likely to adopt online shopping. However, further multivariate tests helped Krizek (2005) and colleagues to conclude that spatial attributes did not have a significant influence on online shopping and that in actual fact, the intra-metropolitan and inter-metropolitan differences were attributed to confounding factors.

In a study conducted in the Netherlands, Farag et al. (2006) established contrasting results. They sampled 2190 internet users collected in 2001 and compared it to a sample of 1172 user collection in 1996. Geographic aspects considered included a group of dummy variables differentiated by street address density (from strongly urbanized to non-urbanized), and more importantly in the context of this research, shopping accessibility which is categorized as the number of shops within the driving distance of a specific time period. Consequently, these authors found that people living in highly urbanized areas have a stronger likelihood of purchasing online, and people with low shop accessibility are more inclined to shop more online. Krizek et al. (2005)'s finding supports the innovation-diffusion hypothesis and Farag et al. (2006) supports the efficiency hypothesis.

Using a sample of 392 internet users in Columbus-Ohio, literature by Ren and Kwan (2009) examined the impact of shopping accessibility on online shopping. Similar to Farag et al. (2006), shopping accessibility was measured by the number of shopping opportunities within the driving distance for a given time period. The binary logistic regression results showed that the area of shopping opportunities within 6.25 minute driving is negatively associated with online shopping. This result agrees with the efficiency hypothesis.

Although their initial hypothesis had no intention to, Weltevreden and Rietbergen (2007) coincidentally discovered the influence of spatial attributes when they investigated the impact of city centre attractiveness on online shopping. In their study, they controlled for shopping accessibility and eventually developed a multinomial logit model to predict the uptake of online shopping by individuals whom have access to different transportation modes. Their results indicated that shopping accessibility did not have an influence on the online shopping. Farag et

al. (2006) also examined the relationship between shopping accessibility and influence on online shopping. These authors managed to successfully compare online buying behaviours of American and Dutch. The United States sample constituted of 360 potential respondents from Minneapolis-St. Paul MN, urban area and the Netherlands sample consisted of 634 respondents from Utrecht (Farag et al., 2006). The authors found that shopping accessibility was not significant in the frequency model for both samples, and that the Dutch who had shorter travel times to store were more probable to shop online that those with longer travel times. As metropolitan areas are more inclined to have higher shopping accessibility, the latter finding seems to be in agreement with the innovation diffusion theory (Cao, 2009). Likewise, for Americans, shopping accessibility did not have a significant influence. However, the insignificance of accessibility for Americans may result in the geographic scale of measurement.

There have been few theories presented by several authors in the field of transportation as well as information and communication technology that suggest that online shopping interacts with travel behaviour in four ways; substitution, complementarity, modification and neutrality (Choo et al., 2007; Mokhtarian, 1990; Pendyala et al., 1991 & Salomon, 1986). Substitution means that a physical trip to bricks and mortar stores is replaced by online transaction (Tonn & Hemrick, 2004). Complementarity denotes that online shopping generates new demands for trips to stores. It is important to note that complementary effects can take at least four forms depending on the different shopping processes (Ren & Kwan, 2009). For example, an individual finds a product online and then buys it in a store, an individual orders a product online and collects it from a satellite store, an individual finds a product online, and travels to a store to experience it and then buys it online and finally, a product purchased online makes an individual travel to a store for accessories or related products (Corpuz & Peachman, 2003). Modification means that online shopping does not affect the amount of physical travel to stores but changes the characteristics of trips such as mode travel and timing (Ferrell, 2004). Neutrality denotes that online shopping is independent of bricks and mortar shopping (Ren & Kwan, 2009). In other words, an individual would not have bought a product if it were not available online, the online channel in actual fact represents an induced demand because of online information (Cao et al., 2010).

The debate of offline/online consumer purchase intention is largely influenced by geographical location (Edwards, Lee, & Ferle, 2009). Common considerations in the retail channel selection process include transportation costs when consumers use the offline channel and disutility costs when buying online (Forman et al., 2009). More specifically, these costs may be monetary costs of travel, the opportunity cost of time and/or inconvenience costs (Anderson et al., 2003). In contrast, consumers face a similar fixed cost when shopping online in the form of shipping cost, lack of immediate gratification or inability to access product quality (Forman et al., 2009). Thus consumers maximize their utility by choosing between the offline and online retailer's offline transportations cost to overcome geographical distance and online disutility costs (Edwards et al., 2009; Gould & Golob, 1997). All else equal, decreased accessibility and increase in transportation costs directly decreases the utility of purchasing from bricks and mortars, and therefore increases the likelihood that the consumer will buy from an online retailer (Cao, 2009).

3.3.3.3 Conceptualization of Geographical Distance

Edwards, Lee and Ferle (2009) described the impact of geographical distance as a multivariate dimension but only touched on physical dimensions that influence online geographical distance. The authors posed that geographical distance was a function of psychological distance and trust/familiarity of the online retailer. In other words, these authors proposed that an unknown online retailer elicits more psychological distance than does a known retailer and that when the retailer is known, there is no difference in the psychological distance reported for an unknown versus a known brand.

In subsequent research, Chocarro, Cortinas and Villanueva (2013) proceeded to build on the dimensions that impact geographical distance in online retailing, and established that the construct can be separated into three situational dimensions, namely; physical dimensions, time dimension and social dimensions. Physical dimensions refer to distance-to-store, store tidiness as well as clarity of website layout and are found to impact in both high and low involvement categories (Ren & Kwan, 2009). Zaichkowsky (1985) found that when it comes to distance-to-store, for example, the purchase of high involvement goods takes longer because consumers are more willing to travel further to ensure correct choice. The more untidy the store, the more likely

the consumer will purchase the desired product online; a choice which is also driven by website clarity (Du Toit, 2013). Purchases being considered 15 minutes before store closing time are also more likely to be made online (Chocarro et al., 2013). With regards to the effects of time-related situational dimensions, time-of-day-of-purchase and time pressures influence online consumer considerations pertaining to geographical distance (Corpuz & Peachman, 2003; Edwards et al., 2009; Tonn & Hemrick, 2004). Online shopping allows consumers greater independence by removing restrictions and enabling them to shop at any time of day or night (Schroder and Zaharia, 2008). In addition, busy consumers may decide to make purchases online rather than offline because of the time it saves Black et al. (2002) and enjoyment it provides (Huang and Oppewal, 2006). Finally, in terms of social dimensions, there is sufficient evidence that suggests that the presence of other people at the time of purchase has a positive influence. This kind of social support might reduce the uncertainty and perceived risk associated with the purchase process, thereby increasing the consumers' confidence in making the right decision (Borges et al., 2010).

With that mentioned, this study relies on the abridged interpretation of this construct presented by Du Toit et al. (2013). The adaptation of this construct into the context of this study will ensure content validity. According to Du Toit et al. (2013), geographical distance is adequately measured using a uni-dimensional construct that consists of three measurement instruments. Du Toit et al. (2013) acknowledged four questions, of which one was omitted, because the factor load was insufficient (less than 0.4). Thus, according to these authors, geographical distance is adequately measured by the three remaining questions that exceed the minimum required value of 0.4 and were retained. The measurement instruments are all structured using a five-point Likert scale, ranging from (1) strongly disagrees to (5) strongly agree.

3.3.4 Product Risk

Numerous studies validate the necessity of sensory modality for acquiring relevant production information and that it is, as a result, highly effective in influencing product evaluation Grohmann, Spangenberg, and Sprott (2007); Peck and Childers (2003) and consumer decision making (McCabe & Nowlis, 2003; Peck & Wiggins, 2006). However, in e-tailing, customers are deprived from actually touching a product prior to making a purchase decision. As a result of

this, online consumers are compelled to make their purchase decisions based on the visual attributes of products that are supplied by the e-tailer (Ho, 2014). Grohmann et al. (2007) have attested to the fact that the inability to physically interact with a product has proven to be a considerable salient reason why consumers remain hesitant to purchase products online. It is therefore imperative to comprehend how this variable is assessed by consumers as they engage in online shopping.

The increasing growth of online shopping means that more consumers have the ability to buy almost anything at any time and from anywhere (Colla & Lapoule, 2012). These consumers have to deal with the risks they perceive about the environment, the product, or the buying process (Ko, Jung, Kim, & Shim, 2004). Electronic commerce magnifies the uncertainties that are involved with any purchase process, leading to higher perceived risks (Bhatnagar & Ghose, 2004). For instance, consumers may be worried about purchasing products and services online because the transaction necessitates that they share their personal and financial information online whilst buying products that they cannot physically examine before a purchase (Brosdahl & Almousa, 2014). Thus, there are two types of risks relevant to online shopping. The first, which is the main concern of this study, is the consumers' inability to physically examine product. This need to physically examine a product varies depending on the product category and is more commonly referred to as product risk (Brosdahl & Almousa, 2014). The other perceived risk, to a lessor concern within the context of this study, arises due to the manner in which transactions are conducted over the internet. Data, which includes consumers' personal and financial information, is transmitted through open lines, leading to consumer fears that the data may be compromised (Molina-Castillo, Lopez-Nicolas, & Soto-Acosta, 2012). This type of risk is referred to as security risk (Bhatnagar & Ghose, 2004). Naturally, this category of risk is present whenever anyone makes a purchase online.

According to Forsythe and Shi (2003) who cites Taylor (1976), the notion of perceived risk has been extensively used to explain consumer behaviour. The authors denote that considerable research has examined the impact of risk on traditional consumer decision making. Forsythe and Shi (2003) also makes reference to earlier works of Cox and Rich (1964), who stipulated that consumers are apprehensive when they cannot be sure that purchases will allow them to achieve

their buying goals. Perceived risk, or product risk as in the context of this study, can thus be considered a function of uncertainty about the potential outcomes of a behaviour and possible unpleasantness of these outcomes. In fact, product risk has been reported as amongst the most commonly cited explanations for not shopping online (Dai, Forsythe, & Kwon, 2014). This uncertainty, caused by customers' inability to physically engage with product prior to purchase, suggests that product risk associated with purchasing online are likely to negatively affect online purchase intention (Bhatnagar, Misra, & Rao, 2000).

Product risk plays a fundamental role in consumer behaviour and makes a considerable contribution towards explaining information searching behaviour and consumer purchase decision making (Masoud, 2013). Product risk entails the perceived risk of not being able to get the full spectrum of a product thus running further risk of a consumer ordering something which will not meet their desired expectation (Bhatnagar et al., 2000). Product risk is significantly different in an online and offline context respectively (Du Toit, 2013). As eluded above, in the case of an online environment, there is a significant difference in that the tangible product attribute is non-existent. De Swardt and Wagner (2008) citing North et al. (2003), suggest that this is a crucial disadvantage in the online shopping environment. Furthermore, in the online environment, less product trust and greater product risk are expected due to the fact that there is no face-to-face interaction with the sales staff and the purchase is affected by security and privacy issues (Laroche, Yang, McDougall, & Bergeron, 2005). On the contrary, in a traditional offline bricks and mortar shopping environment, one of the offsets of costs and travelling time, and the possible inconvenience of physically going to the store, is the fact that the consumer is able to fully examine the product being purchased (Du Toit, 2013).

In an effort to better understand the effect of product risk on online purchase intention, it is important to consider product characteristics and incorporate a product classification into the commentary of the literature. According to Chiang and Dholakia (2003) who cites Nelson (1974), one common way to classify the products is search and experience goods. This author denotes that a "good" is defined as a "search good" when full information for dominant product attributes can be known prior to purchase. In contrast, an "experience good" is defined as when full product information on dominant attributes can only be known with direct experience and

information search for such attributes is more difficult than direct product experience (Chiang & Dholakia, 2003). In summary, experience goods need to be personally experienced whereas, a search good can be evaluated using external information acquired prior to purchase (Gudigantala, Bicen, & Eom, 2016). Thus, as a result of experience goods requiring personal inspection prior to purchase and such information generally being difficult to obtain online, it is likely that consumers' intention to shop online is lower for experience goods than search goods.

Finally, while product risk is imminent in the online shopping environment, in order to lessen the burden of having to make risky online decisions, consumers might use brand loyalty as a way of minimizing uncertainty of purchase or might rely on a money-back guarantee and other risk reduction strategies as a means of avoiding a financial loss in the case of purchasing failure (Overmars & Poels, 2015). Samadi and Yaghoob-Nejadi (2009) confirm fourteen risk reduction methods that may be employed by online shoppers based on their applicability to online shopping: store image, past experience, brand loyalty, information from friends/family, money back guarantee, price information, consumer reports, TV/print commercials, store recommendation, shopping around, visit/call local retailer, well-known brand, warranty quality and internet newsgroups. Although online shoppers rely on these strategies in various ways, they cannot replay the inability to physically examine a product when purchasing online. Therefore it is important to understand the influence and relationship of this variable on consumers online purchase intention as stated in the objective of this study.

3.3.4.1 Definition of Product Risk versus Operational Definition

Product risk falls under the greater scope of perceived risk. Thus, before product risk is defined, it is important to understand the underlining concept of perceived risk. The notion of perceived risk was first presented in the early 1960s by Bauer (1960), who found it to be a key determinant in consumer behaviour and a primary factor in influencing the conversion of browsers to buyers, Mitchell, (1992); Dowling and Staelin (1994) cited by (Brosdahl & Almousa, 2014). Bauer (1960) subsequently defined perceived risk as the degree to which a person expresses uncertainty about a service or good. Perceived risk has more recently been defined as the potential for loss in

purchasing a desired outcome while engaging in online shopping; it is a combination of uncertainty with the possibility of serious of outcome (Ko et al., 2004).

Several types of risk that consumers perceive can be identified: product/physical risk, financial risk, functional risk, social risk and psychological risk (Samadi & Yaghoob-Nejadi, 2009). Table 3.3 summarizes the different types of risks according to Jacoby and Kaplan (1972) categorization as citied in (Samadi & Yaghoob-Nejadi, 2009).

Table 3.3: Types of perceived risk

Type of risk	Buyers most sensitive to it	Purchases most subjected to it
Product/Physical	Risk capital consists of physical vigour, health, and vitality. Those who are elderly, frail, or in ill health are most vulnerable.	Mechanical or electrical goods (such as vehicles, flammables), drugs and medical treatment, food and beverages.
Convenience/Time	Risk capital consists of importance of time, convenience, and effort getting the product adjusted, repaired, or replaced. Those who have a scheduled, oriented life are most sensitive.	Concert, airline tickets, items that require high opportunity cost are most subject to this form of risk.
Financial/Monetary	Risk capital consists of money and property. Those with relatively little income or wealth are most vulnerable.	High-ticket items that require a substantial expenditure are most subject to this form of risk.

Functional/Product Performance	Risk capital consists of alternate means of performing the function or meeting the need. Practical consumers are most sensitive.	Products or services whose purchase and use require the buyer's exclusive commitment and preclude redundancy.
Social	Risk capital consists of self-esteem and self-confidence. Those who are insecure and uncertain are most vulnerable.	SociaIly visible or symbolic goods such as clothes, jewellery, cars, homes, or sports equipment are most subject to it.
Psychological	Risk capital consists of affiliations and status. Those lacking respect or attractiveness to peers are most sensitive.	Expensive personal luxuries that may engender guilt, durable goods, and services whose use demands self-discipline or sacrifice.

Source: Jacoby and Kaplan (1972).

Product risk is the risk type of interest in the context of this study. More particularly, the study seeks to intricately understand the influence and relationship of product risk to consumers' online purchase intention. Thus, product risk is associated with the product itself and its physical form. This risk is allied with the consumers' belief regarding whether the product would meet/function according to their expectations (Bhatnagar et al., 2000).

In the context of this study, product risk refers to the inability of a customer to physically interact with a product online and the associated "risk" involved in the online purchase. The study relies on the definition provided by Kim et al. (2008) to operationally define product risk. That is, product risk is the perception that a product purchased may fail to function as originally expected. In addition, product risk is as of a result of poor product choice based on the shoppers'

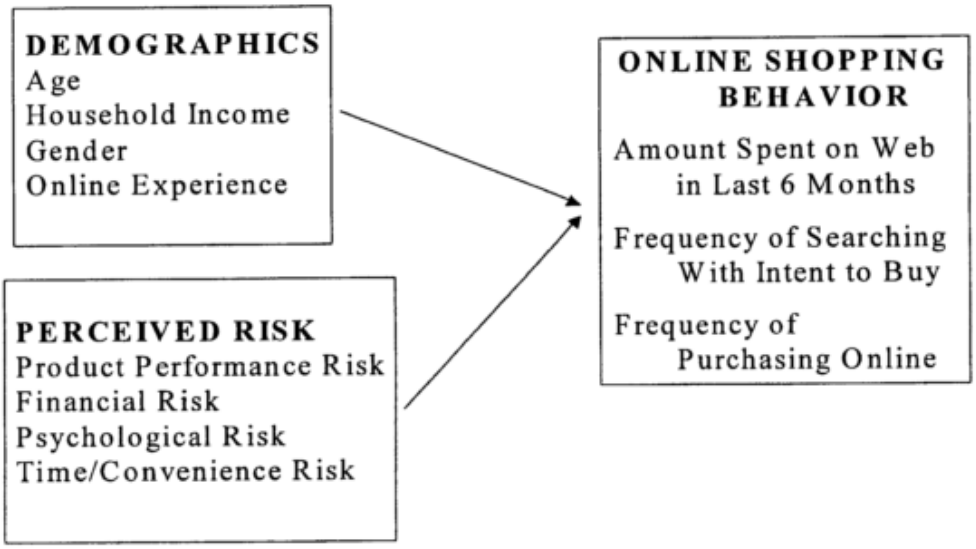
inability to accurately judge the quality of the product online (Bhatnagar et al., 2000). The ability to exactly judge the quality of the product online may be limited by barriers such as touching, feeling and trying the product, inaccurate product colours and descriptions, and insufficient information on quality attributes relevant to the consumer resulting in increased product risk (Forsythe & Shi, 2003).

3.3.4.2 Antecedents and Outcomes of Product Risk

Traditionally, research has addressed consumers' concerns over credit card problems and privacy that could result from shopping online (Hoffman & Novak, 1996). However, by the turn of the millennium, studies by Donthu and Garcia (1999) and Tan (1999) began to examine risk aversion among internet users, but no research examined the types of perceived risk associated with online shopping. The notion of perceived product risk, or as put by Mitchell (1999), "a consumer's subjectively determined expectation of loss" has been used to explain traditional shopping behaviour, in-home shopping behaviour such as catalogue shopping and the risks associated with each medium. However, product risk has not been applied to research that seeks to understand online purchasing behaviour (Forsythe & Shi, 2003).

A study conducted by Forsythe and Shi (2003) makes reference to the six components of risk identified by the likes of Jacoby and Kaplan (1972); and Peter and Tarpey (1975); and Schiffman and Kanuk (2000). In this study, the authors present research that investigated what they understood to be the most prevalent types of risk amongst online shoppers; financial risk, product performance, psychological, and time/convenience. Figure 3.11 below captures the conceptual model used in the research.

Figure 3.11: Conceptual model for the effect of types of risk and demographics on online shopping behaviour.



Source: Forsythe and Shi (2003).

The research conducted by Forsythe and Shi (2003) found that 39% of the respondents identified product risk (inability to judge quality online); 32% mentioned psychological risks (concerns with privacy); 23% cited financial risk (money risk regarding loss from credit card usage); and 20% mentioned concerns regarding time and convenience (product available faster and easier locally) as negative deterrents to shopping online. Overall, product risk was not only the most influential variable cited by internet users as a reason for not purchasing online but is also believed to impact online purchasing frequency (Forsythe & Shi, 2003).

More recently, Zhang, Tan, Xu, and Tan (2012) conducted a study that aimed to examine the dimensions of consumers perceived risk and investigate their influence on online consumers' purchasing behaviour. The study segmented perceived risk into eight dimensions and the findings showed that five of dimensions; perceived after-sale risk, perceived delivery risk, perceived time risk, perceived quality risk (product risk) and perceived health risk significantly affect consumers' purchasing behaviour. While the other three dimensions; perceived economic

risk, perceived social risk and perceived privacy risk are less relevant factors. It is important to note that not all the dimensions expressed by Zhang et al. (2012) are relevant within the context of this study. For example, perceived health risk is only relevant within the online purchase of fresh edible goods. Seeing as this study in taken from the perspective of a general merchandise retailer, perceived health risk, as a result would have no bearing in influencing online consumers' purchase intention. Similar to the findings of Forsythe and Shi (2003), Zhang et al. (2012) also recognize product as significant variable that influences online consumers' purchase intention.

Javadi et al. (2012) facilitated a study where they sought to analyse the factors that affect online shopping behaviour of consumers, and how perceived risks; non-delivery risk, convenience risk, financial risk and product risk impact the attitude towards online shopping. To investigate the hypothesis of the research, the authors dispersed 200 surveys among online stores in Iran. The respondents of survey were made up of randomly selected persons who had shopped online in Iran. The study found that non-delivery and financial risk negatively affected attitude towards online shopping and, interestingly identified no significant effect on convenience risk and product risk on consumers' attitude toward shopping online. These results are however contradictory to the findings of the authors previously mentioned above and thus begin to highlight the inconclusive research present to date with regards to the influence of product risk on online shopping.

Almousa (2011) also led research that studied the abovementioned six perceived risk dimensions. The study was undertaken in Saudi and focused on consumers who were shopping online for apparel merchandise. The results concluded that risk perception has a significantly negative influence on apparel online purchase intention. It will be interesting to see if this phenomenon remains prevalent within a general merchandise retail environment. Nevertheless, differences were identified amongst the different risk dimensions, especially where consumers perceive more performance and time risk in apparel online shopping. In addition, consumers perceived social risk and privacy issues with a lesser significance than time and performance risks on apparel in online shopping (Almousa, 2011). Research conducted by Kailani and Kumar (2011) took a slightly deferring approach in the investigation of the factors impacting online shopping and perceived risk. The authors encompassed the effect of the differences in consumer

characteristics impacting online shoppers in different countries and cultures. The research was conducted in three countries/cultures; Jordan, India and USA but did not discuss perceived risk at dimension level of detail. Therefore the results are only indicative of the potential behavioural pattern when it comes to product risk as a standalone dimension. The results illustrated that in cultures where uncertainty avoidance[2] is high, perceived risk with internet buying is equally high and this, as a result, impacts internet buying negatively (Kailani & Kumar, 2011). Also, in cultures where perceived risk is high, it impacts internet buying negatively.

Kim, Ferrin and Rao (2008) explored how risk and trust affect an online shoppers purchasing decision. Although risk, in the context of this study, is taken from a holistic point of view it does nevertheless give an indication of the potential behavioural pattern of product risk at a dimensional level of detail. The findings of the research showed that online shoppers' perceived risk and trust have significant influence on purchasing decisions. More particularly, the results of the research showed that trust has a strong positive effect on online purchase intention in addition to a strong negative effect on consumer's perceived risk. The study also provides evidence that a high perceived risk reduces the consumer's intention to purchase, whereas a perceived benefit has the opposite effect on consumer's purchase intention (Kim et al., 2008).

The results of a study steered by Samadi and Yaghoob-Nejadi (2009) showed that consumers perceived online shopping to be of higher risk than in-store shopping. A significant portion of this risk is driven by the previously mentioned attribute of consumers' incapability of engaging with product through touch and feel whilst shopping online. The results of the same study also showed that a more positive online shopping experience led consumers' less perceived purchasing risk level in the internet and a higher perceived risk led to future purchasing intention from the internet.

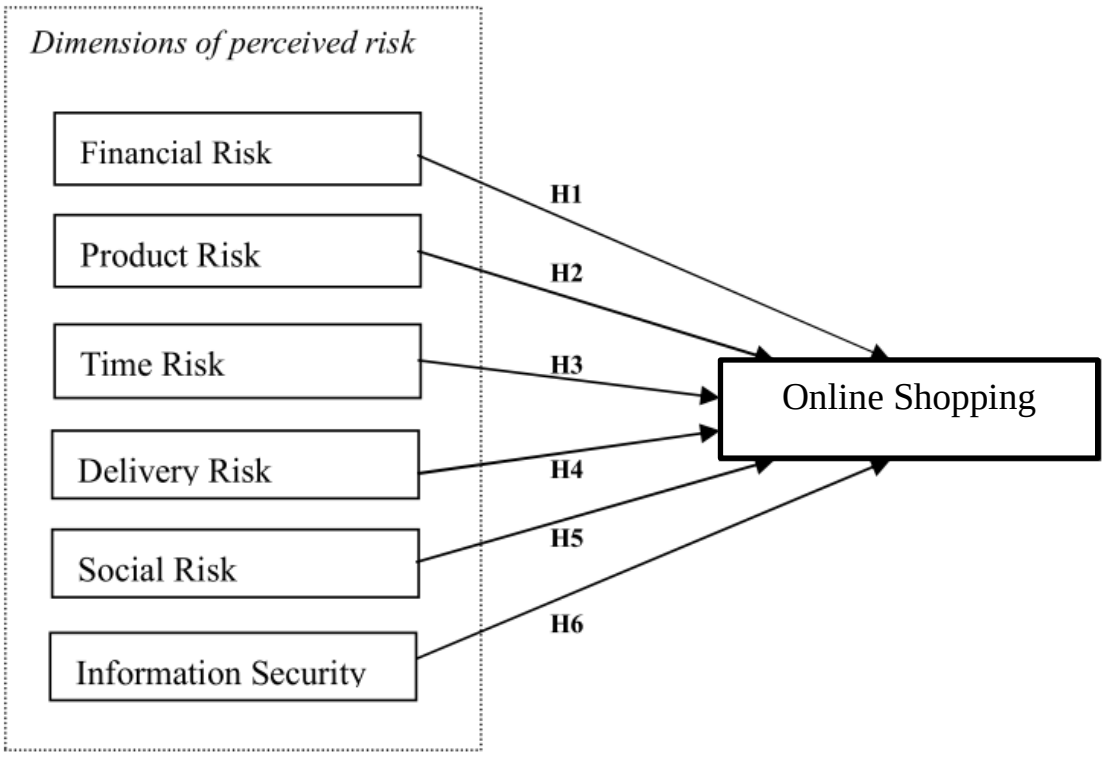
While compiling research that sought to develop a scale to measure the perceived benefits and risks of shopping online, Forsythe, Liu, Shannon and Gardner (2006) found that as shoppers

[2] Uncertainty avoidance is a society's tolerance for uncertainty and ambiguity. It reflects the extent to which members of a society attempt to cope with anxiety by minimizing uncertainty.

shopped online more frequently and spent more money online, naturally they perceived more benefits and less risk to be associated to shopping online. These frequent online shoppers are able to develop skills over time that enable them to leverage information quality to aid them make better purchase decisions online. According to Bhatnagar et al. (2000), as people mature through experience they learn more about the products in the marketplace and are able to form more confident opinions about what suits their likes and what does not. Since they know what they need in any given situation, they do not have to touch and feel (product risk) to be reassured that what they are purchasing is really what they need. This reduces the need for pre-purchase information search as consumers can substitute their knowledge capital for any lack of information (Soto-Acosta, Molina-Castillo, Lopez-Nicolas, & Colomo-Palacios, 2014). This knowledge capital should reduce the uncertainty involved with the purchase and consequently product risk (Bhatnagar & Ghose, 2004). Through online experience, they gain the confidence to choose products on their own initiative. Furthermore, perceived benefits are determined to be a positive predictor of future intention to purchase online, whilst increased perceived risk related negatively to future repurchase intention (Forsythe et al., 2006). These insights are hypothesized to be consistent within the case of product risk and it is one of the objectives of this research to uncover this.

More recent works by Masoud (2013) proposed a revised conceptual model that also encompasses six dimensions of perceived risk almost all very similar to those presented by Jacoby and Kaplan (1972); Peter and Tarpey (1975); and Schiffman and Kanuk (2000) but vary slightly. Figure 3.12 below illustrates the model used to examine the effect of perceived risk on online shopping in Jordan.

Figure 3.12: Conceptual model of the effect of perceived risks (financial risk, product risk, time risk, delivery risk, social risk and information security) on online shopping of Jordanian consumers.



Source: Masoud (2013).

The results of the research showed that H1[3], H2[4], H4[5] and H6[6] were significantly supported. Although financial perceived risk is not a variable of interest in this study, the findings of this study suggest that the fear of losing money and the necessity of disclosing credit card information has a negative effect on consumers attitude toward online shopping. This finding is consistent with the findings of Almousa (2011); Forsythe and Shi (2003); and Javadi et al. (2012). More pertinent to this study, Masoud (2013) conclusions on product risk were consistent with the findings from previous research by Forsythe et al. (2006); Javadi et al. (2012) where perceived product risk is a significant and important risk factor for not shopping online. Also it

[3] The perceived financial risk has a negative effect on online shopping.
[4] The perceived product risk has a negative effect on online shopping.
[5] The perceived delivery risk has a negative effect on online shopping.
[6] The perceived information security risk has a negative effect on online shopping.

was found that the fear of non-delivery, or delivery dependability as referred to within the context of this paper, has a negative influence on attitude towards shopping online (Masoud, 2013). It is further denoted that perceived delivery risk is a significant factor for affecting attitude and hence behaviour towards shopping online (Kailani & Kumar, 2011; Zhang et al., 2012). Accordingly, people are generally discouraged from shopping online because they do not have the confidence that the products they ordered will be delivered.

3.3.4.3 Conceptualization of Product Risk

Various types of risks have been discussed above including physical, product, convenience, and social risk to mention a few. In isolation, product risk, as well as the other types of risks such as those mentioned above, can be evaluated as an individual construct that may or may not consists of other dimensions. Du Toit et al. (2013) pose that product risk is a multifaceted construct that consists of two dimensions, namely; tangibility and uncertainty. Tangibility refers to the inability of consumers to physically examine product before purchase. Tangibility is also interchangeably referred to as "need for touch" (NFT) (Overmars and Poels, 2015). This dimension is measured using three instruments, whereas uncertainty refers to the level of confidence that consumers' will receive what they ordered and is measured using two measurement instruments (Du Toit., 2013). All the questions have sufficient factor loading and are characterized by a 5 point Likert scale ranging from (1) strongly disagrees to (5) strongly agree. Similarly, in the context of this study, the researcher relies on Du Toit et al. (2013)'s interpretation of product risk and only modifies the individual instruments to fit the context of the current study. By using this approach, this researcher maintains content validity within the measurement instruments.

3.3.5 Information Quality

It is commonly agreed amongst academics and practitioners that conducting an online transaction is vastly different from shopping offline (Molina-Castillo et al., 2012). Differences are acknowledged in terms of the increased sense of freedom and control when shopping online Molina-Castillo et al. (2012), product familiarity Wu, Cheng, and Yen (2012), access and

availability of product information Merono-Cerdan and Soto-Acosta (2007) and greater perceived risk (Chen, Shang, & Kao, 2009). There are three aspects that differentiate an electronic retailer from a brick and mortar store; firstly, the distance and time from one shop to another between stores is non-existent, the shopping environment is a virtual screen, and consumers have more control over the information they seek (Vila & Kuster, 2011). The ability of the internet to offer consumers around the clock access to endless amounts of information, lends to the probability that they would naturally expect to see a wider variety of products when shopping online (Du Toit, 2013). Shrivastava and Lanjewar (2011) suggest that increased product variety encourages consumers to shop online. Information quality is not limited to wider product ranges but is closely linked to extended product descriptions. It also refers to the accuracy, timeliness, adequacy and credibility of information exchange (Holmberg, 2000). Detailed product descriptions assist consumers in their decision making process. Furthermore, the level of information quality allows consumers to easily compare features and benefits of products online. Thus, good-quality information can act as a silent product salesman. Guo, Ling and Liu (2012) further validate the aforementioned statement by attesting to the fact that an increased product range is not only a key enabler of e-commerce but that a wider variety of product information makes e-tailers more successful.

Equally, the internet's ability to provide large amounts of information may be detrimental when there is information overload which affects consumer behaviour (Chang Lee, Gurrea, Orús, & Flavián, 2013; Gao, Zhang, Wang, & Ba, 2012). This phenomenon occurs when online shoppers are provided with an overwhelming amount of information in a short space of time, such that it exceeds their processing capabilities (Jackson & Farzaneh, 2012).The problem with information overload is that it causes consumer stress which, in turn, affects their productivity and decision making (Soto-Acosta et al., 2014). These authors further state that online uncertainty is easily caused by too little information as well as information overload and information disorganization. In contrast, Milan et al. (2015), citing Simon (1987) wrote that in actual fact people do not take all available information into consideration when choosing a product. Instead, they tend to focus just on what concerns them the most, selecting what is relevant and, consequently, reducing the overload of information. Hence online retailers need to ensure that they have the right recipe of comprehensive and valuable information for online shoppers to aid their decision making.

Yu and Roh (2002) posit that it is important to take into consideration how information is structured on websites selling products or services online. Online shoppers, in comparison to offline shoppers use their cognitive ability not only to understand information but also to navigate through the web (Chen, Teng, Yu, & Yu, 2016). Therefore, although how the information is organized on the website is independent from its meaning, it has important implications for information processing which, in turn, may influence decision quality (Lurie, 2004). De Andrés, Lorca and Martínez (2010) further add that another issue that may have significant effects on consumer behaviour is the organization of the information display. Excessive search complexity makes it difficult for customers to locate the needed information, thus negatively affecting customers; decision quality (Zha, Li, & Yan, 2013).

Customers are fundamentally changing the way in which they purchase; they access online websites, using smartphones and tablets to get information, compare products and prices and then find the best purchase option (Milan et al., 2015). The internet enables customers to search for different brands, products or services, compare prices, and read the opinions of other customers about their purchase experience from a given online retailer (Detlor, Hupfer, Ruhi, & Zhao, 2013). All of this can be done at any place and at any time. However, these benefits can quickly incur costs when the complexity and quantity of information available is greater than the bounded capability that the customer has to process information (Dabholkar & Sheng, 2012). Invariably, seeking for a product online does come with an associated cognitive "cost", that is, search costs, transaction costs and switching costs (Shih, 2012; Yen, 2010). The quality of website information is thus a factor of great importance in the evaluation a customer does about the online website, so-much-so that (Xu & Koronios, 2005) considered information quality to be a marketing tool to guarantee the smooth execution of transactions in online shopping.

3.3.5.1 Product Type

Under the notion of information quality it is important to be cognoscente of whether items purchased online are search products or experience products. As previously mentioned, increasing amount of information could be challenging to the limited processing capacity of

consumers. From this perspective, providing information to consumers may not guarantee better satisfaction (Gao et al., 2012). According to Nelson (1970) information economics studies suggest that a product can be classified by the degree to which pre-consumption search enables the consumer to evaluate the product. Search products are those dominated by attributes for which full information can be acquired prior to consumption, whereas experience products are dominated by attributes that are not known until the purchase and use of the product (Klein, 1998; Rose et al., 2012). Researchers have found that the quantity of information as well as the level of effort is greater for experience products than for search products (Huang, Lurie, & Mitra, 2009). Search attributes such as weight are easy to compare, diagnostic and objective, whereas experience attributes such as smell, look and feel are inherently subjective, characterized by equivocality and uncertainty are difficult to evaluate (Gao et al., 2012). More particularly, information about search attributes is typically presented in a straightforward manner and requires less time to process (Mudambi & Schuff, 2010). On the other hand, obtaining information about experience attributes involves effort such as inspecting products and reading consumer ratings (Huang et al., 2009).

In the context of this study, items searched online are generally search products that have subtle experience aspects. As an example, the aspects and attributes of a fridge or microwave can easily be compared online however; soft elements such as look and feel are experience components that need to be taken into consideration by customers. Hence, online information quality needs to be at a credible standard and it is important that general merchandise online retailers are consistently delivering on the two following questions;

1. Given the limited information processing capacity of consumers, what is an effective way of presenting product information to improve the quality of consumer decisions when purchasing online?
2. What kind of information contributes to this improvement on decision quality?

(Gao et al., 2012).

The ability of online retailers to harness and leverage the internet's ability to convey rich information to consumers quickly and easily is crucial to e-commerce success.

3.3.5.2 Definition of Information Quality versus Operational

Information quality refers to the undertaken evaluation and judgment that customers do about the information, which is categorized by the degree of accuracy, by the utility (relevance) of information available on the website and by how much information is really capable of informing (Cao, Zhang, & Seydel, 2005; Kim & Niehm, 2009). A more recent definition by Gao et al. (2012) refers to information quality as the information that is useful in helping customers evaluate products, more specifically, how much of the information available about the attributes of a brand or product is useful to customers.

The operational definition of information quality used in the present study is inspired from various researchers that suggested that information quality fundamentally comprised of the following key dimensions; understandability, Salaün and Flores (2001), coherence and comparability Miller (1996), consistency Ballou & Pazer (1982), timeliness Salaün & Flores (2001), accessibility Miller (1996); Salaün and Flores (2001), relevance Liu and Arnett (2000), accuracy, completeness, security and format (Liu & Arnett, 2000; Miller, 1996). In the context of this study, information quality refers to consumers' overall evaluation and judgment of the quality of information, assessed by the degree of timeliness, informativeness, accuracy, and relevancy of information provided by the online retailer.

3.3.5.3 The Importance of Online Information Sources on Information Quality

When making a purchase decision, research on consumer online information search proposes that there are various types of online information sources when searching for product information (Häubl & Trifts, 2000; Smith, Menon, & Sivakumar, 2005). Chen et al. (2016)

suggest that there are three online information sources that affect consumers' trust in online information quality and ultimately purchase intention. Hence it is equally important to understand sources of information and how they potentially influence information quality. The three sources of information (electronic word-of-mouth, or eWOM sources, neutral/third party sources, and manufacturer/retailers sources) are discussed further below.

3.3.5.3.1 eWOM Sources

Various authors including Berger and Schwartz (2011); Gruen et al. (2007); and Smith et al. (2005), agree that a significant amount of research suggests that consumers are likely to follow others when making purchasing decisions. Recent research has demonstrated that more and more consumers are being led by the need for social interaction when shopping online (Hill, 2014). One way in which this occurs, is when consumers are in the decision making process and feel the need to engage in product information search by reading other consumers' product, service rating and evaluations prior to purchase, through an online eWOM (Chen et al., 2016). For example, consumers can share product information with other potential buyers through their experiences via web forums and chat rooms, thus making it possible for them to actively share and facilitate their knowledge and experiences with each other (Bickart & Schindler, 2001; Dellarocas, 2003; Sweeney, Soutar, & Mazzarol, 2012). As the internet is becoming more successful in making information readily available from eWOM sources, consumers are increasingly finding product information that can impact online consumer purchase intention.

There are two proceeding schools of thought when it comes to the quality of information and credibility of eWOM source (Chen et al., 2016). Some researchers fiercely argue that the sharing and exchange of information amongst unknown people on the internet is untrustworthy and unreliable (Salaün & Flores, 2001; Xu & Koronios, 2005; Zha et al., 2013). As a result, it has less perspective to have an impact on consumer decision making (Mathwick, Wiertz, & De Ruyter, 2008). In contrast, other scholars Dillon and Reif (2004); Mayayise & Osunmakinde (2014); Zheng et al. (2013) suggest that customer-to-customer or C2C information is considered more relevant and credible than corporate information because it is less susceptible to commercial motives or bias such as increased profits or sales (Bickart & Schindler, 2001). Gruen

et al. (2007) adds that C2C information exchanges impact the overall perceptions of the value of a firm's offering. Depending on basis of the argument, using eWOM sources can either help consumers achieve a sense of security or loose trust when making a purchase decision (Chen et al., 2016). For instance, consumers may believe that other users have provided them with credible information regarding a product value or worth. Thus consumers will default to a safe purchase based on this advice as a means of avoiding risk and loss (Chen & Xie, 2008). Recent studies have shown that eWOM is greater for negative eWOM than for positive eWOM (Park & Lee, 2009). In this same vein, if a customer purchases a particular product online and this product satisfies the consumer's needs, consumers will most likely recommend that product to fellow consumers through online eWOM sources (Chen et al., 2016). It is therefore hugely important that online retailers make sure that their website information quality in not only reliable, but that it is also accurate, concise and credible (Overmars & Poels, 2015). eWOM can evidently be extremely influential in the online consumer decision making process.

3.3.5.3.2 Neutral/Third Party Sources

According to Senecal and Nantel (2004), product assessment websites such as consmerreport.org are considered to be fully operational third party websites. These sources particularly focus on providing consumers with information that includes product comparisons with reference to sales ranking, Chevalier and Goolsbee (2003), expert's opinions on product recommendations and relevant special reports (Senecal & Nantel, 2004). These so called third party sources are regarded highly by consumers since they facilitate consumers external search effort by decreasing search costs (Lynch & Ariely, 2000). While third party sources have the intention to provide consumers with an objective source of information, some scholars posit that websites may have underlying commercially bias agreements that cause them to mislead consumers into making partial decisions (Steckel et al., 2005). Consumers frequently disrepute recommendations from third party source if they suspect that there are non-objective affiliations or incentives to recommend a product (Folkes, 1988).

Equally, other scholars argue that online product information sourced from neutral/third parties is more influential than that which is sourced from less independent websites such as

manufacturers and retailer websites (Lynch & Ariely, 2000). In other words, online product recommendations that originate from neutral/third parties is perceived as being more useful in terms of providing accurate information. Many consumers are willing to search for information from neutral/third party sources to negate the uncertainty they may feel toward information from manufacturers/retailers (Chen et al., 2016). Consumers ability to source product information at will from various sources affirms the necessity for online retail information quality (Javadi et al., 2012). Thus, information quality can easily determine the success or failure of a website by ultimately determining consumers online purchase intention.

3.3.5.3.3 Manufacturer/Retailer Sources

Finally and perhaps most importantly, manufactures and retailers are central sources of information themselves. Consumers who seek product information from manufacturer/retailer are generally interested in gaining objective and factual information about the attributes of the product or service (Chen et al., 2016). Relying on manufacturer/retailer source provides consumers with the most extensive and timely product information about a particular product and supplements the decision making process (Steckel et al., 2005). For example, consumers can use online retailers' websites to find several product substitutes and then use search engines to locate the ideal product option (Chevalier & Mayzlin, 2006). Furthermore, consumers visiting a manufacturer's/retailer's website can also extensively review write-ups about products from other consumers so that they can make an impartial decision (Ellis-Chadwick, 2010). Thus, product information from a manufacturer/retailer acts as an extrinsic cue that consumers find reliable in order to identify potential alternatives and form their respective product attitude.

Information from manufactures/retailers has two distinct tasks, firstly it is very helpful in the consumer's decision making process and secondly, it increases the loyalty of consumers who have been successfully attracted to the firms offering (Srinivasan, Anderson and Ponnavolu, 2002). Some scholars have indicated that offering complicated information about various alternatives, in addition to providing data related to the product features, prices and quality ratings may be overwhelming for consumers and may even postpone or deter purchase altogether (Steckel et al., 2005). Conversely, other researchers argue that although the information from a

manufacturer/retailer source is at times too complicated, consumers are capable of simplifying the vast amount of information when perusing the website (Chen et al., 2016). In essence and similar to eWOM and neutral/third party sources of information, manufacturer/retailer websites as a source of information have a fundamental importance and determinacy to information quality. Thus, as per the operational definition for information quality used in this study; online retailers who are concerned with maintaining a credible level of information quality should ensure that their websites are well kept in terms of understandability, coherence, comparability, consistency, timeliness, accessibility, relevance, accuracy, completeness, security and format.

3.3.5.4 Antecedents and Outcomes of Information Quality

Earlier, within the subject of information quality, two fundamental questions were raised by Gao et al. (2012) that sought to provide online retailers with practical guidance on how to deliver information effectively improve customers trust on products, that is:

1. Given the limited information processing capacity of consumers, what is an effective way of presenting product information to improve the quality of consumer decisions when purchasing online?
2. What kind of information contributes to this improvement on decision quality?

According to Gao et al. (2012) who cites Bawden (2001); Jacoby (1977); Keller and Staelin (1987), two streams of research have attempted to answer the respective questions. One concerns the application of information processing theory (IPT) to explore how much quantity and quality of information affect the quality of information. The other stream concerns the application of unconscious thought theory (UTT) to explore how information is processed unconsciously (Dijksterhuis & Nordgren, 2006). Although these theories originate from different fields, their core assumptions and ultimate goals are the same. Amongst commonalities are that both the theories recognize human limitation in terms of information processing capacity and explore how to improve consumer decision making quality under this limitation (Gao et al., 2012). In

addition, in online shopping, although the internet allows retailers to present an abundance of information, products are usually dominated by information attributes that are difficult to process, making purchasing products online a complex task (Gao et al., 2012). It is therefore necessary to consider literature on both theories in effectively investigating information quality and its impact on consumers' online purchase intention.

3.3.5.4.1 Information Processing Theory (IPT)

Gao et al. (2012) citing Simon (1955) suggests that when consumers make a decision about purchasing a product or service online, they must examine three decision making criterions including intelligence, design and choice. In the intelligence stage, the consumer recognizes the problem and gathers information (Simon, 1955). In the design stage, the problem is simulated through formed criteria and various alternative solutions are subsequently identified (Bawden, 2001). Finally, during the choice stage, consumers choose the best available alternative that meets the set criteria and makes the decision (Simon, 1955). Although researchers have created various methods that can improve the interpretation of information, such as vivid presentation (Speier, Vessey & Valacich, 2003), there is still a shortage of information concerning how to help consumers to integrate their needs with information quality.

As noted above, humans have a limited information processing capacity that is between 5 to 9 chunks Miller (1956) cited by (Gao et al., 2012). Thus, complex tasks can quickly become confusing and as a result restrain consumers' ability to process, respond and perceive information (Schick, Gordon, & Haka, 1990). This effect of online shopping may in actual fact lead consumers to focus narrowly on a subset of information whilst ignoring other information which may be relevant, resulting in suboptimal purchase intention (Tan, Yi, & Chan, 2008; Turetken & Sharda, 2004). Gao et al. (2012) posit that effective information processing is dependent on the quality and quantity of the information and how the information is processed, among other things. Consequently, the strategies that researchers have chosen to improve information processing efficiency include improving the quality of the information Allert (2001); Simpson & Prusak (1995), exploring decision-support systems (Cook, 1993) and introducing specific goals (Baldacchino, Armistead & Parker, 2002; Chervany & Dickson, 1974). The

achievement of these goals should increase the trust and satisfaction of decision making; however, their success has been limited thus far.

3.3.5.4.2 Unconscious Thought Theory (UTT)

More recently, a dual-process theory has been presented that attempts to provide a solution to the consumer processing problem (Gao et al., 2012). As discussed above, researchers currently acknowledge two distinct approaches of information processing: conscious thought and unconscious thought (Evans, 2008). Under conscious thought, one is deliberately aware of the task, whilst unconscious thought refers to cognitive and/or affective task-processing that takes place outside conscious awareness (Dijksterhuis, 2004). Unlike intuition, which is more random and unpredictable, unconscious thought is a goal-orientated process used to solve problems and includes the ability for an individual to return to the original task after the distraction (Bos, Dijksterhuis, & Van Baaren, 2008; Dijksterhuis & Nordgren, 2006). Consequently, the unconscious thought theory can be seen to be effective in the improvement of consumers' limited information capacity and thus can positively influence consumers' online purchase intention.

Each thought mode applies to a particular circumstance. Often information processing theories assume conscious thought only which suggests that people are systematic information processors and are unable to deal with complex task such as sifting through exorbitant online content (Allert, 2001; Keller & Staelin, 1987). Researchers have found unconscious thought to be more unsystematic and unpredictable than conscious thought, thereby leading to poor decision making (Dijksterhuis & Nordgren, 2006; Simon, 1955). The UTT proposes that unconscious thought can deal with a combination of information better than conscious thought because of its large processing capacity and its ability to better organize information (Dijksterhuis & Nordgren, 2006). This suggests that consumers who unconsciously shop online are more inclined to be able to process more information than those who have pre-purchase product information. Hence the fundamental mechanism of UTT is defined by the capacity principal, which states that unconscious thought, unlike conscious thought, is not constrained by low processing capacity and, consequently, can deal better with complex, information intensive websites (Dijksterhuis & Nordgren, 2006).

Conscious thought follows a top-down principal, thus consciousness is better at filtering irrelevant information and reaching a specific goal. As a result, when consumers perform conscious thought, there may already exist a pre-dominant image of the product prior to purchase, at which point the mind rules out unsuitable alternatives (Dijksterhuis & Nordgren, 2006). However, this process often results in compromise as the pre-dominant product image can hardly be realized. This variation in product aspiration versus product reality can further cause a negative effect on consumer trust and satisfaction (Gao et al., 2012). Unconscious thought, on the other hand, works bottom-up. This means that there can be no bias prior to examining all available product information. Information quality in this instance is paramount in influencing consumers online purchase intention. Unconscious thought effectively integrates every piece of information into better segments which helps consumers make more informed decision (Evans, 2008).

3.3.5.4. Antecedents of Information Quality Continued

Some researchers such as Chen et al. (2009), have shown that a large quantity of information plays a positive role in consumers online purchase intention. While other studies have found that an excessive amount of online information can decrease processing efficiency due to information overload (Eppler & Mengis, 2008; Reutskaja & Hogarth, 2009). It is important to note that the quantity of information is primarily defined by two dimensions: the number of choices and the amount of information per choice (Chen et al., 2009; Jacoby & Kaplan, 1972). The performance, which is sometimes referred to as the quality of decisions of an individual, initially correlates positively with the amount of information he or she receives however up to a certain point (Eppler & Mengis, 2008). When the numbers of alternatives increases and when the number of attributes per alternative increases and surpasses the processing capacity of the consumer, the choice accuracy decreases, implying a “bell-shaped” relationship between decision quality and information quantity (Malhotra, 1982; Paul & Nazareth, 2010).

Whilst there are opposing arguments with relation to whether information quantity affects consumers online purchase intention, Park and Stoel (2005) are of the opinion that the quantity

of information available in online retailer websites is not a determinant factor for purchase decision. According to these authors, such result can be attributed to the fact that customers are not able to deal with a great quantity of information, considering that the excess of information may not be processed and part of the information may be lost, due to the bounded capability of people in processing too much information. For this reason, Park and Stoel (2005) posit that information quality that is understood by how much it is detailed, easy to find and understand, is more relevant than quantity.

Poor information quality can lead to information overload (Fanoberova & Kuczkowska, 2016). In other words, online retailers who have unwarranted product information which, worse is even irrelevant, can discourage customers from shopping online (Kim & Niehm, 2009). A study that consisted of simulating an e-storefront in which 224 graduate and undergraduate students participated found that rich information leads to information overload, while information filtering tools and online experience were found to reduce the phenomenon of information overload (Chen et al., 2009). Parra and Ruiz (2009) conducted an experiment that simulated the purchasing of a product in an online store to analyse the effects of the use of a search tool and information load on the characteristics of consideration sets. They found that both effects were significant and their interaction effects showed that search tools enhance their effectiveness in high information load settings. Thus it is expected that online information disorganization to be negatively associated with purchase intention.

3.3.5.5 Conceptualization of Information Quality

Zheng, Zhao and Stylianou (2013) discuss information quality as a multifaceted construct that consists of six dimensions. These dimensions are reliability, objectivity, value-added, timeline, richness and format. In order to increase content validity, whenever possible, Zheng, Zhao and Stylianou (2013) adopted instruments from prior studies using a 5 point Likert scale. Each of the six dimensions consists of set of individual instruments.

On the other hand, Cao, Zhang and Seydel (2005) successfully use a less complex construct to examine information quality. The authors present a multi-dimensional construct that identifies two major dimensions to information quality. These have been described as information accuracy and information relevance (Cao, Zhang & Seydel, 2005). According to these authors, information accuracy pertains to the accurate, informative and updated information available on websites. Cao, Zhang and Seydel (2005) use a set of six instruments to measure this construct. Information relevance on the other hand, refers to the extent to which the information on the web site is related to the information needs of the customer. Again, Cao, Zhang and Seydel (2005) use a set of questions, two in this instance, to measure information relevance. Respondents were asked to use a 7 point Likert scale ranging from (1) strongly disagrees to (7) strongly agree. This study adopts the same set of instruments in order to measure information quality within context. Minor tweaks were made in the wording without compromising the content validity. Consistent with the other constructs of the overall study, a 5 point Likert scale is used ranging from (1) strongly disagrees to (5) strongly agree.

3.3.6 Online Shopper Satisfaction

Online shopping satisfaction has recently gained increasing attention in marketing literature (Chen et al., 2012; Zhang & Srisutto, 2015). Consequently, more researchers are becoming interested in investigating the attributes that influence website user satisfaction in order to gain insights into the profitability of e-tailers (Evanschitzky et al., 2004; Kim, Ma, & Kim, 2006; Szymanski & Hise, 2000). For e-tailers that are selling their products online, internet users are their main target market for their products and services. The challenge for these online retailers is whether or not they can convert their potential customers into purchasing ones and retaining them depends, to a very large extent, on the services they offer and the satisfaction that consumers perceive to gain (Ho & Wu, 1999). Thus, in this virtual business environment customer satisfaction is of course a critical issue in the success of any business system, irrespective of whether it is traditional or online (Alam & Yasin, 2010).

Customer satisfaction is the critical outcome of meeting a consumer's expectation from the performance of products (Kuo & Wu, 2012). Generally, satisfied customers have the intention to

re-purchase the products if product performance met their expectation (Jiradilok et al., 2014). In the study of consumer behaviour, customer satisfaction is amongst the most core constructs both in a traditional and online business environment (Alam & Yasin, 2010). Online shopping satisfaction is characterized by the level of feeling obtained by customers after evaluating and experiencing or consuming certain products (Giese & Cote, 2002). It is therefore reasonable to accept that in an online environment, improving the website performance is another way customer satisfaction can be achieved. In fact, websites have various facets that can be improved in order to meet customer satisfaction which directly influences on purchase decisions (Dharmesti & Nugroho, 2013). If customers are satisfied with their online shopping experiences, repurchase will most likely take place from the same online shop (Li & Zhang, 2002).

It is important to bear in mind that while overall satisfaction is concerned with consumers' post purchase evaluation of the total product/service experience, attribute satisfaction is concerned with evaluations of specific aspects of the product or service (Abdul-Muhmin, 2011). The respective satisfaction attributes in question within this study are data charges, delivery dependability and geographical distance. Product risk and information quality are similarly recognized, although indirectly, as variables that influence online shopping satisfaction through the mediating variable of trust. Building on this, Chiu, Lin, Sun, & Hsu (2009) posited that positive experiences with online shopping are likely to affect customers' sense of trust. Chen & Chou (2012) have further demonstrated that trust has a positive effect on customer satisfaction. According to Oliver (1993), attribute satisfaction is the consumer's subjective satisfaction judgment resulting from observations of attribute performance. This distinction implies that a consumer may be satisfied/dis-satisfied overall with a product or service and yet still be satisfied/dis-satisfied with certain aspects or attributes of it. As a result of this inquisition to online shopping satisfaction, researchers are attempting to not only identify but to also better understand the characteristics that affect customer evaluation and satisfaction (Szymanski & Hise, 2000; Zeithaml et al., 2002) as well as those that affect marketing performance and e-tail success (Weathers & Makienko, 2006)

3.3.6.1 Importance of Online Shopping Satisfaction

Understanding the attributes that influence consumer online shopping satisfaction is among the critical success factor for e-tailers (McKinney, Yoon, & Zahedi, 2002). More and more online retailers are attaching greater importance to customer satisfaction (Mihelis, Grigoroudis, Siskos, Politis, & Malandrakis, 2001). From a global perspective, sustainable long term growth and profitability of any business are strongly related to the customer satisfaction and customer loyalty (Reichheld & Schefter, 2000). In the early 21st century, Rose (2001), cited by Chen et al. (2012) asserted that approximately 37% of online retailers revenue comes from repurchasing customers. Thus the concept of customer satisfaction occupies a considerable position in marketing thought and practice. Customer satisfaction is important to the individual consumer because it reflects a positive outcome from the outlay of scarce resources and/or the fulfilment of unmet needs (Chang, Chou, & Wen-Chien, 2014).

Customer satisfaction is when products and services meet the expectation of the consumers (Jiradilok et al., 2014). It is very important that consumers are content with the products and services provided by the particular online retailer as satisfied customers are likely to revisit the website (Ha, 2012). Satisfaction is one of the most important customer reactions in online shopping and its significance is reflected in the ability to help build customer loyalty Anderson & Srinivasan (2003), lead to repeat purchases Reibstein (2002), enhance favourable word of mouth Bhattacherjee (2001) and improve the company's market share and profitability (Reichheld & Schefter, 2000). Identifying online customer satisfaction serves as a mediator in the relationship to a myriad of online purchase drivers such as website design, usability and privacy, security; shopping factors such as convenience, delivery and trust; product factors such as merchandise and product customization, product value and customer loyalty (Cheung & Lee, 2000). While the list of possible drivers is endless and is also dependent on the positioning and objective of the online retailer, one fact that researchers commonly agree on is that a satisfied customer is more likely to return Lee, Choi and Kang (2009), making online satisfaction not only a key factor that affects consumers online purchase behaviour but also an important factor of building customer loyalty. Additionally, customer satisfaction has been found to have a direct and positive effect on customer purchase intentions and repeat behaviour (Chiou & Pan, 2009; Tsiotsou, 2006).

Although a significant amount of global research has been done with regards to online customer satisfaction, there is still a need for closer examination of customer satisfaction in specific countries. All sorts of businesses from established, new to large and small scale are now using the internet as a medium of sales of products and services (Alam & Yasin, 2010). Still, there is a huge research gap in literature that talks to developing countries which differ significantly to those which are developed (Spanos, Prastacos, & Poulymenakou, 2002). This limits the generalization of research result from developed countries to that of developing country context (Clarke, 2001). Hence it is important that online customer satisfaction, its drivers and overarching influence on online consumers purchase intention is studied from the context of a developing country such as in the objectives of this study.

3.3.6.2 Definition of Online Shopping Satisfaction versus Operational Definition

A review of the existing literature shows extensive variations in the definitions of satisfaction. Moreover, the inconclusive definitions limit the contribution of consumer satisfaction research. Starved of a uniform definition of satisfaction, researchers are unable to select a suiting definition for a given context, develop valid measures of satisfaction, and/or compare and interpret empirical results (Giese & Cote, 2002). However, Giese and Cote (2002) were able to capture this variety and reconcile their definition of satisfaction as "a summary affective response of varying intensity with a time specific point of determination and limited duration directed toward focal points of product acquisition and consumption". Their definition is reasonable, although, in the online context, satisfaction is conceptualized as the consumer's emotional reaction to a particular online shopping experience (Ha, 2012). Various authors have hypothesized on what are the common attributes that influence online shopping satisfaction. Among these authors are Evanschitzky et al. (2004); Szymanski and Hise (2000), who included convenience, service information, service offerings, site design and safety as key factors that influence online shopping satisfaction. This study builds on these assumptions by proposing additional attributes; data charges, delivery dependability and geographic distance as drivers of online shopping satisfaction.

Literature on customer satisfaction confirms that the most direct determinant of satisfaction is expectation, followed by perceived performance (Kim, 2005). According to Parker & Mathews (2001) the value percept theory describes satisfaction as an emotional response triggered by a cognitive evaluation process. However, earlier concepts define satisfaction as an evaluation judgment that relates to a specific purchasing decision (Oliver, 1997). Though, Swan & Combs (1976) were amongst the first authors to argue that satisfaction is in actual fact associated with performance fulfilling expectations, while dissatisfaction happens when performance falls beneath expectation.

Traditional models that attempted to define satisfaction implicitly assumed that customer satisfaction is a consequence of cognitive process, while more recent conceptual developments posit that effective processes may also contribute substantially to the explanation and prediction of consumer satisfaction Westbrook and Oliver (1991) as cited by (Maditinos & Theodoridis, 2010). Kotler (2009) on the other hand, states that satisfaction is a person's feelings that stems from either contentment or disappointment resulting from the comparison of a products perceived performance in relation to his or hers expectation. Anderson and Srinivasan (2003) substantiated Kotler's point of view by adding that even in the e-commerce context, satisfaction is defined as the contentment of the consumer with respect to his or hers previous purchase experiences with an e-tailer.

Overall satisfaction is generally defined as "an affective state that is the emotional reaction to a product or service experience" (Spreng, MacKenzie, & Olshavsky, 1996). It also has been described as an overall evaluation of performance based on all experiences relating to a product or service with an online retailer, Jones, Mothersbaugh, and Beatty (2000) and as the overall level of customer contentment and pleasure resulting from experience with a product or service (Hellier, Geursen, Carr, & Rickard, 2003).

The operational definition of online shopping satisfaction for this study takes from the following; although it is evident that literature contains significant differences in the definition of

satisfaction, the various definitions share common elements. When scrutinized as a whole, three general aspects can be identified:

1. Consumer satisfaction is a response (cognitive or emotional).
2. The response pertains to a particular focus (experience, consumption, product or expectations).
3. The response occurs at a particular time (after consumption, based on accumulated experience, after choice and so on).

(Pappas, Pateli, Giannakos, & Chrissikopoulos, 2014).

Against this backdrop, online shopping satisfaction is operationally defined within the context of this study as the customer's perception of a pleasurable fulfilment in a product or service (Moon, 2013). Online customer satisfaction will be a function of perceived quality and confirmation judgment if the perceived quality matches repurchase expectations (Kärnä, 2014). In addition, online shopping satisfaction will be acknowledged when a customer's perceived performance is greater than the norm (Abdul-Muhmin, 2011).

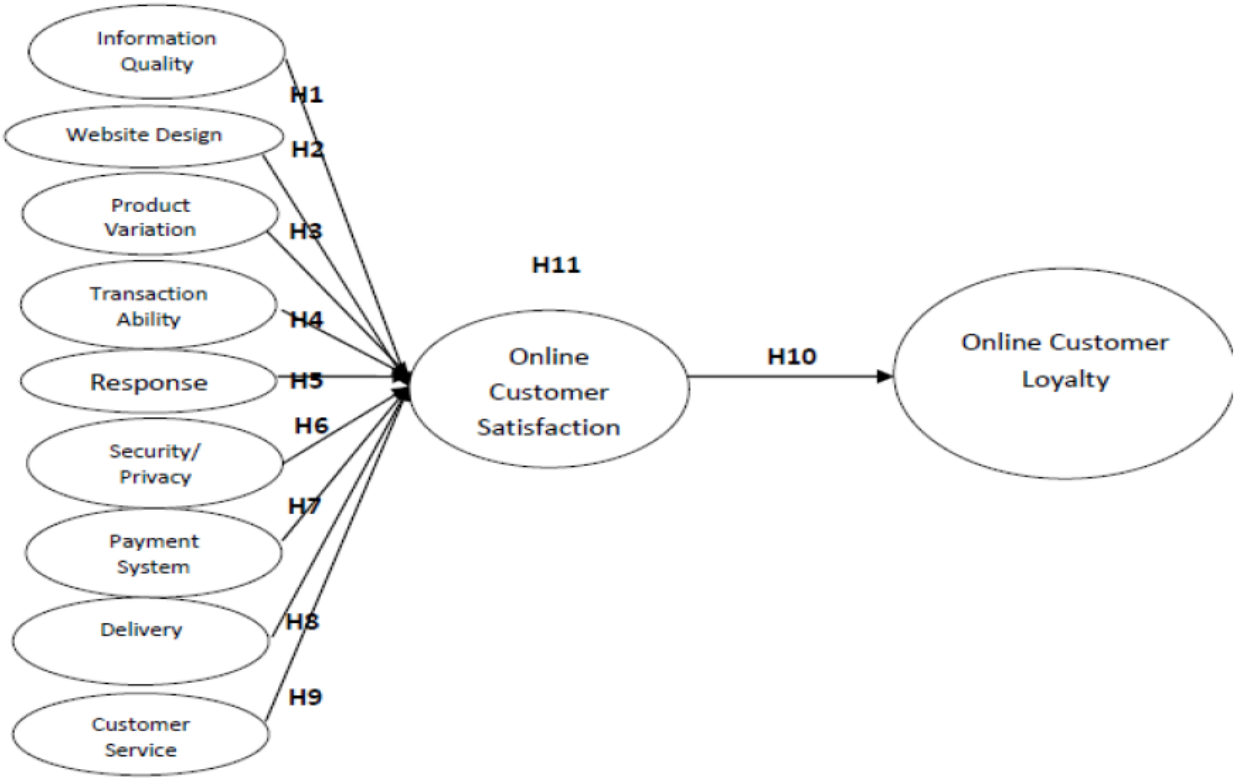
3.3.6.3 Antecedents and Outcomes of Online Shopping Satisfaction

Earlier research by Oliver (1980) focused around the antecedents and consequences of satisfaction, suggested a model that described customer satisfaction as a function of expectation and expectancy disconfirmation. The results from this study found that satisfaction significantly affected customers' attitude and their intention to purchase (Ho & Wu, 1999). Churchhill and Surprenant (1982) performed an experimental study that urged disconfirmation as an intervening variable affecting satisfaction. However, the effect of the disconfirmation is effectively captured by perceived performance and expectation. A study conducted by Bearden and Teel (1983) several years later, likewise studied the identical subject. These authors facilitated research that saw the experiences of 375 members of a consumer panel, used to examine the antecedents and consequences of customer satisfaction. The results of the study were consistent with those proposed by Oliver (1980) in that expectations and disconfirmation are appropriate determinants

of satisfaction. Another study by Tse and Wilton (1988) built on the results proposed by Churchill and Surprenant (1982), and investigated customer satisfaction formation. Results of a subsequent laboratory experiment revealed that performance exerted a direct significant influence from subjective disconfirmation and expected performance. It is important to note that these earlier studies were based on tradition retail stores and that there is doubt whether these studies bare the same conclusions for an online shopping perspective.

More recent studies (Hellier et al., 2003) have, through empirical research, found that satisfaction is positively related to repeat purchase intention. Similarly, in the online context, a positive link between online shopping satisfaction and repeat purchase intention has been found by Anderson and Srinivasan (2003) and Hellier et al. (2003). Liu et al. (2008) posited that information quality determines online customer satisfaction. These authors contest that information assists consumers to make purchase decisions. The more information available, the more it is hypothesized to lead to better consumer buying decisions and will lead to a higher online shopping satisfaction (Szymanski & Hise, 2000). Liu et al. (2008) further suggested eight other attributes that influence online shopping satisfaction that include; website design, variety of products, transaction capabilities, website response, security/privacy, payment system, as well as management of post-purchase customer service and delivery. Their proposed research model is illustrated below, figure 3.13.

Figure 3.13: The antecedents of online customer satisfaction and customer loyalty research model



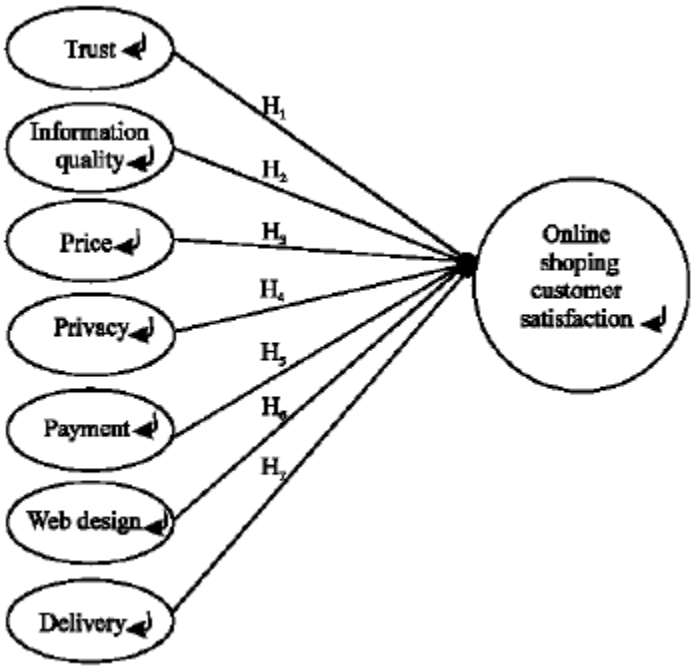
Source: Liu et al. (2008).

Some of these attributes such as information quality and delivery are discussed within the context of the current study and are modelled as part of the research conceptual framework, whilst others are less relevant or have been explored extensively in previous literature. Liu et al (2008) propose the two following hypotheses with regards to two predictor variables related to this study;

- H1: The higher level of information quality will give a significant on customer satisfaction online store.
- H8: The good delivery management will give significant effect on online customer satisfaction

A study conducted by Chen et al. (2012) years later, proposed similar constructs to those presented by Liu et al. (2008). Refer to figure 3.14 below.

Figure 3.14: Antecedents of online customer satisfaction in China proposed conceptual framework.

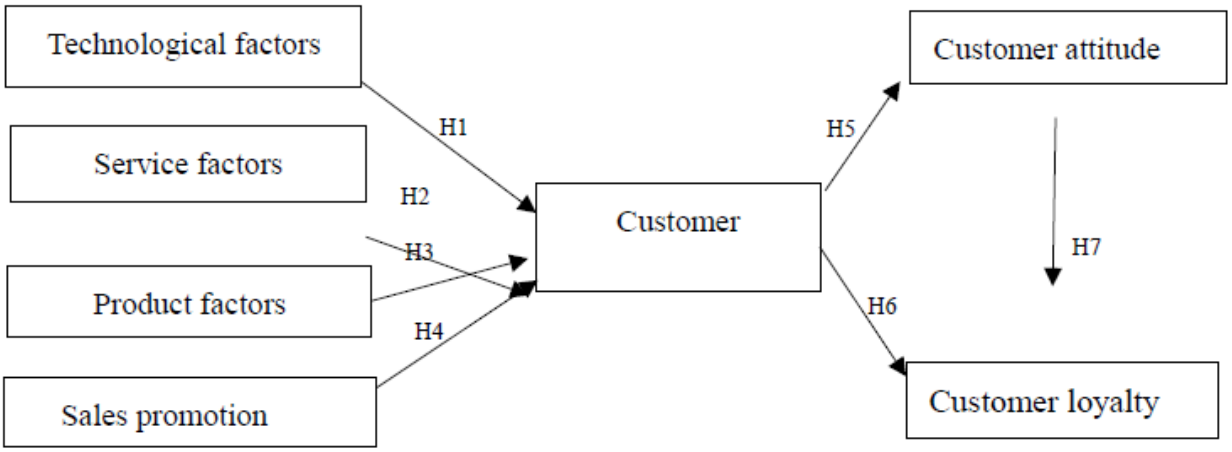


Source: Chen et al. (2012).

Both research frameworks presented by Liu et al. (2008) and Chen et al. (2012) explore various drivers of online shopping satisfaction. However, common to both these frameworks as well as the current research is information quality as well as delivery. It will be of interest to establish if there are consistencies/inconsistencies in findings between the common variables stated by Liu et al. (2008) and Chen et al. (2012) and those which are stated in this study. However what is evident through previous literature is that several researchers agree and propose that there is a relationship between information quality and delivery with online shopping satisfaction. As such the hypothesis for this study is academically sound.

Online customer satisfaction has also been known to be grouped into four distinct categories. According to Cheung and Lee (2005), these categories include product factors, service factors and technological factors; and sales promotion (Yang & Sandow, 2010). Each of the four categories and their relation to online shopping satisfaction is elaborated upon below. Refer to figure 3.15 below.

Figure 3.15: The relationship among customer satisfaction, customer attitude, and customer loyalty towards online shopping.



Source: Zhang and Srisutto (2015).

Product factors include product associated features such as product customization, product value and product range (Park & Kim, 2003). Increased product range is likely to increase the probability of customer needs and meet the customers' satisfaction (Dharmesti & Nugroho, 2013). Online shopping offers customers the option of product customization, the more convenient it is to find product online, the more pleased consumers are with the experience of purchasing product from online retailers (Chen & Chou, 2012). In the context of this study, product risk and information quality are similarly adapted under the umbrella of product factors such as in the study presented by Zhang and Srisutto (2015). That is, a customer's inability to physically interact with a product prior to an online purchase (product risk) and the depth and accuracy of website information (information quality) is hypothesized to influence online shopping satisfaction based on whether the product meets the customer's expectation.

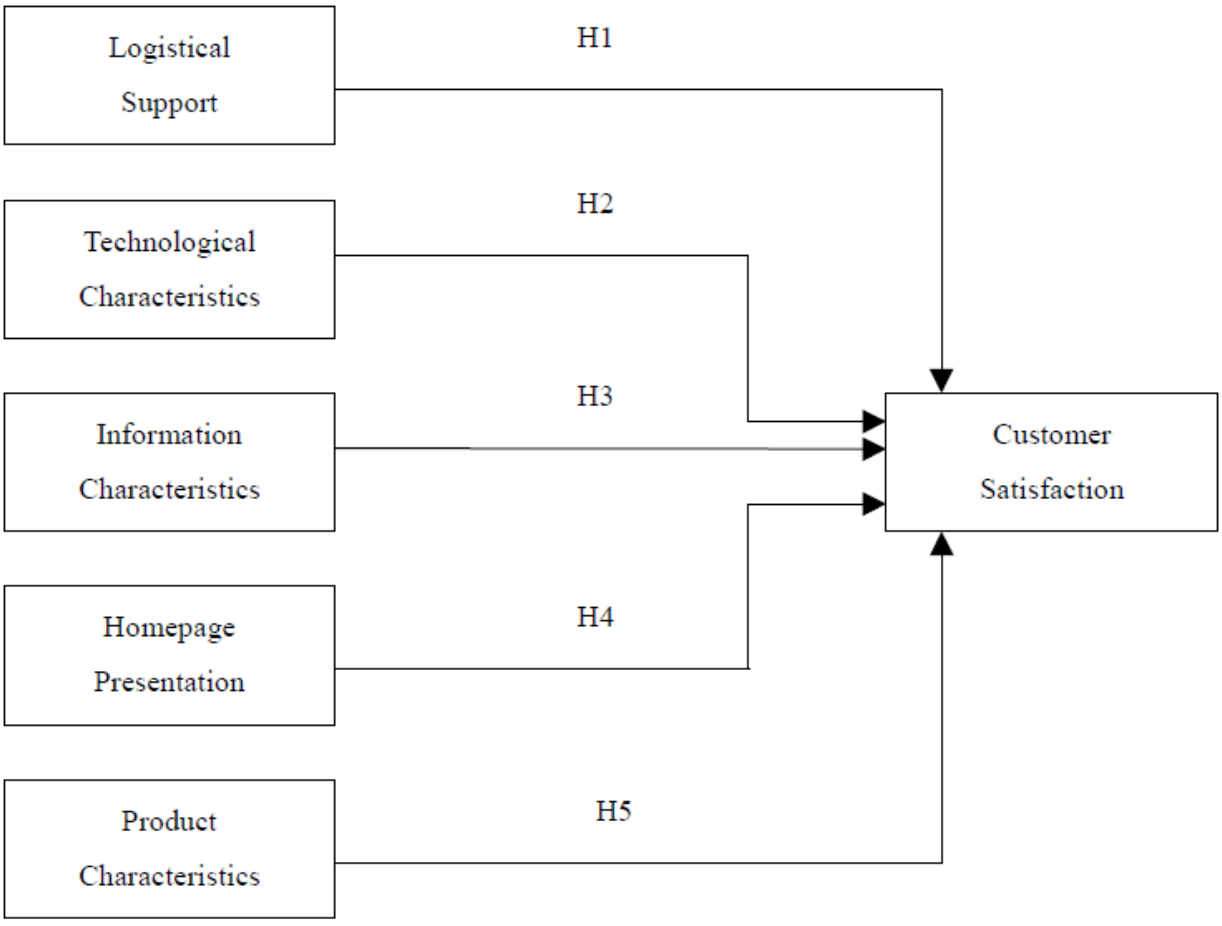
As stated by Zhang and Srisutto (2015), service factors include customer delivery and customer service. More specifically, they are those attributes related to solving customers' problems and concerns before they occur (Yoon, 2010). According to Parasuraman et al. (2005), customers gain appreciation and satisfaction from increased service factors such as credit returns, gift services, payments policies and information about shipping. The better the quality of service, the more customers will be satisfied. Within the context of this study, delivery dependability and geographical distance are hypothesized to influence online shopping satisfaction. Delivery dependability is characterized as the service given by online retailers in their ability to fulfil a consumer's deliveries timely and accurately. Geographical distance on the other hand is the indirect-convenient service offered by online retailers where customers enjoy the luxury of not incurring additional costs such as travel when shopping online. In other words, physical store location and its distance thereof, is a non-factor when shopping online. Thus, it is reasonable to validate delivery dependability and geographical distance as services factors equivalent to that proposed by Zhang and Srisutto (2015) as thought factors that influence on online shopping satisfaction.

Technological factors are those attributes of the website that ensure functionality of the site. Amongst these qualities are security, convenience and website design that influence online shopping satisfaction (Zhang & Srisutto, 2015). Technological factors are affected by a user's belief in the system, which includes perceived usefulness and ease of use (Chen et al., 2012). Data enables or disenables online shopping, as such, it is important to understand the technological relationship between data (its cost) and online shopping satisfaction. For online shoppers, the attractiveness of data is measured by its cost and its accessibility at a point in time (Biggs & Kelly, 2006). If these two components are favourable, that is, affordably and easily accessible, there is assumed value created for buyers which results in online shopping satisfaction. Thus, the cost and ease of accessibility of data has an overarching influence on online purchase intention. As mentioned previously, there are major data cost challenges that exist mainly in developing countries which are generally driven by a small monopolized telecommunications industry and inferior infrastructure. However, as technology develops and industry matures, the cost of data is decreasing and its reach increases (Kim et al., 2009). This results in better data costs, greater accessibility and naturally better user acceptance in online shopping (Mohanlal, 2006). Hence, it is reasonable to hypothesize, based on this rationale that

data charges have a significant role in determining online shopper satisfaction as well as influencing consumers online purchase intention.

Zhang and Srisutto (2015) also mentioned sales promotion as an attribute that influences online shopping satisfaction. Whilst there is some grounding for this variable, it will not be elaborated upon further as it is not relevant in the context of the present study and therefore cannot be adapted to explain the hypotheses of this study. Ho and Wu (1999) presented a similar conceptual framework that was specifically based on cyber shopping stores (CSS) which are also known as online retailers. The authors said variables were very much consistent with those presented by Zhang and Srisutto (2015) barring a few anomalies. Refer to figure 3.16 below.

Figure 3.16: A research model for the antecedents and customer satisfaction of CSS.



Source: Ho and Wu (1999).

As said by these authors, despite the fact that transactions take place electronically, only when the merchandise is delivered, will the customer be able to physically touch the product. Therefore, the distribution process is critical (Ho & Wu, 1999). They also found that a prompt response was a critical success factor for customers. Their research saw the analysis of several CSS and their various strategies which they employ to enhance customer experience and satisfaction. Among these are polices such as replacing defected products, one-year warranty on products and offering a seven day money back guarantee (Ho & Wu, 1999). Essentially these measures are put into place to reassure delivery dependability. Therefore, it proves logical that logistical support as in the context of Ho and Wu (1999) can similarly be adapted as delivery dependability as postulated among the hypotheses of this study. Thus, delivery dependability is hypothesized to influence online shopping satisfaction.

Ho & Wu (1999) suggest a contrasting view to that presented by Zhang and Srisutto (2015) in that they refer to technological characteristics as hardware and software capabilities. Their research found that by increasing and updating to advanced software and hardware online retailers could better serve their customer. In this instance, data charges do not form part of their rationale of technological characteristics that influence online shopping satisfaction. However, the researcher validates data charges as a credible hypothesis based on supporting literature such as that of H. Zhang and Srisutto (2015) for the basis of this study.

Keeping with Ho and Wu (1999), information characteristics relates to offering customers accurate and trustworthy information. Generally this information is gathered to enable electronic payment as well as in the sharing of online product information. These authors agree that online retailers need to spend more time and effort improving the accuracy and reliability of information in order to positively drive customer satisfaction (Ho & Wu, 1999).

Closely related to information characteristics is homepage presentation as a driver of online shopping satisfaction. Ho and Wu (1999) attested that both traditional retailers and online retailers rely on good messaging, images and animation to effectively communicate with their customers. Online retailers can also easily provide customers with more information about

products. However, they need to assure customers that the information they obtain is of the highest quality (Ho & Wu, 1999). Both Zhang & Srisutto (2015) and Ho & Wu (1999) share agreeing views with reference to information quality, its importance and its ability to positively drive online customer satisfaction. However, while these authors are in consensus, previous literature is still few and far between that generalization can be adapted to other countries. Hence this study will either confirm the findings of the previous authors or challenge them based on the context of South Africa.

Online retailers do not have to possess products in order to show them to potential customers. This is commonly discussed under product characteristics. What they display are merely images of the products, in other words, virtual products and they can sell any of them even though they physically may not possess them (Ho & Wu, 1999). Invariably these products appeal to consumers based on online product images and product information. Hence, product risk in terms of physical product engagement or lack thereof, is a critical variable to be considered when shopping online. Whilst online retailers offer more product information and diversification in products to customers, this over compensation does not always materialize to customer satisfaction. For this reason, the current study seeks to uncover the significance, if any, of product risk on online shopping satisfaction.

A research model presented by Alam and Yasin (2010) empirically tested constructs that have literature support, based on previous research that was done in this area in different countries, particularly online shopping from the perspective of the end-user, refer to figure 3.17.

Figure 3.17: A schematic diagram of the research model



Source: Alam and Yasin (2010).

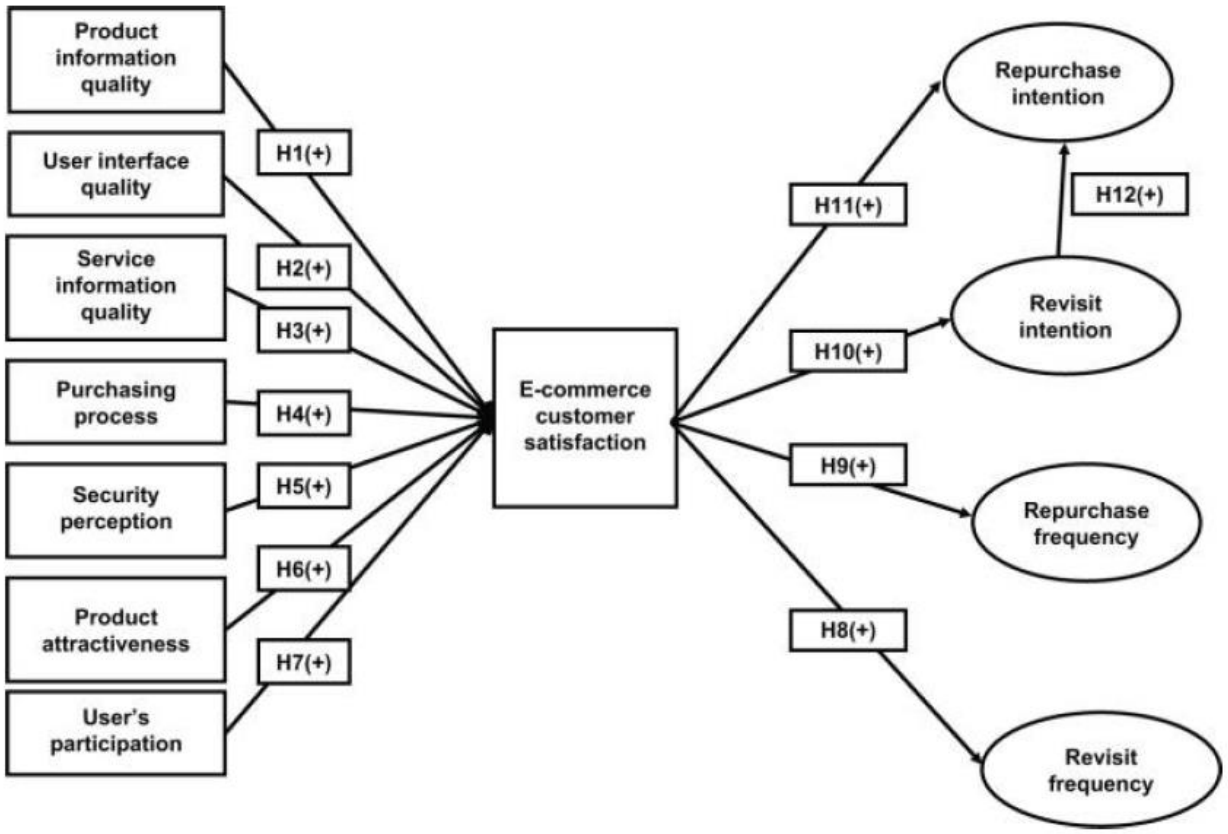
Although this model presents five constructs that potentially influence online shopping satisfaction, only three are relevant for comparison to the current study. Reliability and delivery performance are closely related to delivery dependability. It can be argued that online shoppers want to receive the right quantity and right quality of products that they ordered within the stipulated time offer by the e-tailers (Alam & Yasin, 2010). Further, Lee and Joshi (2007); Ho (2004); Grewal (2004); and Shih (2004) found that delivery performance has significant influence on customer satisfaction. Time and cost savings are factors that are realized through the benefit of online shopping not being impacted by geographical distance. According to Devaraj et al. (2002) store efficiency and time efficiency is reflected in travel saving and time cost respectively. Thus Alam and Yasin (2010) proposed the following hypotheses:;

- H2: There is a significant positive relationship between reliability and online shopping satisfaction.
- H3: There is a significant positive relationship between time saved and online shopping satisfaction.
- H5: There is a significant positive relationship between delivery performance and online shopping satisfaction.

These hypotheses will be measured against those which are proposed and of similarity within this study. In doing so, the research will test which of these hypotheses remain true within the context of this study.

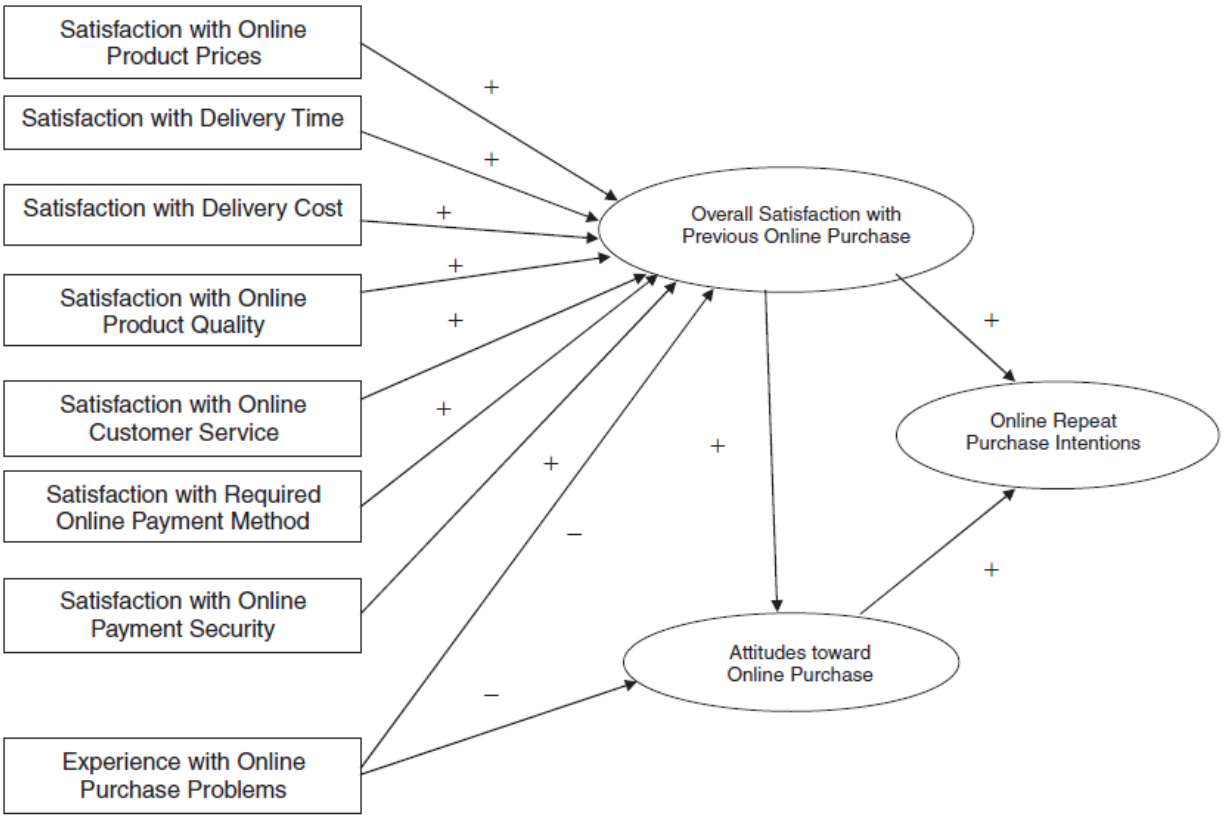
Other conceptual frameworks discussed in previous literature include those derived by Maditinos and Theodoridis (2010) as well as Abdul-Muhmin (2011) refer to figure 3.18 and 3.19 below respectively.

Figure 3.18: Satisfaction determinants in the Greek online shopping context



Source: Maditinos and Theodoridis (2010).

Figure 3.19: Repeat purchase intentions in online shopping: the role of satisfaction, attitude, and online retailers' performance



Source: Abdul-Muhmin (2011).

Research into satisfaction with consumer based electronic commerce is increasing. However what is evident is that most of the drivers that have been studied previously have become monotonous. Factors such price, privacy/security, web design method of payment to mention a few have extensively been researched. Information quality and delivery also appear in previous literature, although less frequently than the aforementioned variables. Hence information quality and delivery is reintroduced into the current study to build on the findings of the existing literature. "Delivery", is particularly taken from the perspective of online delivery dependability and not in the context of "free delivery" as generally sought. In addition, three other variables namely data charges, geographical distance and product risk are brought into the hypothesis of this study as recent topical variables of interest.

Like most areas that are new, researchers have taken dissimilar approaches and focused on a mired of aspects in investigating online shopping satisfaction. As shown in Table 3.4 below, satisfaction has been conceptualized in a variety of ways. For instance, some researchers focused primarily on the impact of consumer perceptions of website characteristics (Ho & Wu, 1999; Szymanski & Hise, 2000), such as logistical support, security, homepage design, and the like, on customer satisfaction with internet shopping. These insights into consumer perception help identify features of Internet stores that have considerable impact on building customer satisfaction. However, there is still no widely accepted consensus on the satisfaction construct. Particular importance for the analysis arises from the fact that a conclusive set of antecedent variables of consumer satisfaction with Internet shopping is missing (Cheung & Lee, 2005).

Table 3.4: Selected studies on online-customer shopping satisfaction

Study	**Antecedents of online-customer shopping satisfaction**		**Research method**
Abbott et al.	• Accessibility • Information Availability • Customization/Personalization • Speed of Acquisition • Security	• Atmospherics • Service/Experiential Convenience • Price across Brands • Assortment • Physical Presence	Conceptual Study

Cho and Park	• Product Information • Consumer Service • Purchase Result and Delivery • Site Design • Purchasing Process	• Delivery Time and Charge • Payment Methods • Ease of Use • Additional Information Services	Survey
Eroglu et al.	• Pleasure • Attitude	• Arousal	Survey
Ho and Wu	• Logistical Support • Technological Characteristics • Information Characteristics	• Homepage Presentation • Product Characteristics	Survey
Kim and Lim	• Width of Information • Update of Information • Depth of Information • Promptness of Retrieval • Speed of Transmission • Web Design & Construction • Customer Service	• Ease of Access • Convenience of Use • Security of User's Information • Reliability of the Site • Advertising • Entertainment • Free Gift	Survey
Kohli et al.	• Time Saving	• Cost Saving	Survey
Lam and Lee	• Business Content • Navigation Efficiency • Security	• Marketing/Consumer Focus • Website Design	Conceptual Study
McKinney et al.	• Information Quality Disconfirmation	• System Quality Disconfirmation	Survey
Reibstein	• Ease of Ordering • Product Selection • Product Information • Product Prices • Navigation	• On-time Delivery • Product Presentation • Customer Service • Privacy Policies • Shipping and Handling	Survey
Shim et al.	• Ease of Contact • Customer Service Information	• Ease of Access of Product Information	Interview
Szymanski and Hise	• Convenience • Merchandising	• Site Design • Financial Security	Survey

3.3.6.4 Conceptualization of Online Shopping Satisfaction

Online shopping satisfaction is a multifaceted construct that consists of countless dimensions. Some of these include "on-time delivery" also referred to as delivery dependability, "product availability" and "product meeting expectations" commonly referred to as product risk (Dholakia & Zhao, 2010). Other scholars mention dimensions such as "trust," "self-efficacy" and "self-expectancy." Other researchers highlighted "information quality," "user interface quality", and "purchasing process" Maditinos and Theodoridis (2010) as important variables that influence online shopping satisfaction. Satisfaction is a subjective consumer feeling, hence there are so many varying interpretations of what drive online shopping satisfaction. What is common amongst the above mentioned authors is that they all derive their instruments based on previous literature with modification to fit the context of their individual studies.

Equally, in their research, Rose et al. (2012) adapt a scale developed by Khalifa and Liu (2007) to measure online shopping satisfaction. The scale consists of four scale items which serve as individual measurement instruments. In the context of the current study, online shopping satisfaction is hypothesized to be a function of "data charges," "delivery dependability" and "geographical distance." The researcher will adapt the four item scale proposed by Rose et al. (2012) with minor modifications to the individual instruments where necessary in order to fit the context of the proposed study. Minor modifications will ensure that content validity is still maintained which is imperative for the credibility of the research. Finally, the measurement instruments will each rely on a 5 point Likert scale ranging from (1) strongly disagrees to (5) strongly agree.

3.3.7 Trust

According to Deutsch (1960), who was among the first authors to write about trust; trust allows people to live in uncertain and risky situations and also provides the means of de-cluttering the complex world by decreasing the number of choices a person has to consider in a given situation. Trust is the act of the trustor (Kaur & Khanam Quareshi, 2015). A person places trust in an object, whether that trust is well founded or not (Chiu, Hsu, Lai, & Chang, 2012). Importantly, trust emanates from a person and their trust, in part; is formed by their perception of the

competence of that object to be trusted (Kaur & Madan, 2013). Moreover, trust is inextricably linked to risk in the online environment (Winch & Joyce, 2006). Ruppel et al. (2003) states that when the purpose of a website is simply to provide information and advertise products and services, online browsers are likely to perceive a lower level of risk which results in a lower required level of trust. However, if the website features online transaction capability, the risk is significantly increased (Chang & Fang, 2013). Therefore, the level of trust must equally rise to match a level of optimal trust where the increased risk is acceptable, manageable and practical. Trust is also considered as a shared principal between two parties that enables cooperation and coordination (Winch & Joyce, 2006). This explanation can be extended into the world of business, where trust is paramount in successful transactions and the development of long term relationships (Keohn, 1996). It is an important aspect for the acceptance of people or things in the business world or social life, which affects consumers' intentions to shop online (Mcknight et al., 2002). These intentions of consumers are directly influenced by various factors like reputation of online retailer, their honesty, dispositional capacity of consumers, competency and so on. (Koufaris & Hampton-Sosa, 2004).

In the same respect, trust is considered to have a vital role in the success of online shopping because of the physical and temporal distance between buyer and seller in the electronic marketplace (Milan et al., 2015). Online transactions often do not involve simultaneous exchange of goods and money – spatial and also temporal separation between exchange partners is common (Grabner-Kräuter & Kaluscha, 2003). Thus online shopping embodies risk and incurs uncertainty, which arises from the time lapse between the purchase and the delivery of the products (Kim, Xu, & Gupta, 2012). Additionally, as a result of the fierce competition within electronic markets, the online shopper is inundated with a myriad of similar offerings from different e-tailers (Milan et al., 2015). Choosing product may very well become overwhelming due to conflicting marketing messages. The online shopper cannot personally inspect each and every product nor are they sure what the online retailer is going to do with the personal information that is collected during the shopping process (Grabner-Kräuter & Kaluscha, 2003). It seems more sceptical that a customer will get what he or she ordered on the computer screen, delivered at the right time in the quantity ordered (Liao & Keng, 2013). Accordingly, with limited cognitive resources available, consumers seek to reduce the uncertainty and complexity of transactions and relationships in electronic markets by applying mental shortcuts (Grabner-

Kräuter & Kaluscha, 2003). One effective mental shortcut is trust, which can serve as mechanism to reduce the complexity of human conduct in situations where people have to cope with uncertainty (Fanoberova & Kuczkowska, 2016). Hence, in the presence of such uncertainty and risk, distrust in e-tailers has been identified as one of the greatest barriers hindering online shopping (Hoffman et al., 1999; Pavlou et al., 2007). Consequently, many studies, including Gefen et al. (2003); Mcknight et al. (2002); and Pavlou and Gefen (2004) have posed that online retailer trust has become a key predictor of customer decisions in online shopping. Trust is also said to positively influence online consumers' purchase intention (Sadi & Al-Khalifah, 2012). Trust is often considered as one of the most important determinants for the success of e-commerce Pavlou et al. (2007), as well as mobile commerce (Luo et al., 2010). As such, understanding the factors that influence the generation of trusting beliefs in an online market has created sizeable interest to researchers alike Cimino, (2001).

Several website characteristics have been identified by various authors as having an influential role in establishing consumer trust (Kaur & Khanam Quareshi, 2015). The following discusses five different characteristics stressed by different website categories (Bart, Shankar, Sultan, & Urban, 2005). Firstly, the functionality of website design is a critical factor in consumer evaluations and subsequent online satisfaction (Song & Zinkhan, 2008). Moreover, when consumers navigate through websites with high information content, they perceive websites with good layout and appearance as trustworthy (Bart et al., 2005).

Secondly, usefulness and accuracy of information signals whether the information presented on the website is correct and helpful to consumers. When information shared by online retailers is accurate and useful, consumers are more likely to trust the e-vendor (Hsu & Wang, 2008; Park & Stoel, 2005; Song & Zinkhan, 2008). In contrast, when consumers find inaccurate information, they will often leave the website and be disappointed with the website service (Goode & Harris, 2007).

Third, brand strength relates to the reputation associated with the brand name of the website (Gao et al., 2012). For example, online retailers such as Amazon.com and Takealot.com have

developed strength in their brand equity. There is significant evidence that online consumers use prompts like brand to reduce the risks inherit in purchasing decisions, and employ brand name as an indicator of quality (Sääksjärvi & Samiee, 2007). Given the unattainability of all relevant information for comparison, brands can provide a persuasive cue and give consumers more comfort in the online environment than the offline one (Yoon, 2002). On the other hand, a brand also serves as a governance mechanism capable of assuring trustworthy behaviour (Standifird, 2001). Therefore, additional costs to the consumer are not incurred when relying on a reputable brand as an intermediary, thus making the brand an important mechanism for reducing the risk associated with online transactions (Sääksjärvi & Samiee, 2007).

Fourth, order fulfilment describes the website mechanism that delivers a product or service when a transaction is made (Rafiq et al., 2012). Order fulfilment is an essential evaluation of websites with transactional ability. When consumers do not know whether to trust the online retailer, they may track the order fulfilment records on the website to assess their trustworthiness (Bart et al., 2005; Shankar, Urban, & Sultan, 2002).

Fifth, privacy refers to the protection of individual confidential and private information stored on the website (Kleinman, 2012). This includes the detailed explanation, adoption, and implementation of a privacy policy. Security denotes the presentation of seals of approval on the website which are verified by a powerful third-party. Hoffman et al. (1999) indicate that the risk of fraud deters consumers from using the internet to purchase goods and services, encouraging many internet companies to adopt encryption methods to protect consumer privacy and security on their sites (Goode & Harris, 2007; Lu, Wang, & Hayes, 2012).

There is rich literature that expresses the contrast of trust, its nature, antecedents and consequents. Political scientists, anthropologists, economists as well as organizational behaviour scientists, psychologists and sociologists have created a wide body of knowledge on this topic (Sadi & Al-Khalifah, 2012). In the world of information systems (IS), researchers have discussed at great lengths, how trust contributes towards the success of many types of online environments (Lu, Fan, & Zhou, 2016). Although IS researchers' interest in the topic continues to expand, to

date studies on the trust construct provide a limited view of the phenomenon in developing countries such as South Africa (Comline, 2008; Du Toit, 2013). In the context of developing countries, online shopping provides challenges in that it is new and most of the people do not have much experience with it (Dolatabadi & Ebrahimi, 2010). In traditional brick and mortars, a consumer has the opportunity to physically engage and evaluate a good or service, but in the virtual space, shopping differs because of its unique features of insecurity; uncertainty and lack of control involved (Fanoberova & Kuczkowska, 2016). For example, when shopping online, a consumer is required to share personal and financial information and also is exposed to the risk of mismatching of product with description and possible damage of the products during delivery process (Kaur & Khanam Quareshi, 2015). As a result, there is always an element of doubt from consumers that they will receive the product comparable to the one they have ordered online (Mcknight et al., 2002).

Although there are certain challenges shared by traditional retailers and e-tailers, e-tailers are faced with greater competition due the wide scope on the internet and the fact that a competitor is only a click away (Mithas, Tamasubbu, Krishnan & Fornell, 2007). Therefore, attracting and retaining the attention of online shoppers who skim virtual shelves is not an easy task and without a compelling offer for online shoppers to visit a website and without a strong value proposition to keep customers on it, e-tailers struggle to retain customers in increasingly competitive e-markets (Eid, 2011). Thus, building and managing customer trust not only improves loyalty and decision making, but also increases online consumers' purchase intention.

3.3.7.1 Importance of Trust in Online Shopping

Online shopping is characterized differently from traditional shopping behaviour with factors such as anonymity, conscious attention, lack of control, gradual development overtime and potential opportunism being some of the contrary realities (Lu et al., 2016). Therefore, trust is an important factor to smooth online shopping (Prompongsatorn, Sakthong, Chaipoopirutana, & Combs, 2012). As such, the importance of initiating, building and maintaining trust between buyers and sellers as key success factors of e-commerce is increasingly being recognized in academic as well as in practitioner communities (Grabner-Kräuter & Kaluscha, 2003). Trust is

particularly important under conditions of risk and uncertainty (Kim et al., 2012). As previously mentioned, online shopping involves more uncertainty and risk as shopping in traditional bricks and mortar stores. In addition, a customer cannot physically check the quality of a product before making a purchase, or monitor the safety and security of sending sensitive personal and financial information through the internet to a party whose motives and behaviours may be hard to predict (Prompongsatorn et al., 2012). These uncertainties are either caused implicitly through using open technological infrastructure for the exchange of information (system-dependant uncertainty) or can be explained by the conduct of actors who are involved in the online transaction (transaction-specific uncertainty) (Grabner-Kraeuter, 2002). The importance of trust in e-commerce is evident and cannot be underestimated (Lee & Turban, 2001). Consequently, trust can serve as a mechanism for mitigating the sources of uncertainty or drastically reducing uncertainty (Pavlou, Liang, & Xue, 2006). This suggests that the importance of trust will decrease in proportion when the conscious consideration of uncertainty becomes silent (Chiu et al., 2012).

Online retailing has fast become an important channel or business model for many companies. According to Chiu et al. (2012), for e-tailers, the focus has shifted from creating online awareness and inducing consumers to adopt their online channels to securing recurring online consumers. They further attest that repeat customers are five times more profitable than new customers, but less than 50% of repeat customers seldom complete a third purchase. Online retailer trust is vital in maintaining continuity in the buyer-seller relationship. In fact, a repeatedly satisfactory online shopping experience may not only increase trust but also develop habit and reduce the impact of trust gradually (Chiu et al., 2012). Consumer trust is fundamentally important in the online context as customers are increasingly relying on the internet for information and purchases (Shankar, Smith and Rangaswamy, 2003). With trust playing such an important role in e-tailing, lack of consumers' trust often leads to unrecoverable loss of reputation and revenues (Eid, 2011). Lack of trust results in financial losses to an online retailer as the business will not be able to generate sustainable revenues with lesser number of customers at hand (Kaur & Madan, 2013). In reality, customers will shy away from converting an online purchase due to the customers' perceived fear of shopping online (Ghobakhloo, Arias-Aranda, & Benitez-Amado, 2011). Hence, it is very important that e-marketers address the trust

issues of their perspective as well as existing customers in order to make profits and keep their customer happy (Kaur & Madan, 2013).

3.3.7.2 Online Trust versus Offline Trust

The focus in this study is centred on online trust which differs from offline trust in important ways. Unlike offline trust, the object of online trust is the internet, the website or the technology. In the virtual world of e-commerce, a company's website can be viewed as a store from the position of building consumer trust (Bart et al., 2005). A customer's interaction with bricks and mortar retailers is similar to their interaction with an e-tailer, and consumers are likely to develop perceptions of trust in an e-tailer based on their interactions with the website. This is expected to happen to an extent that an online consumer has positive impressions about a website and accepts vulnerability, where they then develop a relationship of trust with that website (Bart et al., 2005). A consumer's perception of a website's ability to execute the required functions, and perceptions of the good intention of the firm behind the online store front, contributes to the perceptions of trust in that website (Van Nierop et al., 2011). Online trust thus includes consumer perceptions of how the website would deliver on expectations, how believable the websites' information is, and the level of confidence in the website. These perceptions may be driven by many antecedents.

3.3.7.3 Definition of Online Trust versus Operational Definition

There are various posed definitions of trust that have been adapted by many seasoned researchers. This section will highlight numerous definitions proposed by academics in a sequential manner that will see works from earlier studies up until the most recent definitions. Some researchers find these varying definitions to be contradictory and confusing. For example, Lewis and Weigert (1985); Shapiro (1987); and Taylor (1989), others conclude that the notion of trust is almost indescribable (Gambetta, 1988; Yamagishi & Yamagishi, 1994). All these inconsistencies are found in the e-commerce dominion, with academics defining trust as the

willingness to believe Fung and Lee (1999) or as beliefs regarding various attributes of the other party Menon and Konana, (1999) and Stewart (1999), such as predictability, honesty, benevolence, ability, strength, goodness and fairness.

According to Luhmann (1989), trust can be defined as the mechanism to reduce the complexity of human conduct in situations where people have to cope with uncertainty. "Trust is a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions of Behaviour of another," (Rousseau, Sitkin, Burt & Camerer, 1998). Intrinsically, trust suggests a willingness to accept vulnerability, but with a confidence or expectation that one can rely on the other party to perform a particular action important to the trustor (Lewicki et al., 1998; Moorman, Zaltman & Deshpande, 1992; Morgan & Hunt 1994). In the marketing literature, trust has been studied primarily in the context of relationship marketing (Doney & Cannon 1997; Ganesan, 1994; Morgan & Hunt, 1997). In studies of buyer-seller relationships, trust is defined as a sales agent that evolves over time and is based on the buyer's observation of a sales person's honesty, consistency reliability and trustworthiness (Anderson, 1990; Doney & Cannon, 1997). The commonly accepted definition of trust in the relationship marketing domain is; "when one party has confidence in an exchange partner's integrity and reliability (Morgan & Hunt, 1994).

McKnight and Chervany (2001) built on these definitions and further suggested that trust is when one party believes that the other party has characteristics beneficial to itself. These characteristics imply that e-tailers will act in the consumer's interest, and may include traits such as being capable of and being predictable in delivering as promised (Winch & Joyce, 2006). Trust is also defined as a belief that the other party can in actual fact be trusted, based on the assumption that the other party will behave ethically and socially and not opportunistically (Gefen, Karahanna & Straub, 2003; Hwang & Kim, 2007). Trust is also noted as a set of specific beliefs dealing largely with the integrity, competence and benevolence, of another party (Chiu, Hsu & Wang, 2006; Doney & Cannon, 1997). Integrity is the notion that the trustee will be honest and honour his/her commitments. Competence is the confidence in the trustee's ability to fulfil his/her obligations as expected by the trustor. Benevolence is the confidence that the trustee will not act opportunistically against the trustor, even if given the opportunity (Kaur & Quareshi, 2015).

The concept of trust has evidently been defined by academics in many different ways. Some definitions overlap, but generally each definition offers an explanation of a different aspect of trust (Harridge-March, Grabner-Kräuter, & Faullant, 2008). That said, organizational trust literature is operationally defined as the belief or expectation that the other (trusted) party, or as a behavioural intention or willingness to rely or depend on another party, coupled with a sense of risk or vulnerability if the trust is violated (Rousseau et al., 2008). In the same way and in the context of the current study, online trust is operationally defined as the belief or expectation about a website, the internet and/or the online retailer as the trusted party or object of trust or as a behavioural intention or willingness to rely or depend on the trusted party (McKnight, Choudhury & Kacmar, 2002).

3.3.7.4 Characteristics of Online Trust

Although they all may not be pertinent to the study, it is still worthwhile to discuss the characteristics of online trust. These characteristics are the broad topic areas from which most individual drivers of online trust are hypothesized from. The research makes reference to (Bart et al., 2005), who highlights eight characteristics of online trust namely; privacy, security, navigation and presentation, brand strength, order fulfilment, community features, and absence of errors. The characteristics are further discussed below.

- Privacy. According to the definition found on (www.privacyalliance.org, 2016), privacy refers to the protection of individually identifiable information on the internet. Hoffman, Novak and Peralta (1999) further add that privacy is a fundamental driver of online trust and its grade of influence is different across website categories. It is expected to be greater for categories with high product involvement and high information risk (Bart et al., 2005).
- Security. Website security refers to the safety of the online platform and the consumers financial or credit card information (Bart et al., 2005). Consumers consider security gravely important when procuring goods and services online (Belanger, Hiller, & Smith, 2002). Consumers rely on website authentication providers such as TRUSTe, Better Business Bureau and Verisign as indicators of security and seals of approval. However, the relationships could differ depending on website category. Security is related to

financial risk on websites (Biswas & Biswas, 2004). For example, those websites that have high involvement or ticket prices necessitate greater financial risk than other online categories which have low involvement items. Thus, when consumers purchase from websites whose products or services are high involvement items, they are generally concerned about the exposure of financial information. For such websites, it is expected that the effect of security on online trust to be higher than for other websites (Bart et al., 2005).

- Navigation and presentation. Navigation and presentation refers to the layout, appearance and possible sequence of clicks, paths and images on a website. Hoffman and Novak (1996) posit that navigation and presentation are directly related to the flow construct and to the websites' perceived ease of use. Trustworthiness is driven by factors such as navigation, presentation, convenience and ease of use (Belanger et al., 2002). Similar to privacy and security, navigation and presentation will likely be different across websites. Navigation and presentation is particularly important for websites with high information content (Milan et al., 2015). When consumer engage with website categories with high information content, they may perceive those websites that are easy to navigate through, have good appearance and layout and capable of taking them to their desired destination with a minimum number of clicks as trustworthy (Bart et al., 2005). As a result, the relationship that manifests of navigation and presentation with online trust is expected to be stronger for website categories with high knowledge or information than it is for other categories.
- Brand strength. Keller (1993) defines a brand as a trust mark for all intangible trust-generated activity, and absent human touch, can act as a symbol of quality and assurance in building trust. In absence of all relevant information for comparison, brands can provide greater comfort online than offline in customer choice (Yoon, 2002). For example, Amazon.com has high brand strength and as a result enjoys a greater level of trust than rival book e-tailers (Pan, Ratchford, & Shankar, 2003). Bart et al. (2005) propose that the effect of brand strength on online trust to be greater for categories for which consumer involvement or ticket price of the product or service purchased is high. Equally, brand strength is also expected to be a more influential determinant of online trust for high search good or service websites. When consumers spend a great deal of time searching for an item on a website, they may rely on the brand behind the e-tailer to

be able to trust the item quality, information and performance (Fanoberova & Kuczkowska, 2016).

- Advice. Online advice is a real-time Website feature that assists and guides a consumer toward an appropriate solution for problems and issues experienced on a website. A study conducted by Urban et al. (2000), that looked at consumers' online purchasing behaviour of pickup trucks, revealed that e-tailers who had virtual advisors enhanced their online trust. It is expected that the effect of advice on online trust is different across web site categories and customer groups. For websites that are classified by high information risk and financial risk, the presence of an online advisory mechanism could alleviate a consumer's concerns about that site and increase consumer sensitivities of trust (Masoud, 2013). Online advice can also boost trustworthiness on a website when consumers believe that sharing information with that site could be risky (Bart et al., 2005). Thus, online advice is anticipated to be more influential on online trust for website categories that are characterized by a high level of high search efforts and website information than it is for other categories.
- Order fulfilment. Order fulfilment pertains to the completion of delivery of a product or service relative to orders placed by consumers, and it is an essential aspect of e-tailers with transactional ability (Colla & Lapoule, 2012). The importance of order fulfilment as a builder of online trust is likely to vary across online retailers depending on the nature of the product or service being purchased (Rafiq et al., 2012). It is expected to be greater for e-tailers with high involvement products or high ticket prices than for others with less (Riel et al., 2001). When consumers intensely care about the products they buy from an online retailer and are unsure about trusting that website, they may rely on the order fulfilment track record issued by the e-tailer. Thus, order fulfilment is a key determinant of online trust for high-involvement items (Bart et al., 2005).
- Community features. This construct relates to the opportunities available to online shoppers to engage and interact with other online shoppers in the same website by participating in a chat group or similar online forum (McKnight et al., 2002). Online community features encourage knowledge sharing and information exchange and offer a helpful environment for the consumer, thereby growing consumer trust in the online retailer (Chen et al., 2016; McKnight, 2001). The impact of community features on consumer trust may differ depending on the type of online retailer and category of good and service sold. Community features are predominantly valuable for establishing trust in

situations in where the expected uncertainty about gathering and sharing of information on a website is high (Bart et al., 2005). Thus, it is expected that the effect of community features' on online trust is greater for online retailers characterized by greater information risk.

- Absence of errors. This construct refers to the absence of mistakes on a website in response to consumers' actions on that site, such as incorrect processing of orders and wrong information (Sadi & Al-Khalifah, 2012). Consumers expect rock-solid data integrity from online retailers and for them not to have errors. When e-tailers are devoid of such errors, it is anticipated that its trust among consumers is high (Camp, 2001; Li & Xie, 2012). As a result of errors generally not being acceptable to online shoppers, it is expected that the impact of absence of errors on online trust to not be different across online retailers (Bart et al., 2005).

The below table summaries and visually illustrates the drivers of online trust and their relationship to the underlying website factors of financial risk, information risk, involvement/ticket price, information on the site and search good/service.

Table 3.5: Expected influence of underlying website category factors on the effects of drivers of online trust on online trust

	Underlying Web Site Factors				
Driver of Online Trust	Financial Risk	Information Risk	Involvement/ Ticket Price	Information on the Site	Search Good/Service
Privacy		+			
Security	+				
Navigation and presentation				+	
Brand strength			+		+
Advice	+	+		+	+
Order fulfillment			+		
Community features		+		+	
Absence of errors	+	+	+	+	+

Notes: The "+" sign indicates that the effect of a driver of online trust (e.g., privacy) on Web site trust is greater for Web site categories that are dominant with this Web site characteristic (e.g., information risk).

Source: Bart et al. (2005).

3.3.7.5 Antecedents and Outcomes of Online Trust

The literature on trust across a broad range of disciplines provides a useful basis on which to explore consumer trust, its antecedents and consequences in the context of online shopping (Cheung & Lee, 2000). Equally, the concept of trust has been scrutinized under numerous contexts over the years, for example, in bargaining Schurr and Ozanne (1985), industrial buyer-seller relationships Doney and Cannon (1997), distribution channels Dwyer, Schurr and Oh (1987), market research Moorman et al. (1993) and in partner cooperation in strategic alliances (Das, 1998). Different theoretical perspectives have been used in these studies, which can be aggregated into three distinct categories (Lewicki & Bunker, 1995) below:

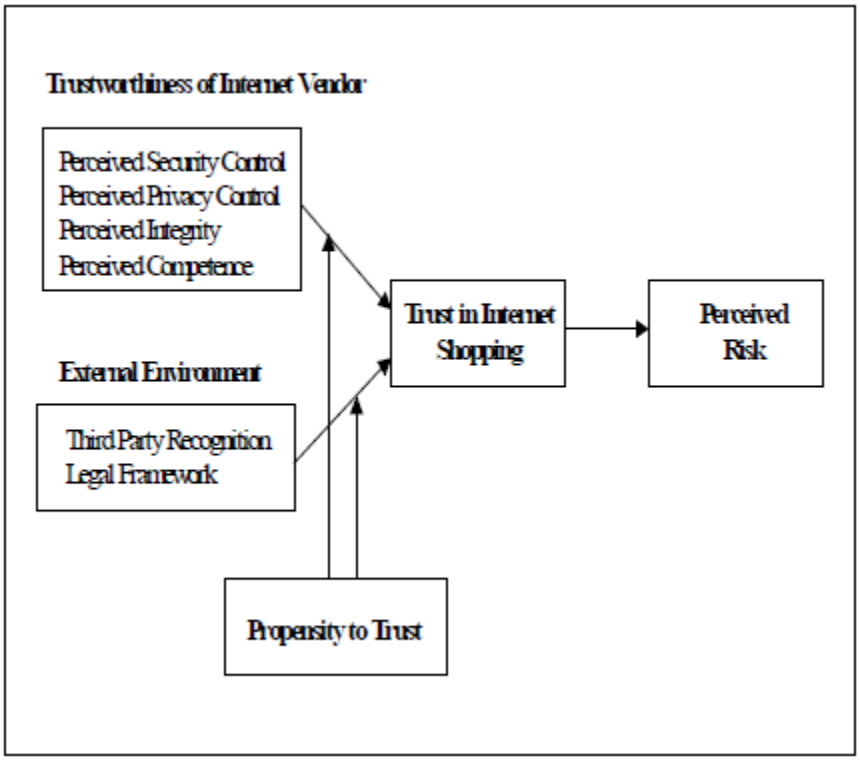
1. The first of these perspectives is that of personality theorists who conceptualize trust as a belief, expectancy, or feeling which is deeply rooted in one's personality and has its origins in the individual's early psychological development.
2. The second view is of sociologists and economists who conceptualize trust as a phenomenon within and between intuitions, and as the subsequent trust individuals put in those institutions.
3. Finally, the views of social psychologists characterize trust in terms of expectation and willingness of the trusting party engaging in a transaction, the risk associated with such

expectations, and the contextual factors that serve to wither enhance or inhibit the development and maintenance of that trust.

Cheung and Lee (2000).

While the social-psychological view appears to be the most relevant in the understanding of consumers trust in online shopping because of its focus on transactions, the other perspectives still have weighting as they contribute to the understanding of trust in their unique ways. For instance, it would be inadequate to consider consumers' trust in online shopping without investigating trust propensity – which is a personality trait – of the consumers concerned (Cheung & Lee, 2000). Cheung and Lee (2000) present a conceptual framework that fuses the broad literature on trust in order to develop a research model of consumer trust in internet shopping (CTIS). Refer to figure 3.21 below.

Figure 3.20: A conceptual model of trust in internet shopping.



Source: Cheung and Lee (2000).

As depicted in figure 3.20, trust in internet shopping is impacted by the trustworthiness of an online retailer and the relevant external environmental factors affecting online shopping transactions. These antecedent factors are moderated by an online shopper's propensity to trust (Cheung & Lee, 2000). As noted by Lewicki and Bunker (1995), trust is context-specific and situational, and thus should be examined under specific contextual and situational parameters. In the case of online shopping, risk is a pertinent situational parameter in that;

1. There is uncertainty about the outcome of the online shopping transaction.
2. The outcome depends on the behaviour of the online shopper, which is not within the consumers control and purview.
3. The harm of an undesirable outcome may be greater than the benefits of a successful outcome.

Cheung and Lee (2000) citing Limerick and Cunnington (1993) said that trust can decrease uncertainty about the future and is a requirement for a continuing relationship with partakers who have opportunistic behaviour. The core of risk is uncertainty about the future. Thus, the establishment of trust, as a result, reduces consumers' perceived risk of online shopping. The factors that impact online trust are elaborated upon below.

3.3.7.5.1 Trustworthiness of Internet Vendor

This construct is characterized by four influential sub-variables namely; perceived security control (PSC) and perceived privacy controls (PPC) which are two new factors added to the model to reflect the nature of online shopping as well as perceived integrity (PI) and perceived competence (PC). PSC and PPC are critical characteristics of online shopping transactions impacting the advancement of consumers trust in online shopping. Prior research finds that these two factors are the major concerns of online shoppers (Cheung & Lee, 2000).

In the context of this study, perceived security control is defined as the online shopper's perception of an e-tailers ability to fulfil online security requirements such as encryption,

integrity and authentication. Perceived privacy control is defined as the online shopper's perception on the ability of an e-tailer to protect consumer's personal information. Perceived integrity relates to the online shoppers perceived honesty of online retailers. Finally, perceived competence refers to the online shopper's perception on the abilities, skills and expertise of online retailers (Cheung & Lee, 2000). Whilst PSC and PPC do not form part of the conceptual framework of the current study, perceived integrity can be adapted to similarly include information quality just as hypothesized in the framework presented in the current study. Perceived competence also has no bearing in terms of the variables of interest in the current study.

3.3.7.5.2 External Environment

According to Kaur and Quareshi (2015), trust is context specific. In the impersonal world of electronic commerce, legal framework and third party recognition are two key contextual and environmental factors impacting the formation of consumers' trust. Benassi (1999) argued that third party recognition, such as TRUSTe[7], can help build consumers' online trust and as a result, accelerate the growth of online shopping. In the research model posed by Cheung and Lee (2000), third party recognition (TPR) refers to the assurance of the trustworthiness of e-tailers by third party recognition bodies. While legal framework (LF) refers to the code and law of practice established to protect online shoppers during electronic transactions. Although these variables are significant in developing trust in online shopping as per the works of (Cheung & Lee, 2000), they are not are not being tested in the context of this study.

3.3.7.5.3 Propensity to Trust (PTT)

Propensity to trust is a factor that indirectly mediates the said drivers (trustworthiness of internet vendor and external environment), and affects the likelihood the party will trust. According to Hofstede (1980), propensity to trust is different from person to person and is influenced by

[7] TRUSTe offers a range of technology and services to help businesses manage data privacy. TRUSTe powers privacy compliance and risk management with comprehensive technology, consulting and certification solutions (www.truste.com).

developmental experiences, personality traits and cultural backgrounds. The propensity to trust proposed, according to Cheung and Lee (2000) is viewed as personality trait and as a result leads to generalized assumptions about the trustworthiness of others. Mayer et al. (1995) posited that the propensity to trust moderates the effects on the of the trust antecedents on the formation of trust. In establishing whether to trust or not, consumers search for cues such as trustworthiness and the effect of trust propensity is to magnify or reduce the signals provided by these cues (Lu et al., 2016). In essence, the research model proposed by Cheung and Lee (2000) certainly does explore elements that influence online shopping trust however; it equally exposes how many varied approaches are possible in unpacking this construct. The commonalities between the model published by Cheung and Lee (2000) and the research model presented in this study are very few. Whilst there are elements that can be adapted from the previous research, there is profound opportunity to explore other variables such as those proposed in this study so as to understand their impact on developing consumers' online trust.

3.3.7.6 Antecedents and Outcomes of Online Trust Continued

Chiu et al. (2012), citing Anderson and Weitz (1989), posed that trust in the seller is a critical component in maintaining continuity in the buyer-seller relationship in the traditional retail environment. Many scholars have built on this and subsequently suggested that trust is an important mechanism governing many social exchange relationships in the contexts that are characterized by uncertainty, especially in the e-commerce environment (Ratnsaingam, 2005; Riegelsberger, Sasse & McCarthy, 2005). In the context of online shopping, some of the signals that are present in traditional retailers such as product engagement are unavailable, and some information could even be distorted (Riegelsberger, Sasse & McCarthy, 2005). This may have an adverse impact on buyers in that they are not assured of the credentials and trustworthiness of the seller and thus risk making the former reluctant to purchase online (Pavlou, Liang & Xue, 2007). Trust has since been viewed as the result of individual conclusions about historical behaviour in which the derived principles of such future behaviour are cognitively assessed (Wilson, Straus & McEvily, 2006). Hence, it is said that trust is developed gradually over time based on positive outcomes from repeated behaviour (Lankton, Wilson & Mao, 2010).

Morrison and Firmstone (2000) argued that the main function of trust is to reduce uncertainty, which relates to an individual's supposed inability to predict something accurately. Jarvenpaa, Shaw and Staples (2004) specify that the role of trust may vary depending on the level of uncertainty presented within the context in which an event occurs. When ambiguity and uncertainty is high, consumers have no clear guidance or useful cues to lead their purchasing behaviour; as a result trust plays a strong influence in such situations (Fanoberova & Kuczkowska, 2016). On the other hand, in situations that involve little ambiguity and uncertainty, trust exerts a minor role in helping consumers to judge or understand others behaviour (Chiu et al., 2012). The nature of trust in the online context has also been explored by Daignault, Shepherd, Marche and Watter (2002). In their study, these authors identified several trust principles and mechanisms that encourage online trust. The trust principles include; first party information as important in developing trust as well as formal and social controls as important in developing trust; second party opinions are important in developing trust; third party ratings are important in developing trust; culture affects trust; trust is a matter of degree; trust deepens over time and is increased with reciprocity; trust is a function of perceived risk; trust is based on quality of information; and trust depends on identity. Gummerus et al. (2004) proposed that the quality of a website directly affects online trust. Similarly, Roy, Dewit and Aubert (2001) found that interface design, ease of navigation, and user guidance affect the establishment of consumer online trust. Whilst these findings are appropriate and valid, apart from product/information quality, they are not realized as influencing variables in the context of this study. They are nevertheless important to mention as factors that influence consumer trust on a broader scale. More relevant to this study, McKnight et al. (2002) refers to product/information quality and argue that website content is an antecedent of online customer trust. The author's acknowledgement of the relationship that exists between information quality and trust is consistent with the proposed hypothesis as per the conceptual framework in the current research.

According to a study by Caldwell and Helen (2000), factors that indicate the potential trustworthiness of an e-tailer prior to an exchange are referred to as cues. Their study revealed that cues such as alternative ordering process, secured online transactions, and product guarantees are important for initiating a consumer/e-tailer trust relationship. Chang and Cheung (2005) took a varied approach and investigated three trust building mechanisms; return policy, reputation and party certification. On the other hand, Kossecki and Swierczynska-Kaczor (2006)

identified other key factors that have an effect on building consumers' trust. These factors are characterized into two groups – transactional factors which are strictly connected with the process of making transactions such as communication before purchase, delivery costs, security of payment, means of dealing with claims and returns; and non-transactional factors which are not related directly with the process of making transactions like law regulations, technical infrastructure, protection of consumer rights and privacy and transfer of external trust. In other words, trust can be viewed as an antecedent belief that creates a positive attitude toward transaction behaviour Jarcenpaa, Tractinsky, and Vitale (2000), which in turn leads to transaction intentions. Not to mention, previous studies have shown that there is a correlation amongst trust that is established in specific online retailers with transaction intentions with those same retailers (McKnight & Chervany, 2002; Pavlou, 2003).

Evidently, assortments of studies have created strong linkages between behavioural intentions and trust in offline contexts. Sultan and Mooraj (2001) explained that trust is imperative for businesses, irrespective of whether they trade online or offline. On the other hand, Grewal et al. (2003) observed that online customers are likely to trust online retailers more than their bricks and mortar counterparts. This prompted Fusaro et al. (2002) to argue that without trust, e-commerce is destined to stagnation at best and extinction at worst. Luo (2002) argued that the development and maintenance of trust is the responsibility of online retailers. Hasslinger, Hodzic and Obazo (2007) maintained that trust, security and prior experiences are factors that are highly regarded by the online consumer and that trust and security factors are a key drivers for consumers when considering a potential online purchase. Bhatt and Bhatt (2012); De Swardt (2008); and Dennis et al. (2009) concurred with the argument raised by Hasslinger et al. (2007) that prior online shopping experience positively contributes to the internet presenting a trustworthy online platform. De Swardt (2008) endorsed this view by quoting one of the respondents in their study that confirmed that they felt safe to engage in online shopping after following a few security precautions. This again confirms that the consumer's attitude towards trust and security as an influential factor correlates with prior experience in online shopping and the relevant computer literacy. Chen et al. (2010) backed this view and produced a simple summary when they concluded that "when consumers have adequate computer skills and e-commerce experience, they are able to determine whether an e-tailer is secure enough based on the kind of authentication or encryption mechanisms the online retailer adopts". They further

concluded that prior e-commerce experience will drive the consumers' behaviour to such an extent that other factors such as convenience take precedence over online trust and security (Chen et al., 2010). The opposite is also true where trust and security becomes paramount to the more inexperienced user. Contrary to the findings by the authors mentioned above, Guo et al. (2012) conducted a study of eight factors contributing to consumer satisfaction in China. Trust was chosen as the second most important influential factor by a sample in which the vast majority of participants vouched to being very familiar with online shopping, most visiting online shopping sites frequently. Javadi et al. (2012) and Lian and Yen (2013) reported parallel discoveries out of another sample of frequent online shoppers who confirmed that online trust and security concerns posed as barriers to a liking towards online shopping. Regardless of the minor dissimilarities in opinion between these studies, what is consistent is that no consumer wants to be a casualty of online fraud or theft thus signifying that trust and security are indeed influential factors when it comes to online shopping is significant.

3.3.7.7 Conceptualization of Trust

Trust is similar to online shopping in that there are a myriad of interpretations of the construct. Thus, in many instances, such as in this study, trust is conceptualized as a multidimensional construct. Accordingly, Grabner-Krauter and Faullant (2008) further conceptualized online trust as trusting beliefs in the reliability and predictability of the internet and willingness of the consumer to depend on the internet with regard to economic transactions. Trust is also a very subjectively earned characteristic and varies from individual to individual. Cheung and Lee (2000) conducted comprehensive research and subsequently proposed five constructs that affect trust in online shopping. These include; perceived integrity of merchant, perceived ability of internet merchant, individual trust propensity, perceived effectiveness and consumer trust in online shopping. After extensive testing was performed, amongst the five constructs, 15 measures were qualified as valid instruments. The content validity of these individual constructs was verified through Cronbach's Alpha tests performed (Lee & Turban, 2001).

Harris and Goode (2010) proposed a very comprehensive construct for online trust that identified three broad dimensions (online aesthetic appeal, layout and functionality and financial security) which could be further broken into another nine more specific sub-dimensions. These nine

dimensions all include their own set of individual items, namely; originality of design, visual appeal, entertainment value, usability, relevance of information, customization, interactivity, perceived security and ease of payment. Originality of design was measured using a four item instrument that was inspired by works of Grewal et al. (2003), where perceived visual appeal was assessed using a two item instrument adopted from Mathwick et al. (2002), while entertainment value was tested via the adoption of a three item instrument inspired by Mathwick et al. (2002). The functionality and layout of sites was evaluated via measures of usability, information relevance, the extent of customization, and interactivity. Usability was gauged using a 11 item instrument that was adapted from the three item measurements of Srinivasan et al. (2002); Hasan and Tibbits (2000), a single item modified from Srinivasan et al. (2002) with the remaining four items inspired by Abels et al. (1997). The extent to which relevant information was available was measured via a five item scale reliant on the theory of Eroglu et al. (2003). The measure of customization was designed to encompass consumer personalization and firm-led customization and included one item adapted from Srinivasan et al. (2002), five items developed from Abels et al. (1997) and a single item developed during pretesting. Finally, the extent of contact interactivity was drawn from the five-item scale of Srinivasan et al. (2002). The third dimension of financial security was measured via assessing ease of payment and perceived security. Ease of payment was gauged via a five item instrument, in part reliant on the comments of Bitner (1992) while perceived security was tapped via a five-item instrument also from Swaminathan et al. (1999). Other scholars such as Eid (2011), Sadi and Al-Khalifah (2012), and Grabner-Krauter and Faullant (2008), share research and ideas that originate from the same body of knowledge.

Whilst there are countless aspects of online trust, Lee and Turban (2001) were able to present a simplified construct for measuring online trust. In their study, Rose et al. (2012) adapt the scale originally developed by Lee and Turban (2001) in order to measure online trust. This scale consists of four measurement instruments. All questions were modified to fit the context of this study thus ensuring that content validity is still maintained. In addition, there is sufficient factor loading within each scale item and all items are characterized by a 5 point Likert scale ranging from (1) strongly disagrees to (5) strongly agree.

3.3.8 Online Purchase Intention

Ajzen (1991) described intention as the extent to which a conscious person will follow to validate his/her behaviour. Intention is also referred to as one of the motivational components of behaviour. Ajzen (1991) further suggested that intentions are assumed to be a gauge of to what extent individuals are willing to approach certain behaviour and how many times are they trying in order to perform certain behaviour. Thus, purchase intention takes place when a person plans to buy a specific good or service in the future (Liat & Wuan, 2014). Hausman and Siekpe (2009) posited that purchase intention, as well as intention to return, is one of the more frequently denoted online behavioural intentions. Consumers with confident purchase intention, for instance, customers that have developed favourable or positive feelings toward the product are more likely to make a purchase (Pavlou, 2003). Generally, customers initially engage with e-tailers as they search for information on the desired product. Through this process, they formulate either a positive or negative purchase intention over a period of time and as a result feel more confident about their choice before they buy the product (Rozekhi et al., 2014). Leelayouthayotin (2004) added that the increase in availability of useful and relevant information encourages consumer purchase intention and ultimately drives actual purchase.

Pavlou (2003) also noted online purchase intention to be a more suitable measure of intention to use an e-tailer when assessing online consumer behaviour. Given that online transaction involves purchase action and information sharing, purchase intention depends on various factors (Pavlou, 2003). In order to prompt online purchase intention amongst consumers, online retailers frequently need to put effort on these factors to improve the chance of purchase by consumers (Goyal, Maity, Thamizhvanan, & Xavier, 2013). Hence, purchase intention is the final consequence of a number of various factors in an online shopping context (Ling, Chai, & Piew, 2010).

3.3.8.1 Definition of Online Purchase Intention versus Operational Definition

In the context of e-commerce, online purchase intention can be defined as a situation when a person desires to buy a particular good or service through an online retailer (Chen et al., 2010;

Pavlou & Fygenson, 2006). Consumer online purchase intention has also been defined as the construct that gives the strength of a consumer's intention to purchase online (Salisbury, Pearson, Pearson, & Miller, 2001). With that mentioned, for the purpose of this study, online purchase intention will be operationally defined as a consumer's willingness to purchase goods or services from an online retailer (Ha & Janda, 2014).

3.3.8.2 The Importance of Online Purchase Intention

The understanding of purchase intention plays an important role in helping online retailers predict consumer buying behaviour (Dodds, Monroe, & Grewal, 1991). Purchase intention also refers to consumer propensity to purchase a product (Yoo, Donthu, & Lee, 2000). It is important for e-tailers to recognize consumers purchase intentions because a consumer's behaviour generally predicts his or hers intention (Park & Kim, 2016). Wu, Wu, Lee, & Lee (2015) point out that online purchase intention is a combination of a consumers' concentration on purchasing a good or service and the probability of buying. Hence it is vital that online retailers ensure that consumers online purchase intention is nurtured and protected by developing online trust. In fact, according to research conducted by He, Lu and Zhou (2008), lack of online purchase intention is the biggest obstacle in the development of e-commerce. Thus, many authors Yoh, Damhorst, Sapp and Laczniak, 2003; Yoon (2002) draw consensus in that purchase intention may be influenced by a person's propensity to trust online retailers. Although trust is considered an important driver of online shopping Corbitt, Thanasankit and Yi (2003), satisfaction is equally noted as to having a significant impact on purchase intention (Fiore, Jin, & Kim, 2005; Wen, 2009). Generally, the interaction between these variables (trust, satisfaction and purchase intention), is assumed to be positive. It is important to understand the drivers of consumers online purchase intention because consumers' actual buying behaviour is dichotomous, meaning consumers either have to purchase or not purchase the item (Lee & Lee, 2015). Hence, online purchase intention is not only a significant predictor to actual purchase (Kim et al., 2008; Pavlou, 2003) but it is also used to reach the goal of actual purchase (Lee & Lee, 2015). Consequently, the construct of purchase intention is viewed as an important outcome variable in this study, and is thus denoted as the dependent variable in the proposed conceptual framework.

3.3.8.3 Antecedents and Outcomes of Online Purchase Intention

According to Wu (2003), a person's shopping behaviour is impacted by four major psychological aspects, namely attitude, belief, perception and motivation. Consumers' behavioural intentions and decision making have been widely acknowledged as influential to a person's personal attitude (Wu, 2003). More particularly, attitude serves as the bridge between consumer consumption and characteristics that satisfies their needs. In addition, consumers' characteristics such as demographic, personality and perception on online shopping benefits, have also been found to influence consumers online shopping behaviour (Cheung & Lee, 2003; Goldsmith & Flynn, 2004; Wu, 2003). Meanwhile, Delafrooz, Paim, & Khatibi (2011) argue that intention is determined by a person's attitude when acting on a specific behaviour. On the other hand, Yu and Wu (2007) suggested that when consumers have an optimistic attitude towards spending online, they are likely to have a far better intention to shop for goods and services via the internet.

The Technology Acceptance Model, Theory of Reasoned Action and Theory of Planned Behaviour, provide a valid bases for explaining and predicting consumers'' intention towards online shopping behaviour (Choi & Geistfeld, 2004; Pavlou & Chai, 2002; Salisbury et al., 2001). Boster, Shaw, Carpenter, & Lindsey (2014) believed that the Theory of Reasoned Action has an influential role in explaining the process that determines peoples' purchase intention. Often, people tend to consider the outcomes of their actions before they decide to perform a certain action (Ajzen & Fishbein, 1980). These authors further denote that the Theory of Reasoned Action is useful in predicting an individual's intention to behave in a certain way; this is achieved by assessing an individual's attitude towards a specific behaviour in addition to the subjective norms of groups and individual people that could affect the one's attitude. Subjective norms are influenced by people's perception of the beliefs of the individual's around them, for instance, colleagues, friends or parents (Ajzen & Fishbein, 1980). These authors also pose that subjective norms affect consumers seeing as people often have preconceived views of how others will react to their behaviour and whether they will tolerate it or not. Consequently, subjective norms impact consumers' online purchase intention through the attitude consumers have towards online shopping (Hansen, Jensen, & Solgaard, 2004). In the same way, attitudes influence consumers' online intention to purchase (Korzaan, 2003). Heejin, Lim & Dubinsky

(2005) endorsed the latter and said that consumer attitudes towards shopping online are affected positively when consumers have intentions to purchase online. As a result, in later research, Hansen et al. (2004) established that consumer's attitude toward online shopping is in actual fact a predictor of online shopping. Thus, consumers' attitude toward the behaviour of online shopping is a determining factor of Behavioural intention (Hansen et al., 2004).

Taylor and Laohapensang (2009) applied the Theory of Reasoned Action on a base of Thai consumers and the results of that study found that the intention to shop online was most likely to be influenced by perceived behavioural control and subjective norm. In view of the fact that these two elements have an influence over consumers purchase intention, thereby influencing their actions towards online shopping and eventually lead to actual action; online shopping intention as a substitute for purchasing behaviour warrants further exploration (Lim, Osman, Salahuddin, Romle, & Abdullah, 2016). While intention has been deemed as a significant factor of behaviour to shop online He et al. (2008); Pavlou and Fygenson (2006); Taylor and Laohapensang (2009), it should be acknowledged that purchase intention does not translate into purchase action (Kim & Jones, 2009).

According to The Technology Acceptance Model, perceived usefulness and perceived ease of use influence the online shopper's decision after online behavioural intention sets in (Hu et al., 2009). As stated by Kim, Zhao and Yang (2008), an online retailer should understand their customers purchasing behaviour in order to develop and sustain a healthy relationship with customers. In contrast, Limayem, Khalifa and Frini (2000) discouraged other scholars to further investigate intention under the assumption that behaviour automatically strings along. Jamil (2011) disagrees with Limayem et al. (2000) and proposed that purchase intention could have a positive impact on actual purchasing and suggested advancement of research on the relationship between these two variables in future studies.

For online purchase intention to exist, consumers must perceive the benefits of online shopping to outweigh those of in bricks and mortar retailer (May, Danny, Wong, & Sculli, 2005). Purchase intention is the aim to acquire a particular good or service within a selected time period (Hair,

Wolfinbarger, Money, Samouel, & Page, 2011). Furthermore, online purchase intention is influenced by consumers' willingness to purchase from an e-tailer (Ling et al., 2010; Salisbury et al., 2001). When customers are accustomed and familiar with e-tailers, they are inclined to visit the online retailer with the intention to purchase (Chen & Barnes, 2007; Forsythe & Shi, 2003; Gefen & Straub, 2004). Hence, it is imperative that online retailers continuously meet the demands of their customers in terms of fulfilling their wants and needs in order for purchase intention to increase (Forsythe & Shi, 2003).

3.3.8.4 Conceptualization of Online Purchase Intention

Various dimensions of online purchase intention have been developed from literature. Hongyao (2013) developed a multi-dimensional model for online purchase intention that considered six constructs as individual dimensions. These consist of; privacy, security, perceived risk (PR), trust, perceived use (PU) and perceived ease of use (PEOU). The authors believed that these six constructs developed consumers' attitude which in turn directly affected their online purchase intention. Four scale items were used to measure the respective dimensions using a 7 point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

On the other hand, Rizwan (2014) divided the dimensions of online purchase intention into five categories. Some of these categories were consistent with those presented by Hongyao (2013) and others slightly different. In addition at the above-mentioned dimensions, Rizwan (2014) discussed the following constructs, attitude towards online shopping intention (ATOSI) and perceived online shopping experience (POSE). The ATOSI dimension refers to positive or negative emotional stimulus that influences consumers buying Behaviour on the internet (Chiu et al., 2005; Schlosser, 2003). Previous literature shows that POSE directly affects the purchase intentions of consumers of Internet (Eastlick & Lotz, 1999, Weber & Roehl, 1999). According to Rizwan (2014), successful experiences also improve customer perception on the usefulness, ease of use whilst minimizing PR related to online shopping.

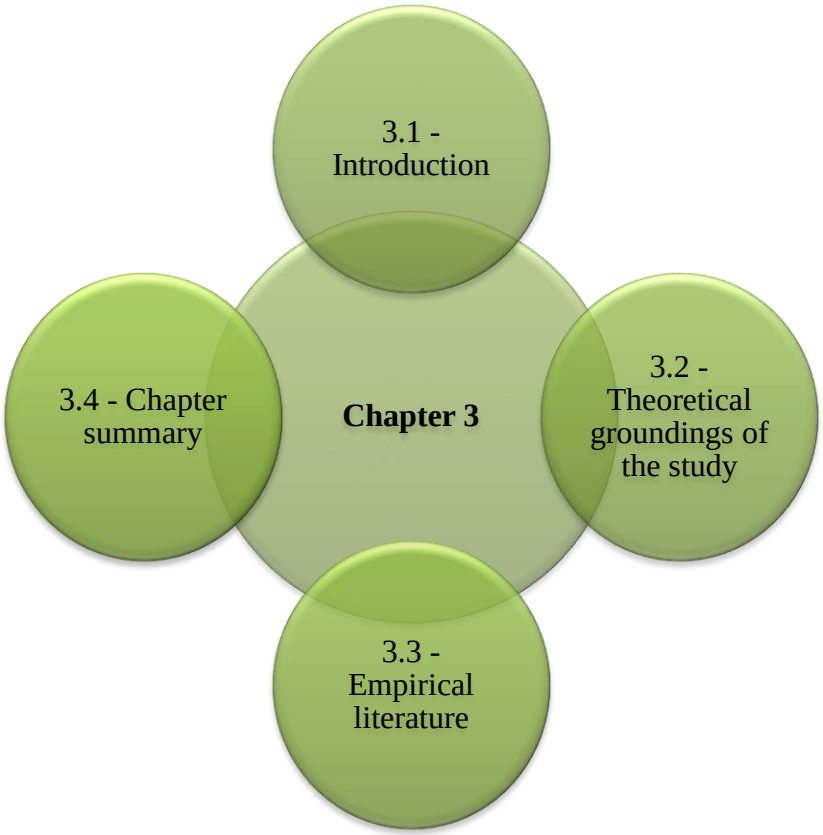
Rose et al. (2012) make reference to Khalifa and Liu (2007) and developed a three item scale that measures online purchase intention. This study adapts all but one of these measurement

instruments, and modifies them to fit the context of this research. In doing so, content validity is transferred into the adapted measurement instruments. Thus, the scale developed by Khalifa and Liu (2007) yielded an instrument that can qualify each different dimension of online purchase intention and consolidated this into an overall score, which reflects how positive or negative consumers online purchase intention may be, based on these dimensions. Similar to all aforementioned instruments, the measurement of online purchase intention will rely on a 5 point Likert scale ranging from (1) strongly disagrees to (5) strongly agree.

3.4 Chapter Summary

This chapter covered the theoretical groundings and literature review of this study at length. It began with a brief introduction of the chapter which led into a detailed discussion of each of the five theoretical groundings of the study. A deep analysis was provided for the Technology Acceptance Model (TAM), The Theory of Planned Behaviour (TPB), The Innovation Diffusion Theory (IDT), The E-Service Quality Model (SERVQUAL) and the E-Commerce Success Model (ECS) and how each of these theories/models is relevant to this study. This was followed by a comprehensive unpacking of the literature. All the variables of this study, namely; data charges, delivery dependability, geographical distance, product risk, information quality, online shopping satisfaction, trust and online purchase intention were covered in depth. The chapter ends with a diagrammatic representation for illustrative purposes.

Figure 3.21: Diagrammatic representation of Chapter Three



Source: Author (2016).

CHAPTER FOUR – CONCEPTUAL MODEL AND HYPOTHESIS DEVELOPMENT

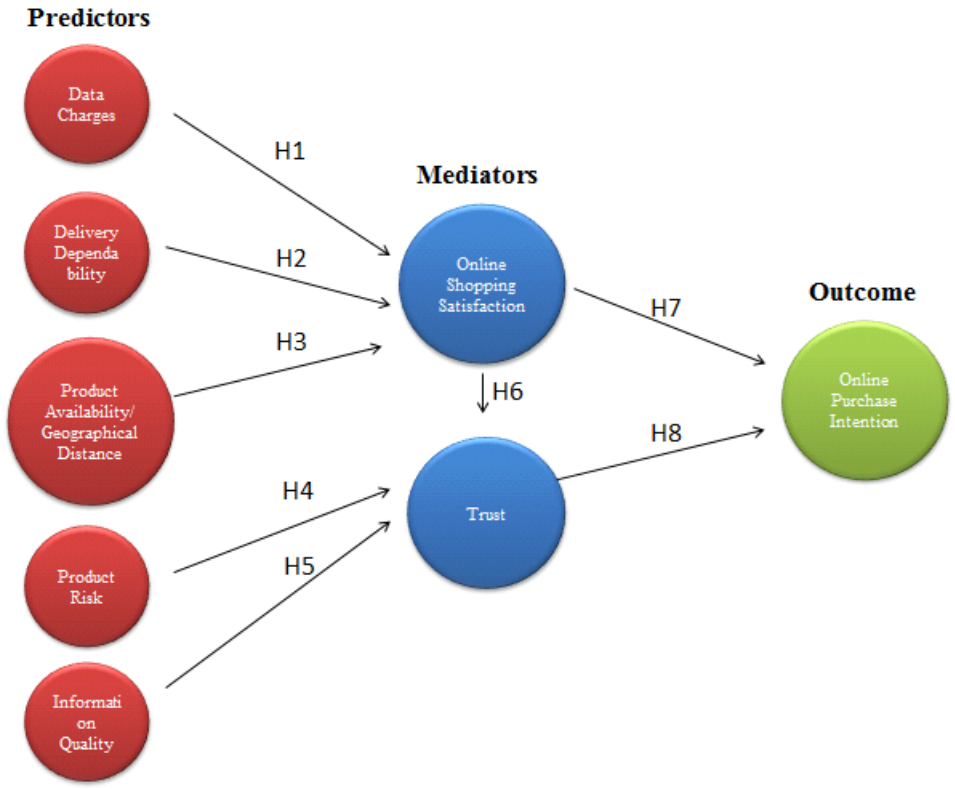
4.1 Introduction

The following chapter provides a detailed discussion of the proposed conceptual model and the hypothesis development. Hypotheses development and statements were done after formulating a conceptual model on the basis of the theoretical and empirical literature reviewed as detailed in Chapter 3. Following the hypothesis development, the hypothesis statements on each research construct is given. Consistent with the research objectives, research questions and the literature review, the conceptual model has 5 independent variables (i.e., data charges, delivery dependability, geographical distance, product risk and information quality) which are modelled against 1 dependent variable (i.e., online purchase intention). It was assumed that the exogenous variables were subsequently going to predict consumers' online purchase intention for general merchandise products. The mediator variables conceptualised in the current study are online shopping satisfaction and trust.

4.2 Conceptual Model

A model can be defined as a statement about a relationship between variables (Gois & Ehrlich, 2014). In order to statistically test the associations between the study constructs, Figure 4.1 below presents the proposed conceptual model for the current study.

Figure 4.1: Conceptual model



Source: Author (2015).

Data charges, delivery dependability, geographical distance, product risk and information quality represent the predictor variables, with online purchase intention as the outcome variable. There are two mediators namely, online shopping satisfaction and trust. The purpose of the study is to investigate the relationship between data charges, delivery dependability, geographical distance, product risk information quality and online purchase intention, and the mediating role of the two aforementioned mediators. It is therefore proposed that data charges, delivery dependability, geographical distance, product risk and information quality has positive influence on the two mediating variables, which in turn has a positive influence on online purchase intention. In practice, this means that when online retailers and marketers create favourable circumstances that inspire the said predictor variables, it will have a positive effect on consumers' online shopping satisfaction and online trust. This will lead to an increase in consumers' online purchase intention.

4.3 Hypotheses Development

By means of a critical analysis of literature, this section discusses the creation of the conceptual model. This is followed by an overview of the development of hypotheses.

4.3.1 Data Charges and Online Shopping Satisfaction

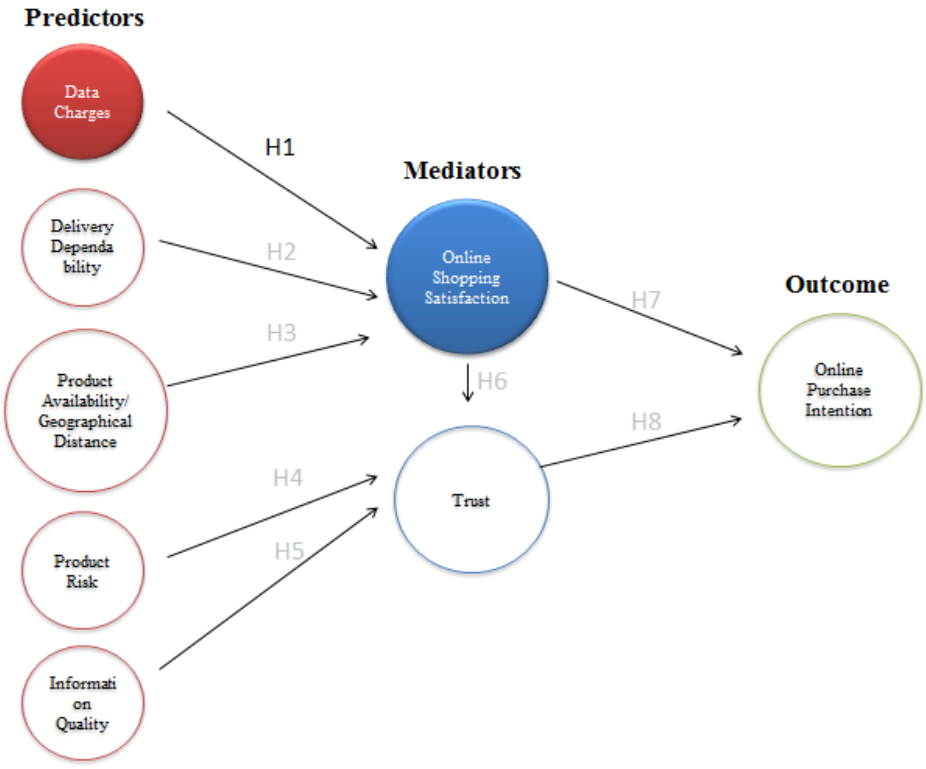
As consumers become technology savvy and rely on internet usage and connectivity daily, their operational costs in the form of data proportionately increases. In fact, for some consumers the cost of data has become more prominent than that of talk time (Kim et al., 2009). As a result, it has become increasingly important for both practitioners and researchers to understand the relationship between data charges and online shopping satisfaction. Practitioners (internet service providers and e-commerce channels) would desire to comprehend this relationship so that they can develop the relevant marketing strategies to keep online consumers in demand of data irrespective of the cost implications as they continuously see additional value in consuming more data. For researchers, understanding this variable would mean the ability to better deliver on strategy.

According to Prieger (2013), it is worthwhile re-examining the usage of broadband amongst the subpopulation that consists of the lowest income group of households. This is of interest because lower-income households would naturally be more sensitive to the price of broadband. It is thus fairly logical to assume that high data charges would have an adverse effect on online shopping especially to price sensitive consumers. Other scholars, Madden and Simpson (2007); Savage and Waldman (2005); and Cerno and Perez Amaral concur with the notion that household income is an important determinant of uptake and utilization of data which in turn affects online adoption and online shopping. Hamm and Chaudhuri (2007) found that broadband price had a significant influence on broadband demand in both urban and suburban areas. This finding suggests that broadband prices would certainly have an impact on data consumption and as a result, consumers' appetite to shop online.

Finally, the growth of the mobile smartphone and its increased use as a means to access the internet cannot be ignored. In their study, Kongaut and Bohlin (2016) established that lower income respondents tend to use their devices more for social networking, online shopping and internet telephone than those with a higher income. The growth of the mobile smart phone has subsequently put enormous pressure on both policy makers and telecommunications companies to make sure that mobile broadband is affordable and that consumers are knowledgeable should they want to use it (Kongaut & Bohlin, 2016). In this way, non-adopters would be encouraged by data that is more accessible through reasonable pricing, thus reducing the digital divide in the economy. Based on the above interest, the research proposes the following hypothesis;

- H 1: High Data charges will have a negative effect on consumers' online shopping satisfaction.

Figure 4.2: Data charges and online shopping satisfaction



Source: Author (2016).

4.3.2 Delivery Dependability and Online Shopping Satisfaction

Delivery dependability refers to the ability of an online store to successfully fulfil its customer delivery (Li et al., 2005). Many studies have conducted research on "Free Delivery" as a variable that predicts online purchase intention (Al-Bakri & Katsioloudes, 2015). In many instances it was found that a positive relationship exists between free delivery and increased online purchase intent (Comline, 2008). Because of such academic insight, many online stores have sold this value add as part of their online value proposition but very few are actually able to deliver timeously on this promise. Thus, this study seeks to research the relationship between delivery dependability and online satisfaction. It will uncover how customer perception of the ability of an online store to deliver a product influences their online purchase intention. It is effortless for an online store to promise delivery/free delivery. However the dependability of that store to execute delivery accurately and timeously has far reaching consequences on a consumer's online shopping satisfaction.

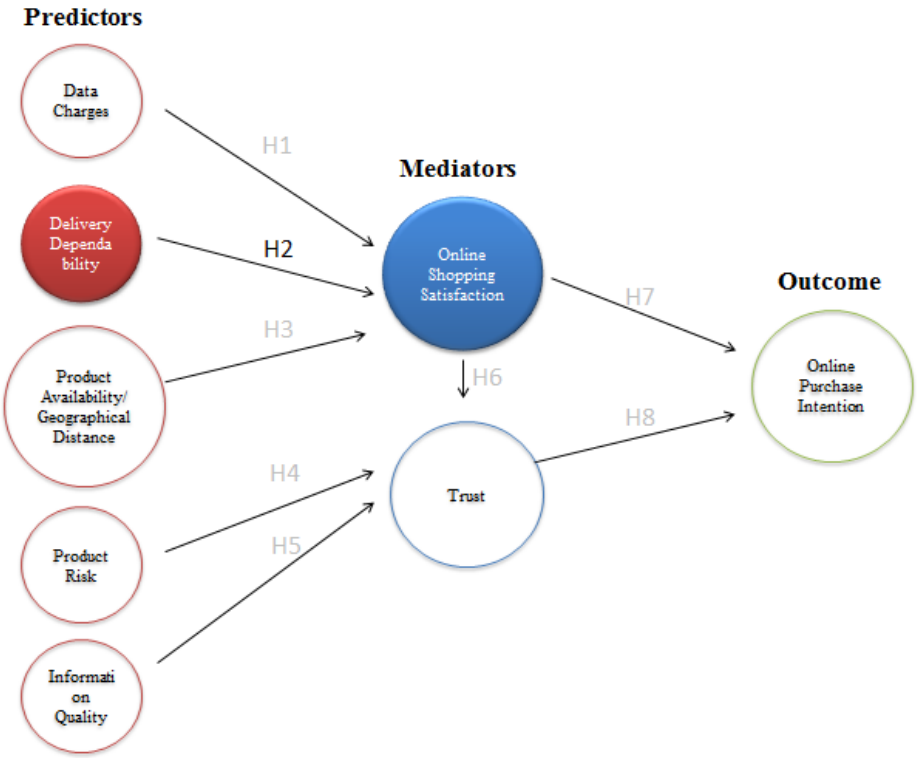
The absence of physical interactions between buyers and selling is one of the biggest shortfalls of online shopping. Massad, Heckman and Crowston (2006) argued that delivery performance or delivery dependability, as also argued in this study, is the key factor for keeping customers satisfied with online retailers. Xia Liu, He, Gao and Xie (2008) proclaimed that in the context of e-commerce not only is consumption of products separated from production, therefore making it a necessity for products to be delivered to customers before consumption, but there is also a postponement in the delivery of products. Shankar, Smith and Rangaswamy (2003) propose that delivery dependability makes part of customer service of a website and that it affects consumer satisfaction. These authors are of the opinion that the better the quality of service in terms of delivery management, the more customers will be satisfied. Therefore, e-tailers often provide consumers with contact numbers should they need to ask product related questions. Good customer service will have a positive outcome on customer satisfaction (Xia Liu et al., 2008).

On the other hand, it is also important to note that profoundly delayed delivery or bad customer service may have an adverse effect on satisfaction (Liu et al., 2008). Hence, online retailers should pay particular attention to improving the customer experience by providing prompt

feedback on the delivery status, reliable and cost effect delivery options, safe packaging and ensuring timely delivery of the ordered goods (Massad et al., 2006). A late delivery not only causes delay in satisfaction in the purchased product, but it also creates uncertainty about the products customers will find it difficult predicting the quality of the product (Liu & Wei, 2003). Koyuncu and Bhattacharya (2004) also found that protracted delivery lead times are amongst the top reasons that cause consumers to purchase online less frequently. Besides uncertainty and late satisfaction, consumers also have to bear other problems caused by the online delivery process. For instance, consumers need to agree on the time and date for the delivery such that they will not miss the package; alternative arrangements need to be made should the delivery schedule be missed or if anything about the product received goes wrong such as damaged product, wrong product delivered, and so on. All these cause inconvenience to consumers to some degree and negatively impact online shopping satisfaction (Hsiao, 2009). Massad et al. (2006) suggest that an informed customer is more likely to be a satisfied customer. Thus this study posits that;

- H 2: Delivery dependability has a positive effect on consumers' online shopping satisfaction.

Figure 4.3: Delivery dependability and online shopping satisfaction



Source: Author (2016).

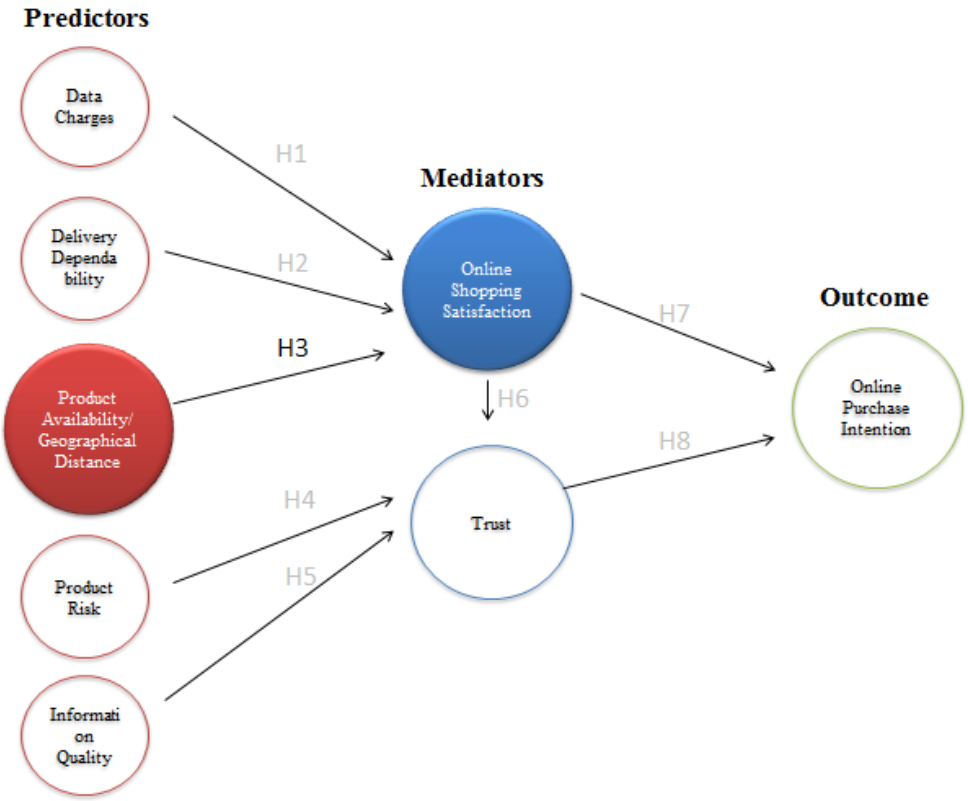
4.3.3 Geographical Distance and Online Shopping Satisfaction

Geographical distance can be categorised as the distance between an online store and the closest physical store that a consumer can make an equivalent purchase (Du Toit, 2013). Consumers are being increasingly exposed to the benefits of e-commerce, part of which include convenience by way of home shopping and unrestricted shopping times (Chocarro et al., 2013). Due to such advantages, consumers are finding it more and more appealing to shop online at their own convenience and have products delivered to them. Convenience derives consumer satisfaction and in this instance, online shopping, through convenience drives online shopping satisfaction. As a result, it is becoming more apparent that it is vital for researchers and practitioners to understand the relationship between geographical distance and online shopping satisfaction. As is, the information available is scant and needs more studies to investigate the relationship between geographical distance and online shopping satisfaction (Du Toit, 2013).

Consumers need to weigh the rewards of visiting a bricks and mortar retailer where they could enjoy benefits such as physically interacting with a product, expert customer service and in store experience versus virtual shopping where they can enjoy benefits such as ability to easily compare products, direct home delivery and unrestricted shopping hours (Van Nierop et al., 2011). Thus, geographical distance and how it impacts online shopping satisfaction is a variable of interest in understanding the predictors of online purchase intention. In some instances, particularly in the case of global markets, geographical distance coerces consumers to purchase online more often, especially when dealing with credible online retailers who can vouch for their deliver dependability. Moreover, Oppewal et al. (2012) recently obtained that distance has a negative influence on bricks and mortar outlets. The further the store, the greater the convenience and the probability of online shopping (Chocarro et al., 2013), which in turn influences online shopping satisfaction by drawing on higher customer utility. On this premise the research proposes the following hypothesis;

- H 3: The increased ability of customer to access geographically distant product positively impacts their online shopping satisfaction.

Figure 4.4: Geographical distance and online shopping satisfaction



Source: Author (2016).

4.3.4 Product Risk and Trust

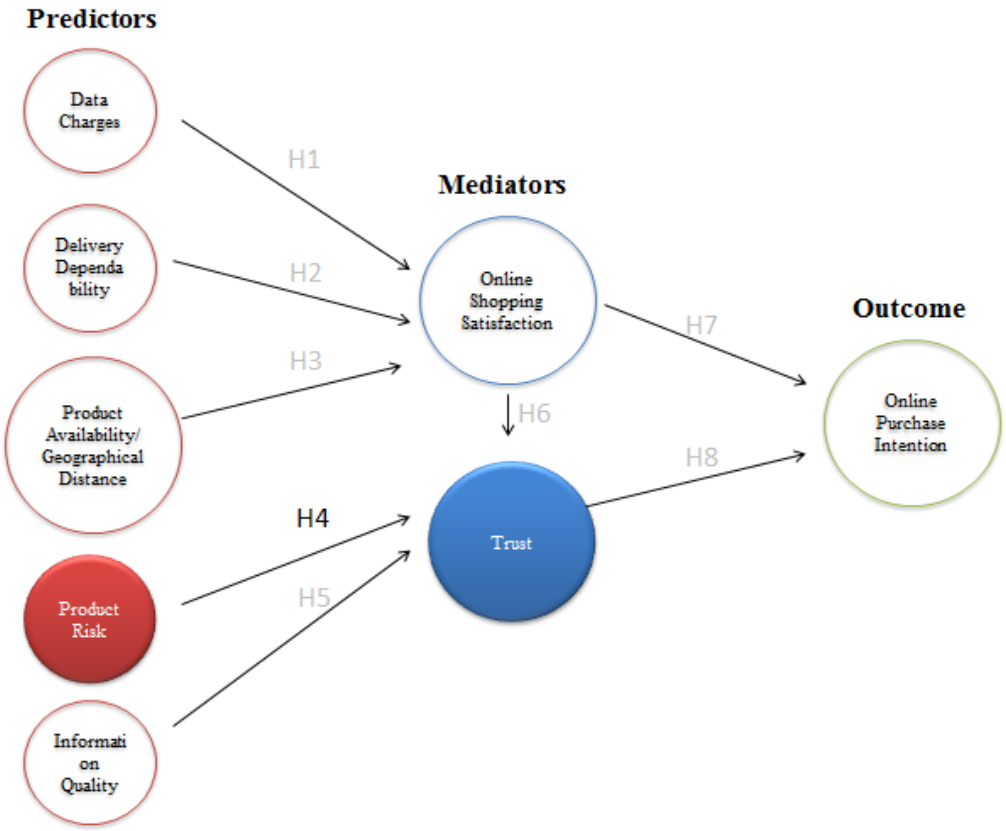
This refers to the inability of a consumer to touch or physically interact with a product prior to purchase. This notion is particularly prominent in high involvement general merchandise categories such as large domestic appliances (Grohmann et al., 2007). When consumers purchase pricey items such as fridges as an example, they tend to want to touch and feel the product before making a purchasing decision. Unfortunately, the inability to touch a product when shopping online is perceived to have an adverse relation to trust in an online product (McCabe & Nowlis, 2003). Essentially, product risk is centred on the sensitivity that a product purchased may fail to function or look as originally expected (Kim et al., 2008). It is therefore categorized as the subsequent loss incurred when a brand or product does not perform or look as expected. Again, this is largely due to the shoppers' inability to accurately evaluate the quality of the product online (Bhatnagar et al., 2000).

It goes without say that consumers who purchase products based on aesthetic appeal will find themselves at a disadvantage. Hence, online shopping, similar to any type of non-brick and mortar shopping makes it problematic to inspect physical goods. As a result, consumers are forced to rely upon rather limited information and pictures illustrated on websites (Jarvenpaa & Tractinsky, 1999). Consequently, consumers are negatively impacted when goods are delivered and do not meet their expectation from a functional and aesthetic point of view. In such instances, consumer trust is negatively affected.

Conversely, there are advantages of online shopping which decrease product risk and add to the trust of consumers. For example the ability to read up additional product features and benefits decreases consumer product risk (Ho, 2014). The view of whether product risk has a negative or non-existent relationship to the trust of online products is to be empirically determined by the research. Therefore, it is vital that both researchers and practitioners understand the relationship that exists between product risk and trust. In light of the above discussion the research proposes the following hypothesis:

- H 4: There is a negative relationship between the inability to touch an online product and trust

Figure 4.5: Product risk and trust



Source: Author (2016).

4.3.5 Information quality and Trust

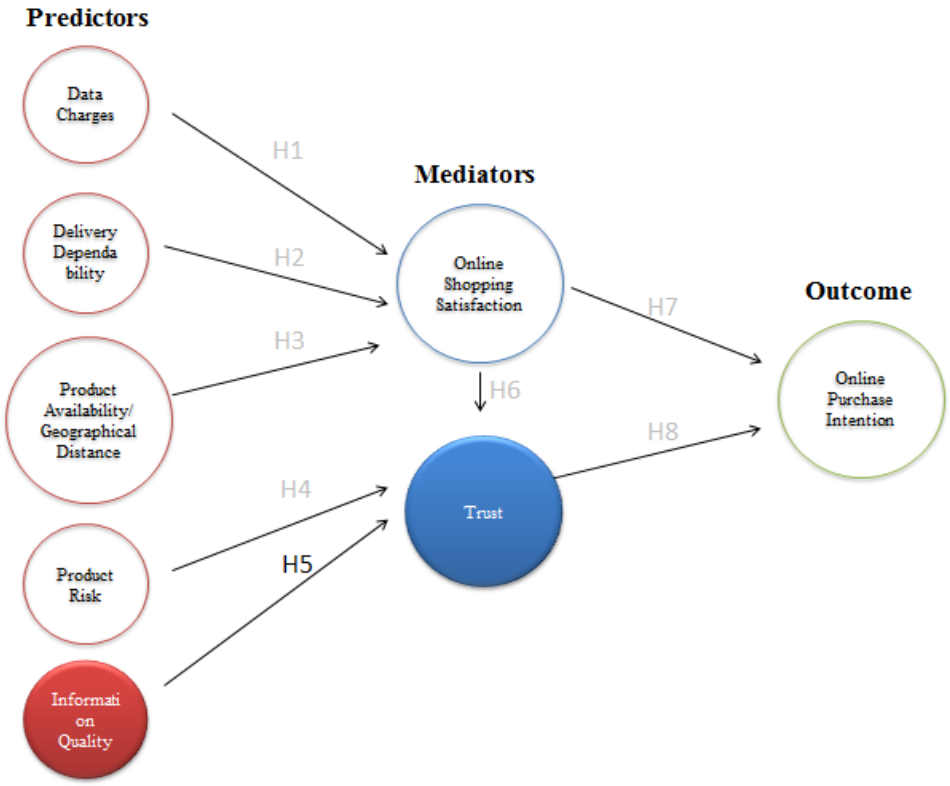
Information quality relates to how up to date, sufficient, easy to understand and consistent is the information that an online retailer provides about its products (Cho & Park, 2001). In the context of this study, information quality is defined as the level of detailed information a customer has at their disposal at the time of purchase (Holmberg, 2000). Since online stores do not have the ability to rely on in store sales people, they are forced to rely solely on their ability to educate consumers through detailed product information (Guo et al., 2012). This could include a vast array of additional value propositions. Some online stores allow comparative product information to help consumers make informed purchase decisions whilst others offer for three dimensional product viewing while some e-tailers utilise a combination of both (Du Toit, 2013). Whichever mechanisms online stores opt to utilize to share additional information to aid

consumers, it is vital that they provide clear and concise information that offers consumers product solutions. Too much information can be daunting for consumers. The correct amount of product information develops trust between the consumer and online stores.

Unlike retailer-customer relationships in bricks and mortar retail environments, the major interface with an online retailer is an information technology website. Thus website performance in terms of information quality is crucial to attract people and more importantly, retain them as loyal online shoppers' (Kim & Niehm, 2009). Kim and Niehm (2009) citing Siegel (2007) suggests that in order to be successful, online retailers should provide extensive information that is presented in a digestible format and well-designed navigation and ease of operation are essential for an effective website. According to Park and Kim (2003), information quality is most influential online characteristic that affects trust and customer satisfaction. This is primarily because the quality of product information allows potential customers to minimize searching and processing costs (Alba et al., 1997). In addition, Park and Kim (2003) empirically proved that up to date, accurate and consistent information on an e-tailers products increases overall trust and consumer satisfaction. Eid (2011) proposed that if the information provided by an e-tailer is accurate and reliable, then this will increase online trust and satisfaction which will lead consumers to make the initial purchase. Following these conclusions, it is hypothesized that:

- H 5: Increased information quality positively affects customers' trust of online products.

Figure 4.6: Information quality and trust



Source: Author (2016).

4.3.6 Online Shopping Satisfaction and Trust

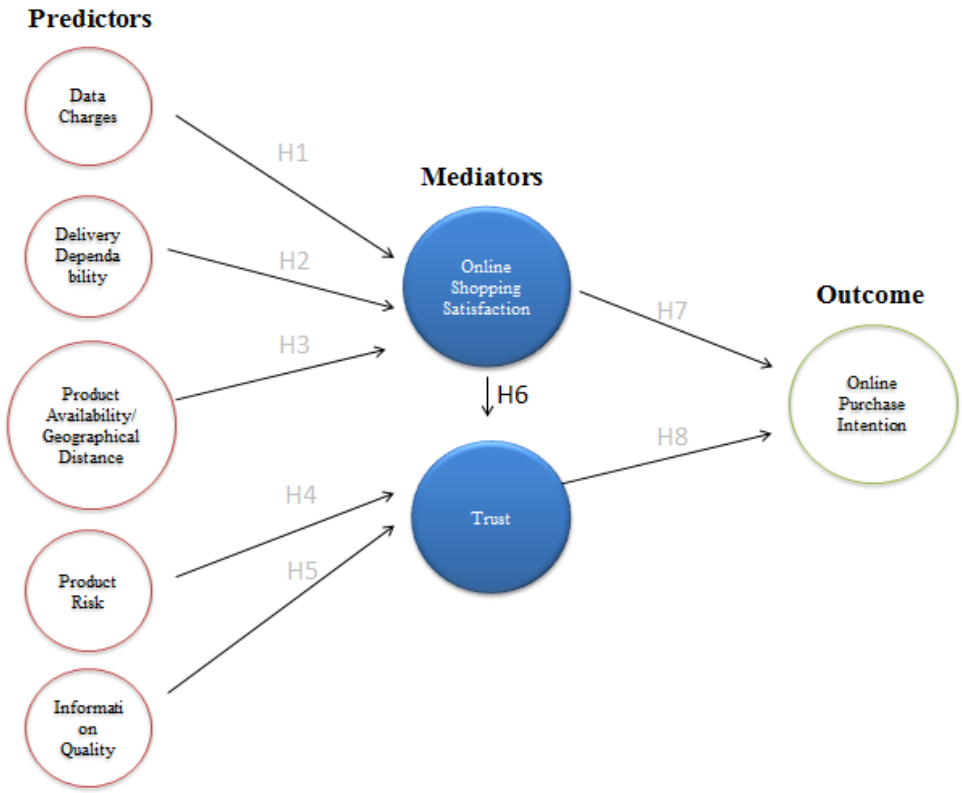
Online shopping satisfaction is necessary in order to develop trust in online products. Online shopping satisfaction refers to effectively satisfying the variable components that each consumer considers before making an online purchase (Kim et al., 2008). If this can be achieved successfully by an online store, consumers are likely to develop a level of trust with the e-tailer (Jin & Park, 2006). Thus, online shopping satisfaction is a critical variable for determining how well an e-commerce website is meeting the requirements of the visitor (Gudigantala et al., 2016).

The reviewed literature uncovers that online shopping satisfaction is a fundamental driver for online shoppers. In most cases, consumers who have had positive online outcomes tend to be more trusting of online retailers (Walczuch & Lundgren, 2004; Wang & Head, 2007). This is

because satisfaction with previous online experiences increases consumers' assurance that they are not being taken advantage of and that online retailers are genuinely concerned about their benefit during transactions (Lankton, Wilson & Mao, 2010). Thus, trust is built as a result of online shopping satisfaction being achieved. According to Liao & Keng (2013), satisfaction and trust need to be maintained in online shopping regardless of customer experience because they are important factors when it comes to customer retention and in unfortunate instances such as service failure. In addition, satisfaction and trust are recognized as being positively related (Paul A. Pavlou, 2003). In other words, trust has been found to be generated from a customer's overall satisfaction (Zineldin & Jonsson, 2000). Other scholars Li, Browne and Wetherbe, (2006) and Wang and Head (2007) empirically showed that satisfaction plays a vital role in the formation of trust. On the other hand, Chang-Lee et al. (2013) highlight that the level of trust is a consequence of the capacity of a business to satisfy the needs of its clients. In view of this, the research suggests;

- H 6: The greater the level of online shopping satisfaction the greater the level of trust in online shopping.

Figure 4.7 Online shopping satisfaction and trust



Source: Author (2016).

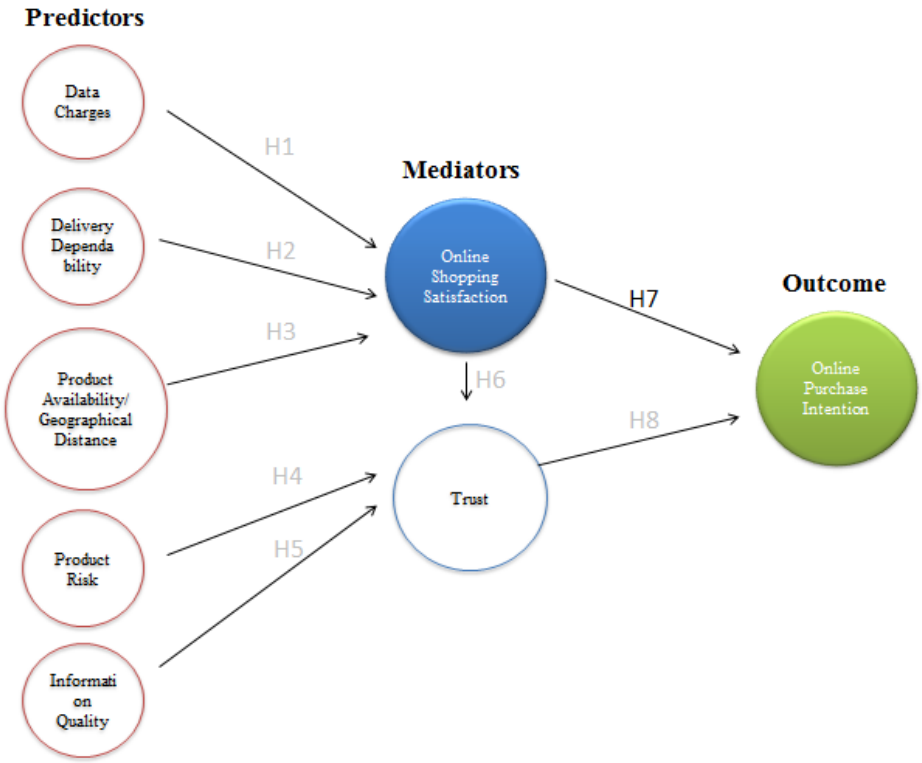
4.3.7 Online Shopping Satisfaction and Online Purchase Intention

According to the proposed conceptual framework, once consumers are satisfied that their basic predictor variables are waivered, trust in the online store is developed and they are most likely to complete the online purchase. Purchase intention refers to the likelihood that an individual will purchase from any channel of a retailer as a result of a website visit (Gudigantala et al., 2016). For example, it is common for consumers to perform robust online product searches on e-tailer websites before concluding a purchase. Online shoppers may purchase from the website or visit the physical store to make the purchase (Gudigantala et al., 2016). Understanding consumer purchase intention and the correlation to online shopping satisfaction is vital in understanding what drives an actual purchase. Zeithaml (2000) posits that by increasing customer satisfaction, organizations stand to achieve higher customer retention rates, positive word of mouth and increased profits. Lee and Lin (2005) cited online shopping satisfaction to positively influence

customers' intention to purchase. In another study, Hsu et al. (2006) found that satisfaction has a positive influence not only on consumers online purchase intention, but as well as consumers' intention to repeat online purchases. According to Al-Fadhli (2011), limited studies have scrutinised the correlation between differing dimensions of e-service quality in predicting overall service quality, customer satisfaction, and purchase intentions for online shopping. Therefore the research further proposes the following hypothesis;

- H 7: The greater the level of online shopping satisfaction, the greater the level of online purchase intention.

Figure 4.8 Online shopping satisfaction and online purchase intention



Source: Author (2016).

4.3.8 Trust and Online Purchase Intention

As previously alluded, online trust can be defined as a set of values held by a consumer in relation to certain characteristics of the e-tailer, in addition to the likely Behaviour of the e-tailer in the future (Coulter & Coulter, 2002). Trust stimulates online purchasing and effects consumer attitudes towards purchasing from e-tailers (Lee & Lin, 2005). Trust is vital component in establishing online purchase intention. Consumers need to feel "safe" and "secure" in making a potential purchase. Hence numerous studies have emphasised the importance of online trust between customers and online stores (Krauter & Kaluscha, 2003). Trust encourages online customer purchasing activity and affects customer attitudes towards purchasing from an online store (Gefen, 2000; Gefen el at, 2003). The internet, as the enabler of communication between businesses and consumers is often faced with risks that affect both respective parties. Some of these risks include privacy concerns and information security among online consumers Runya, Smith & Smith (2008), which if not addressed can possibly hinder e-commerce. Online retailers should have mechanisms that meets the expectation of its users such that information that is disclosed and posted online cannot be availed to or used by any third party or for any other purpose than what is was organically intended for without proper knowledge and consent by the user (Rauniar et al., 2014). Thus establishing online consumer trust is at the heart of e-commerce success (Mayayise & Osunmakinde, 2014). As discussed, the element of trust can be created by the ability of the online store to positively deliver on the predictor variables in the presented conceptual framework. Such as in many cases in business, trust is a catalyst in conducting effective trade between two parties and this is no exception when it comes to online retailers and consumers

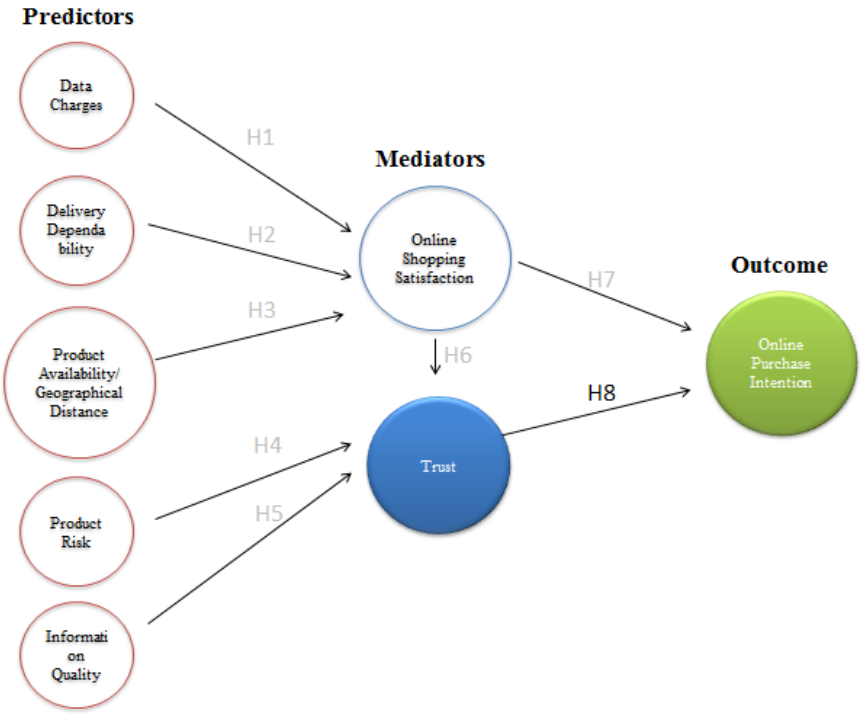
The literature discussed in the empirical review indicated that perceived trust plays an important role in online shopping due to the lack face-to-face interaction between e-tailers and consumers (Mohseni & Sreenivasan, 2014; Lee, Eze, & Ndubisi, 2011). Trust refers to a consumer's perception towards an online retailer's behaviour based on their ability, benevolence and integrity (Harrison McKnight, 2001; Guo et al., 2012). In addition, privacy, reliability and security are considered as the main factors that influence online trust (Camp, 2001). In the online retail context, a large group of consumers assume that big companies are more trustworthy and are able to impact their purchase intention and trust feeling via online (Koufaris & Hampton-

Sosa, 2004). Consumers' online purchase intention is likely to increase when consumers are more certain that their personal information is insured and protected (Yong-Man & Shim, 2002; Yu-Bin et al., 2005). Hence online trust needs to be established when personal data and personal financial information is shared while making an online purchase (Eggert, 2006).

Whilst online transaction is perceived to be slightly risky, an increased sense of trust can significantly reduce the fear of uncertainty in online shopping, thereby eliminating the psychological concern of customers about reliability of online retailers (Mohseni & Sreenivasan, 2014). E-tailers should focus on developing sustainable relationships with their customers by establishing value through transparency and delivering on trust. Trust contributes positively towards the success of online transactions (Jarvenpaa, Tractinsky, & Saarinen, 1999). In other words, consumers are more inclined to engage in online shopping if they perceive the online retailer to be trustworthy and when they establish confidence towards the online transaction process. As numerous studies have concluded, higher consumer online trust will result in higher customer online purchase intention (Ling et al., 2010; McKnight et al., 2002b; Verhagen, Meents, & Tan, 2006). Therefore, the study proposes the following hypothesis;

- H 8: The greater the level of trust in online shopping, the greater the level of online purchase intention.

Figure 4.9 Trust and online purchase intention

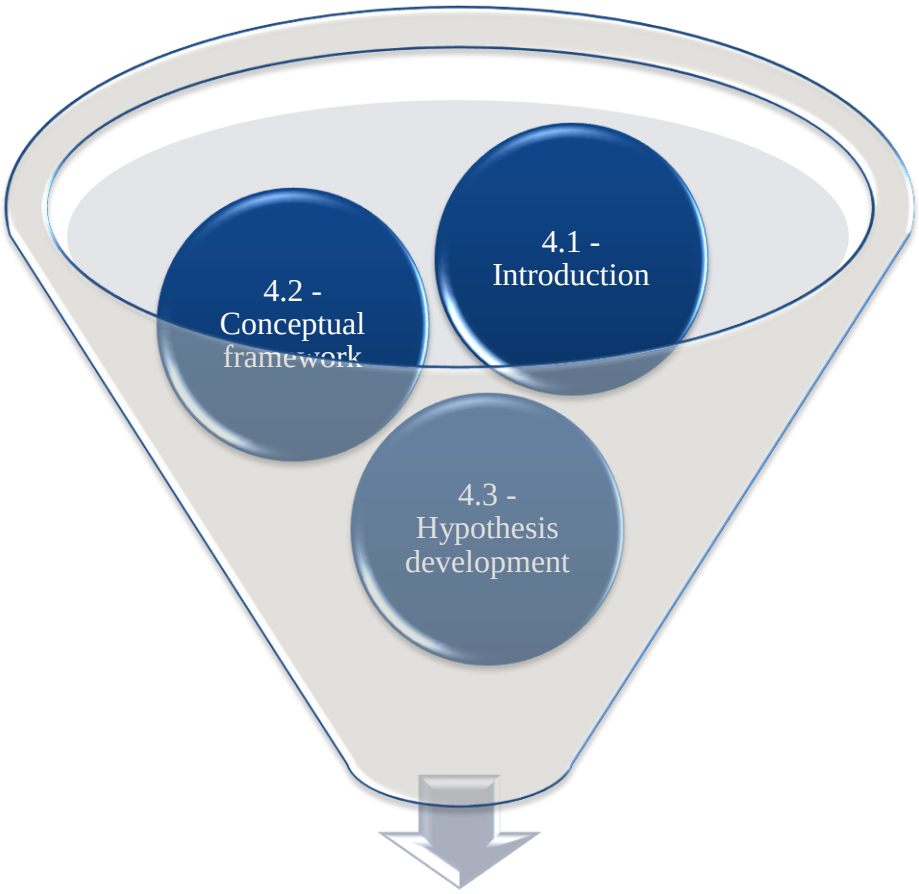


Source: Author (2016).

4.4 Chapter Summary

This chapter presented the conceptual model and hypothesis development of this study. It began with a brief introduction which paved the context of the chapter. This was followed by an illustration of the proposed conceptual model for the study, after which eight variables of the study and subsequent hypothesis developments were discussed in detail. The chapter ends with a diagrammatic illustration of the entire chapter

Figure 4.10: Diagrammatic representation of Chapter Four



Source: Author (2016).

CHAPTER 5: RESEARCH METHODOLOGY

5.1 Introduction

The preceding chapters provided a background and overview of the drivers that make people shop online. It is evident from the literature review that there are multiple factorials that can influence a customer to shop online. This chapter presents the research design and methodology. Before embarking on the notion of research methodology, it is imperative to first define research. According to Adams, Khan, Raeside and White (2007) research is a thorough pursuit, experimentation, review, or investigation directed towards the finding of recent facts and may be associated to any subject of review pertaining to the collection of raw data, the way in which the facts are decoded, and review of existing philosophies or regulations in the light of new facts or evidence. It is said that research is carried out in order to improve the researchers knowledge of what they already know; or either know very little about, and to allow the researcher to better understand the world.

According to Polit and Hungler (2004) research methodology can be defined as the way in which the researcher obtains, assembles and examines data and the discipline used to carry out the research. Rajaseka and Philominatha (2013) added that it is a structured approach in solving a problem. According to Henning (2004) and Sekaran and Bougie (2013) research methodology is a collection of techniques which are consistent and complement each other, which have the capability to provide information, increase knowledge and results that will replicate the research question and suitability of the research objectives. However, Holloway (2005) explains research methodology as a structure of philosophies and principles on which techniques and procedures are grounded. This chapter explains that research methodology, research design, research philosophy, the research instrument, data collection method, research sample, target population, data collection and analysis, methodological limitations, the validity and reliability for this study. Before examining the research it is critical to distinguish the research design that influences this research study.

5.2 Research Strategy

There are various research strategies that can be employed by researchers that are dependent on the nature of research being conducted. According to Saunders, Lewis, and Thornhill, (2007) there are seven research strategies that one may choose. Table 5.1 below illustrates each strategy and its characteristics.

Table 5.1: Features of the different research strategies.

Strategy	Characteristics
Experiment	The aim here is to explore causal connection between two or more variables. Exploratory and explanatory research tends to use experiments in order to answer 'how' and 'why' questions.
Survey	Surveys allow the grouping of enormous volume of data from a large population in a highly cost-effective way. This strategy is perceived overall as authoritative by individuals and is simple to understand and explain.
Case study	Robson (2002) states that case study is "a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence ''. Case study approach has the capability to answer why a specific study was performed.
Action research	Action research is related to the resolution of organisational problems; with involvement of stakeholders in the study; researcher is part of the organisation and interactive nature of the process.
Grounded theory	According to Goulding (2002), grounded theory is especially helpful for research to foresee and clarify behaviour, the importance being upon advancing and constructing the theory.
Ethnography	The purpose here is to describe and explain the social world the research subjects inhabit in the way in which they would describe and explain it.

Archival research	Goulding (2002) states that archival research strategy permits research questions of which emphasis is placed upon the past and adjusts over time to be answered. The capability to respond to such enquiries will be hindered by the nature of documents and the administrative records

Source: Saunders, Lewis and Thornhill (2007).

Having reviewed the various research strategies available, this study is based on surveys for several key reasons that are highlighted by (Kothari, 2004):

1. It is a low cost research method. This is also the case when conducted on large , sparsely dispersed populations
2. It is free from bias from the researcher – respondents answer in their own words
3. Respondents are not under time pressure to respond
4. Respondents can be reached more conveniently
5. Large samples can be reached which results in more reliable and dependable results

The following section discusses the research philosophy and the research design, while a justification of the adopted methods is provided.

5.2.1 Research Philosophy

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analysed and used. There are several research perspectives that can be employed by researchers depending on the objectives of the study as well as the type of research that will be conducted. Saunders et al. (2007) highlighted that research philosophy illustrates the way in which the researchers perceive the world. The philosophy adopted by the researcher will be motivated by practical thoughts. The procedural point of view in research philosophy is made clear in terms of both ontology and epistemology (Blaikie, 2007).

Wand and Weber (1993) stated that ontology is concerned with the nature of reality. Ontology as outlined by Crotty (2003) is "the study of being". Hirschheim, Klein, and Lyytinen (1995)

explained that ontological theories are those that answer the question of things that are there, that can be acknowledged or answer the question of 'what is the reality of nature? Generally ontology is related to the theories held about reality. Craig (2005) added that the attribution of knowledge and the possession of people results in interactions. Individuals fail to define what they know in a particular field or concerning a specific subject matter, it is the result of relations that they exhibit and generate knowledge.

Epistemology is concerned with articulating the nature and structure of the world, it refers to the nature of the relationship between the researcher and the world and it signifies philosophy (Hirschheim, Klein & Lyytinen, 1995). Furthermore, epistemology also involves affording a theoretical foundation for determining what kinds of knowledge are achievable and how it can guaranteed that it is both suitable and legal (Crotty: 2003). Epistemology can also be defined as the philosophy of knowledge, particularly with respects the methodology, sources, nature, validity, scope and limits. It is concerned with the investigation of what separates opinion from justified beliefs (Craig, 2005).

Both ontological and epistemological characteristics are concerned with what is regularly referred to as an individual's worldview, which has substantial influence on the perceived relative importance of the aspects of reality. This study relies on epistemological characteristics as it used a survey questionnaire; the researcher became secluded from objects. This provided the possibility of getting more objective results. Moreover, the usage of simple random sampling may have ensured that this objectivity is guaranteed. According to Ates (2008), there are 4 fundamental epistemologies in social sciences and they include; positivism, post-positivism, interpretivism and critical theory. Table 5.2 below defines the unique features of each paradigm.

Table 5.2: Differences between the Research Paradigms

	Positivism	Post-positivism	Interpretisvism	Critical theory
Ontology: What is the nature of reality?	-Reality is static and fixed -The world is ordered according to an overarching objective truth	-Reality is static and fixed -The world is ordered according to an overarching objective truth	-Reality is subjective and changing -There is no one ultimate truth	-Reality may be objective but truth is continually contested by competing groups
Epistemology: What is the nature of knowledge?	-Objective, generalizable theory can be developed to accurately describe the world -Knowledge can be neutral or value-free	-Objective knowledge of the world is not necessarily fully accessible -Seeks to establish 'probable' truth	-Knowledge is subjective -There are multiple, diverse interpretations of reality -There is no one ultimate or 'correct' way of knowing	-Knowledge is co-constructed between individuals and groups -Knowledge is mediated by power relations and therefore continuously under revision
Methodology: What is the nature of the approach to research?	-The aim is to discover what exists through prediction and control -Theory is established deductively -Uses scientific method	-Seeks to develop knowledge through the falsification of hypotheses -Emphasis on well-defined concepts and variables, controlled	-Focus on understanding -Uses inductive reasoning -Meaning is constructed in the researcher–participant interaction in the natural environment	-Focus on emancipation -Research is used to envision how things could change for the better -Seeks representation of diverse and under-

	to develop abstract laws to describe and predict patterns -Looks for causality and fundamental laws	conditions, precise instrumentation and empirical testing	-Gathers diverse interpretations (e.g. grounded theory, ethnography)	represented views -Characterised by continual redefinition of problems and cooperative interaction (e.g. action research)
Methods: What techniques can be used to gather this information?	-Tends to use quantitative methods, often including statistical testing of hypotheses (e.g. randomised controlled trials, questionnaires)	-Quantitative and qualitative methods: systematically gathered and analysed data from representative samples (e.g. surveys, interviews, focus groups)	-Tends to use qualitative methods to capture various interpretations of a phenomenon (e.g. naturalistic observation, interviews, use of narrative)	-May use both quantitative and qualitative methods, usually in a participatory way Often uses iterative research design (e.g. case studies, focus groups, participant observation)

Source: Bunniss and Kelly (2010).

The study follows a positivism research philosophy, as it investigates the relationship between, and the exploration of the dependent and independent variables. In a positivist view of the world, science and scientific research is seen as the way to get to the truth (Sekaran & Bougie, 2014). This particular research philosophy is chosen because for a positivist, the world functions by laws of cause and effect that can be determined by using a scientific approach to research (Sekaran & Bougie, 2014). Furthermore, this study is based on hypothesis testing and the

development of a conceptual framework made up of analytical constructs that can be used to analyse the regularities of the data (Bryman & Bell, 2003). Positivism not only allows for all these research criterion to be fulfilled but it also lends itself more to quantitative research methodology of which is the approach chosen for this study.

5.2.2 Research Design

Creswell and Plano (2007) and Cavana and Maani (2000) describe research design as the blueprint that is used for collecting, evaluating and investigation of data, founded by research questions of the study. In other words, it is a principal strategy stipulating the procedures and techniques for gathering and evaluating the required information. On the other hand Denzin (2010) states that research design is "the researcher's strategy for answering the research question or testing the research hypothesis". The way in which research will be carried out is essentially connected to the nature of the research questions asked. The research design of a study is the roadmap that guides the research process to assist in the attainment of the set research objectives (Myers, 2013). Research methodologies are divided into two major paradigms, namely: quantitative/positivist research and qualitative/phenomenological research. Saunders, Lewis and Thornhill (2007) explain that quantitative research is synonymous with data collection techniques that utilise, generate and analyse numerical data such as questionnaires, statistics and graphs. Conversely, qualitative research utilises and generates non-numerical data through data collection techniques such as interviews or data analysis procedures that categorise data (Saunders et al., 2007).

According to Kothari (2004), research design is essential because it fundamentally plans the methods that will be adopted in collecting the relevant data and the techniques to be used in their analysis, whilst keeping in sight the objective of the study and the accessibility of personnel, time and money. Greener (2008) defines research design as a ground plan to the research topic. The research design that was chosen for this study is based upon both exploration research as well as hypothesis testing.

This study is exploratory in nature and involves a quantitative approach. This enables the researcher to test the hypothesis and arrive at a conclusion. Kothari (2004) highlighted that there are a numerous ways to conduct research such as: causal-comparative research, correlational research, explanatory research, descriptive research, and exploratory research each of these methods will be elaborated below.

5.2.2.1 Causal-Comparative Research

Sekaran et al (2013) explained that casual-comparative research is used to investigate whether or not one variable is the cause for the other to get modified. Here the researcher is concerned with drawing the difficult components in the study. Wiid and Diggins (2015) explained causal – comparative research as research that demonstrates interconnection between variables, occurrences or illustrates it to be inaccurate. It also attempts to discover a causative connection between a dependent and an independent variable.

The relation between the dependent and independent variable is usually a proposed relation which has not necessarily been proven, as a result of the researcher not having comprehensive control over the independent variable (McKinney, 2004).

5.2.2.2 Correlational Research

Creswell (2008) stated that correlational research is useful in determining the degree to which two variables are linked with one another. According to Sekaran et al (2013) correlational research is used to analyse the nature, the importance and direction of the relationship between variables, if the relation exists and to determine a regression equation that may possibly be used to make estimates for a population. The data in correlational research is examined by means of scatterplots diagrams or the use of correlation coefficients. It is imperative to assess the correlation associated between two or more variables in a study in order to reach a conclusion.

Marilyn and Goes (2011) explain that in correlational research it is important for the researcher to examine one or more qualities of the selected population to determine the degree to which the qualities vary from one another.

5.2.2.3 Explanatory Research

Research that brings about causal relations among two or more variables is normally labelled as explanatory research (Craig, 2005). The importance here is on reviewing a situation or issue adequately in order to describe the relations among two or more variables. The importance in explanatory research is analysing a situation or a hindrance in order to elucidate the relations between the variables (Kothari, 2004). According to McKinney (2004) explanatory research is used to explain in detail why certain relationships occur and to clearly define variables in a research study. Adams et al (2007) added that explanatory research is deep-rooted in the sense that it defines an occurrence and explains why behaviour is the way it is. Explanatory research sometimes works hand in hand with quantitative research which will be explained as one progress down this study.

5.2.2.4 Descriptive Research

Descriptive research studies, according to Kothari (2004) and Robson (2002) are studies which involve describing and depicting precise characteristics of a particular individual, group of people and of a particular occurrence. Descriptive research involves direct analysis, exploration, and explanation of a certain situation (Burnes & Groova, 2001). Often it is the beginning of the research of which insufficient facts are known (Adams et al, 2007). It paints an image of a situation as it naturally happens in the mind of the researcher. Therefore, it may be used to make judgements and also develop theories. According to Sekaran et al (2013) the objective of the descriptive research is to reach an accurate census with the data collected about a population.

5.2.2.5 Exploratory Research

Exploratory research is also called formulative research. Exploratory research according to Burneset al (2001) is research steered towards gaining another perspective, developing new concepts, and for increasing knowledge of the phenomenon. The key driver of such research is that of compiling a problem for more accurate examination or to foster a working hypothesis from an operational standpoint (Kothari, 2004). Exploratory study is an essential way of finding out what is happening in a particular situation in order to seek new insights and to inquire and to evaluate a phenomenon in a new light (Robson 2002). Sekaran (2013) supports the above view by saying that exploratory research is performed by the researcher when inadequate information is accessible on the situation or when there is insufficient research done on the subject area in past studies. Given the nature of this study, in the sense that the research topic has not been extensively researched in South Africa and the topic at hand has information from developed countries which cannot be generalized for South Africa, this necessitates an exploratory research design to be conducted.

Whilst there are various research design approaches that can be used by researchers depending on the desired end goal of the research, exploratory research is the chosen approach for this study for several reasons. The major emphasis of this study is on the discovery of ideas and insights, the exploratory research design allows for the appropriate flexibility to permit the consideration of many different aspects of a phenomenon (Kothari, 2004). Hypothesis testing is incorporated in the research design because of its ability to minimise bias and maximise the reliability of the evidence collected. Kothari (2004) added that studies involving the testing of a hypothesis of a causal relationship between variables require a design which will permit inferences about causality in addition to the minimisation of bias and maximisation of reliability.

5.2.3 Qualitative versus Quantitative Research

According to Kothari (2004), qualitative research is based on qualitative phenomenon, that is, phenomena relating to or involving quality or kind while quantitative research is founded on the

measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity.

5.2.3.1 Qualitative Research

Rajaseka et al (2013) stated that qualitative research involves qualitative phenomenon of quality. Polit and Beck (2004) explained that qualitative research stresses individual characteristics of the human experience, in other words the respondent's thoughts, beliefs, experience and values become the research. In qualitative research a researcher can begin the research without a hypothesis. The researcher is regarded as the main instrument of information gathering and analysis. The central motive of qualitative research represents the way in which individuals being studied understand and interpret their surroundings. According to Matveev (2002) the researcher partakes in the occurrence and ensures that it is in logical sense with several explanations, as several realities occur in any particular time. It encourages inductive data analysis in order to afford improved understanding of the dealings and to clarify the networking experiences and realities of the researcher and the respondent. It permits the development of a design relatively than having a complete design at the start of the research, as it is a challenging to foresee the result of the interactions as a result of the values systems and diverse perspectives of the participants and researcher. The researcher has enormous influence on the understanding of reality of the respondent and the conclusion of the study. According to Saunders et al. (2007) qualitative research offers fruitful descriptively reports of participant's attitudes, views, perceptions, beliefs, and feelings. However with qualitative research complete objectivity is not possible and the methodology is not accurate because people do not always act in a predictable manor or reasonably fashion (Holloway & Wheeler 2003). This is because the researcher will try to put themselves in the shoes' of the respondent or attempt to comprehend the respondent's perspective.

According to Creswell (2008), different approaches are visible in the qualitative research approach. Evident data collection techniques which are identified by Patton (2001:14) for qualitative research include: group discussions, observational methods, in-depth interviewing,

analysis of documentary evidence and questionnaires. Qualitative research is initiated by open questions and is intended to discover characteristics in a particular situation. Freedom is granted to the researcher to contribute his or her own understanding to the methodological explanation of the research. Matveev (2002) stated that qualitative research has three characteristics. Firstly, qualitative research is the study of conversations and texts. Secondly, qualitative research is the study of the informative philosophies that individuals practice to make sense of their activities. Lastly, qualitative research is the study of contextual standards, such as the physical setting, roles of the participants and a set of situational proceedings that lead the way in which and individual interprets a situation. Patton (2001) suggests that the credibility in quantitative research is highly dependent on the way the instrument is constructed, whilst on the other hand the researcher is the instrument in qualitative research.

5.2.3.1.1 Advantages of Qualitative Research Methods

According to Saunders et al. (2007) the advantages of qualitative include: allows the researcher to be able to communicate with the respondent about the study and for proper explanation on the research at hand, removing any misunderstandings which might have occurred. It allows for a more genuine feel of the world that cannot be explained in statistical data and statistical analysis used in quantitative research. Qualitative research allows the researcher to communicate with the respondent in their own language, which gives the respondent a sense of belonging.

5.2.3.1.2 Disadvantages of Qualitative Research Methods

Saunders et al. (2007) explains the disadvantages of qualitative research to include: The data gathering process can be time consuming as the researcher has to interpret the results in his or her own words. Data analysis is complex; the researcher has to come to terms with the probability that an unclear pattern may not develop, it is perceived as a less reliable method by non-research. The researcher can influence the respondent in answering the questions in a certain way. According to Matveev (2002), depending on the personal characteristics of the researcher,

arriving at different conclusions is possible based on the same information. Qualitative research lacks reliability and consistency since the researcher can employ distinct procedures and the respondent can decide on telling particular stories and ignore others. There is a difficulty in justifying the variance of quality and quantity of raw data in qualitative research which is obtained from different respondents thereby resulting in a conclusion that is non-consistent. According to Patton (2001), qualitative research is difficult to modify. A poor distinction between facts and explanations exists. Qualitative research is vague, non-scientific and does not follow a structured plan, which makes it hard to generalise the results to the rest of the population (Creswell, 2008).

5.2.3.2 Quantitative Research

Quantitative research is based on quantity or amount measurement .Whereby a process is expressed or defined in terms of numbers. Rajaseka et al (2013) explained that in quantitative research statistics is the most used form of mathematics. Saunders et al. (2007) further added that analysis of quantitative research is conducted through the use of diagrams and statistic and the highly structured methodology is used to facilitate replication. Quantitative research makes use of surveys, questionnaires and experiments in order to collect raw information that is modified and tabulated in numbers, which then permits statistical analysis of the data to be characterised. Furthermore, Holloway and Wheeler (2003) explained that researchers that utilise quantitative research use it to measure variables on a sample of subjects and articulate the relation amongst the variables by means of statistics such as: relative frequencies, correlations, or differences between means; to a large extent their focus is on the testing of the theory.

According to Matveev (2002) quantitative approach has no room for the researchers own beliefs, values, biases and subjective preferences. Winter (2000) supports the notion of dividing a phenomenon into measurable quantities or mutual groups that can be generalised to all the individuals or comparable situations. In order for the researcher to fully understand which research philosophy is best suitable for this research, it is imperative to highlight the advantages and disadvantages of qualitative and quantitative research. The suitability of this technique is

dependent on the notion that the decision factors such as: cash flow, risks, political, social, economic and market factors can be reliable and quantified estimates that are influential decision supporting tools that validate the use of quantitative techniques (Thamhain, 2014). This study necessitates quantitative research method to be conducted, as the need arises to quantify the motives that make people shop online. The result can be tabulated or graphically presented to allow easy analysis.

5.2.3.2.1 Advantages of Quantitative Research Methods

According to Saunders et al. (2007), the advantages of quantitative include: cost-effective and accurate collection of huge quantities of data, the research collected is unambiguous, theoretically focused for the study and there is substantial opportunity for the researcher to keep control of the research procedure. Furthermore, Matveev (2002) it is possible to achieve high level of reliability with the data that is collected and to control observation. Manipulation of mass surveys, laboratory experiments or other form of research can be attained. The researcher can eradicate or reduce prejudicial judgment. The results gathered from quantitative research can be generalizable to the rest of the population and it cannot be influenced by the researcher. Quantitative research permits longitudinal measures of performance of research subjects (Matveev, 2002).

5.2.3.2.2 Disadvantages of Quantitative Research Methods

The disadvantages of using quantitative research according to Saunders et al. (2007) include that the researcher cannot be provided with information on situation where the studied phenomenon occurs as quantitative research deals with numbers. The course of action cannot be altered once the data has been gathered. The environment cannot be controlled where the respondents provided answers to the questions in the survey. The researcher has limited results that were highlighted in the research objectives as a result of the structured format and closed type questions (Matveev, 2002). Quantitative research works on the basic belief that ‘theory’ can

signify the realism of the problem as it arises within a certain framework. As quantitative research only deals with numbers, the firm orderly approach does not permit any room for unforeseen developments in the field. Buckingham and Saunders (2004) added that quantitative research works with a conceptual model that is systematic and technically sound; however it fails to provide information about the actual occurrence in words. The figures in quantitative research are not linked with words and therefore do not speak for themselves. The results generated have to be translated into words in order to make them relevant if not applicable.

5.2.4 Differences between Qualitative and Quantitative Research

Quantitative research as suggested by Buckingham and Saunders (2004) is number orientated, as a result non-descriptive. It is an iterative process whereby data is assessed and analysed. Quantitative results are normally presented in the form of a table or graph. Rajaseka et al (2013) stated that quantitative research is deductive. Facts are formulated using measurable data and reveal patterns in research. Wyne (2011) highlighted that quantitative data collection method is more structured and organised than qualitative data gathering approach. Concepts are in the form of distinct variables. Buckingham and Saunders (2004) explain that in quantitative practices a difference is regularly made between researches intended at examining the hypotheses after the research is conducted against one that is conducted experimentally.

On the other hand qualitative research does not use numbers and instead uses descriptive. The goal of qualitative research is to get a description of the situation, the meaning and feel. The results of qualitative research cannot be plotted on a graph. It is exploratory in nature. According to Rajaseka et al (2013) qualitative research is inductive and is used to dive deeper into a problem and is also employed to discover trends in thought and opinions. Qualitative information gathering technique varies using unstructured or semi-structured procedures. The usual procedures for collecting information include focus groups discussions, personal interviews, and observations (Wyne, 2011). Concepts tend to be in the form of themes, motifs, generalizations, and taxonomies. However, the objective is still to generate concepts. Patton (2001) argued that

the credibility of quantitative research is highly dependent on the construction of the instrument, however in qualitative research, “the researcher is the instrument".

5.2.5 Rationale for Quantitative Research

This study will employ quantitative research methods as part of the research objectives is to empirically investigate the proposed variables in relation to the mediator and outcome variable. Furthermore, findings will be tested statistically in order to deliver on the stated objectives. This study will utilise an online survey where a random sample of population will be questioned to determine its unique characteristics. This approach can be further sub-classified as an inferential approach to research. It is appropriate in the context of this study due to the fact that the purpose of inferential approach to research is to form a data base from which to infer characteristics or relationships of population (Kothari, 2004).

5.3 Sample Design

According to Polit and Beck (2004), sampling refers to the procedure of choosing a section that follows a selected set of specifications. A sample is a subsection of the chosen population to partake in the study. Corbin et al. (2008) further elaborates that sampling is a method or procedure of choosing an appropriate sample aimed at determining parameters or traits of the entire population. A sample is preferred when it is representative, flexible and reliable, and fulfils the requirements of efficiency.

More specifically, Saunders et al. (2009) stated that a sampling design or strategy is utilised to gather data from a carefully considered segment of the researchers target population to deliberately reduce the amount of data the researcher will have to utilise to reach his/her research findings. A sample design is a definitive plan that is set out by the researcher for obtaining a sample for a given population (Greener, 2008). It refers to the technique that is adopted in selecting items for the sample (Sekaran & Bougie, 2014). The steps in sample design include the

target population, sampling frame, sampling size and sampling method. These areas are further elaborated on below in the context of the proposed research.

5.4 Target Population

Research population is defined by Polit and Beck (2004) as the totality or aggregate of those following a set of stipulations. Corbin et al. (2008) and Sekaranet al (2013) explain research population is the grouping of all the objects, subjects, or members that follow exact specifications. A target population can also be referred to as the universe Sekaran and Bougie (2014), and can be more simply denoted as the entire group to be studied as governed by the objectives of the research. The target population can also be finite or infinite. With finite target populations the number of items is certain, conversely, however with an infinite target population, the number of items is undetermined such as in instances where the researcher does not have any idea about the total number of items (Kothari, 2004). The relevant population for this study is customers that do their shopping online.

5.5 Sampling Frame

Kadame (2013) defines a sample frame as the population to be sampled from which statistical tests will be performed. A sampling frame can also be referred to as the working population and is concerned with the list of elements from which the sample may be drawn (Uprichard, 2013). The sampling frame of this study consists of two established South African retailers which fall under the greater Massmart trading group, namely Dion Wired and Makro. These mass retailers have a combined strong general merchandise market share with constitutes to about 50% of the South Africa industry. Furthermore, the sample frame will be comprised of customers who have been randomly selected from an internal data base of customers that have purchased online from these retailers within the last twelve months from 07/06/2016.

5.6 Sample Size

This refers to the number of items to be selected from the target population to constitute a sample (Kothari, 2004). The size of sample should neither be excessively large, nor too small, it should be optimum. An optimum sample is one which fulfils the requirements of efficiency, representativeness, reliability and flexibility. More specifically, the target population will be finite and consist of 20 000 – Dion Wired (10 000) and Makro (10 000). The selection of a large target population is deliberate as Greener (2008) recommends the application of the law of large numbers in probability sampling whereby this theory asserts that the bigger the sample it is less likely that it would be fraught with sampling errors and the more likely it is to represent the total population. According to Sekaran and Bougie (2010) a research study with population of N = 20 000 elements is suited by a sample between s = 1332 and s = 1448 in order to generate a 95% confidence interval that predicts the proportion of repeat customers within a plus or minus 2.5% margin of error.

5.7 Sampling Method

Sampling method is separated into two distinctive broader categories, namely; probability sampling and non-probability sampling. Each of these techniques can be utilised by the researcher, depending on the objective and style of the sampling design. Both probability and non-probability sampling techniques are respectively discussed below.

5.7.1 Probability Sampling

A probability sample according to Bryman (2001) is defined as a sample in which each component of the population has an equivalent chance of being chosen. Probability sampling is normally assumed to be the most demanding method of sampling for statistical research. Often the probability of units being selected is equal in which case groups will be represented in the sample in their true proportions.

5.7.1.1 Unrestricted or Simple Random Sampling

This sampling method involves the researcher choosing the sample randomly from the sampling frame by means of an online random number generator or random number tables. Each unit is chosen with a non-zero probability and known chance of being selected, so that each element in the population has an equivalent (known) chance of selection. The outcome of random sampling results in the selection of a determinate set of units (Sekaran et al, 2013).

5.7.1.2 Restricted or Complex Probability Sampling

This sampling technique has various sub methods that can either be used individually or as a combination of one or more. Restricted sampling is characterised by the sample set not having equal probability of being selected. There are many ways of meeting this defining feature while also being capable of representing the population and having advantages for other research goals. The various complex sampling methods are discussed below.

5.7.1.2.1 Systematic Sampling

According to Kothari (2004) systematic sampling is beneficial when the sampling frame is accessible and in the form of a list. In this sampling design the selection procedure begins by selecting some random point in the list and then each nth component is selected till the preferred number is secured. Sekaran et al (2013) highlighted that systematic sampling includes the researcher choosing the sample at regular intervals from the sampling frame. This assures that the units cannot be sampled more than once.

5.7.1.2.2 Stratified Random Sampling

According to Kothari (2004) if the population from which a sample is to be depicted does not comprise a homogeneous group, then a stratified sampling technique is used so as to acquire a representative sample. This methodology requires that the population is stratified into numerous non-overlapping strata or subpopulations and the sample items are chosen from each stratum. Stratified random sampling is modified random sampling in which the researcher splits the population into two or more related and significant strata founded on one or a number of characteristics. In effect a random sample (systematic or simple) is then drawn from each of the strata. Splitting the population into a sequence of related strata means that the sample is possibly likely to represent, each of the strata in proportion with the sample (Saunders et al, 2007). Stratified sampling has similar advantages and disadvantages of systematic sampling.

5.7.1.2.3 Cluster Sampling

Cluster sampling encompasses grouping the population and then choosing the clusters or groups rather than distinct elements for insertion in the sample. Cluster sampling frame is a comprehensive list of clusters rather than a comprehensive list of separate cases. Area sampling on the other hand is fairly closely related to cluster sampling and is frequently used when the whole geographical region occurs to be very large (Kothari, 2004). It is very convenient with respect to the time and money allocated for a particular study. The sample is reliable as it allows random allocation at different stages.

5.7.1.2.4 Single-stage Multistage Cluster Sampling

Saunders et al (2007) explained that multi-stage sampling is sometimes called multi-stage cluster sampling. It is generally used to conquer difficulties connected with geographically scattered population, in times when face-to-face exchange is required or where it is time consuming and costly to build a sampling frame for a big geographical area.

5.7.1.2.5 Double Sampling

Cooper et al (2006) maintained that it could be appropriate or efficient to gather data by sample, thereafter utilize this data as the foundation for choosing a subsample for additional study

5.7.2 Non-probability Sampling

Non-probability sampling or non-random sampling offers an array of alternative methods to choose the samples based on the researchers subjective judgement. In non-probability sampling, units are purposely chosen to replicate specific characteristics of the groups within the sampled population based on specific selective criteria as determined by the researcher (Vanderstoep & Johnston, 2009). The sample is not meant to be statistically representative: the odds of being chosen for each division are unknown however; the features of the population are used as the foundation of selection.

5.7.2.1 Convenience Sampling

Convenience sampling, which is sometimes known as haphazard sampling, encompasses choosing randomly those samples that are the simplest to obtain for your sample. While this method of sampling is commonly used, it is likely to be bias and motivates that are beyond the researchers powers. Here the researcher selects the sample according to convenience of access to the population and not by what is required of the study. Some researchers have proposed that convenience sampling comprises of familiar form of qualitative sampling, founded on the misinterpretation that small sample sizes do not allow statistical generalisation, hence it does not matter how cases are selected (Mason, 2002; Patton, 2002).

5.7.2.2 Quota Sampling

Quota sampling is completely non-random and is usually used for interview surveys. It is founded on the basis that the sample will signify the population as the variability in the sample for countless quota variables is the same as that in the population. Quota sampling is said to be less expensive than other sampling methods and is quick to set up. It is generally used for large populations. The reasoning behind quota sampling is that certain applicable features describe the elements of the population. In most quota samples, researchers stipulate more than one control elements. One of the reasons why researchers use quota sampling is to decrease the cost of the surveys and the time required to finish them by using a convenient sample of people who are ready and prepared to be interviewed for the first time the interviewer calls (Adams, Khan, Raeside & White, 2007).

5.7.2.3 Purpose Sampling

According to Greener (2008) purposive sampling is frequently used with very small population and samples. This method cannot yield any statistical interference about the population. Purposive sampling could also be used by researchers embracing the grounded theory strategy. The sample units are selected because they have specific characteristics or features which will allow comprehensive examination and understanding of the central puzzles and themes which the researcher wishes to pursue. These may well be related to specific experiences, socio-demographic characteristics, behaviours or roles. People selected to be part of the sample are chosen with a purpose to type in relation to a key criterion or represent a location. In the early design phases of the research decisions about which criteria are used for selection are frequently made. The method of purposive sampling necessitates clear objectivity so that the sample stands up to independent scrutiny.

5.7.2.4 Snowball Sampling

According to Greener (2008) snowball sampling is a special type of non-probability sampling where it is difficult to identify participants. The researcher communicates with an initial group of people applicable to the research topic, and then utilises the group to contact other people for the research. In snowball sampling there is no sample frame however now and again it is difficult to pre-define the population. Adams (2007) added that the one of the advantages of snowball sampling is reduced sample sizes and costs.

5.7.2.5 Rationale for Sampling Method

Given the aforementioned sampling techniques available, the current study used simple random probability sampling. The chosen technique was consistent with the intention of the research to construct a representative sample. Furthermore, probability sampling was ideal for this study as it works best with large numbers, particularly large-scale surveys using quantitative data and where there is a known population (Denscombe, 2010).

5.8 Ethical Considerations

Before embarking on the study, it is imperative that the researcher defines ethics and what is considered as the correct actions for research. Polit et al (2004) define ethics as the quality of research techniques, with respect to the adherence to legal, professional, and social obligations to the study respondents. Mbatha (2005) defines ethics as a practice of moral codes that is constructed on principles concerning the way in which individuals handle themselves, with respects to right or wrong of several activities and to the reasons that exist in selecting a good or bad decision. According to Hitt (2008) the researcher is responsible for the truthfulness of the research method and the nobleness of how the research is performed.

Thus, due to the nature of this research, which involves human participants, ethical clearance had to be obtained before commencement of the data collection. The researcher followed the University of the Witwatersrand's ethics policy, and obtained ethical clearance prior to starting with the data collection. In addition, it was imperative that sample members' informed consent to participate in the study was obtained. This means giving respondents clear and honest information about the intention of the study, who are the people who make up the research team, how the data will be used, how important their contribution to the study is, and how they will benefit from the results and the themes expected to be covered. The participation of the respondent was completely voluntary and the respondent had the right to decline at any time.

5.9 The Measurement Instrument

Research instrument as described by Bernard and Ryan (2010) is a technique used to gather information in the way of questionnaires, personal interviews and document review observation. Boynton and Greenhalgh (2004) explained that questionnaires suggest a way of collecting information about people's behaviour, attitudes beliefs and knowledge, in a meaningful and objective way. Oppenheim (2009) added to this definition by stating that a questionnaire is a list of recorded questions that can be completed by the respondent in one of two simple ways, firstly, respondents could be asked to fulfil the questionnaire by verbally responding the questions in the researcher's presence. Secondly, the respondents could be asked to complete the questionnaire during the researcher's absence. There are also two types of questionnaires that may be used to collect information, namely personally administered questionnaires and interview administered questionnaires. Each of these will be elaborated below so as to highlight which was more suitable for the current study.

5.9.1 Personally Administered Questionnaires

Personally administrated questionnaires are generally completed by the respondents. These questionnaires are electronically administered using the intranet (intranet-mediated

questionnaires), or Internet (Internet-mediated questionnaires) as a medium, or forwarded to participants via post who then complete and return it via post, mail or hand delivered to the researcher (Saunders, Lewis & Thornhill, 2007). This method is normally used when the researcher wants to target a large population. It is cost efficient and effective. Generally respondents respond to this method as they can respond to the questionnaires at their leisure.

5.9.2 Interviewer Administered Questionnaires

Saunders et al (2007) highlights that interview administered questionnaires are documented by the interviewer depending on the how the respondent responds to each question presented to him or her. In this way the interviewer is able to elaborate each question to the respondent to ensure that the questions are properly answered. The face to face meeting puts the respondent at ease and the research is able to record the answers based on the understanding of both parties. It has been proven by past researchers that interviewer-administered questionnaire generally has a greater response rate than self-administered questionnaires. Interview administered questionnaires guarantee that all questions on the questionnaire will be answered in way that the researcher finds acceptable.

5.9.3 Rationale for Measurement Instrument

This study subsequently makes use of personally administrated questionnaires. Questionnaires are distributed electronically which means that completion is done in the absence of the researcher. Again, the main benefit of this approach is based on the ability to reach a large and diverse target group in a very cost effective manner. Information will be examined by reviewing the questionnaires answered by the respondents.

5.10 Questionnaire Design

When constructing questionnaires, the researcher must choose the types of questions that will be included. According to Foddy (2010) the sort of questionnaire structure chosen will impact the amount of people who will be chosen to partake in the questionnaire. Thus, it is important to understand the different types of questions available to the researcher, whether open or close-ended, in attempting to extract insights from their respondents.

5.10.1 A Comparison of Qualitative and Quantitative Questionnaire Design

The two question types are discussed below followed by Table 5.3 that shares the advantages and disadvantages of questionnaires.

5.10.1.1 Open-Ended Questions – (Qualitative)

Open questions, every so often are referred to as open-ended questions. They permit the participant to give responses in their own way that they feel comfortable (Dillman 2007). According to Jonker and Pennink (2010), open-ended questions take an extensive look at a problem, hence leaving plenty of room for countless definitions. It is commonly vague what essentially needs to be examined. When open-ended questionnaires are used the path which the research takes cannot be precisely predetermined. According to Jonker et al (2010), the characteristic of qualitative research is the fact that the researcher utilises open question. Open ended questions are useful in questionnaires if the researcher is uncertain of the response of the participant, such of exploratory research, or when the researcher necessitates a comprehensive response or when the researcher want to know what is in the respondent's mind. When open-ended questions are used according to Saunders.,et al (2007), the phrasing of the questions and the magnitude of space somewhat determines the fullness and length of responses from the respondent.

Open-ended questionnaires do not comprise tick boxes, however leaves a blank spaces for the respondent to fill their answers. They can be used for many things, such as to investigate what people think about a particular service provided or how a particular product treated them. As a result of no uniform response to these questions, the data collected and analysed is more complex. It may be challenging to code, particularly if several responses are provided. Furthermore, Dawson (2007) explains that trust can be generated through the use of open-ended questions and they are seemingly less frightening to the respondent; they aid a complete unrestricted response and may also be very useful to provide clarity about the topic. A few benefits of using open-ended questions include the likelihood of determining the answers that respondents give spontaneously, thus preventing the bias that could have resulted from proposing responses to individuals, a bias which may have resulted from the use of close-ended questions (Foddy, 2010). Open-ended questions can be advantageous by not restricting the respondent to set of answers.

5.10.1.2 Close-Ended Questions – (Quantitative)

Closed-ended question according to Foddy (2010) "is a question for which a researcher offers an appropriate list of answers (e.g. Yes / No)." Jonker et al (2010) explained that closed-ended questions are also known as forced-choice questions. This is because the respondent is forced to choose an answer between other answers provided. Quantitative research is populated with closed-ended question. Close-ended questions offer a number of alternative answers from which the respondent is directed to choose from. Thus the respondents are forced to response in a way which might not complement their actual opinion and may, result in the frustration of the respondent. Closed-end questions have a number of advantages which include improved accuracy, it is simpler for the respondent to remember, provides standardised questions, the data can be generalised to the rest of the population, it allows for simpler coding and analysis of data. Closed-ended questions reduce ambiguity in responses and greatly facilitate data processing and analysis. The disadvantages of closed-end questions include, it restricts the number of responses provided for the respondent to choose from. Respondents cannot answer a question the way they like. Respondents are forced to think like the researcher.

Table 5.3: Advantages and Disadvantages of Questionnaires

Strengths / Uses of Method	Weaknesses / Limitations of Method
1. The researcher is able to access a larger population, efficiently by utilizing postal questionnaire and is cost effective.	1. People tend to not answer postal questionnaires, the number of responded that complete the questionnaire is low, as people tend to dispose postal mail.
2. Questionnaires are somewhat fast and simple to decode and analyse (especially when closed questions are utilized).	2. Postal questionnaires, doesn't allow the researcher to truly know if the questionnaire fits in with the respondent.
3. Standardization of questionnaires is possible for closed-ended questions. This makes the questionnaires reliable that respondents in the sample respond to questions that have similar answers, which makes this a very reliable method of conducting a research.	3. When the researcher is not the one asking the questions to the respondent, it is difficult to know if the respondent truly understood the question at hand.
4. It is said that questionnaires may also be used to uncover possible sensitive topics of discussion (such as criminal and sexual matters). Questionnaires can be both completed in privacy and anonymous. This escalates the probability of individuals responding to questions honestly.	4. With postal questionnaires it is hard to see the body language of the respondent. 5. Some questions may be left un-answered due to the respondent not understanding the question properly. This then affects the results.

Source: Foddy, (2010).

5.10.2 Rationale for Questionnaire Design

An electronic survey was created through the use of an electronic survey provider called Surveymonkey. Computer assisted surveys assist by streamlining the process of administration and basic data collection of questionnaires electronically. Conventionally, data that is gathered on the field needs to be transcribed, hand-coded and hand-tabulated, amongst many other data extrapolating steps before the collected data can be interpreted. Also, computers and computer assisted surveys assist researchers by automating some of these steps into workable basic data (Sekaran & Bougie, 2010).

The questionnaire consisted of 34 statements that were grouped into 8 sections. Each section apart from Section A, that will determine each respondent's demographics, is representative of the individual constructs that test each variable with its corresponding hypothesis. Modifications are made in each measurement instrument that has been adapted from previously academically sound research in order to fit the context of the current research. In addition, for the purpose of reinforcing validity and reliability, the research will consistently use a Five-point Likert interval scale throughout the respective constructs, where the respondents will answer from a set of close ended alternatives and numerically rated scaling (Saunders et al., 2009).

5.11 Measurement Scales

Measurement scale is important when conducting research; depending on the type of research conducted it will determine the type of measurement scale used. Researchers must ensure that they are accurate when choosing a measurement scale as it can affect the end results. Wiid and Giggines (2015) examined that, it is necessary for a researcher to establish the level of measurement required to supply the desired information. Each measurement level communicates various amount volume of information about the measured items and thus concludes the kind of analysis that is required in order to translate the gathered data. In addition to this, the present study uses a Likert Scale that aids the researcher to differentiate customers in terms of how they vary from one another in their attitudes. It employs the anchor of strongly disagree, disagree,

neutral, agree and strongly agree (Saunders, 2007). Likert Scale permits the study to react precisely to records which are reasonable and in a well-ordered form (Kerlinger & Lee 2000). This study particularly uses a five point Likert Scale where 1 - being strongly agree, 2 -agree, 3 - neutral, 4 - disagree and 5 - strongly disagree. The respective sections are categorised as follows;

- Section A comprises of demographic questions which have a two-fold purpose. To introduce the respondents to the questionnaire and to aid with understanding the intricate demographic details of each respondent. The questions will be multiple choices with respondents required to select one answer per question before moving to the next section. Section B comprises of online connectively preference questions. The questions will also be multiple choices with respondents required to select one answer per question before moving to the next section.
- Section C comprises of questions that relate to data charges and how this potentially impacts the online purchase intention of consumers Kim et al. (2009) – This section will utilise a 5 point Likert Scale system (1 – Strongly disagree to 5 – Strongly agree) to gather data.

Table 5.4: Data charges

To what extent do you disagree or agree with each of the statements below:		**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
C1	The fee that I have to pay for the use of the internet is high.					
C2	The fee that I have to pay for the use of the internet is reasonable.					
C3	I am pleased with the fee that I have to pay for the use of the internet.					

- Section D looks at the role of delivery dependability in influencing consumer online purchase intention. Du Toit (2013); Li et al. (2005), This section utilises a 5 point Likert Scale system (1 – Strongly disagree to 5 – Strongly agree) to gather data

Table 5.5: Delivery dependability

To what extent do you disagree or agree with each of the statements below:		**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
D1	Online stores deliver the kind of products I ordered.					
D2	Online stores deliver my orders on time.					
D3	Online stores provide dependable delivery.					
D4	I shop online because of the availability of reliable & well-equipped shippers.					

- Section E comprises of questions that pertain to geographical distance as a variable that predicts online purchase intention. Du Toit (2013) – This section utilises a 5 point Likert Scale (1 – Strongly disagree to 5 – Strongly agree) to gather data.

Table 5.6: Geographical distance

To what extent do you disagree or agree with each of the statements below:		**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
E1	It's not worth travelling the distance when I can rather shop online.					
E2	With travelling costs constantly					

	increasing, I prefer shopping online.					
E3	I prefer to shop online as the nearest physical store is too far away.					

- Section F comprises of questions that deal with product risk as a predictor online purchase intention. Overmars & Poels (2015) – This section utilises a 5 point Likert Scale (1 – Strongly disagree to 5 – Strongly agree) to gather data.

Table 5.7: Product risk

To what extent do you disagree or agree with each of the statements below:		**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
F1	I find it difficult to judge the quality of the product over the internet.					
F2	I want to see and touch products before I buy them.					
F3	I place more trust in products that can be touched before purchase.					

- Section G looks at information quality as a predictor of online purchase intention. Du Toit (2013) – This section utilised a 5 point Likert Scale (1 – Strongly disagree to 5 – Strongly agree) to gather the data.

Table 5.8: Information quality

To what extent do you disagree or agree with each of the statements below:		**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
G1	Online stores offer more useful information about the different					

	choices.					
G2	I like to browse the various categories on a site when doing my shopping.					
G3	When searching for something to buy, I like to examine different search results even if the first one is exactly what I want.					

- Section H deals with questions that look online shopping satisfaction as predictor of online purchase intention. Rose et al. (2012) – This section utilises a 5 point Likert Scale (1 – Strongly disagree to 5 – Strongly agree) to gather data.

Table 5.9: Online shopping satisfaction

To what extent do you disagree or agree with each of the statements below:		**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
H1	I am satisfied with my overall experiences of online shopping.					
H2	I am satisfied with the pre-purchase experience of online shopping websites (e.g., consumer education, product search, quality of information about products, product comparison etc).					
H3	I am satisfied with the purchase experience of internet shopping websites (e.g., ordering, delivery dependability).					

- Section I comprises of questions that deal with trust as a predictor of purchase of online purchase intention. Rose et al. (2012) – This section utilises a 5 point Likert Scale (1 – Strongly disagree to 5 – Strongly agree) to gather data.

Table 5.10: Trust

To what extent do you disagree or agree with each of the statements below:		**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
I1	Online shopping is reliable.					
I2	In general I can rely on online stores to keep the promises that they make.					
I3	Online stores can be trusted, there are no uncertainties.					
I4	Online shopping is a trustworthy experience.					

- Section J comprises of questions that deal with online purchase intention Rose et al. (2012) – This section utilises a 5 point Likert Scale (1 – Strongly disagree to 5 – Strongly agree) to gather data.

Table 5.11: Online purchase intention

To what extent do you disagree or agree with each of the statements below:		**Strongly Disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
J1	I intend to buy online frequently.					
J2	I anticipate purchasing from online stores in the near future.					

5.12 Pilot Test

Hassan, Schattner and Mazza (2006) suggested that pilot testing is a small scale study scale trial that is conducted in order for the researcher to examine the research procedures, sample recruitment strategies, data collection instruments and other research techniques that are also required in the study, in preparation of a larger study. In other words, it can be viewed as a "pre-test" that is conducted before the actual test is done. This assists the researcher in such that, all the procedures that uncover potential problems in the pre-test can be eliminated, revised or adjusted, beforehand (Mackey & Gass, 2005). A pilot study is said to be extremely valuable as it has the ability to reveal subtle flaws that may not have been immediately visible from the planning phase of the research or by the researcher at hand (Mackey & Gass, 2005). Parasuraman et al. (2004); Cooper and Schindler (2006); Burns and Burns (2008); and Russell and Purcell (2009) expressed that in order to assess the competency of the research design as well as the measuring instruments a pilot test is necessary. Constructive feedback from the pilot sample is critical in order for research process to be accurate. It is important that the researcher utilises this feedback in order to better construct the research (Sapford & Jupp 2006).

Thus, once the survey was developed online, a miniature pilot study was conducted amongst 20 randomly selected respondents in order to pre-test the working of the research instrument. Although the questionnaire was well received, a few comments generated improvements in certain aspects of the questionnaire, such as question flow and the wording and phrasing. Also, because the questionnaire was developed online, certain logic rules need to be fixated to particular questions such that respondents cannot choose more than one response for one question as an example. This is particularly important in the case of personally administrated questionnaire such as in the present study. In order to maintain consistency, it is vital that respondents are coerced to respond within the rules governing the entire survey. Once the changes were implemented, a second pilot test was conducted amongst 5 other respondents to confirm the research instruments sufficiency for the purpose of the current study. The results from the second pilot study successfully established the competence of the research instrument for achieving the research objectives.

5.13 Data Collection Technique

Adams et al (2007) stated that there are two primary sources of information generally used when conducting research, namely primary and secondary sources of data. Primary information is said to be those which require a new analysis for collecting information at different levels. Denzin (2010) added that, those primary sources are the first existence of a piece of work that originates from the source. Primary sources include: "published sources such as reports and some central and local government publications such as White Papers and planning documents. They also include unpublished manuscript sources such as letters, memos and committee minutes that may be analysed as data in their own right." On the other hand secondary sources are said to be those which are accessible or have been gathered for other research purposes. Secondary data appears as processed or raw data. Secondary sources include: archives, various company records, census data, trade union materials and government sources, books and journals, which are aimed at a wider audience. Many businesses gather and record a variety of information in support of their business operations (Adams et al, 2007).

Within the scope of primary and secondary sources, there are various data collection techniques available to researchers which pose different advantages and disadvantages. The below Table 5.12 provides a summary of the options

Table: 5.12: Advantages and disadvantages of various data collection techniques

Technique	Advantages	Possible Constraints
Using available information	• Is inexpensive, because data is already there. • Permits examination of trends over the past.	• Data is not always easily accessible. Ethnical issues concerning confidentiality may arise. • Information may be imprecise or incomplete.
Observing	• Gives more detailed and context-related information. • Permits collection of information on facts not mentioned in an interview, • Permits tests of reliability of responses to questionnaire.	• Ethnical issues concerning confidentiality or privacy may arise. • Observer bias may occur. (Observer may only notice what interests him or she) • The presence of the data collector can influence the situation observed. • Thorough training of research assistants is required.
Interviewing • **Face to face** • **Telephonic** • **Focus groups**	• Is suitable for use with both literates and illiterate. • Permits clarification of questions. Has higher response rate	• The presence of the interviewer can influence responses. • Reports of events may be less complete than information

	than written questionnaires.	gained through observations.
Questionnaires • **Self-administered** • **Interview methods**	• Is less expensive. • Permits anonymity and may result in more honest responses. • Does not require research assistants. • Eliminates bias due to phrasing questions differently with different respondents.	• Cannot be used with illiterate respondents. • Require some extra training of researches.

Source: Chaleunvong (2009).

The study will utilize both primary and secondary data sources, more particularly, self-administered online questionnaires. Recent times have seen the growth of Internet usage for data collection and as a result, have provided marketers with increasing opportunities to conduct online research, which saves both time and money. In addition, questionnaires that are distributed online are good if there is a large sample such as in the present study. The only hurdle the research had to overcome was the development of the online questionnaire however; this posed no challenges to the researcher. Hence, this study undertook an online survey method that was conducted among a panel of subjects, who were contacted for market research purposes as the source of primary data. Secondary sources in terms of journals, articles, business reviews and newspaper articles are also used in this study.

5.14 Data Analysis Approach

Luigi, Oana, Mihai and Simona (2012) state that data analysis is adding value out of gathered raw data. Data analysis approach refers to the computation of indices in the aim of searching for patterns of relationship that exist among the data groups. Analysis, predominantly in the case of

survey data, involves estimating the values of unknown parameters of the population and testing of hypotheses for drawing inferences (Kothari, 2004). There are two leading data analysis approaches relevant to quantitative research, namely regression analysis and structural equation modelling. Both shall be discussed below in terms of their advantages and shortcomings, followed by rationale for the chosen approach for this study.

5.14.1 Regression Analysis

Regression analysis is the most commonly used multivariate technique (Singh, 2007). It allows researchers to ascertain whether there are connections between two variables through correlation analysis. Regression analysis can be conducted in one of two ways, either in the form of simple regression where there is one dependent variable and on independent variable or multiple regressions where there is one dependent variable and many dependent variables (Singh, 2007). Once connection is established, regression analysis is used to identify the exact form of the relationship (Buglear, 2005). Furthermore, regression analysis enables academics to find the straight line most appropriate for representing the connection between two sets of observed values (Buglear, 2005). This understanding is particularly important if one wants to use the relationship to make predictions such as in the case of the present study.

5.14.2 Structural Equation Modelling (SEM)

Ullman (2006) have described SEM as a collection of statistical techniques that allow a set of relationships between one or more independent variables and one or more dependent variables to be examined. SEM is used to evaluate the extent to which the hypothesised causal structure was able to explain the observed association between variables and to estimate magnitude of the postulated effects (Gois & Ehrich, 2014). In line with Khine et al. (2013), SEM is a mixture of statistical techniques for modeling the multivariate rapport amongst variables. As a result, SEM is often regarded as a statistical technique that integrates components of conventional multivariate model, for example, Simultaneous Equation Modelling, Regression and Factor

Analysis. While traditional multivariate study techniques are incapable of either assessing or correcting for measurement error, SEM provides rich estimates of these parameters (Marsh et al., 2012).

A central issue addressed by SEM is how to assess the fit between observed data and the hypothesised model (Mueller & Hancock, 2007). Researchers use SEM for finding the relationship among variables and for quantification (Vinodh & Joy, 2012). Moreover, SEM is a technique that takes a confirmatory methodology (for calculating reliability, validity and model fit) to the analysis of theory about what is being studied. Correspondingly, SEM's diverse statistical techniques also include path analysis (for computing model fit and hypothesis testing). Therefore, SEM can be viewed as a dual process – a process that starts with CFA and ends with Path Modeling/Analysis (Anderson & Gerbing, 1988). The following diagram 5.1 by means of summary bullet points, illustrates the key factors that make SEM attractive to the researcher.

Figure 5.1: Why SEM?



Source: Support (2001).

5.14.3 Approach for the Study

Before conducting data analysis, the researcher needs to ensure that a robust data screening process is adhered to, as such; data screening process suggested by Malhotra (1999) and Churchill (1999) were implemented to ensure data are cleaned before performing further statistical analysis. The major analytical tasks in the data screening process include questionnaire checking, editing, coding, and tabulation. Kerlinger and Lee (2000) denote to coding as a term used to simplify lengthy question responses in order to make it short for ease of analysis. This is when the researcher takes the information received from the questionnaires or surveys and decodes it for statistical analysis. The first step taken was the coding of raw data on an excel spread sheet. Once the results were verified in terms of editing, filtering of the data, and finding missing values to the satisfaction of the researcher, results were subsequently imported to SPSS for descriptive statistics and AMOS for structural equation modelling (CFA analysis first and then Path Modeling afterward). The fact that AMOS (the statistical software used) was designed to allow users to easily create and fit SEMs instinctively and fast (that is, GUI) made the researcher to find this statistical package as appropriate in addressing the research questions and test the hypotheses for the current study.

SEM will be used to analyse the data. SEM is a two staged data analysis approach which consists of measurement model and structural model both of which will be discussed in greater detail in the forthcoming sections. Measurement model assessment was conducted where reliability, validity and model fit were tested through SPSS 22. SEM was used for inferential statistics through the use of AMOS 21 statistical software. Once the constructs were verified, structural modelling was tested in terms of measuring path coefficients, significance levels and model fit.

AMOS was particularly chosen because of its ability to work well with large sample sizes such as the one in this present study. The study acquired in excess of 1000 valid responses from respondents and as a result, AMOS automatically became the most favoured statistical tool, as it befits this purpose. Thereafter, the researcher proceeded to test the hypothesised relationships between the constructs and the estimates. Ultimately, the inter-relationships between these variables were provided.

5.14.4 Measurement Model Assessment

The measurement model adapted previous scales, as such; the measure model statistic will be generated using confirmatory factory analysis (CFA). The following sub-section discusses CFA and provides an overview of the tests conducted to gauge instrument reliability, validity and model fit.

5.14.4.1 Confirmatory Factor Analysis

CFA is an investigative tool that enables the researcher to examine hypotheses about what variables the test in question is measuring and provides a clinical basis for empirical interpretation (Burton, Ryan, Axelrod, Schellenberger, & Richards, 2003). There are several reasons as to why CFA was used in the present study, firstly involves the separation of a large number of variables into a smaller number of factors within which all variables are related to each other. Secondly, CFA ensured that the relationships between the observed variables and the latent variables met the uni-dimensionality assumption. Thirdly, it assisted in the investigation of the underlying variance structure of a set of correlation coefficients. Fourth, CFA was performed to obtain the standard regression weights as well as to check the standardized factor loadings.

5.14.4.2 Reliability

According to Saunders (2007), reliability can be defined as the degree to which data gathering methods or analysis techniques will yield consistent results which are free from bias. Saunders (2007) and Hawking and Mlodinow (2010) further ads that reliability denotes to the amount to which results of the research are constant over a period of time and exact representation of the entire population under study. Joppe (2000) further adds to this definition by stating that if the outcomes of a research can be replicated under a similar approach, then it is considered having obtained a reliable research instrument.

There are multiple threats to reliable that can hamper the results of the study. Robson (2002) states that there are four threats to reliability which can hamper the study. The first is subject or participant error. This is when the participant fails to understand the questions in the questionnaires and therefore gives an incorrect answer for that particular question. The answer becomes non void. Secondly there might be subject or participant bias. This could occur when the participant favours some questions over others. Lastly, there might be observer error. This could be the result of observer failing to understand the objectives of the study or if the objectives are too vague. These all can hinder the reliability of the study.

In the case of this study, reliability will be measured using two statistical measures, namely; Cronbach Alpha and Composite Reliability. These two tests are discussed below.

5.14.4.3 Cronbach Alpha Coefficient

The Cronbach Alpha Coefficient is used to test the reliability of the measurement instrument. According to Bryman and Bell (2003), reliability can be seen as the degree to which a predetermined test produces similar results under similar experimental conditions. Hair et al. (2011) added that reliability of the instrument refers to the extent to which the scale produces consistent results when being re-used. Cohen, Manion, & Morrison (2013), takes this further and suggests that reliability is an essential phenomenon for measuring consistency over time, over instruments as well as over groups of respondents. Consistent with Hair et al. (2011), this study relies on a Cronbach Alpha Coefficient of a value higher that 0.7 to measure the reliability of the individual scales that are used in the research questionnaire.

5.14.4.4 Composite Reliability

The Composite Reliability (CR) index assists in testing the internal consistency of the measurement model. In order for the Composite Reliability to be accepted, the index should be greater than 0.7 (Hair et al., 2011). CR is relevant for measuring instruments that use multiple

items such as questionnaires, scales and self-reports (Raykov, 1998). The formula below guides its calculation:

(CR): $CR\eta = (\Sigma\lambda yi)2/[(\Sigma\lambda yi)2+(\Sigma\varepsilon i)]$; where

$CR\eta$ = composite reliability, $(\Sigma\lambda yi)^2$ = square the sum of the factor loadings and $(\Sigma\varepsilon i)$ = sum of error variances (Chinomona, 2013).

It is found that the coefficient is almost identical to that of Cronbach's alpha. For straightforward research the threshold for Composite Reliability index is 0.5 whilst 0.6 for exploratory research which can sometimes prove to be more complex Nunnally, Bernstein, & Berge (1967) which was later adjusted to 0.7 (Hair, Joseph, Bush, Robert, & Ortinau David, 2006; Nunnally et al., 1967).

5.14.4.5 Validity

Saunders (2007) explains that validity is involved with whether the discoveries are truly about what they seem to be about. Validity is founded on the fundamental evaluation of the degree to which theoretical considerations and empirical findings sustain the adequacy of the argumentation (Thomas 2006). Joppe (2000) further explained that validity establishes whether the research calculates that which it was intended to calculate or how accurate the research results are. In other words, validity is a quantitative measure. Often researchers verify validity by asking a series of questions, and will frequently search for the answers in the research of others scholars. Creswell and Miller (2000) suggested that the validity is affected by the researcher's opinion of validity in the study and his/her choice of paradigm assumption. Many researchers have fostered their own theories of validity and have frequently adopted or generated what is considered to be more suitable terms, such as, precision, quality and trustworthiness.

Validity will be assessed using two distinct measures which have two sub-measures respectively. Convergent validity will be tested with special reference being made to item to total correlations and factor loadings, while discriminant validity will also be assessed focusing on correlation matrix, the Average Value Extracted (AVE) and Shared Value (Pedersen & Nysveen). These measures are discussed further below.

5.14.4.6 Convergent Validity

According to Zikmund, Babin, Carr, and Griffin (2013) convergent validity certifies that concepts that should be related are indeed related. Patel, Tang and Elliot (2006) posited that convergent validity ensures significant correspondence between scores from two or more different measures of the same variable. Consequently, the convergent reliability of the measures is tested by calculating the extent to which each indicator variable represented its respective latent variable. Patel et al. (2006) recommended that the item loadings to be greater than 0.5 to signify acceptable validity.

5.14.4.7 Item to Total Correlation

Item to total correlation is a statistical test that is assessed in order to measure convergent validity. According to Dunn, Seaker and Waller (1994), in order to improve the internal consistency of the construct, item to total values should be above the cut-off point of 0.3 (often ≦0.3). This study will use this definition as the benchmark to measure item to total correlation.

5.14.4.8 Factor Loadings (Standardised Regression Weights)

Factor loadings are accepted as valid for items that exceed the minimum threshold of 0.5 (Schwab, 2006). When this result bears true, this indicates acceptable individual item convergent validity, with more than 50% of each item's variance being shared with its respective variable. Hence, for the purpose of this study, a value of greater than 0.5 will be accepted to indicate a good factor loading.

5.14.4.9 Discriminant Validity

Discriminant validity is somewhat the opposite of convergent validity. It occurs when scores of different variables do not converge (Patel et al., 2006). Thus discriminate validity highlights inconsistency better described as heterogeneity between constructs (Malhotra, 2008). Without it, it is a challenge for scholars to be sure whether results that confirm the postulated structural paths are genuine or whether they are as a result of statistical inconsistencies. The construct and individual indicators become uncertain if discriminant validity is not recognised. Furthermore, an absence of discriminant validity may suggest that measurement scales used in research may function incorrectly, making the researcher to draw incorrect conclusions (Mhlophe, 2015). The correlation matrix test is used to assess the discriminant validity of the research variables in this study. In addition, to achieve high discriminate validity O'Rourke and Hatcher (2013) suggests that values of less than 0.8 are sought.

5.14.4.10 Correlation Matrix

Inter-construct correlation matrix is used to measure how distinct and less similar the constructs are from one another. The level of distinction indicates discriminant validity. According to O'Rourke and Hatcher (2013) and Chinomona, Lin, Wang and Cheng (2010), high discriminant validity is achieved the more values deviate from 1 towards 0. In other words, the lesser the value, the more unique the variables are.

5.14.4.11 Average Variance Extracted (AVE)

Another method used to check discriminant validity related to the correlation matrix is that of checking whether the average variance extracted (AVE) for two constructs is greater than the square of the correlation between the constructs. The average variance extracted (AVE) quantifies the sum total variance in the indicators, as accounted for by the latent construct. Ideally, AVE should be greater than 0.4 for the construct to be deemed reliable (Fraering &

Minor, 2006). In order to calculate AVE, the identical factor loadings of Confirmatory Factory Analysis (CFA) are adapted. The below equation is used to calculate AVE:

$$V\eta=\Sigma\lambda yi2/(\Sigma\lambda yi2+\Sigma\varepsilon i)$$; where

$V\eta$ = AVE; $\Sigma\lambda yi2$ = sum of the squared factor loadings; $\Sigma\varepsilon i$ = sum of error variances (Chinomona, 2013). When combined the construct reliabilities and the Average Value Extracted estimates suggest the scales are internally consistent.

5.14.4.12 Average Variance Extracted (AVE) Versus Shared Variance (SV)

An additional measure for gauging discriminant validity is assessing whether the AVE value is greater than the highest SV value (Nusair & Hua, 2010). If the latter is established, the existence of discriminant validity is confirmed.

5.14.4.13 Model Fit

Model fit is assessed through the performance of the following statistical tests, namely; Chi-Square, Comparative Fit Index, Goodness Fit Index, Incremental Fit Index, Normed Fit Index, Tucker Lewis Index and Root Mean Square Error of Approximation. All tests are elaborated upon below as well as their associated individual thresholds.

5.14.4.14 Chi-square

Schumacker and Lomax (2004) posited that a statistically insignificant Chi-square value indicates that the reproduced model-implied covariance matrix and sample covariance matrix are virtually identical, whilst a Chi-square value of zero indicates a perfect fit or no variance

between the reproduced implied covariance matrix and the values in the covariance matrix. In simple terms, the chi-square test allows researchers to establish confidence in a relationship between the variables in the population (Bryman & Bell, 2003). This is achieved by evaluating the overall model fit in order to measure the degree of incongruity between the sample and fitted covariance matrices (Hu & Bentler, 1999). This present study relies on the parameters suggested by (Barrett, 2007), who posit that an acceptable model fit would point toward an insignificant result at a 0.05 threshold.

5.14.4.15 Comparative Fit Index (CFI)

The comparative fit index is also commonly referred to as Bentler Comparative Fit Index and compares the existing model fit with a null model that assumes the latent variables in the model are uncorrelated (Bentler, 1990). According to Rigdon (1998), this index evaluates whether the hypothesised model is better than the baseline or competing model. It thus compares the covariance matrix predicted by the model to the observed covariance matrix, and compares the null model with the observed covariance matrix to gauge the percentage of lack of fit which is accounted for by going from the null model to the researcher's SEM model (Chivandi, 2015).

An acceptable statistic for this test ranges between 0.0 and 1.0 with values nearer to 1.0 indicating a very good fit. Though in the past, the minimum standard was > 0.90, contemporary studies have revealed that a value of greater than 0.9 is necessary to make sure that models that fit poorly are not accepted (Hu & Bentler, 1999). Similarly, in this case of this study, a suitable CFI statistic is a value of greater than 0.9.

5.14.4.16 Goodness of fit Index (GFI)

The goodness of fit index was originally created by Jöreskog and Sörbom (1993), who developed it as an alternative to the chi-square test. A goodness of fit test checks a collection of data, in

categories, to see if that data falls according to a specified probability distribution (Shayib, 2013). In addition, GFI measures the comparative amount of the observed covariance's and variances (Tabachnick & Fidell, 2007). This statistic ranges from 0 to 1, with 1 demonstrating a perfect fit. Chinomona, 2014; Hoyle (1995) recommended the threshold for GFI to be at or above 0.90. Consistent with this proposal, in this study, a value of greater than 0.9 will be accepted to indicate a good model fit.

5.14.4.17 Incremental Fit Index (IFI)

The incremental fit index is also known as the comparative fit index Miles and Shevlin (2007) and was developed by (Bollen, 1989). Its computation is similar as that of the Normed Fit Index which will be discussed below, except that degrees of freedom are taken into account. IFI should generally be equal to or greater than 0.90 to accept the model (Fan et al., 1999). Similarly, the present study aligns with the criteria set by (Fan et al., 1999).

5.14.4.18 Normed Fit Index (NFI)

The normed fit index reflects the proportion by which the researcher's model improves fit compared to the null model. This is achieved by comparing the x^2 value of the model with the x^2 of the null model. According to Bentler and Bonnet (1980), values for this statistic range between 0 and 1, with 1 indicating a very good fit. One distinct draw back from this index is its sensitivity to sample size (Bentler, 1990), however this is drawback is addressed by using the Tucker-Lewis Index which is discussed below.

5.14.4.19 Tucker Lewis Index (TLI)

Whilst the TLI to a large extent dealt with the problem of sample size sensitivity presented by NFI, the tucker lewis index proposes a concern in that when small samples are used, the value of this index can indicate a poor fit, despite other statistics pointing towards a good fit (Bentler, 1990; Tabachnick & Fidell, 2007). Comparable to CFI, the TLI can also be used to measure comparative fitting, with values close to 1 signifying a good fit. This study accepts a value of equal or greater than 0.90 as indication of good model fit.

5.14.4.20 Root Mean Square Error of Approximation (RMSEA)

The root mean square error of approximation relates to the residual in the model (Suhr, 2014). Browne and Cudeck (1993) denotes RMSEA as the statistical provision for the error of approximation in the population. RMSEA assists in ascertaining how well the model would be with unknown but optimally chosen parameter values in terms of fitting the population covariance matrix (Browne & Cudeck, 1993). A key advantage of the RMSEA is that its asymptotic distribution is known, which allows for hypothesis testing (Savalei, 2012). The incongruity measured by RMSEA, is expressed in per degree of freedom which results in this index being sensitive to the number of likely parameters in the model (Chivandi, 2015). RMSEA values range from 0 to 1, with a smaller RMSEA indicating better model fit. In fact, Browne & Cudeck (1993) further suggest that values of RMSEA less than 0.05 constitute close fit, values less than 0.08 constitute fair fit, while values greater than 0.10 represent poor fit. The 0.08 to 0.10 range has also been labelled mediocre fit (MacCallum, Browne, & Sugawara, 1996). As soon as a satisfactory model fit is accepted, the parameter estimates are examined. In most cases, the RMSEA is reported at 95% confidence level in order to redress any sampling errors associated with a lower RMSEA value and the projected RMSEA (Mhlophe, 2015). If the model fit is unacceptable, the model could be looked over and revised. In such instances, the investigator can either free parameters that were fixed, or fix parameters that were free (Suhr, 2014).

5.14.5 Structural/Path Modelling

Once reliability and validity of measurement instruments, together with model fit under CFA is checked, and acceptable thresholds are met, the next step is structure modelling. The researcher proceeded to perform Path Modelling using Analysis of Moment Structures (AMOS) 21.0 software package. Path modelling as a SEM technique (or a sub-set of SEM) is defined by a measurement model linking the manifest variables to their latent variable (Khine, 2013). Moreover, it is also regarded as a structural model that links independent unobserved variables to other unobserved variables Chatelin, Vinzi and Tenenhaus (2002) and tests the structural paths of the conceptualised research model.

5.14.5.1 Path Coefficients

The main advantage of using path modelling (over regression analysis), is that the indirect and total effects are analysed, as opposed to only analysing direct effects which are prevalent when using regression analysis (Keith, 2015). The causal paths in SEM were assessed using statistical significance and strength, through the use of standardized path coefficients that ranged between -1 and +1 (Mhlophe, 2015). Furthermore, path analysis provides a clearer understanding of the cause and effect between variables and is often a better choice for the explanatory analysis of non-experimental data (Keith, 2015). The path coefficients reflect the nature of the strength between the variables: the higher the value, the stronger the relationship. In order to detect whether the hypotheses are supported or not, the p-values are analysed.

5.14.5.2 Significance Level

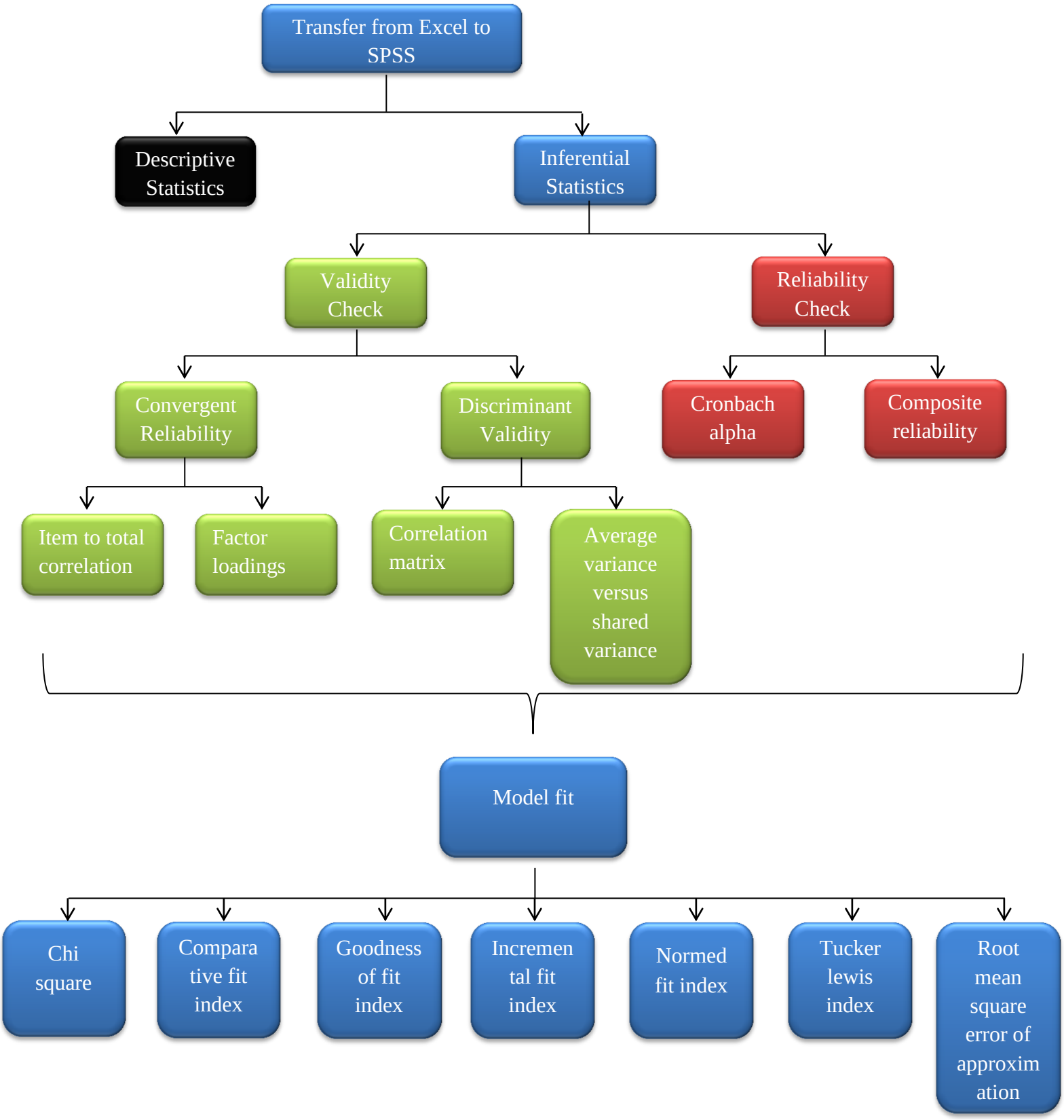
Significance levels will also be used to estimate the degree to which the hypotheses are supported or not within a confidence interval around the measurement on the test sets. A commonly used level of reliability of the result is 95%, also written as p = 0.05, called *p-level* (Koehn, 2004). Significance can also be measured at greater extremes, for example when p =

0.01 there is 99% confidence in the relationship between constructs. Similarly, when p = 0.1 there is 90% confidence in the significance between constructs. Thus the researcher assesses the level of significance between variables to ascertain the relevance of the original hypotheses in the context of the current study.

5.14.5.3 Model Fit

Model fit tests adopted for structure modelling mirror those used to test the measurement model. Those being; Chi-Square, Comparative Fit Index, Goodness Fit Index, Incremental Fit Index, Normed Fit Index, Tucker Lewis Index and Root Mean Square Error of Approximation. Equally, the same thresholds are maintained in assessing the model fit, as such, the steps mentioned in the discussion above can best be represented by Figure 5.2 below.

Figure 5.2: Statistical Modelling



Source: Author (2016).

5.15 Chapter Summary

This chapter presented a comprehensive outline of the methodology used to collect the data. This was achieved by firstly sharing the research strategy undertaken in the study. This was followed by a clear description of the sample design, target population, sampling frame, sample size, sampling method and ethical considerations. Following this, the measurement instrument was discussed as well as the questionnaire design. Thereafter, a synopsis of each measurement scale was discussed after which a pilot test was conducted to ensure the right-working of the research instrument. Emphasis was placed on the fact that the content, research questions and the preferences of the researcher should be assessed so as to describe the methodological requirements of a specific study. This helped in selecting the most conducive methodology for this study. Finally, the data collection technique was discussed alongside the data analysis approach that was used and deemed most appropriate in the context of the present study. Subsequently, a comprehensive justification and rationale for the chosen method was discussed. The chapter ends with a diagrammatic representation of chapter five. The next chapter presents the data analysis from the study.

Figure 5.3: Diagrammatic representation of Chapter Five



Source: Author (2016).

CHAPTER 6: DATA ANALYSIS

6.1 Introduction

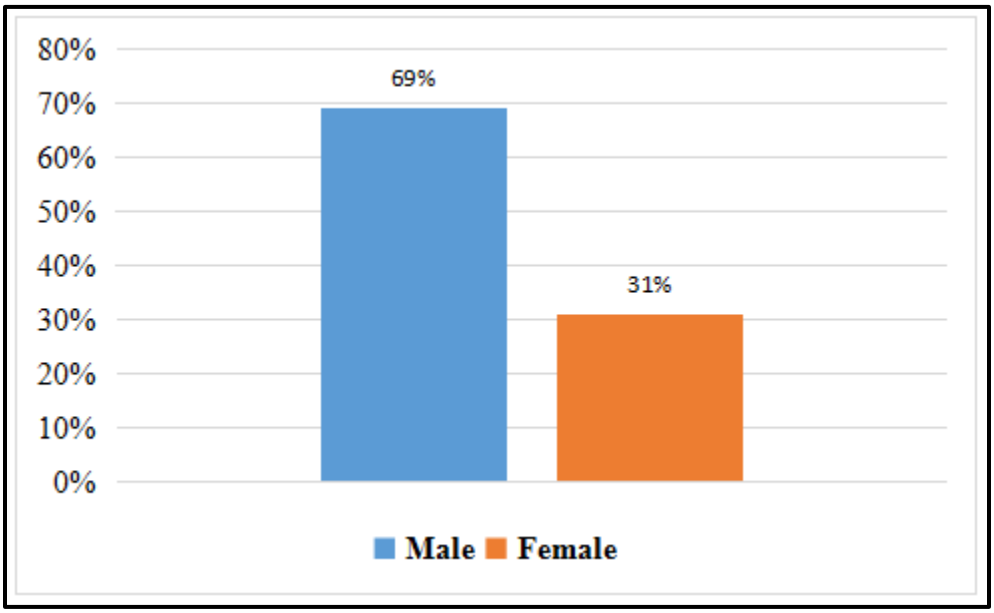
This section presents the statistical analysis and results obtained from the data collected on how data charges, delivery dependability, geographical distance, product risk, information quality, online shopping satisfaction and trust influences online purchase intention of consumers in the South African retail sector. An overview of the descriptive statistics is provided making reference to the demographic profile of the respondents. This is followed by a discussion of the measurement model assessment including an analysis of reliability, validity and model fit. Finally, a structural model assessment is given with particular discussion on path coefficients, significance level and model fit.

6.2 Descriptive Statistics

Questions relating to the respondents were included to report the biographical results as outlined to Section A of the measuring instruments. This section classifies the respondents for the sample into categories measured by gender, age, race, frequency of online shopping, devices used to login on the internet, marital status, monthly income and academic level. Each of these characteristics is discussed in the following subsections.

6.2.1 Gender composition of the sample

Figure 6.1: Respondents' gender

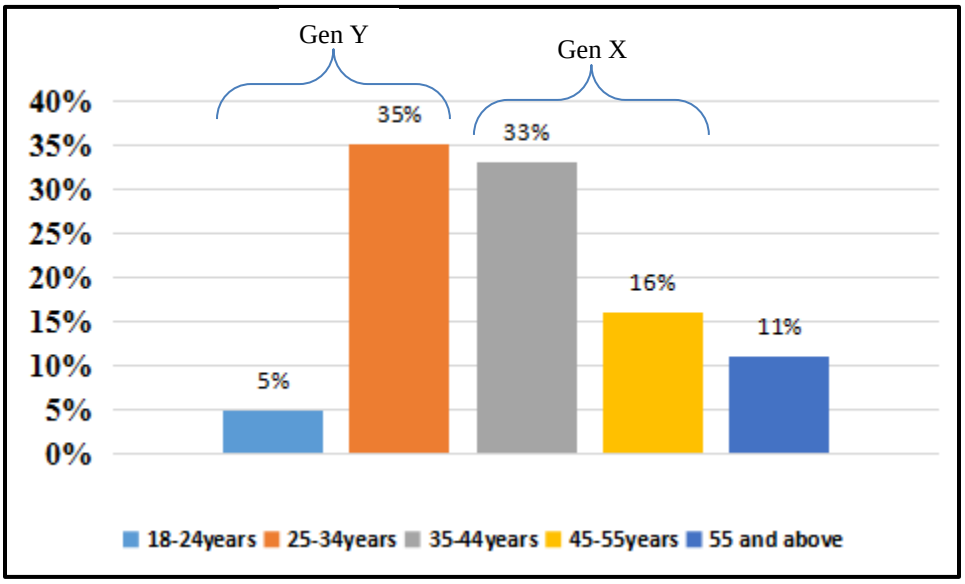


Source: Author (2016).

The gender distribution of the sample is reflected in Figure 6.1. Of the 924 respondents in the sample, the majority were males (69%; n=637), whilst females made the up balance (31%; n=287) of the sample.

6.2.2 Age Distribution of the respondents

Figure 6.2: Age distribution of respondents

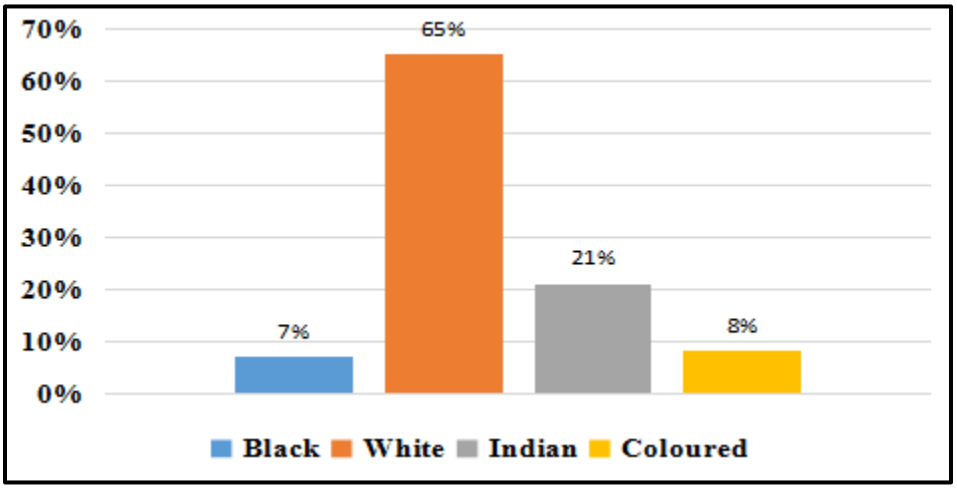


Source: Author (2016).

The respondents were classified into five age groups as illustrated in Figure 6.2. Most the respondents (35%; n=319) were aged between 25-34 years. The age category 35-44 years comprised (33%; n=308) of the sample; the age category of 45-55 years comprised (16%; n=150) of the respondents. Additionally, the age category of 55 and above years of age comprised (11%; n=103) and the age category of 18-24 years constituted the least amount (5%; n=44) of respondents in the sample. In terms of age classifications, generation y makes up 40% of the respondents spread between ages 18-34; whilst 49% of the respondents comprised of generation x respondents aged between 35-55 years.

6.2.3 Ethnic Group Profile

Figure 6.3: Ethnic group profile

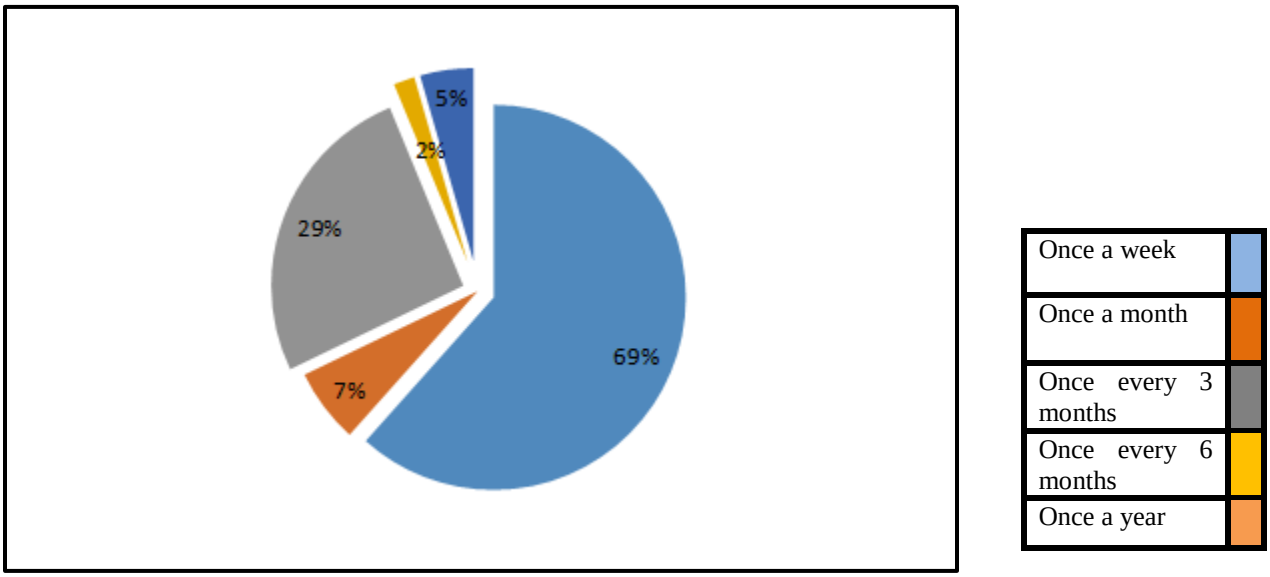


Source: Author (2016).

Figure 6.3 reports the demographical information pertaining to the respondents' racial groups/ethnic groups. The majority of respondents were white with (65%; n=597), followed by those who identified themselves as Indian with (21%; n=191). Furthermore, the respondents who belonged to the last two racial groups, namely coloured and black represented a small portion of this sample groups (8%; n=73) and (7%; n=63) respectively.

6.2.4 Frequency of online shopping

Figure 6.4: Frequency of online shopping

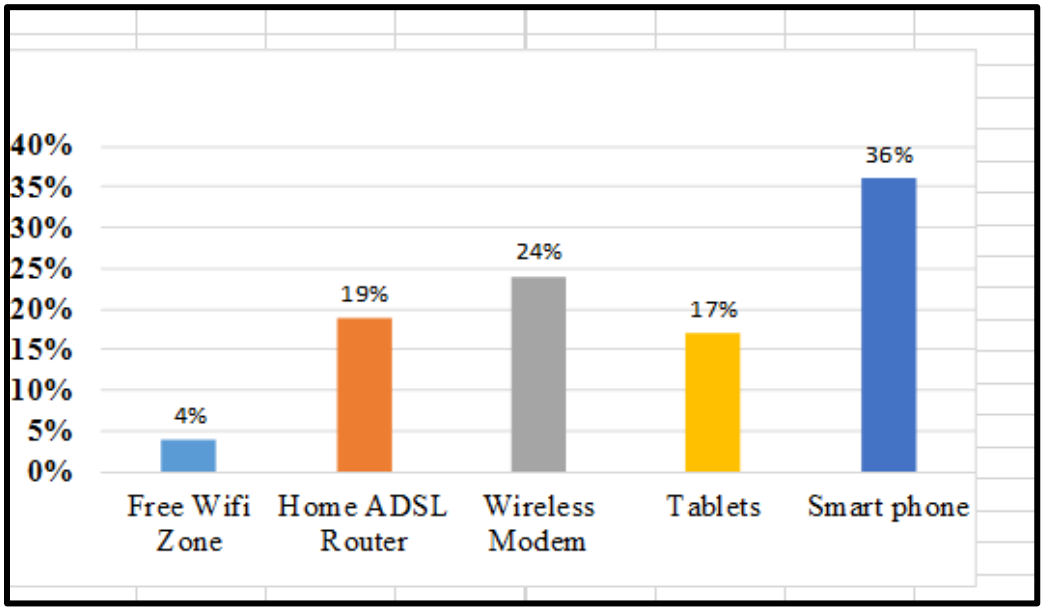


Source: Author (2016).

In terms of online shopping, majority 62%; n=569 of the respondents go online to shop at least once a week, while 29%; n=266 go online for shopping once every 3 months. (7%; n=68) indicated that they go online for shopping once a month; (2%; n=17) of the respondents indicated that they go online for shopping once in every 6 months; Only 5%; n=5 of the respondents revealed that they go only for shopping once a year. Overall, there is a very high frequency of online shopping which mostly occurs weekly for nearly 70% of all respondents.

6.2.5 Device used for internet login

Figure 6.5: Device used for internet login

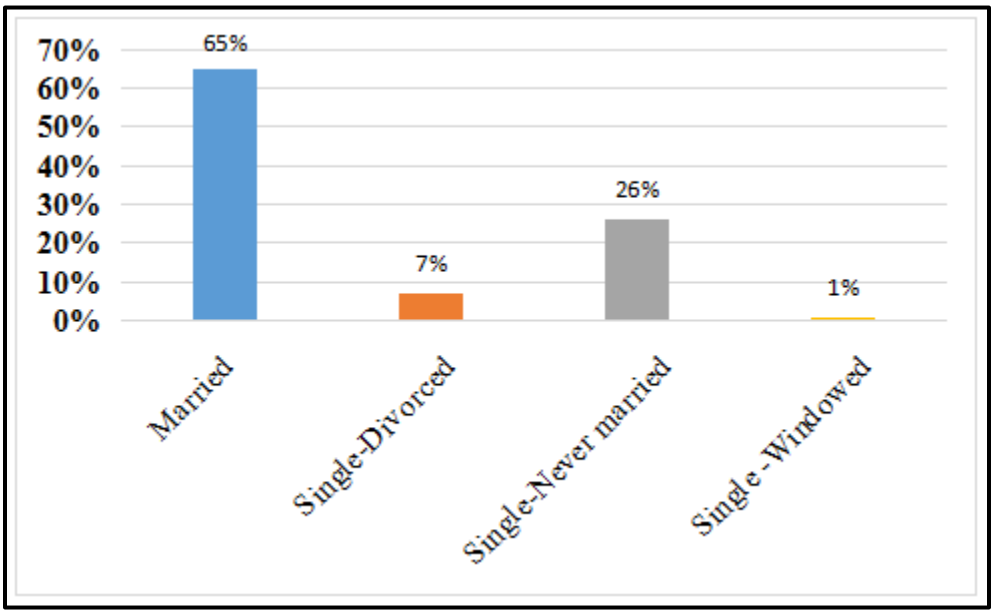


Source: Author (2016).

In terms of the devices used by the respondents to login on the internet, most the respondents (36%; n=336) indicated that they make use of their smart phones to login on the internet, followed by (24%; n=221) of the respondents who indicated that they use wireless moderns to login in on the internet. Furthermore, 19%; n=174 of the respondents revealed that they make use of their home ADSL Router to login on the internet. (17%; n=157) indicated that they are utilize tablets to log in on the internet. The remainder of the respondents revealed that they make use of a Wifi zone to login on the internet. Of interest is the high dependence amongst respondents with smart phones as a means to login to the internet. Thus, the role of data and its cost (data charges) impacts consumers' online purchase intention and certainly proves to be relevant predictor variable.

6.2.6 Marital status of the respondents

Figure 6.6: Marital status of the respondents

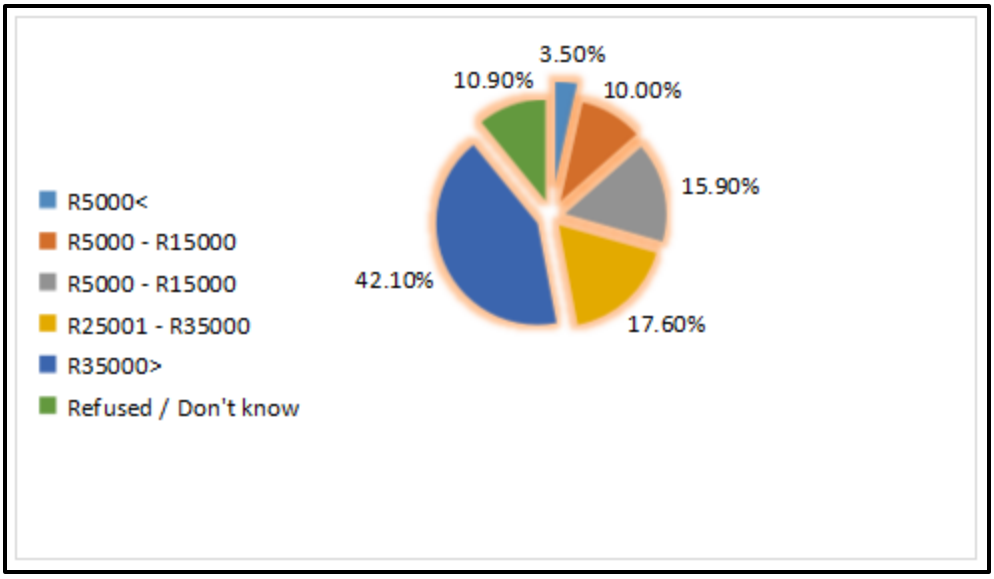


Source: Author (2016).

An analysis of marital status reveals that most the respondents 65%; n=602 were married, followed by (26%; n=244) who reported that they were single (never married), (7%; n=66) of the respondents indicated that they were single (Divorced/Separated). The remainder of the respondents (1%; n=12) revealed that they are single (windowed).

6.2.7 Monthly Income of the respondents

Figure 6.7: Monthly income

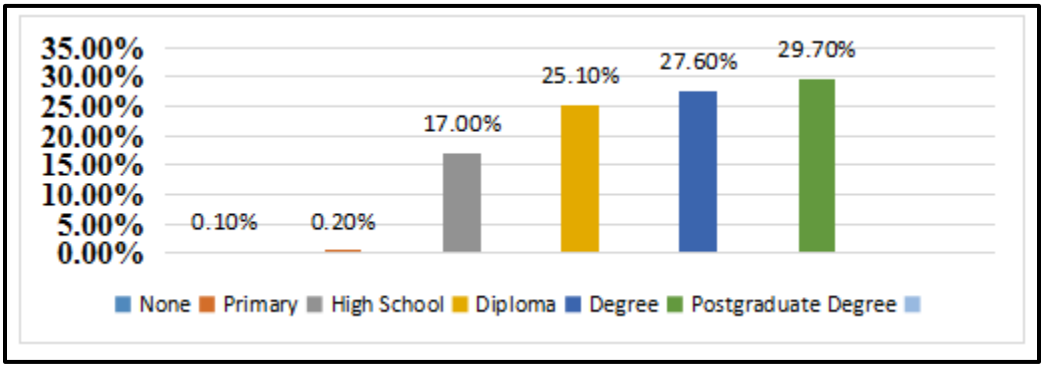


Source: Author (2016).

Most the respondents 42.1%; n=389 indicated that they receive a monthly income which is more than R35 000, closely followed by (17.6%; n=163) of the respondents who indicated that they receive a monthly income between R25 000 - R35 000. The third category representing 15.9%; n=147 of the total sample receive a monthly income of between R15 001- R25 000). The fourth category representing 10.9%; n=101 of the sample refused to mention their income range. Lastly 3.5%; n=32 of the respondents receive a monthly income of more than R5000. There certainly seems to be a correlation between level of affluence and online shopping with almost 60% of respondents earning well over R25 000 monthly.

6.2.8 Academic level

Figure 6.8: Academic level for the respondents



Source: Author (2016).

The distribution of the respondents' level of education achieved is shown in Figure 6.8. In terms of educational level, approximately 29.7%; n=274 were in possession of a postgraduate degree. Then followed by 27.6%; n=255 those who indicated that they are in possession of a degree. In addition, 25.1%; n=232 of the respondents indicated that they are diploma holders. (17%; n=160) of the respondents indicated that they have acquired high school education. Furthermore, only (0.2%; n=2) revealed that they have only gained primary school education. Lastly the remainder of the respondents (0.1%; n=1) indicated that they never acquired any form of education.

6.3 Inferential Statistics

The following sections of the questionnaire, namely section B, C, D, E, F, G and H individually refer to the respective predictor variables set out in this study and how they each potentially impact consumers online purchase intention.

6.3.1 Data Charges

Table 6.1: Internet fees being high

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	291	31.5	31.5	31.5
	Disagree	389	42.1	42.1	73.6
	Neutral	169	18.3	18.3	91.9
	Agree	56	6.1	6.1	97.9
	Strongly Agree	19	2.1	2.1	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.1 above illustrates response to the statement "The fee that I have to pay for the use of the internet is high". Most participants disagree with the statement and this represented 42.1% of the total sample. This was followed by those who strongly disagreed with the statement (31.4%), those who were neutral (18.2%), those who agreed (6.0%) and the remainder strongly agreed (2.0%) of the total sample. It is evident that the cost of data is becoming more affordable as over 73% of respondents disagree with the statement that "the fee that I have to pay for the use of the internet is high".

Table 6.2: The extent to which internet fees are reasonable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	90	9.7	9.7	9.7
	Disagree	203	22.0	22.0	31.7
	Neutral	631	68.3	68.3	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.2 above illustrates response to the statement "The fee that I have to pay for the use of the internet is reasonable". Most participants are neutral with the statement and this represented

68.2% of the total sample. This was followed by those who disagreed with the statement (21.9%) and the remainder strongly disagreed (9.7%) of the total sample.

Table 6.3: The extent to which a respondent is pleased with the fee they pay for the internet

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	485	52.5	52.5	52.5
	Disagree	279	30.2	30.2	82.7
	Neutral	160	17.3	17.3	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.3 above illustrates response to the statement "I am pleased with the fee that I have to pay for the use of the internet". Most participants strongly disagree with the statement and this represented 52.4% of the total sample. This was followed by those who disagreed with the statement (30.1%) and the remainder were neutral (17.3%) of the total sample.

6.3.2 Delivery Dependability

Table 6.4: Online stores deliver the kind of products I need

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	33	3.6	3.6	3.6
	Disagree	143	15.5	15.5	19.0
	Neutral	208	22.5	22.5	41.6
	Agree	339	36.7	36.7	78.2
	Strongly Agree	201	21.8	21.8	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.4 above illustrates response to the statement "Online stores deliver the kind of products I need". Most participants strongly disagreed with the statement and represented 60.0% of the total sample. This was followed by those who disagreed with the statement (38.1%) and the remainder were neutral (1.8%) of the total sample. Undoubtedly a strong element of scepticism and lack of validation that online retailers can indeed deliver the kind of products customers need.

Table 6.5: Online stores deliver my orders on time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	1.3	1.3	1.3
	Disagree	8	.9	.9	2.2
	Neutral	70	7.6	7.6	9.7
	Agree	403	43.6	43.6	53.4
	Strongly Agree	431	46.6	46.6	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.5 above illustrates response to the statement "Online stores deliver my orders on time". Most participants disagreed with the statement and this represented 29.4% of the total sample. This was followed by those who were neutral with the statement (28.4%), those who agreed (21.7%), those who strongly disagreed (15.8%) and the remainder strongly agreed (4.0%) of the total sample

Table 6.6: Online stores provide dependable delivery

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	24	2.6	2.6	2.6
	Disagree	33	3.6	3.6	6.2
	Neutral	102	11.0	11.0	17.2
	Agree	395	42.7	42.7	60.0
	Strongly Agree	370	40.0	40.0	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.6 above illustrates response to the statement "Online stores provide dependable delivery". Most participants disagreed with the statement and this represented 35.6% of the total sample. This was followed by those who were neutral with the statement (24.46%), those who agreed (21.5%), those who strongly disagreed (14.7%) and the remainder strongly agreed (3.6%) of the total sample. Generally mixed emotions portrayed by respondents with some agreeing and others disagreeing with the statement. This suggests a sense of inconsistency in delivery dependability of the select online retailers.

Table 6.7 Online stores deliver the kind of products I need

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	33	3.6	3.6	3.6
	Disagree	143	15.5	15.5	19.0
	Neutral	208	22.5	22.5	41.6
	Agree	339	36.7	36.7	78.2
	Strongly Agree	201	21.8	21.8	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.7 above illustrates response to the statement "Online stores deliver the kind of products I need". Most participants agreed with the statement and this represented 36.6% of the total sample. This was followed by those who were neutral with the statement (22.5%), those who strongly agreed (21.7%), those who disagreed (15.4%) and the remainder strongly disagreed (3.5%) of the total sample. This highlights the range width or additional product selection that is largely offered by online retailers.

Table 6.8: Online stores deliver my orders on time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	1.3	1.3	1.3
	Disagree	8	.9	.9	2.2
	Neutral	70	7.6	7.6	9.7
	Agree	403	43.6	43.6	53.4
	Strongly Agree	431	46.6	46.6	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.8 above illustrates response to the statement "Online stores deliver my orders on time". Most participants strongly agreed with the statement and this represented 46.6% of the total sample. This was followed by those who agreed with the statement (43.6%), those who were neutral (7.5%), those who disagreed (0.8%) and the remainder strongly disagreed (1.3%) of the total sample. Certainly the delivery strategies employed by the select online retailers proves to have some consumer confidence in terms of delivering orders on time.

6.3.3 Geographical Distance

Table 6.9: It's not worth travelling the distance when I can rather shop online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	15	1.6	1.6	1.6
	Disagree	37	4.0	4.0	5.6
	Neutral	140	15.2	15.2	20.8
	Agree	443	47.9	47.9	68.7
	Strongly Agree	289	31.3	31.3	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.9 above illustrates response the statement "It's not worth travelling the distance when I can rather shop online". According to the results from the sample population, most participants agree with the statement and this represented 47.9% of the total sample. This was followed by those who strongly agreed with the statement (31.2%), those who were neutral (15.1%), those who disagreed (4.0%) and the remainder strongly disagreed (1.6%) of the total sample.

Table 6.10: With travelling costs constantly increasing, I prefer shopping online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	.9	.9	.9
	Disagree	63	6.8	6.8	7.7
	Neutral	178	19.3	19.3	26.9
	Agree	411	44.5	44.5	71.4
	Strongly Agree	264	28.6	28.6	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.10 above illustrates response to the statement "With travelling costs constantly increasing, I prefer shopping online". Most participants agreed with the statement and this represented 44.4% of the total sample. This was followed by those who strongly agreed with the statement (28.5%), those who were neutral (19.2%), those who disagreed (6.8%) and the remainder strongly disagreed (0.8%) of the total sample. A significant amount of consumers agree with this statement which reinforces the necessity amongst traditional format retailers to penetrate the online retailing market.

Table 6.11: I prefer to shop online as the nearest physical store is too far away

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	16	1.7	1.7	1.7
	Disagree	101	10.9	10.9	12.7
	Neutral	270	29.2	29.2	41.9
	Agree	340	36.8	36.8	78.7
	Strongly Agree	197	21.3	21.3	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.11 above illustrates response to the statement "I prefer to shop online as the nearest physical store is too far away". Majority participants agreed with the statement and this represented 36.8% of the total sample. This was followed by those who were neutral (29.2%), those who strongly agree (21.3%), those who disagreed (10.9%) and the remainder strongly disagreed (1.7%) of the total sample. Online retailers completely decimate the notion of geographical distance and store location. Shopping is convenient and virtually accessible at customers will.

6.3.4 Product Risk

Table 6.12: I find it difficult to judge the quality of the product over Internet

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	26	2.8	2.8	2.8
	Disagree	194	21.0	21.0	23.8
	Neutral	194	21.0	21.0	44.8
	Agree	327	35.4	35.4	80.2
	Strongly Agree	183	19.8	19.8	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.12 above illustrates response to the statement "I find it difficult to judge the quality of the product over Internet". Most participants agreed with the statement and this represented 35.3% of the total sample. However, there was a mixed distribution of results that followed by respondents who were neutral and those who disagreed with the statement (21.0%), those who strongly agree (19.8%) and the remainder strongly disagreed (2.8%) of the total sample.

Table 6.13: I want to see and touch products before I buy them

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	13	1.4	1.4	1.4
	Disagree	185	20.0	20.0	21.4
	Neutral	406	43.9	43.9	65.4
	Agree	271	29.3	29.3	94.7
	Strongly Agree	49	5.3	5.3	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.13 above illustrates response to the statement "I want to see and touch products before I buy them". Most participants were neutral and this represented 43.9% of the total sample. This was followed by those who agreed with the statement (29.3%), those who agreed (20.0%), those who strongly agreed (5.3%) and the remainder strongly disagreed (1.4%) of the total sample.

Table 6.14: I place more trust in products that can be touched before purchase

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	21	2.3	2.3	2.3
	Disagree	218	23.6	23.6	25.9
	Neutral	334	36.1	36.1	62.0
	Agree	301	32.6	32.6	94.6
	Strongly Agree	50	5.4	5.4	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.14 above illustrates response to the statement "I place more trust in products that can be touched before purchase". 36.1% of the respondents were neutral and this represented the majority of the respondents. This was followed by those who agree with the statement (32.5%), those who disagreed (23.5%), those who strongly agreed (5.4%) and the remainder strongly disagreed (2.2%) of the total sample.

6.3.5 Information Quality

Table 6.15: Online stores offer more useful information about the different choices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	28	3.0	3.0	3.0
	Disagree	243	26.3	26.3	29.3
	Neutral	247	26.7	26.7	56.1
	Agree	339	36.7	36.7	92.7
	Strongly Agree	67	7.3	7.3	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.15 above illustrates response to the statement "Online stores offer more useful information about the different choices". Most participants agreed with the statement and this represented 36.6% of the total sample. This was followed by those who were neutral (26.7%), those who disagreed (26.3%), those who strongly agreed (7.2%) and the remainder strongly disagreed (3.3%) of the total sample. The expectation amongst respondents is high when it comes to depth and quality of information thus imposing responsibility on online retailers to ensure that website information is relevant and legitimate.

Table 6.16: I like to browse the various categories on a site when doing my shopping

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	1.6	1.6	1.6
	Disagree	102	11.0	11.0	12.7
	Neutral	200	21.6	21.6	34.3
	Agree	492	53.2	53.2	87.6
	Strongly Agree	115	12.4	12.4	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.16 above illustrates response to the statement "I like to browse the various categories on a site when doing my shopping". Most participants agreed with the statement and this represented 53.2% of the total sample. This was followed by those who were neutral (21.6%), those who strongly disagreed (12.4%), those who disagreed (11.0%) and the remainder strongly disagreed (1.6%) of the total sample.

Table 6.17: When searching for something to buy, I like to examine several search results even if the first one is exactly what I want

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	.5	.5	.5
	Disagree	49	5.3	5.3	5.8
	Neutral	105	11.4	11.4	17.2
	Agree	607	65.7	65.7	82.9
	Strongly Agree	158	17.1	17.1	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.17 above illustrates response to the statement "When searching for something to buy, I like to examine several search results even if the first one is exactly what I want". Most participants agreed with the statement and this represented 65.6% of the total sample. This was followed by those who strongly agreed with the statement (17.1%), those who were neutral (11.3%), those who disagreed (5.3%) and the remainder strongly disagreed (0.5%) of the total sample. This signals that online product comparison is strong feature of online shopping. Online retailers therefore need to provide a credible website experience that ensures features such as ease of use, ease of navigation and robust information in order to secure roaming customers.

6.3.6 Online Shopping Satisfaction

Table 6.18: I am satisfied with my overall experiences of online shopping

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	.3	.3	.3
	Disagree	25	2.7	2.7	3.0
	Neutral	61	6.6	6.6	9.6
	Agree	467	50.5	50.5	60.2
	Strongly Agree	368	39.8	39.8	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.18 above illustrates response to the statement "I am satisfied with my overall experiences of online shopping". Most participants agreed with the statement and this represented 50.5% of the total sample. This was followed by those who strongly agreed with the statement (39.8%), those who were neutral (6.6%), those who disagreed (2.7%) and the remainder strongly disagreed (0.3%) of the total sample. This is very important in terms of securing recurring online business as satisfied customers are repurchasing customers. Over 80% of the respondents of the total sample agree that they are satisfied with their overall shopping experience.

Table 6.19: I am satisfied with the pre-purchase experience of online shopping websites (e.g., consumer education, products search, quality of information about products, product comparison etc.)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	1.2	1.2	1.2
	Disagree	49	5.3	5.3	6.5
	Neutral	178	19.3	19.3	25.8
	Agree	550	59.5	59.5	85.3
	Strongly Agree	136	14.7	14.7	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.19 above illustrates response to the statement "I am satisfied with the pre-purchase experience of online shopping websites (for example, consumer education, product search, quality of information about products, product comparison, and so on)". Most participants agreed with the statement and this represented 59.5% of the total sample. This was followed by those were neutral (19.2%), those who strongly agree (14.7%), those who disagreed (5.3%) and the remainder strongly disagreed (1.1%) of the total sample.

Table 6.20: I am satisfied with the purchase experience of internet shopping websites

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	1.6	1.6	1.6
	Disagree	42	4.5	4.5	6.2
	Neutral	115	12.4	12.4	18.6
	Agree	571	61.8	61.8	80.4
	Strongly Agree	181	19.6	19.6	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.20 above illustrates response to the statement "I am satisfied with the purchase experience of Internet shopping websites (for example, ordering, delivery dependability)". Most participants agreed with the statement and this represented 61.8% of the total sample. This was followed by those who strongly agree with the statement (19.5%), those were neutral (12.4%), those who disagreed (4.5%) and the remainder strongly disagreed (1.6%) of the total sample.

6.3.7 Trust

Table 6.21: Online shopping is reliable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	13	1.4	1.4	1.4
	Disagree	36	3.9	3.9	5.3
	Neutral	116	12.6	12.6	17.9
	Agree	559	60.5	60.5	78.4
	Strongly Agree	200	21.6	21.6	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.21 above illustrates response to the statement "Online shopping is reliable". Most participants agreed with the statement and this represented 61.8% of the total sample. This was followed by those who strongly agree with the statement (19.5%), those were neutral (12.4%), those who disagreed (4.5%) and the remainder strongly disagreed (1.6%) of the total sample. In summation, over 82% of respondents agree with the statement that online shopping is reliable signifying that e-tailing has great future commercial prospects.

Table 6.22: In general I can rely on online stores to keep the promises that they make

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	.3	.3	.3
	Disagree	19	2.1	2.1	2.4
	Neutral	107	11.6	11.6	14.0
	Agree	650	70.3	70.3	84.3
	Strongly Agree	145	15.7	15.7	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.22 above illustrates response to the statement "In general I can rely on online stores to keep the promises that they make". Most participants agreed with the statement and this represented 70.3% of the total sample. This was followed by those who strongly agree with the statement (15.6%), those were neutral (11.5%), those who disagreed (2.0%) and the remainder strongly disagreed (0.3%) of the total sample. Further substantiating evidence that consumers trust online retailers as more than 85% of respondents feel they can rely on online stores to keep the promises they make.

Table 6.23: Online stores can be trusted, there are no uncertainties

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	.5	.5	.5
	Disagree	19	2.1	2.1	2.6
	Neutral	119	12.9	12.9	15.5
	Agree	644	69.7	69.7	85.2
	Strongly Agree	137	14.8	14.8	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.23 above illustrates response to the statement "Online stores can be trusted, there are no uncertainties". Most participants agreed with the statement and this represented 69.7% of the total sample. This was followed by those who strongly agree with the statement (14.8%), those were neutral (12.8%), those who disagreed (2.0%) and the remainder strongly disagreed (0.5%) of the total sample. Outcomes of this statement are consistent with the aforementioned results in that respondents have a high trust for online stores.

Table 6.24: Online shopping is a trustworthy experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	2.5	2.5	2.5
	Disagree	143	15.5	15.5	18.0
	Neutral	342	37.0	37.0	55.0
	Agree	355	38.4	38.4	93.4
	Strongly Agree	61	6.6	6.6	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.24 above illustrates response to the statement "Online shopping is a trustworthy experience". Most participants agreed with the statement and this represented 38.4% of the total sample. This was followed by those who were neutral (37.0%), those who were neutral (15.4%), those who strongly agreed (6.6%) and the remainder strongly disagreed (2.4%) of the total sample.

6.3.8 Online Purchase Intention

Table 6.25: I intend to buy online frequently

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	.8	.8	.8
	Disagree	42	4.5	4.5	5.3
	Neutral	304	32.9	32.9	38.2
	Agree	493	53.4	53.4	91.6
	Strongly Agree	78	8.4	8.4	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.25 above illustrates response to the statement "I intend to buy online frequently". More than half of the participants agreed with the statement and this represented 53.3% of the total sample. This was followed by those who were neutral (32.9%), those who strongly agree (8.4%), those who disagreed (4.5%) and the remainder strongly disagreed (0.7%) of the total sample.

Table 6.26: I anticipate repurchasing from online stores in the near future

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	.4	.4	.4
	Disagree	28	3.0	3.0	3.5
	Neutral	118	12.8	12.8	16.2
	Agree	534	57.8	57.8	74.0
	Strongly Agree	240	26.0	26.0	100.0
	Total	924	100.0	100.0	

Source: Author (2016).

Table 6.26 above illustrates response to the statement “I anticipate repurchasing from online stores in the near future”. Again, more than half of the participants agreed with the statement and this represented 57.7% of the total sample. This was followed by those who strongly agree with the statement (25.9%). If one adds these two positive responses than more than 80% of respondents intend on repurchasing from online stores in the near future. Those who were neutral amounted to 12.7%, those who disagreed 3.0% and the remainder strongly disagreed 0.4% of the total sample.

6.4 Assessment of the Measurement Model

The constructs under study in this research paper, namely; data charges, delivery dependability, geographical distance, product risk, information quality, online shopping satisfaction, trust and online purchase intention were individually measured. In this section, the results of the reliability and validity of the measurement instrument are examined, justified and elaborated on.

6.4.1 Testing for Reliability

Reliability is the extent at which research is consistent with what it measures (White & Denholm, 2011). The reliability of the study's instrument was assessed using Cronbach Alpha and Composite Reliability.

6.4.1.1 Cronbach's Coefficient Alpha Test

The Cronbach's Coefficient Alpha was used to assess the internal consistency of each construct employed in the study. According to Kipkebut (2010) values for Cronbach Alpha ranges between 0 and 1.The closer the co-efficient is to 1.00, the greater is the internal consistency of the items in the scale (Malhotra 2010). In the current study, the lowest Cronbach Alpha value was 0.776 while the highest value was 0.908. It was then clear that, the Cronbach Alpha values of the study all exceeded the recommended threshold of 0.6 and 0.7, authenticating that the measures that were used in the study were all reliable as presented in Table 6.35.

Table 6.27: Cronbach's Coefficient Alpha test

Research constructs		Individual measure of each item	Cronbach Alpha values
Data charges			0.915
	DC3	0.844	
	DC2	0.844	
Delivery dependability			0.818
	DD2	0.706	
	DD3	0.706	
Geographical distance		-	0.812
	GD2	0.686	
	GD3	0.686	
Product risk			0.831
	PR2	0.713	
	PR3	0.713	
Information quality			0.513
	IQ1	0.206	
	IQ2	0.206	
Trust			0.780
	TR4	0.538	
	TR3	0.713	
	TR2	0.678	
Online purchase intention			0.563
	OPI1	0.392	
	OPI2	0.392	
Online shopping satisfaction			0.718
	OSS2	0.560	
	OSS3	0.560	

Source: Author (2016).

6.4.1.2 Composite Reliability (CR)

The results of composite reliability are shown in Table 6.27. The results yielded CR indexes between 0.62 and 0.92. The exhibited CR level exceeded the estimated criteria of greater than 0.70, which is recommended as adequate for internal consistency of the constructs (Nunnally 1978; Chin 1988), thus finding support for the scales satisfactory composite reliability.

The CR estimates reported in Table 6.36 were calculated using the formula, whereby CR is calculated as the square of the summation of the factor loadings divided by the sum of the square of the summation of the factor loadings and the summation of error variances (Bewick, Cheek & Ball 2004). The formula is illustrated in the following manner:

$$\mathbf{CR\eta = (\Sigma\lambda yi)^2 / [(\Sigma\lambda yi)^2 + (\Sigma\varepsilon i)]}$$

Where:

$CR\eta$ = Composite reliability

$(\Sigma\lambda yi)^2$ = Square the sum of the factor loadings

$(\Sigma\varepsilon i)$ = Sum of error variances.

Table 6.36 provides the figures for the composite reliability values which were all greater than 0.7.

Table 6.28: Assessment of accuracy analysis

Research Construct		CR	Factor Loadings
Data charges		0.92	
	DC3		0.931
	DC2		0.906
Delivery dependability		0.83	
	DD2		0.744
	DD3		0.950
Geographical distance		0.82	
	GD2		0.777
	GD3		0.883
Product risk		0.84	
	PR2		0.930
	PR3		0.767
Information quality		0.62	
	1Q1		0.596
	1Q2		0.741
Trust		0.83	
	TR4		0.674
	TR3		0.833
	TR2		0.837
Online purchase intention		0.65	
	OP1		0.741
	OP2		0.529
Online Shopping Satisfaction		0.76	
	OSS2		0.598
	OSS3		0.938

Source: Author (2016).

6.4.2 Testing for Validity

Convergent validity and discriminant validity were both used in estimating the measurement validity. For convergent validity, the study's instrument was tested using item-to-total correlations and factor loadings. Whereas for discriminant validity, the study's instrument was tested using correlation matrix and average value extracted versus shared value.

6.4.2.1 Convergent Validity

According to Hair et al. (2006) convergent validity is "the extent at which indicators of a specific variable converge or share a high proportion of variance in common." It simply explains the extent at which a scale correlates with other measures of the same construct to the same direction. According to Carlsman and Herdman (2012) weaker convergent validity is evident using values deviating from one while values closer to one are normally accepted. Below Table 6.29 depicts the assessment of item-to-total correlation and factor loadings.

Table 6.29: Assessment of item-to-total correlation and Factor Loadings

Measurement Instrument		Inter-to-total correlation	Factor loadings
Data charges			
	DC3	0.844	0.931
	DC2	0.844	0.906
Delivery dependability			
	DD2	0.706	0.744
	DD3	0.706	0.950
Geographical distance			
	GD2	0.686	0.777
	GD3	0.686	0.883
Product risk			
	PR2	0.713	0.930
	PR3	0.713	0.767
Information quality			
	IQ1	0.206	0.596
	IQ2	0.206	0.741
Trust			
	TR4	0.538	0.674
	TR3	0.713	0.833
	TR2	0.678	0.837
Online purchase intention			
	OPI1	0.392	0.741
	OPI2	0.392	0.529
Online shopping satisfaction			
	OSS2	0.560	0.598
	OSS3	0.560	0.938

Source: Author (2016)

6.4.2.1.1 The Item-to-Total Correlation

The corrected item-to-total correlation values are shown in Table 6.29 which indicates the degree at which each item correlates with the total score (Pallant, 2010). Individual items or questions ought to be correlated between each distinct item and the total score (Field, 2006). Values that are less than three or < 3, shows that the item is measuring something different from the scale as a whole (Pallant, 2010). In this study, individual items that were less than 3 were considered as incorrect item scores and they were therefore removed prior to the statistical analysis. The values for the individual items ranged from 0.206 to 0.844. This demonstrates the reliable nature of the items that were used for the study.

6.4.2.1.1 Factor Loadings Estimates

In addition, Table 6.29 presents the estimates of the factor loadings that were all greater than 0.5, showing a greater convergent validity. The lowest loading was 0.529, representing online purchase intention question number two (OPI2) while the highest among the loadings was with the delivery dependability question number three (DD3) with 0.950. This evidence further validates the convergent validity of all the scales.

6.4.2.2 Discriminant Validity

Kline (2011) defined discriminant validity as contrary to convergent validity in the extent that variables alleged to evaluate different variables shows discriminant validity. Discriminant validity describes how measures in the same study are distinct from other measures. The discriminant validity of the study was examined through a comparison of the square root of the AVE for each construct and its relationship with other constructs. Fornell and Larcker (1981) posited that discriminant validity is achieved when a square root of an AVE for a construct is greater than the correlation with the other construct. Table 6.30 presents that the

square root of all the AVE for each construct is greater than their correlations with other constructs − showing that discriminant validity has been achieved.

6.4.2.2.1 Inter-construct Correlation Matrix

Table 6.30: Correlations between constructs

	DC	DD	DG	PR	IQ	T	OPI	OSS
Data charges (Steckel et al.)	1							
Delivery dependability (DD)	.109(**)	1						
Geographical distance (Tangwe & Rembe)	.064	.201(**)	1					
Product risk (PR)	-.089(**)	-.101(**)	.211(**)	1				
Information quality (IQ)	-.026	.070(*)	.022	.453(**)	1			
Trust (T)	.181(**)	.236(**)	.285(**)	.258(**)	-.036	1		
Online purchase intention (OPI)	.153(**)	.558(**)	.273(**	-.134(**)	.106(**)	.326(**)	1	
Online shopping satisfaction (OSS)	.153(**)	.172(**)	.327(**)	-.304(**)	.106(**)	.725(**)	.265(**)	1

Source: Author (2016).

The table above presents the results from the correlation matrix. The inter-correlations between the variable were relatively high (for example the correlation between the constructs T and OSS of 0.725**). In spite of this high correlation, such results were still hardly acceptable as proposed by (Hulland, 1999). The findings also revealed that there is no absolute (100%) correlation between variables meaning that there is no similarity between constructs. Since all of the correlations between constructs were less than 1, such results confirmed that the existence of discriminant validity was indisputable. In accordance, the variables did not display any problems of multi-collinearity, for instance, a high correlation

value of > 0.89 (Brown & Cudeck, 1993) mean that a variable can be linearly predicted from the others with a substantial degree of accuracy. All the correlations were under 0.8 and were thus in agreement with the threshold recommended (Fraering & Minor, 2006). As such, they indicate discriminant validity. Therefore, the study variables were found to be dissimilar. The inter-construct correlations ranged between 0.022 (which showed high signs of discriminant validity) and 0.725** (which showed a fair level of convergent validity). Judging from the inter-construct correlation matrix in the table above, discriminant validity existed, owing to the fact that the constructs were highly dissimilar.

6.4.2.2.2 Average Variance Extracted (AVE)

The AVE estimates in total reflected that the overall amount of variance in the indicators was accounted for by the latent construct (Neuman, 2006). All AVE values were above 0.4, thus acceptable (Fraering & Minor 2006:249). AVE values indicated indexes between 0.45 and 0.84. These results provided evidence for acceptable levels of research scale reliability.

Malhotra (2010) defines AVE as the variance in the indicators or observed variables that are explained by the latent construct. A value of 0.40 or higher indicates a satisfactory measure (Anderson & Gerbing 1988). It is calculated as the summation of the squared factor loadings divided by the sum of the summation of the squared factor loadings and summation of error variances (Bewick, Cheek & Ball 2004). The formula below was applied when examining AVE.

$V\eta = \Sigma\lambda yi2 / (\Sigma\lambda yi2+\Sigma\varepsilon i)$

AVE = summation of the squared of factor loadings / {(summation of the squared of

factor loadings) + (summation of error variances)}

Table 6.31: Assessment of average variance extracted (AVE)

Research Construct		AVE Values	Factor Loadings
Data charges		0.84	
	DC3		0.931
	DC2		0.906
Delivery dependability		0.73	
	DD2		0.744
	DD3		0.950
Geographical distance		0.69	
	GD2		0.777
	GD3		0.883
Product risk		0.73	
	PR2		0.930
	PR3		0.767
Information quality		0.45	
	IQ1		0.596
	IQ2		0.741
Trust		0.62	
	TR4		0.674
	TR3		0.833
	TR2		0.837
Online purchase intention		0.48	
	OPI1		0.741
	OPI2		0.529
Online Shopping Satisfaction		0.62	
	OSS2		0.598
	OSS3		0.938

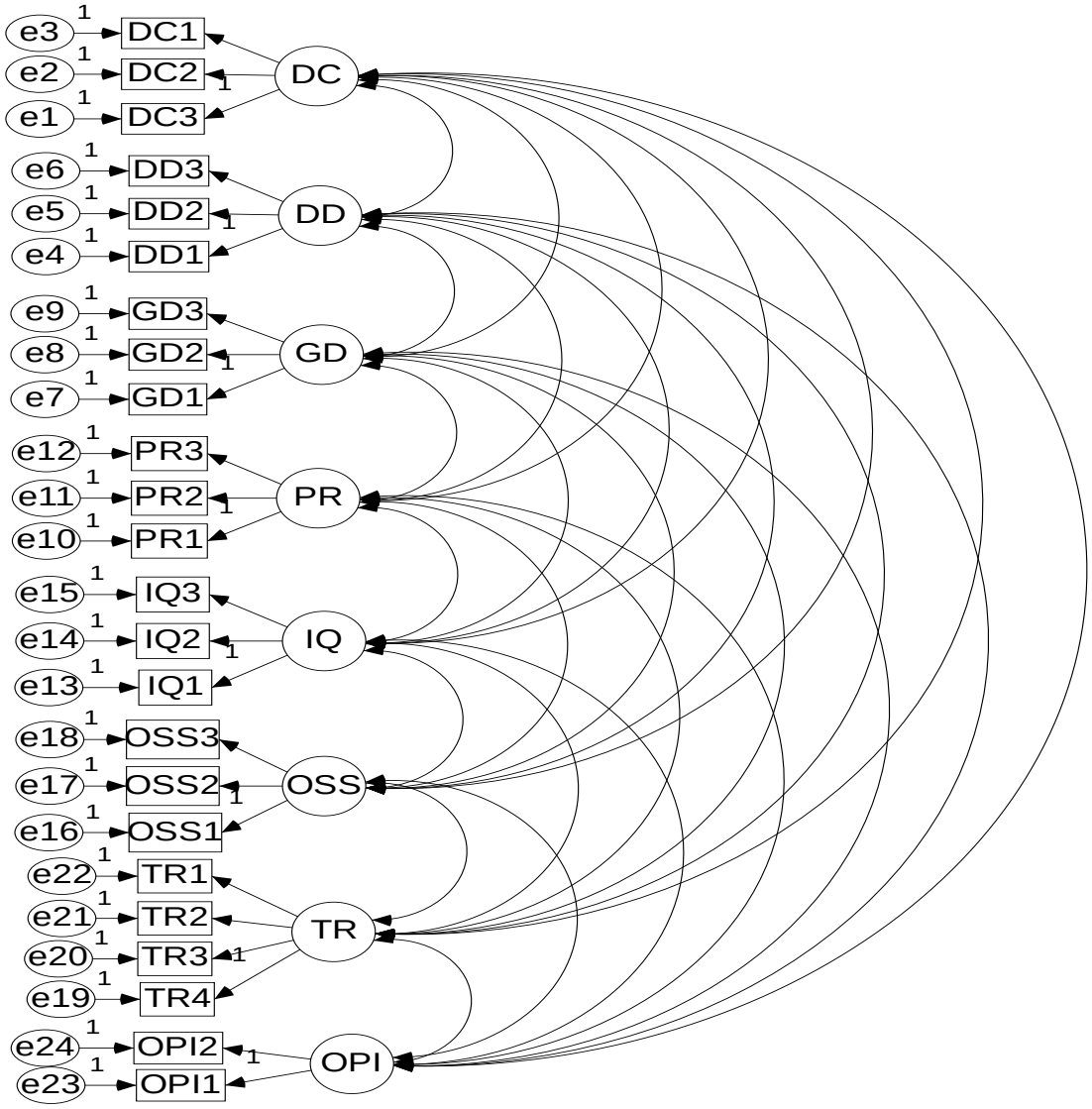
Source: Author (2016).

6.5 Model Fit Measurement

Model fit testing is done to determine if the conceptual model fits the collected data or not. The model was assessed using the final measurement model, the correlated error variance

terms and the standardized factor loadings from the indicators. Figure 6.31 shows the actual model that was used for the study while their respective indices are presented afterwards.

Figure 6.9: The initial confirmatory factor analysis (CFA)



Source: Author (2016).

The arrangement from the top to the bottom shows the observed variables with their respective latent constructs as: **DC** = data charges delivery; **DD** = delivery dependability; **GD** = geographical distance; **PR** = product risk; **IQ** = information quality; **OSS** = online shopping satisfaction; **TR** = trust as well as **OP**I = Online purchase intention.

6.5.1 Incremental Fit Index (IFI)

As part of the processes in ensuring acceptable or good model fit, standardized regression weights which were below 0.5 of the loadings were removed and they were **(DD** - data charges delivery; **DD** - delivery dependability; **GD** - geographical distance; **PR** - product risk; **IQ** - information quality; **OSS** - online shopping satisfaction ; **TR** - trust): DC1, DD1, GD1, PR1, IQ3, OSS1, TR1. After the deletion was done, errors were correlated using the modification index to improve upon the model fit.

6.5.2 Chi-Square Index

The chi-square index was examined as part of the confirmatory factor analysis in determining the model fit of the study. The CMIN/DF value of 2.229 was considered as an acceptable fit for the model. The value is consistent with Bentler and Bonet (1980), Schumacker and Lomax (2004) and Hair et al. (2010) who suggested for a good model fit of chi-square value to be less than five or < 5. as shown in Table 6.32.

Table 6.32: CMIN Index

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	76	169.395	224	.000	**2.229**
Saturated model	300	.000	0		
Independence model	24	8331.649	276	.000	30.187

Source: Author (2016).

6.5.3 Baseline Comparison Index

The baseline comparison index was calculated using the Normed Fit Index (NFI), the Tucker Lewis Index (TLI), the Incremental Fit Index (IFI) as well as the Comparative Fit index (CFI). According to Hair et al. (2010), a report on the chi-square value, either the CFI or the

TLI and the RMSEA is expected to provide sufficient results for the model fit. 247 In the current study all the indices were above 0.9, which were strong enough to be accepted in the model fit. The NFI was .912; the RFI was .903; the IFI was .932; the TLI was .932 while the CFI was .944. Hair et al. (2010) suggested for a value greater than 0.9 to be considered as an acceptable value for the indices as shown in Table 6.32.

Table 6.33: Baseline comparison index

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	**.934**	**.927**	**.964**	**.940**	**.953**
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Source: Author (2016).

6.5.4 The Root Mean Square Error of Approximation (RMSEA)

The Root Mean Square Error of Approximation was examined as part of the model fit and it indicated a value of 0.43. According to Joreskog and Sorbom (1986: 201; Hair et al. (2010: 672) the recommended value for REMSEA was < 0.08 to be accepted for a model fit. Table 6.34 presents the value for the RMSEA as shown below.

Table 6.34: RMSEA Index

Model	RMSEA	LO90	HI90	PCLOSE
Default model	**.074**	.098	.110	.000
Independence model	.259	.255	.264	.000

Source: Author (2016).

6.5.5 Summary of Model Fit Indices for CFA

Table 6.35 gives a summary of the model fit indices for the confirmatory factor analysis of the study.

Table 6.35: Fit Indices of the measurement model

Model Fit Indices	Acceptable Threshold	Study Threshold	Acceptable Unacceptable
Chi-Square Value:χ2/(df)	<3	**2.922**	Acceptable
Comparative Fit Index (CFI)	> 0.900	**.953**	Acceptable
Tucker Lewis Index (TLI)	> 0.900	**.940**	Acceptable
Incremental Fit Index (IFI)	> 0.900	**.964**	Acceptable
RFI	> 0.900	**.927**	Acceptable
Normed Fit Index (NFI)	> 0.900	**.934**	Acceptable
Random Measure of Standard Error Approximation (RMSEA	< 0.08	**.074**	Acceptable

Source: Author (2016).

The results of the fit indices of the initial assessment of the confirmatory factor analysis of all the manifest variables and their indicators were all acceptable as presented in the Table 6.35. The findings from the CFA showed that the conceptual model was a depiction of the data that was collected for the study. Lytras et al. (2010) and Thai et al. (2015) observed that, once a good fit is obtained for a hypothesised model, the path significance of each association in the research model and the variance ought to be estimated. In view of that, the path modelling and its hypotheses testing were estimated in the next section.

6.5.6 Model Fit (Path Modelling)

Testing model fit is one of the most essential outcomes of appropriate path model (Lytras et al. (2010); Thai et al. (2015). The assessment of the model fit under path modelling just like the CFA was done before the actual testing of the study's hypotheses took place. Table 6.36 presents the model fit for the path modelling analysis of the study.

Table 6.36: Path modelling assessment

Model Fit Indices	Acceptable Threshold	Study Threshold	Acceptable Unacceptable
Chi-Square Value:χ2/(df)	<3	**2.274**	Acceptable
Comparative Fit Index (CFI)	> 0.900	**.934**	Acceptable
Tucker Lewis Index (TLI)	> 0.900	**.974**	Acceptable
Incremental Fit Index (IFI)	> 0.900	**.934**	Acceptable
RFI	> 0.900	**.963**	Acceptable
Normed Fit Index (NFI)	> 0.900	**.925**	Acceptable
Random Measure of Standard Error Approximation (RMSEA	< 0.08	**.078**	Acceptable

Source: Author (2016).

The model fit for the path analysis as presented in Table 6.36 is given as: χ2/df= 1.264; CFI=0.932; IFI = 0.941; NFI= 0.924; TLI = 0.903; RMSEA = 0.051; a Significance level <0.01;b significance level <0.05; c significance level <0.10. It was again observed that, the indices for the model fit met all the recommended thresholds for the path modelling assessment.

6.6 Path Modelling: Hypothesis Testing and its Significance Levels

The results of the path coefficient, the interpretation of the stated hypotheses with their corresponding factor loadings, the probability value (P-Value) as well as the outcome of their respective relationships is presented in Table 6.37.

Table 6.37: Outcome from the structural model testing

Study's hypothesis	Hypothesis outcome	P - value	Path coefficient estimate	Decision rejected/ supported
DC OSS 	**H1**	0.006	-0.091	Supported and insignificant
DD OSS 	**H2**	***	0.691	Supported and significant
GD OSS 	**H3**	***	0.169	Supported and significant
PR T 	**H4**	***	-0.273	Supported and significant
IQ T 	**H5**	***	0.230	Supported and significant
OSS T 	**H6**	***	0.317	Supported and significant
OSS OPI 	**H7**	0.243	0.040	Supported and insignificant
T OPI 	**H8**	0.279	0.031	Supported and insignificant

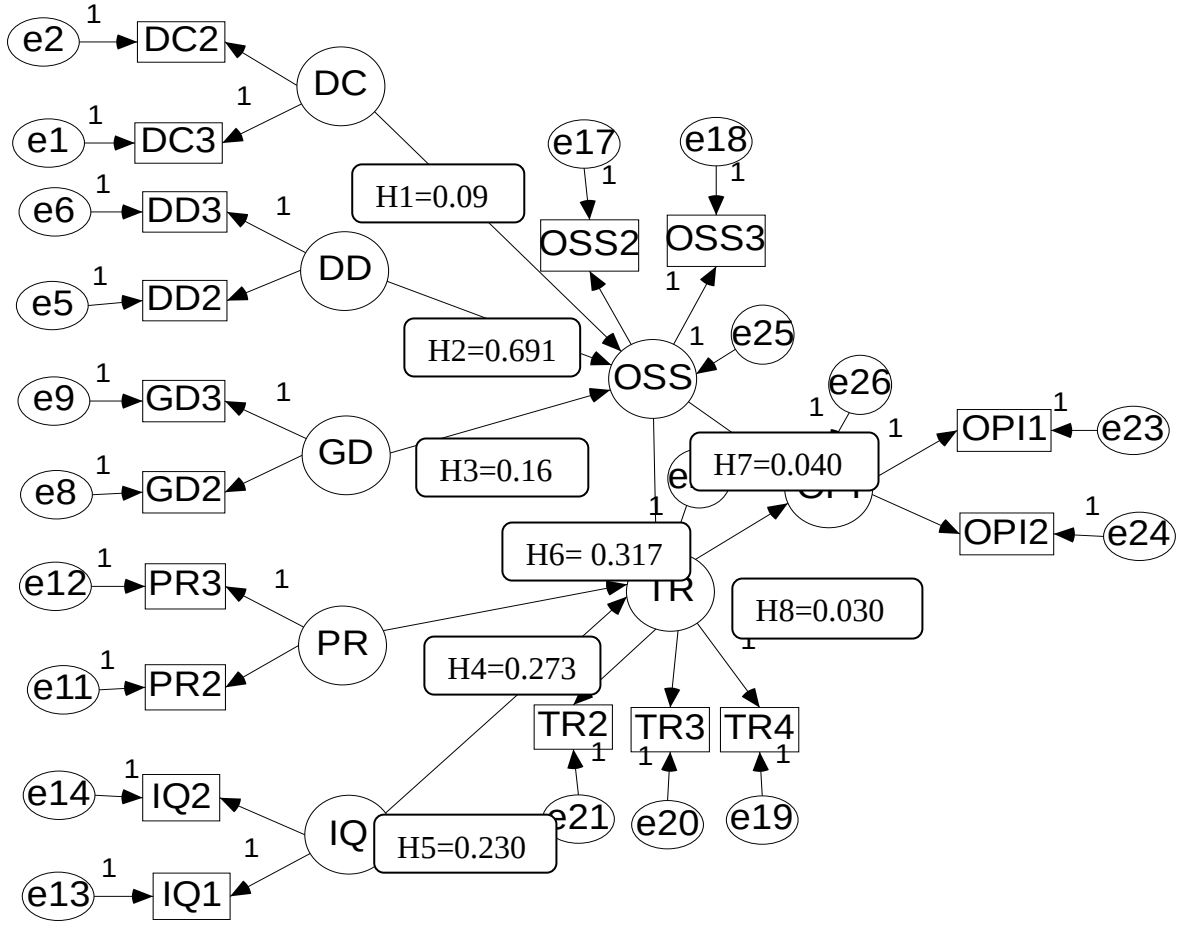
Source: Author (2016).

Note: DC = data charges delivery; **DD =** delivery dependability; **GD =** geographical distance; **IQ** = information quality; **TR** = trust; **PR** = product risk; **OSS** = online shopping satisfaction; **OPI** = Online purchase intention ***p<0.01; **<0.05.

From the above table, eight hypotheses were postulated for the study. The hypotheses and estimates were: H1, H2, H3, H4, H5, H6, H7, H8 and -0.091, 0.691, 0.169, 0.273, 0.230, 0.317, 0.040, 0.031 respectively. It is clear from Table 6.37 that all eight proposed

hypotheses were supported. In assessing the probability value or the P - value, it was observed that, five of the hypotheses had significant relationships out of the eight that were stated at a significance level of 0.01 which are indicated with asterisks (***) as shown in table 6.37. The remaining three hypotheses namely, DC→OSS; OSS→OPI and T→OPI reflected insignificant relationships as indicated by P – value 0.006; 0.243 and 0.279 respectively.

Figure 6.10: A Diagram for the Study's Path Modelling



Source: Author (2016).

Note: DC = data charges delivery; **DD =** delivery dependability; **GD =** geographical distance; **IQ** = information quality; **TR** = trust; **PR**=product risk; **OSS** = online shopping satisfaction; **OPI** = Online purchase intention ***p<0.01; **<0.05.

6.7 Summary of the Hypothesised Relationships

The summary of the hypothesized relationships was done according to the conceptual model presented in the path diagram analysis in Figure 6.36 as well as outcome from Table 6.45.

6.7.1 Data charges and Online Shopping Satisfaction

H 1: High Data charges will have a negative effect on consumers' online shopping satisfaction.

The initial proposition of this study Hypothesis H1 stated that high data charges have a negative effect online shopping satisfaction. As a result of the survey the result of the analysis indicated that this proposition was indeed supported but the relationship was insignificant as indicated by the path coefficient value of -0.091 and the p value of 0.006. On the basis of the findings, H1 is supported but insignificant.

6.7.2 Delivery Dependability and Online Shopping Satisfaction

H 2: Delivery dependability has a positive effect on consumers' online shopping satisfaction.

The relationship between delivery dependability and online shopping satisfaction was found to be significant. The strength of the relationship is reflected by the path coefficient value of 0.691 at $p<0.01$ showing a very strong relationship. Based on the results, it is clear that H2 is supported and significant.

6.7.3 Geographical Distance and Online Shopping Satisfaction

H 3: The increased ability of customer to access geographically distant product positively impacts their online shopping satisfaction.

The relationship between geographical distance and online shopping satisfaction was assessed and the finding revealed that there was a positive relationship between the variables, which then supported the stated hypothesis. This means that geographical distance has an influence on online shopping satisfaction. The results also suggest that the relationship is significant (0.169, $p < 0.01$), thus illustrating that H3 is supported.

6.7.4 Product Risk and Trust

H 4: There is a negative relationship in so far as the inability to touch an online product and trust.

The relationship between product risk and trust was found to be supported. This means that product risk has a negative influence on trust. The strength of the relationship is reflected by the path coefficient value of -0.273 at $p<0.01$ showing a relatively strong relationship. Based on the results, it is clear that H4 is supported and significant.

6.7.5 Information Quality and Trust

H 5: Increased information quality positively affects customers' trust of online products.

H5 postulated a positive relationship between information quality and trust. The relationship between the two research variables was found to be significant. It means that information quality has a positive influence on trust. The strength of the relationship is reflected by the

path coefficient value of 0.230 at $p<0.01$ showing a strong relationship. Based on the results, it is clear that H5 is supported and strongly significant.

6.7.6 Online Shopping Satisfaction and Trust

H 6: The greater the level of online shopping satisfaction the greater the level of trust in online shopping.

The sixth hypothesis, H6 in this study stated that the greater the of online shopping satisfaction the greater the level of trust in online satisfaction The path coefficient value for hypothesis 6 is 0.317; which is an indication of a strong association and relationship between online shopping satisfaction and trust. The P value indicates a 0.01 level of confidence which therefore means that the hypothesis is supported and significant.

6.7.7 Online Shopping Satisfaction and Online Purchase Intention

H 7: The greater the level of online shopping satisfaction, the greater the level of online purchase intention.

The seventh hypothesis, H7 stated that the greater the level of online shopping satisfaction; the greater the level of online purchase intention. As a result of the survey it emerged that online shopping satisfaction positively influences online purchase intention but has an insignificant influence on online purchase intention as indicated by the path coefficient value of 0.040 and the p value of 0.243.

6.7.8 Trust and online Shopping Satisfaction

H 8: The greater the level of trust in online shopping, the greater the level of online purchase intention.

The last hypothesis H8 was also positive and supported. However, in assessing the relationship between trust and online satisfaction, the results indicate that trust has an insignificant relationship with online shopping satisfaction as illustrated by the path coefficient value of 0.031 and the p value of 0.279. Thus H8 was sustained.

6.8 Chapter Summary

This chapter analysed and presented a report on the results of the empirical study. It started with a description of the demographic profile of the respondents, followed by a discussion of the descriptive statistics of the individual variables with their respective mean and standard deviation values. An assessment of normality in correlating the study's data to assume a normal distribution pattern was evaluated. The measurement instrument of the confirmatory factor analysis (CFA) through reliability and validity of the study was presented. The test for the reliability comprised the Cronbach Alpha, the Composite Reliability as well as the average variance extracted. The validity was assessed through the convergent and discriminant validity. The determination of the model fit was then evaluated for confirmation through the application of thresholds and indices to conclude that the collected data fit the model. It was then followed with the structural model fit testing using the various indices to determine the model fit for the structural analysis. The determination of the structural model fit was followed with a summary of the eight hypothesised relationships − subject to how they were stated or how they were represented in the study's conceptual model. Specifically, all the eight hypotheses stated were supported. However, at their respective significant levels, six of the relationships were significant while two were not. The next chapter discusses the findings of the results presented in this chapter.

CHAPTER 7: DISCUSSION OF FINDINGS AND IMPLICATIONS

7.1 Introduction

This chapter presents the research findings. A three stage approach is taken where the results of each hypothesis are first presented; this is followed by a critical discussion of the research findings in light of the previous literature and finally, a discussion of the implications of the results to marketing practice.

The current study sought to investigate the predictors of Data Charges (DC), Geographical Distance (GD), Product Risk (PR), Delivery Dependability (DD) and Information Quality (IQ) on Online Purchase Intention (OPI) of online consumers; and the mediating role of Online Shopping Satisfaction (OSS) and Trust (T) in the South African general merchandise retail sector. The eight hypothesis developed by the study were examined. Findings regarding each of the hypotheses are discussed below.

7.2 Data Charges and Online Shopping Satisfaction

H10: There is no relationship between data charges and online shopping satisfaction

H1a: High data charges will have a negative effect on consumers' online shopping satisfaction.

The finding of hypothesis 1 indicated that although the relationship is insignificant as implied by the path coefficient value of -0.091, higher data charges do have a negative effect on online shopping satisfaction. In other words, it can be affirmed that when data charges are increased, online shoppers are likely to have negative attitudes towards online shopping which ultimately results to dissatisfaction among online shoppers. This was expected since the high data charges are likely to displease consumers on the overall online shopping

experience. However, because the relationship is insignificant, it means that online shoppers will most likely not be discouraged by this when shopping online

Hamm and Chaudhuri (2007) were of the view that data charges had a significant influence on the demand for data in both urban and rural areas. The findings from the present study provide clarity in the South African context in that, whilst the high cost of data has a negative effect on consumers' online shopping satisfaction, the effect is insignificant. This suggests that online retailers should be conscious of the effect of the cost of data but more importantly understand that it is not the leading driver for online shopping satisfaction nor online purchase intention. Thus, online retailers should lessor concern themselves with the means of which customers access their online stores and rather focus on how they engage consumers once they are on their website so that they are prompt to shop their online store. Certainly this notion reflects well with The Technology Acceptance Model which advocates that perceived ease of use and perceived usefulness are both key drivers that influence individual's attitude toward using technology, which in this case refers to online retailer websites. Online shoppers' likely still gain more value through convenience, time saving and decreased traveling cost over the cost of increased data. Hence the impact of increased data charges can be overlooked relative to the overall benefit of online shopping. Perhaps issues such as crime and safety in South African can still be deterring factors to visiting brick and mortar stores. Other slightly less obvious factors may include burdens such as the payment of parking at shopping malls. As an example, the South African brick and mortar retailer Checkers tries to overcome this potentially discouraging physical store factor by subsidising the cost of parking for their customers.

Research by Prieger (2013) suggested that lower income groups are more price sensitive to the cost of data than those who are more affluent. Cerno and Amaral (2006) add that income has a positive effect on access to data. Savage and Waldman (2005) further add postulate that technologically enabled consumers are less price sensitive to data charges. Interestingly when asked about their monthly income, most of the respondents 42.1%; n=389 indicated that they receive a monthly income which is more than R35 000. This result proposes that there is a positive relationship between monthly income and online shopping as majority of the respondents stemmed from the highest income tier. This finding perhaps explains the reason

why data charges would have an insignificant impact on online shopping satisfaction. Based on the targeted sample, it is evident that online shoppers are generally of an affluent demographic, as such whilst the cost of data is a considered factor; it does not carry significant weighting. Thus the findings of the research also agree with conclusions of a study conducted by Madden and Simpson (2007) which found that household income is an important determinant of uptake and utilization of data which in turn affects online adoption and online shopping. In other words, the wealthier the customer demographic where data charges become less of a deterring factor, the greater is the inclination to shop online. Therefore, online retailers should invest their time and efforts into website development strategies that focus on enhancing factors such as website navigation, security, information quality and consumer retention strategies. It is evident that even though there is a negative relationship between high data charges and online shopping satisfaction, the effect is insignificant based on the targeted sample. Therefore practitioners and promoters of online retailing should focus on other more-significant drivers of online shopping satisfaction that will more likely influence online purchase intention.

7.3 Delivery Dependability and Online Shopping Satisfaction

H20: There is no relationship between delivery dependability and online shopping satisfaction

H2a: Delivery dependability has a positive effect on consumers' online shopping satisfaction

The research findings indicate that there is positive relationship between delivery dependability and online shopping satisfaction. Furthermore, the relationship is very strong-significant as illustrated by the path coefficient of 0.691 and is seen to have the overall strongest influence on online shopping satisfaction. This means that the more reliable e-tailers delivery processes, the more probable consumers will be satisfied with their online shopping experience. Thus online shopping satisfaction leads to the increased likelihood of online purchase intention.

The research finding agrees with previous literature pertaining to the impact of delivery dependability on online shopping satisfaction. For example, this is illustrated by Massad et al. (2006) who in their research posited that delivery performance is a key factor for keeping customers satisfied with online retailers. Other scholars, Shankar et al. (2003) also suggested that delivery dependability makes part of customer service and that it affects consumers' satisfaction. With respect to delivery dependability, the noted consistency between previous literature and the research finding emphasises the relevance and importance of this variable to online shopper satisfaction and potentially as a key variable in predicting online purchase intention. Koyuncu and Bhattacharya (2004) also found that delayed delivery lead times are amongst the top reasons that cause online consumers to purchase less frequently. In addition, Jiradilok et al. (2014) elucidated that dependable shopping is the most significant factor to satisfy online customers since the shoppers weight their decision mainly in the process of delivery starting from accurate information of merchandise availability, anticipated delivery date, and confirmation e-mail for specific order. Therefore; it can be noted that the ability of an online store to offer consumers delivery services which are reliable the more it increases the online shopping satisfaction.

When consumers were asked if online stores provide dependable delivery, 50% of the respondents disagreed with this statement. This finding vividly illustrates that there is considerable work that still can be done by online retailers to improve this construct in order to improve online shopping satisfaction. According to the targeted sample, the ability of online retailers to deliver the kind of products that consumers ordered was also considerably weak with 60% of respondents disagreeing with this statement. Thus the opportunity for online retailers lies in their ability to better understand logistics processes in order to drive delivery efficiencies. Furthermore, procedural enhancements such as post-purchase follow-up will also improve the likelihood of building online shopping satisfaction. Online retailers need to take their delivery process just as importantly as they do conducting a sale. Online retail managers have to ensure that their online retail store grantees reliable delivery in order to enhance online shopping satisfaction. As for academicians in the field of marketing this finding enhances their understanding of the relationship between delivery dependability and online shopping satisfaction as this is a useful contribution to existing literature on these two variables. By focusing on this, they will ensure a more consistent and pleasant customer

experience which leads to online shopping satisfaction and increased probability of online purchase intention

In summary, delivery dependability influences online shopping satisfaction. Based on the above mentioned evidence, the proposed hypothesis that delivery dependability has a positive effect on online shopping satisfaction bares truth. In effect, this means that in the context of the present study, for South African consumers who shop in the general merchandise online environment, the more delivery dependable the online retailer, the more likely that they will develop online shopping satisfaction.

7.4 Geographical Distance and Online Shopping Satisfaction

H30: There is no relationship between geographical distance and online shopping satisfaction

H3a: The increased ability of customer to access geographically distant product positively impact their online shopping satisfaction

After the assessment of the relationship between geographical distance and online shopping satisfaction, it was found that there is a positive relationship between the variables. This finding supported the stated hypothesis and suggests that the greater is the ability of a consumer to access geographically distant product, the more likely that consumers' will be satisfied with their online shopping experience. In addition, it was also concluded that the positive relationship that exists between the variables is also one that is moderate to strongly significant which is reflected by the path coefficient value of 0.169.

Research by Chocarro et al. (2013) suggested the further the store, the greater the convenience and the probability of online shopping. This finding is consistent with the stated hypothesis 3 and indicates that online shoppers draw positive gains from increased accessibility to geographically distant product. This positive impact influences their online shopping satisfaction which in turn enhances the likelihood of consumers online purchase intention. According to Rudansky-Kloppers (2014) customers do not have to physically go to

a store if the store offers e-shopping. Furthermore, Rudansky-Kloppers (2014) also emphasized that there is the time-saving benefit which online shopping offers to customers and shoppers do not have to take the time to travel to a store, drive through heavy traffic, or stand in long queues to pay. Based on these findings, it can therefore be confirmed that the increased ability of an online customer to access geographically distant product positively impacts their online shopping satisfaction. In addition to convenience, the respondents from the sample (more than 72%) agreed with the statement that with travelling costs consistently increasing, they prefer to shop on and that they (more than 57%) prefer to shop online as the nearest physical store is too far away. Due to such advantages, consumers are finding more satisfaction in shopping online at their own leisure and having products delivered to them. Thus, by implication the ability of an online shopper to avoid the long geographical distance of travel to store enhances online shopping satisfaction. As for academicians in the field of marketing and online retailing this finding enhances their understanding of the relationship between geographical distance and online shopping satisfaction as this is a useful contribution to existing literature on these two variables.

It would therefore seem logical that having a hybrid retail store business model would be most appetizing for bricks and mortar retailers where they could exercise physical store presence whilst having the dual ability of leveraging their brands on an online plat form where they can extend their consumer reach even further. In summary, the research findings were anticipated by the researcher as previous literature revealed similar results. The relationship between geographical distance and online shopping satisfaction not only supported, it is also positive and significant. In other words, in the context of the South African general merchandise retail sector, greater ability to access geographically distant product through online shopping, positively impacts consumers online shopping satisfaction.

7.5 Product Risk and Trust

H40: There is no relationship between product risk and trust

H4a: There is a negative relationship between the inability to touch an online product and trust

Hypothesis 4 postulated that there is a negative relationship between product risk and trust. The research finding revealed consistent results with the proposed hypothesis in that product risk has a negative influence on trust. In other words, the inability to physically touch a product has an adverse impact on establishing online product trust. The strength of the relationship was indicated by the path coefficient value of -0.273 at $p<0.01$ which reflected a strong-significant relationship. The relationship between product risk and trust can also be characterized as inverse in its nature, simply meaning that as consumers sense that product risk increases, product trust decreases.

A study conducted by McCabe and Nowlis (2003) found that there is an adverse relationship between product risk, or as sometimes referred to as "inability to touch", and trust. Previous literature by Bhatnagar et al. (2000) concluded that online consumers strongly consider the inability to physically interact with a product prior to purchase as a limitation to online shopping. This concern is further emphasized on high involvement product categories which generally require more capital outlay from consumers such as large appliances. George (2015) examined and investigated online shopping in Nigeria considering perceived risk and trust among online shoppers and online vendors. Findings revealed that the presence of perceived product risk negatively affects trust in online shopping. The said hypothesis certainly proved constant with the findings of above mentioned authors and based on the current research findings, it can therefore be affirmed that the in inability to trust an online product leads to a decrease in trust of online products. Research by Ho (2014), expressed that there are some advantages of online shopping that decrease product risk and contribute positively. The author makes the example of consumers having the ability to read up on additional product information online which decreases consumers perceived product risk. Whilst this makes for an interesting finding, it does not hold true within the context of the present study. The research demonstrated that more than 54% of respondents agreed with the statement that they find it difficult to judge the quality of the product over the internet, which implies that they would be more hesitant to purchase online without physical product validation taking place.

Whilst there is no actual solution for consumers inability to touch products online, as a means to overcome this challenge, online retailers should overcompensate when it comes to website

features such as detailed product imagery and information quality. Different angels of the same product with high zoom capability can make the difference in capturing a sale. Furthermore, online retailers should be well scripted with regards to product benefit write-ups. Some online retailers such as Mr Price Home allow online shoppers to see different colour variations of the same product which favourably assists in the consumer decision making process.

In summary, product risk is a predictor of online trust; however the relationship that exists between the variables is negative, thus supporting the proposed hypothesis. In other words, within the context of this study, it was found that the inability for consumers to touch a product (product risk), negatively impacts trust when shopping online. More particularly, this was found for consumers who shop online within the South African general merchandise retail environment as targeted in the select sample. This implies that the existence of product risk influences trust; precisely if an online shopper perceives a degree of risk in terms of purchasing online products; this influences the extent to which an online shopper trusts the products offered by the online retailer. Therefore, practitioners and promoters of online retailing should prioritize in risk reduction strategies to boost trust and confidence among online shoppers.

7.6 Information Quality and Trust

H50: There is no relationship between information quality and trust

H5a: Increased information quality positively affects customers' trust of online products.

Upon testing the relationship between information quality and trust, it was found that the association between the variables was positive. This means that information quality has an influence on trust. In addition, the strength of the relationship is indicated by the path coefficient value of 0.230 at $p<0.01$ which illustrates that the relationship is strong-significant. Simply put, the more online retailers invest in the accuracy and relevance of their

information quality, the greater is the trust that is developed for online products. Thus achieving trust in information quality increases probability for online purchase intention.

Equally, previous literature pertaining to information quality and trust shares similar findings. According to a study by Park and Kim (2003), empirical evidence proved that up-to-date, accurate and consistent information on an e-tailers products increases overall trust and consumer satisfaction. Siegel (2007) found that in order to be successful, online retailers should provide extensive information that is presented in a digestible format. Other examples of scholars who sought to understand the impact of information quality on online trust include the likes of Eid (2011) as well as Park and Kim (2003) who found that accurate and reliable information provided by online retailers increased online trust and satisfaction which motivated consumers first purchase; in addition to finding that information quality is the most influential online characteristic that affects trust and customer satisfaction. These results are in line with the works of Mao (2010) who pointed out that the perceived service quality or information quality is related to gaining consumer trust and building long-term customer relationship by providing high-quality services, including guarantees, warranties and customized services warranties Therefore it can be noted that a high level of information quality enables customers to have more trust in online products and making commitment to the relationship with the online store.

The consequence of these findings strongly suggests that online retailers should prioritise the management of their information quality as a key success factor on their online interfaces. This implies that online retail managers have to ensure that their customers are provided with the right amount of product information at the time of purchase; this will develop trust between the consumer and online stores. As for academicians in the field of marketing as well as retailing this finding enhances their understanding of the relationship between information quality and trust as this is a useful contribution to existing literature on these two variables. Both the previous literature and findings in this study highlight the importance of this variable on developing online trust which in turn increases the likelihood of online purchase intention. Marketers and e-tailers can use clear and concise information in order to educated customers on pre-purchase selection and de-clutter what sometimes can be overpopulated online websites. For example, Makro online has a useful feature where

potential customers can easily compare similar products based on bullet point product features. Other useful features that can be encompassed by online retailers include search tools which enhance product search in high information environments. The on-going challenge for online retailers is to provide just enough information. A study by Chen et al. (2009) revealed that large quantity of information has a positive role in consumers online purchase intention, whilst results from a study by Reutskaja and Hogarth (2009) found that excessive information can decrease processing efficiency due to information overload. Thus the solution for online retailers should be on focusing on the level of quality of information versus the quantity, meaning publishing accurate and relevant information.

In summary, the findings of this study indicated that there is a relationship between information quality and trust. Over and above, information quality has a strong-significant impact on trust and therefore, the proposed hypothesis was supported. In other words, this means that the better the information quality provided by online retailers, the more likely it is that online shoppers will develop trust in online products. Established trust increases the probability towards online purchase intention. This finding is subsequently relevant in this current study, and thus applies to South African online consumers in the general merchandise retail sector.

7.7 Online Shopping Satisfaction and Trust

H60: There is no relationship between online shopping satisfaction and trust

H6a: The greater the level of online shopping satisfaction the greater the level of trust in online shopping

The sixth hypothesis sought to test the relationship between online shopping satisfaction and trust. Through the measurement of the path coefficient value which signaled 0.317 at $p<0.01$, the research findings indicated that there is a strong-significant relationship between these

two variables. Thus it was concluded that the proposed hypothesis was supported and significant.

The findings from this study are consistent with a number of previous studies. For example Li, Browne and Wetherbe (2006) as well as Wang and Head (2007) both found empirical evidence that showed that satisfaction has a vital role in the formation of online trust. Chang Lee et al. (2013) found that the level of trust is a result of the capacity of an e-tailer to satisfy the needs of its customers. Research conducted by Jonsson and Zineldin (2003) established that trust is generated from customer's overall satisfaction; while Pavlou (2003) found that satisfaction and trust are recognized as being positively related variables. In other words, the previous literature implies that the more online shoppers enjoy a pleasant customer experience and as a result are satisfied, the more trust they develop with shopping online. These results refute the study conducted by Pratminingsih, Lipuringtyas and Rimenta (2013) to examine empirically the influence of satisfaction, trust and commitment on customer loyalty in online shopping. The empirical study results revealed that e-satisfaction directly influences trust of online shopping. Therefore; it can be noted that the greater the level of online shopping satisfaction the greater the level of trust in online shopping. This trend also manifests in the current study and is substantiated by the result of over 90% of respondents agreeing with the statement that they are satisfied with the overall experience of online shopping. Thus, it is evident that the wealth of historical content in relation to online shopping satisfaction and trust, shared supporting observations to that of the proposed hypothesis.

From a practical perspective, marketers and online retailers can gain from this insight in the following ways. They can ensure that their levels of service in terms of functions such as delivery dependability and information quality are a seamless customer experience. For example, Takealot has grown into a renowned online retailer and part of their success is in their ability to successfully delivery orders reliably. Another example of an e-tailer who is able to establish online shopping satisfaction and does so by having mastered online cues such as information quality is Amazon. There are various examples of online stimuli that retailers can adopt to not only differentiate themselves but also in providing online shopping satisfaction to their customers. This implies that online retail managers have to use relevant

predictor variables to ensure that their customers are satisfied in order for them to trust the services provided by their online stores. As for academicians in the field of marketing this finding enhances their understanding of the relationship between online shopping satisfaction and trust as this is a useful contribution to existing literature on these two variables. Ultimately, it is the consistent delivery on these predictor variables that develops online satisfaction.

In summary, a positive and strong-significant relationship between online shopping satisfaction and trust was reviewed that was similarly in line with previous literature. Thus, in the context of current study, the hypothesis was supported. In other words, for South African consumers who shop online within the general merchandise retail sector, online shopping satisfaction influences online trust.

7.8 Online Shopping Satisfaction and Online Purchase Intention

H70: There is no relationship between online shopping satisfaction and online purchase intention

H7a: The greater the level of online shopping satisfaction, the greater the level of online purchase intention

Upon studying the relationship between online shopping satisfaction and online purchase intention, it emerged that online shopping satisfaction positively influences online purchase intention. However it was found that the impact is insignificant. This was indicated by the path coefficient value of 0.040 and the p value of 0.243. This means that online retailers will reap minimal benefits from solely focusing on online shopping satisfaction as a main driver of online purchase intention.

Previous literature tends to mostly agrees with the proposed hypothesis in that research acknowledges that there is a positive relationship between online shopping satisfaction and

online purchase intention. The results are in keeping with the study of Khan, Liang, and Shahzad (2015) who investigated the perceived factors affecting customer satisfaction to re-purchase intention in e-stores. The findings of their study revealed that customer satisfaction has a direct positive effect on re-purchase intention in online stores. Moreover; Kim, Jin, and Swinney (2009) pointed out that satisfaction was the strongest predictor of re-purchase intention of customers in online stores. In another study, Lee & Lin (2005) posit that online shopping satisfaction influences customers' intention to purchase. While, Hsu et al. (2006) found that satisfaction has a positive impact not only on consumers online purchase intention, but as well as consumers' intention to repeat online purchases. Therefore it can noted that the greater the level of online shopping satisfaction, the greater the level of online purchase intention.

Based on the insights uncovered in the present study, although the relationship is insignificant, online retailers should not completely discount online shopping satisfaction as a potential driver of online purchase intention. The implication that online shopping satisfaction does to some degree influence online purchase intention means practitioners and promoters of online retailing should strive on making online shoppers satisfied so that they will intend to purchase online. In fact, this may very well present a working area for online retailers to create competitive advantage. The difficulty in establishing online shopping satisfaction is that it is achieved through consistency and for many consumers; many of which are not frequent online shoppers, means that they can occasionally settle for a suboptimal online shopping experience and still purchase. Also unlike bricks and mortar, online retailers do not have the same customer experience complexities that drive satisfaction. Online shopping is impersonal whereas physical store experience goes a lot further and provides better customer satisfaction touch points and as a result drivers different consumer behaviour. In addition, by virtue of its natural convenience, online shopping perhaps provides a minimum sense of satisfaction to online shoppers. Thus, making the statement; the greater the level of online shopping satisfaction, the greater the level of online purchase intention relatively insignificant.

In summary, whilst the previous literature and research findings concur that there is a positive relationship between online shopping satisfaction and online purchase intention; it was found

that the relationship is insignificant. In other words, for South Africans who shop online within the general merchandise retail sector, online shopping satisfaction as a mediating variable is insignificant or has minimal bearing on their online purchase intention.

7.9 Trust and Online Purchase Intention

H80: There is no relationship between trust and online purchase intention

H8a: The greater the level of trust in online shopping, the greater the level of online purchase intention

The last hypothesis H8 indicated that there is a positive relationship between trust and online purchase intention. However, it was noted that this relationship was insignificant. In context, this means that when reviewed in isolation the relationship between trust and online purchase intention is relatively weak in comparison to other relationships between constructs. This relationship was illustrated by the path coefficient value of 0.031 at p value 0.279. Nevertheless, the proposed hypothesis initially proposed was supported.

Several authors shared consistent views with that uncovered in the current study. For example, Lee and Lin (2005) found that trust stimulates online purchasing and effects consumer attitude towards purchasing from e-tailers. Krauter and Kaluscha (2003) deduced that trust is a vital component in establishing online purchase intention. These authors further add that consumers need to feel safe and secure prior to making a potential purchase. Gefen et al. (2003) also found that trust encourages online customer purchasing activity. Other scholars like Yu-Bin. (2005) and Man and Shim (2002) concluded that online purchase intention is likely to increase when consumers are more confident that their personal information is protected. This is another form of earning consumer trust that will potentially increase online purchase intention. Another study conducted by Jarvenpaa, Tractinsky and Saarinen (1999) revealed that trust contributes positively towards the success of online transactions. A study conducted by Gefen and Straub (2004) which focused on consumer

trust in B2C e-commerce revealed that the higher the degrees of consumers' trust, the higher degree of consumers' purchase intentions of consumers. Moreover it has been demonstrated in the extant literature that trust beliefs positively influence customer online purchase intention (Lim, Sia, Lee, & Benbasat, 2001; McKnight et al., 2002; McKnight, Kacmar, & Choudhury, 2004; Verhagen et al., 2006; Verhagen, Tan, & Meents, 2004). Based on past research, it is therefore evident that trust influences online purchase intention.

Although the relationship was designated as insignificant in the context of the present study, South African marketers and practitioners can benefit from this finding by ensuring that their dealings with consumers are as transparent, reliable and as secure as possible so as to encourage trust. As previous literature illustrates, increased trust can significantly reduce the fear of uncertainty within customers, thus encouraging purchase intention. Online trust can manifest in various ways, including; reliable information, delivery dependability and secure payment methods. Trust takes time to develop yet can be broken very quickly. It is therefore imperative that online retailers continuously revisit this variable to make sure that online shoppers consistently view the online retailer as trustworthy. Thus, there is opportunity for promoters of online retailing to prioritize in the implementation of trust building strategies to influence online purchase intention among online shoppers. When this is achieved it significantly increases probability of online purchase intention.

To conclude, in the context of the current study as a standalone relationship, trust has a positive yet insignificant influence on online purchase intention. Thus, for South African online consumers in the general merchandise retail sector, trust marginally impacts online purchase intention.

7.10 Summary of Findings

In summary, it was found that all eight hypotheses were supported although two of the eight relationships were insignificant. H1 was supported, which indicated that increased data charges have a negative influence on online shopping satisfaction; however, this finding was

weak to moderately significant. H2 was not only supported but it was also categorized as very strong-significant. This meant that delivery dependability has an impact on online shopping satisfaction. Upon testing H3, the findings indicated that geographical distance influences consumers' online shopping satisfaction. Thus hypothesis 3 was supported and illustrated a moderate to strongly significant relationship. The results from H4 showed that there is a positive relationship between product risk and trust. Moreover, this relationship was indicated as strong-significant. H4 was supported and indicated a strong-significant relationship. These findings were consistent with sentiments from previous literature. With regards to H5, it was found that information quality influences trust and the relationship was strongly significant. Thus it is reasonable to conclude that H5 is supported. Likewise, online shopping satisfaction positively influences trust (H6). This finding supports the proposed hypothesis and is of strong significance. H7 revealed that whilst there is a positive relationship between online shopping satisfaction and online purchase intention, the relationship is weak-significant. Nevertheless, H7 is considered as supported. Finally, H8 indicated a weak-significant relationship between trust and online purchase intention. It therefore can be concluded that trust has a positive relationship with online purchase intention, and that trust influences online purchase intention. Similar to the above-mentioned hypotheses, H8 is supported and shows consistency with findings from studies conducted by previous authors. Table 7.1 presents a summary of the results from the hypotheses.

These findings indicate that the study's theoretical proposition is valid and acceptable. It is also evident that data charges; delivery dependability and geographical distance have a positive influence on online shopping satisfaction; while product risk and information quality have a positive influence on trust. Online shopping satisfaction and trust have a positive influence on online purchase intention.

Table 7.1: Results from Research Hypotheses

	Hypothesis	Result
H1	High data charges will have a negative effect on consumers' online shopping satisfaction.	Supported *
H2	Delivery dependability has a positive effect on consumers' online shopping satisfaction.	Supported *
H3	The increased ability of customers to access geographically distant product positively impacts their online shopping satisfaction.	Supported *
H4	There is a negative relationship in related to the inability to touch an online product and trust.	Supported *
H5	Increased information quality positively affects customer's trust in online products.	Supported *
H6	The greater the level of online shopping satisfaction, the greater the level of trust in online shopping.	Supported *
H7	The greater the level of online shopping satisfaction, the greater the level of online purchase intention.	Supported *
H8	The greater the level of trust in online shopping, the greater the level of online purchase intention.	Supported *

Source: Author (2016).

7.11 Chapter Summary

This chapter provided a detailed discussion on the research results. This encompassed a critical review of each hypothesis and using the data analysis, involved a comparative examination of the research findings to previous literature. The individual hypotheses were then discussed in terms of their practical application to marketing practice. In the subsequent and final chapter, the conclusion, contributions, limitations and areas of future research are discussed.

CHAPTER 8: CONCLUSION, RECOMMENDATIONS, LIMITATIONS AND AREAS OF FUTURE RESEARCH

8.1 Introduction

This chapter discusses the main findings of the research. In addition, it presents the managerial implications of the research, as well as the contributions and limitations, and finally, areas recommended for future research.

8.2 Conclusion of Main Findings

Tests were conducted in order to address the study's empirical objectives. The results from the tested hypotheses found that there are positive relationships amongst seven of the eight proposed hypotheses. More specifically, delivery dependability and geographical distance have a positive relationship with online shopping satisfaction; product risk and information quality have a positive relationship with trust. Online shopping satisfaction and trust have a positive relationship with each other while online shopping satisfaction and online purchase intention also have a positive relationship. Additionally trust and online purchase intention have a positive relationship. Conversely, data charges have a negative relationship with online shopping satisfaction. In addition, the research findings highlighted that some relationships were more significant compared to others and some were relatively insignificant. Inferences regarding the associated objectives are discussed below.

8.2.1 Conclusions on the Influence of High Data Charges on Online Shopping Satisfaction

The study's first empirical objective was to investigate the influence of data charges towards online shopping satisfaction. The findings revealed that high data charges will have a negative influence on online shopping satisfaction. However the findings also revealed that

the relationship between the two variables is insignificant. Therefore, it is now understood that when compared to other constructs in the conceptual model, high data charges do not influence online shopping satisfaction, and is not the most influential predictor variable.

8.2.2 Conclusions on the Influence of Delivery Dependability on Online Shopping Satisfaction

The study's second empirical objective was to investigate the influence of delivery dependability towards online shopping satisfaction. The findings established that delivery dependability will have a positive influence on online shopping satisfaction. Therefore, it can be accepted that the ability of an online store to provide reliable delivery will have an influence on online shopping satisfaction. Findings also made it apparent that the relationship between the two variables is significant. It is therefore submitted by the study that when compared to other constructs in the conceptual model, delivery dependability is very important in influencing online shopping satisfaction.

8.2.3 Conclusions on the Influence of Geographical Distance on Online Shopping Satisfaction

The study's third empirical objective was to investigate the influence of geographical distance towards online shopping satisfaction. The findings established that geographical distance has a positive influence on online shopping satisfaction. Therefore, it can be accepted that geographical distance will have an influence on online shopping satisfaction. Findings also showed that the relationship between the two variables is significant. It is therefore submitted by this study that when compared to other constructs in the conceptual model, geographical distance is important in influencing online shopping satisfaction.

8.2.4 Conclusions on the Influence of Product Risk on Trust

The fourth study's empirical objective was to investigate the influence of product risk on trust. The findings revealed that product risk will have a positive and strong influence on trust. Findings also made it evident that the relationship between the two variables is significant. It can therefore be accepted that when practitioners in online retailing attempt to build up trust among online shoppers, they must not do so without considering the issue of product risk.

8.2.5 Conclusions on the Influence of Information Quality on Trust

The study's fifth empirical objective was to investigate the influence of information quality on trust. The findings conveyed that information quality will have a positive influence on trust. Therefore, it can be accepted that when online shoppers get to access quality information they will likely eventually end up trusting the website of the online store which they are accessing. The findings also revealed that the relationship between the two variables is significant. The study therefore submits that practitioners specializing in online retailing in South Africa must prioritise providing quality information to online shoppers since it is significantly influential in building up trust.

8.2.6 Conclusions on the Influence of Online Shopping Satisfaction on Trust

The study's sixth empirical objective was to investigate the influence of online shopping satisfaction on trust. The findings conveyed that online shopping satisfaction will have a positive influence on trust. Therefore, it can be accepted that when online shoppers are satisfied they are likely to eventually end up trusting the website of the online store which they are accessing. The findings also revealed that the relationship between the two variables is significant. The study therefore concludes that online retailers in South Africa must consider online shopping satisfaction in order to build up trust amongst online shoppers.

8.2.7 Conclusions on the Influence of Online Shopping Satisfaction on Online Purchase Intention

The study's seventh empirical objective was to investigate the influence of online shopping satisfaction on online purchase intention. The findings conveyed that online shopping satisfaction will have a positive influence on online purchase intention. Therefore, it can be accepted that the more online shoppers get satisfied the more likely they will intend to shop online. However the findings also revealed that the relationship between the two variables is insignificant. Thus the study concludes; although the relationship is positive between variables, online shopping satisfaction does not materially influence online purchase intention. That mentioned, whilst it bares marginal influence on online purchase intention, it is nonetheless in the interest of online retailers to be mindful of consumer online shopping satisfaction in a continuous effort to encourage online purchase intention.

8.2.8 Conclusions on the Influence of Trust on Online Purchase Intention

The study's eighth and final empirical objective was to investigate the influence of trust on online purchase intention. The findings recognised that trust will have a positive influence on online purchase intention. Therefore, it can be accepted that the more online shoppers trust the product and services provided by an e-tailer the more they will intend to purchase online. The findings however revealed that the relationship between the two variables is insignificant. The study therefore advocates that trust, because of its relatively weak association, is not an element to be prioritised by online managers when seeking to positively influence consumers' online purchase intention; particularly when compared to other more significant predictor variables such as delivery dependability or product risk.

8.3 Managerial Implications

From a managerial perspective, the findings in this study imply that e-commerce managers need to continuously evolve their digital strategies so that they are relevant to their customers. This would be achieved by influencing those variables which first showed the

strongest, through to the weakest significance. The study highlights that the online environment is vastly different to that which is presented in bricks and mortars. As such, online retailers need to pay close attention as to what drivers particularly influence online purchase intention. As previously mentioned, e-tailing is still considered a developing market within South Africa in comparison to the more develop western nations and learnings from the present study will assist managers gain to first mover insights into South African online buying behaviour. Thus, as online managers gradually become more abreast with the key drivers of online purchase intention in order of significance, they can develop the associated digital strategies that are pertinent to the targeted marketing base.

8.4 Recommendations

Findings of the current study have prompted suggestions that are likely to lead to the betterment of online retailing in South Africa. They are discussed below.

8.4.1 Recommendations on Data Charges and Online Shopping Satisfaction

As previously mentioned, the findings conveyed that high data charges have a negative impact on online shopping satisfaction. However, the relationship between the two variables was noted as insignificant. The study therefore recommends that in their efforts to promote online retailing, online managers should pay less attention to data charges and rather focus on predictor variables with stronger influences as will be shown below. In addition, data charges are not directly influenced by an online retailer which makes affecting prices rather problematic. As such, whilst data charges do influence online shopping satisfaction, the impact is insignificant; thus the recommendation asserts that online retailers refocus their efforts into other strategic initiatives that will drive the influence online purchase intention.

8.4.2 Recommendations on Delivery Dependability and Online Shopping Satisfaction

The findings further conveyed that delivery dependability has a positive influence on online shopping satisfaction. The relationship between the two variables was significant. As such, the study recommends that online retailers should provide guarantees to consumers that their ordered products will definitely be delivered to them accurately and timeously. They can achieve this goal by providing the qualifying certificates from authorities and governmental organizations that assure customers that the online retailer is authorised and competent in rendering delivery services legibly, so customers will purchase from them with more confidence and will not be worry about the delivery of their orders anymore. In addition, the inclusion of structures such as delivery tracking and post purchase follow ups, clear returns policy, flexibility to re-route packages and flexibility to choose delivery date/window are instrumental in increasing delivery dependability. Thus, by implementing such initiatives, online retailers will enhance online shopping satisfaction.

8.4.3 Recommendations on Geographical Distance and Online Shopping Satisfaction

It was also acknowledged from the findings that geographical distance has a positive influence on online shopping satisfaction and that the relationship between the two variables is significant. The study therefore recommends that online store managers should mainly focus on providing the customers the ability to quickly access an online store in comparison to traveling long geographical distances to access a physical store. This can be achieved by having a multi-platform digital web page strategy that is not solely reliant on laptops and personal computers. In effect, this means that consumers have the added benefit of being able to access online retailers using other internet enabled devices such as smart phones and tablets. The proliferation of smartphones and tablets has enabled lower market segments to penetrate the online world making this market very lucrative for future e-commerce prospects. Moreover, it is expected that the online shoppers will appreciate the value of online shopping when they are educated about the merits of it through continuous learning and training. For instance, as online consumers get to appreciate the advantage of not traveling to a store and enjoying shopping online in the comfort of their homes, so it is

anticipated that online shopping will gain more relevance by virtue of no geographical distance. Hence it is further recommended that South African e-tailers invest in digital strategies that stimulate online customer acquisition and awareness. Some mediocre examples used by many retailers include free delivery on your first purchase as well as percentage discounts offered on a consumer's first purchase.

8.4.4 Recommendations on Product Risk and Trust

Product risk is imminent in the online shopping environment. Based on the findings of this study, the recommendation is that online retailers take significant measures to mitigate online product risk factors so as to encourage trust in this form of retailing. Components of product risk that can be strengthened by the online retailer include; store image, distinct money back guarantee policy and consumer product reports. In addition, online retailers can reduce product risk through quality information. According to Halepete (2006: 232) in-depth information, as a result of high involvement, functions to reduce risk and uncertainty. Online retailers need to provide sufficient information for an online shopper to feel comfortable in making decisions. Known brands, knowledgeable sales staff and guarantees of satisfaction can help reduce perceived product risks (Batra & Kazmi, 2008). Therefore, it can be noted that if online shoppers are highly involved with certain online products and online stores, they will have greater knowledge of the online products and online stores that offer the best online products they seek. In fact, their confidence and trust in the selection of online products will be increased, which leads to less consumers experiencing product risk.

8.4.5 Recommendations on Information Quality and Trust

The findings conveyed that data information quality has a positive impact on trust. The relationship between the two variables was also found as significant. The study therefore recommends that in their efforts to encourage online retailing, practitioners should pay more attention on providing information which is accurate, relevant and of good quality so as to gain trust among online shoppers. It should be noted that there also exists quite a considerable danger in too much information. This occurs when online shoppers are bombarded with

excessive amounts of information in a short space of time. In such instances, the opposite effect may occur in that consumers are discouraged from shopping online. Thus it is highly important the online retailers strike the perfect balance of good information and not provide excessive amounts of unwarranted information. A key feature of a well-designed and informative website is the ability to compare product specifications. This component of website navigation is highly recommended for the ease of use of online shoppers and assists in quickly getting through large amounts of information to aid in decision making.

8.4.6 Recommendations on Online Shopping Satisfaction on Trust

The findings also conveyed that online shopping satisfaction has a positive influence on trust. The relationship between the two variables was significant. As such, the study recommends that online retailers should strive to make sure that online shoppers are satisfied in order to gain trust from them. For example, online retailers can introduce live chat with consumers who are having a query with regards to the products they want to purchase online. Online retailers such as Apple.com and Vodacom.co.za utilise this strategy. Other strategies that can assist in building online shopping satisfaction include; the enhancement of website performance, under promising and over delivering, exercising empathy and sincerity as well as surprising customers with occasional freebies. This will enhance consumers shopping experience and as a result make the online shoppers to trust in the products and services provided by online retailers.

8.4.7 Recommendations on Online Shopping Satisfaction on Online Purchase Intention

The research findings established that online shopping satisfaction has a positive influence on online purchase intention. However, the relationship between the two variables was insignificant. Though other drivers may yield more immediate return on investment in the short term, the study recommends that online retailers should still strive to make sure that online shoppers are satisfied in an effort to encourage online purchase intention. Online shopping satisfaction was considered as a mediating variable in the context of the present

study and therefore was not assumed to be amongst the strongest predictors of online purchase intention. Thus the opportunity lays in the increasing number of customers that apportion less significant value to in-store shopping experience. For example, American retailers Macy's and Kohl's both reported 2.1% declines in comparable store sales in November and December, resulting in 10% and 15% stock price drops, respectively (Mohammed, 2017). This clearly illustrates that brick-and-mortar retailers have a strategy problem. Thus the author further recommends online shopping satisfaction and the influence on online purchase intention as an area for future research particularly within the South Africa online retail context. There is significant opportunity for marketers and practitioners in understanding how a positive online shopping experience can positively influence online purchase intention which, in turn, has the potential to innovate the South African online retailing space.

8.4.8 Recommendations on Trust on Online Purchase Intention

Finally, the findings highlighted that trust has a positive influence on online purchase intention. However, the relationship between the two variables was insignificant. Generally, people interact with companies they resemble with, know, and trust. Brands are a popular proxy for trust. Equally, online retailers such as Amazon.com are trusted brands on their own which are able to leverage the same trust benefits as national product brands. If a consumer believes that a specific brand or online retailer produces quality products or services, anything with their stamp of approval is likely to pass the basic trust test, thus positively influencing online purchase intention. The fact that online retail global giants such as Amazon use trust as a key driver for online purchase intention, means the same opportunity exists for South African retailers to adopt the same strategy and quickly yield benefits. As such, although the relationship between trust and online purchase intention is insignificant, the study nonetheless recommends that online retailers should strive to gain the trust of online shoppers in order to encourage online purchase intention. This can be achieved by implementing website enhancements such as money-back guarantees, testimonials from other consumers, ensuring that the nominated third party payment vendor is reliable and remains current on the latest security technology. Consequently the results of these efforts will lead to a better likelihood of online purchase intention.

8.4.9 Overall Recommendations

Since online retailing in South Africa is relatively new, it is therefore recommended that practitioners promoting online retailing should consider investing in enriching online content, service delivery, online shopping experience and customer education. Precisely, in order to close the gap between online shopping in South Africa and online shopping in the rest of the world. South African retailers should pay attention to the factors that influence online shopping satisfaction; trust; and online purchase intention. They could use these factors in the design of their websites and advertisements, product descriptions, pricing policies, and delivery methods, resulting in increased online sales, and online customer satisfaction.

8.5 Contributions

The study contributes academically in multiple disciplines including conceptual, theoretical and practical. The various contributions are discussed below.

8.5.1 Conceptual Contribution

Conceptually, this study makes a significant contribution to research in a South African context, particularly with regards to online shopping in the general merchandise retail sector. Previous research within this area conformingly makes reference to similar variables such as ease of payment, convenience and website usability whereas this study has elected to study contemporary variables which are currently topical in the minds of consumers as drivers of online purchase intention. Furthermore, the scant literature that does exist in relation to the studied variables have been explored in a broad global context, whereas this study has localised the investigation of data charges, delivery dependability, geographical distance, product risk and information quality specifically within a South African context. By exploring the impact of these predictor variables, the study adds contextual knowledge on e-tailing and the respective factors that influence consumers' online purchase intention. In addition, the nominated online predictor variables (data charges, delivery dependability,

geographical distance, product risk and information quality) have not been used previously as a holistic framework to measure the impact on online purchase intention. Therefore the results of this study are unique and are contribute as new literature.

8.5.2 Theoretical Contribution

The research contributes to marketing literature, e-commerce, online retail management and other connected fields in several ways. Perhaps the most noticeable contribution of this research is the unique investigation of the individual constructs (data charges, delivery dependability, geographical distance, product risk and information quality) within an online environment specifically focusing on general merchandise retailing. Thus, this research contributes to decision making theory, particularly, the decision making process or as in the current study the buying decision process by providing a validated theoretical framework, which explains the relationship between the predictor variables and online purchase intention. Although similar studies have been conducted in North America, Europe and some developed parts of the East, few have explored online retail within the South African context and as especially approached as in this study. In terms of contribution towards academic literature, this study presents evidence of data charges, delivery dependability, geographical distance, product risk and information quality as predictor variables of online purchase intention. Moreover, the research validates that online shopping satisfaction and trust are mediator variables in the greater concept of the entire conceptual framework presented, whilst also acknowledging the individual constructs as predictor variables of online purchase intention when tested in isolation. Due to the lack of research in the present context, this study also authenticates the proposed conceptual framework which identifies constructs that have a relationship with online purchase intention in the South African general merchandise online retail sector. This research presented statistical findings from research instruments that measured the factors that influence online purchase intention of general merchandise products in a local setting. The findings subsequently provided justification that the proposed predictor variables indeed influence online purchase intention. Decision making theory is continuously revisited by marketers in order to stay abreast with evolving consumer buying patterns and in creating competitive advantage. As such, this study provides researchers with an in-depth understanding of consumer responses to online intrinsic cues that influence online

purchase intention. Finally, researchers will have additional access to the growing body of literature exploring the drivers of online purchase intention within in the South African online retail sector.

8.5.3 Marketing Contribution

By investigating the drivers of consumers' online purchase intention, the research findings can provide marketing practitioners with a better understanding of the strategies that maybe employed in order to be effective in influencing consumer buying behaviour. Due to the fact that this study provides fresh and contemporary evidence, online marketers and policy marketers in South Africa are bound to make informed decisions, supported by reliable information.

It is important for marketers to know that data charges were less of an impact on online purchase intention and this was found to be a reality as majority of the respondents from Dion Wired and Makro were relatively affluent customers. In addition, data charges are not directly controlled by online retailers and as a result have a negligible influence on online shopping satisfaction and online purchase intention. The findings highlighted delivery dependability as the strongest element that influences online purchase intention. Equally, it was also noted as working area for online retailers as the majority of respondents were not convinced by the ability of e-tailers to deliver their orders reliably. Here lies the opportunity for marketers to develop compelling value propositions that address this uncertainty for online shoppers. Geographical distance was a notably important driver of online purchase intention, retailers and marketers alike should emphasis a hybrid business model that caters for a pleasurable in-store and virtual store environment. Product risk was assessed as a significant motive of trust and subsequently online purchase intention. Marketers are now equipped with empirical evidence that certifies the importance of this variable to online shoppers. In other words, it would be advantageous to marketers and equally beneficial for online retailers to focus on strategies that minimize risk and product uncertainty when shopping online. Finally, information quality was recognized as an important variable for customers shopping online. The research found that right balance of information yields

positive gains for online retailers in terms of developing trust and ultimately positively swaying online purchase intention. Information presented on websites has the potential to convince or deter a potential online shopper. Therefore, as the custodians of this communication tool, marketing managers have the influence and obligation to ensure that the content is accurate, relevant and not overwhelming for customers to digest. By successfully implementing this, positive attitudes towards trust are developed which as a result increase the likelihood of online purchase intention. If these suggestions are successfully implemented, marketers are more likely to realize greater sales, profit and market share.

8.6 Limitations and Future Studies

This research has some limitations. Initially, the research was narrowed to online retailers that traded in the general merchandise sector. The study recommends that a similar study is conducted as future research however in a different sector such as the food, textiles and home deco industries. Retailers such as Woolworths and Mr Price Home would make fantastic examples if such a comparative study is done. The potential findings from future research would contribute towards understanding if the insights from the current study are indeed generalizable in South African online retail context. . Furthermore, the study is based on online retailing in the South Africa. Future studies should consider replicating this study in other BRICS nations or other developing countries.

Although the research and its theoretical supposition is supported by empirical evidence, future studies should attempt to investigate consumer attitudes towards online shopping, whilst focusing on making improvements in the factors that influence consumers online purchase intention. The continuous development of literature focusing on factors that affect consumers online purchase intention will help marketers to advance marketing strategies that gain the competitive edge over others.

Another limitation may have been as a direct result of the survey being administrated online. The danger with this research tool is that respondents might have dashed through the

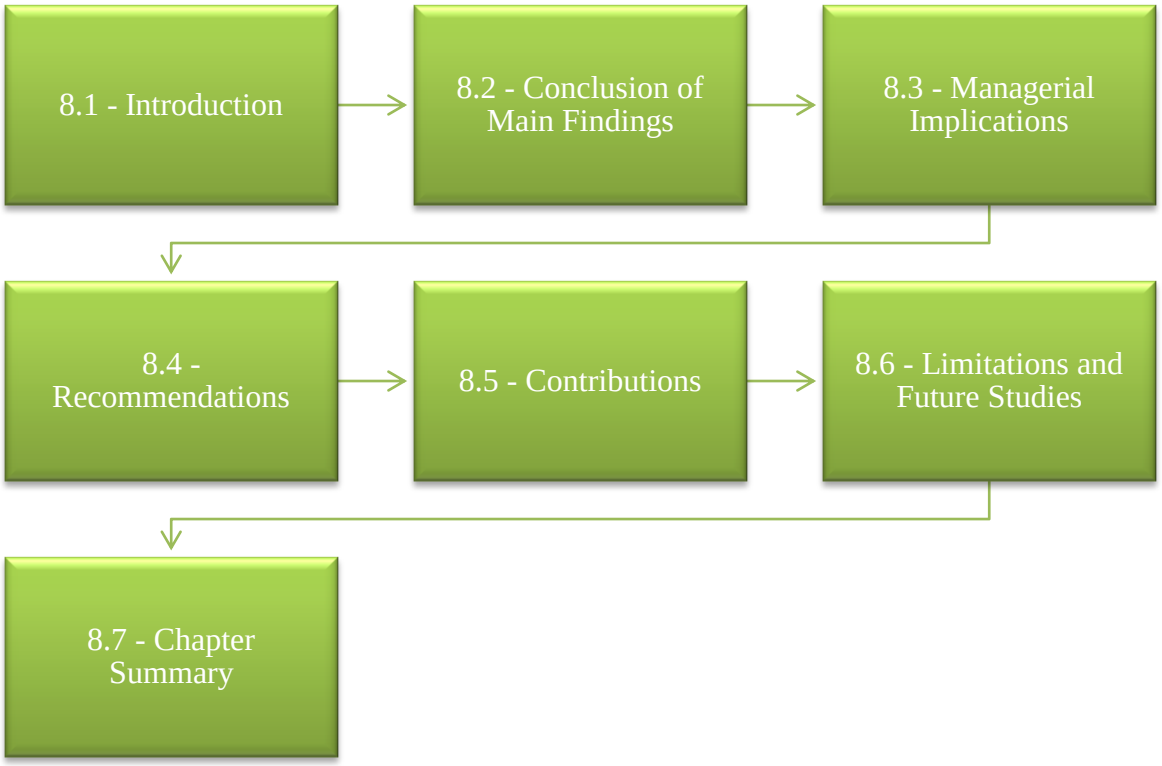
questions, as the there was no research facilitator present to monitor and control this aspect of the research. The nature of online research naturally imposes the risk and possibility of the respondent not having completed the questionnaire personally. However, this is unlikely as survey was sent to a credible customer base of existing online shoppers. Perhaps future research could overcome this shortfall by taking a qualitative research approach that focuses on in-depth interviews and open ended questions.

The study was also limited by the fact that the survey was designed in English which may have had an impairing result on the data because for most South Africans, English is a second or third language. This may have resulted in elements of confusion and misunderstanding in questioning, although measures were taken to mitigate this. It is suggested that future research take on the task of replicating this study with multiple language questionnaire options. In this way the research can be far clearer and accommodating to the multilingual South African sample population at large. In doing so, more knowledge with regard to online shopping in South Africa will be uncovered thus making a further contribution to existing literature on the subject.

8.7 Chapter Summary

This chapter provided five concluding section of the thesis. First it presented the summation of the main findings where each individual hypothesis was discussed. Secondly, this was followed by a comprehensive conversation of the managerial implications. Third, the chapter suggested recommendations based on the research findings, in doing so each variable was scrutinised in terms of its real-world application into marketing practice. Fourth, research contributions were examined using a threefold approach that makes reference to conceptual, theoretical and marketing contributions. Finally, the limitations of the study and areas of future research for academics are given. Below is a diagrammatic presentation of a summary of chapter eight.

Figure 8.1: Diagrammatic representation of Chapter Eight



Source: Author (2016)

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APPENDIX 1: QUESTIONNAIRE

Online Shopping

Section A: Demographic Profile

1. Gender

- Male
- Female
- Other

2. Age

- 18 – 24
- 25 – 34
- 35 – 44
- 45 – 55
- 55+

3. Race

- Black
- White
- Indian
- Coloured
- Other

4. Marital Status

- Married / Living Together as Partners
- Single – Divorced / Separated
- Single – Never – Married
- Single – Widowed

5. Personal Income

R5000 <

R5000 – R15000

R15001 – R25000

R25001 – R35000

R35000 >

Refuse / Don't know

6. Indicate your highest academic level

None

Primary School

High School

Diploma

Degree

Postgraduate Degree

Online Shopping

Section B: Online Connectivity Preference

7. How often do you shop online?

Once a week

Once a month

Once every 3 months

Once every 6 months

Once a year

8. What device do you most frequently use to log onto the internet?

Tablet

Smart Phone

Computer/Laptop

9. What source of connectivity do you most frequently use to access the internet?

Free Wifi Zone

Home ADSL Router

Data bundles including wireless mobile modem

Online Shopping

Section C: Data Charges

10. To what extent do you disagree or agree with each of the statements below:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am pleased with the fee that I have to pay for the use of the internet.					
The fee that I have to pay for the use of the internet is reasonable.					
The fee that I have to pay for the use of the internet is high					

Online Shopping

Section D: Delivery Dependability

11. To what extent do you disagree or agree with each of the statements below:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Online stores deliver the kind of products I ordered.					
Online stores deliver my orders on time.					
Online stores provide dependable delivery.					
I shop online because of the availability of reliable & well-equipped shippers.					

Online Shopping

Section E: Geographical Distance

12. To what extent do you disagree or agree with each of the statements below:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It's not worth travelling the distance when I can rather shop online.	○	○	○	○	○
With travelling costs constantly increasing, I prefer shopping online.	○	○	○	○	○
I prefer to shop online as the nearest physical store is too far away.	○	○	○	○	○

Online Shopping

Section F: Product Risk

13. To what extent do you disagree or agree with each of the statements below:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I want to see and touch products before I buy them.	○	○	○	○	○
I place more trust in products that can be touched before purchase.	○	○	○	○	○
I find it difficult to judge the quality of the product over the internet.	○	○	○	○	○

Online Shopping

Section G: Information Quality

14. To what extent do you disagree or agree with each of the statements below:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Online stores offer more useful **product** information about the different choices.	○	○	○	○	○
I like to browse the various **categories** on a site when doing my shopping.	○	○	○	○	○
When searching for something to buy, I like to examine different **online stores,** even if the first one is exactly what I want.	○	○	○	○	○

Online Shopping

Section H: Online Shopping Satisfaction

15. To what extent do you disagree or agree with each of the statements below:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am satisfied with the pre-purchase experience of online shopping websites (e.g., consumer education, product search, quality of information about products, product comparison etc).	○	○	○	○	○
I am satisfied with the purchase experience of internet shopping websites (e.g., ordering, delivery dependability).	○	○	○	○	○
I am satisfied with my overall experiences of online shopping.	○	○	○	○	○

Online Shopping

Section I: Trust

16. To what extent do you disagree or agree with each of the statements below:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Online shopping is reliable.	○	○	○	○	○
In general I can rely on online stores to keep the promises that they make.	○	○	○	○	○
Online stores can be trusted, there are no uncertainties.	○	○	○	○	○
Online shopping is a trustworthy experience.	○	○	○	○	○

Online Shopping

Section J: Online Purchase Intention

17. To what extent do you disagree or agree with each of the statements below:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I intend to buy online frequently.	○	○	○	○	○
I anticipate purchasing from online stores in the near future.	○	○	○	○	○