Relationship marketing: an evaluation of trustworthiness within the Jordanian hotel sector
Kharouf, H.
Submitted version deposited in CURVE April 2011

Original citation:

Copyright © and Moral Rights are retained by the author. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

Some materials have been removed from this thesis due to third party copyright, including appendices 3-9. The unabridged version of the thesis can be viewed at the Lanchester Library, Coventry University.

CURVE is the Institutional Repository for Coventry University
http://curve.coventry.ac.uk/open
Relationship Marketing: An Evaluation of Trustworthiness Within the Jordanian Hotel Sector

Husni Kharouf
Doctoral of Philosophy (candidate)

Coventry University
February 2010

A thesis is submitted in partial fulfilment of the University’s requirements for the Degree of Doctor of Philosophy. Coventry University - UK
ABSTRACT

The objective of this study is to investigate the concept of trustworthiness and then examine its effect within the venue of the hotel sector. Given trustworthiness accepted importance to relationship marketing, there appears to be a failure to develop a coherent framework to indicate trustworthiness. This is a gap that this thesis addresses and by doing so, it will extend the body of knowledge by contributing to our understanding of the construct and its determinants.

The main hypothesis in this thesis is identifying the determinants of trustworthiness with an outcome as part of a causal model. Within the proposed model, the determinants; consistency, competence, integrity, benevolence, value alignment and communication are assumed to have a positive impact on trustworthiness. In turn, trustworthiness has a positive impact on both attitudinal loyalty and behavioural loyalty, the two types of loyalty are proposed as the model outcome, whereas the previous six determinants are proposed as antecedents of trustworthiness.

In order to test the proposed hypotheses, a new measurement scale was developed in order to evaluate trustworthiness with its determinants and outcome, the model was tested within the hotel sector in Jordan where over 526 respondents took part in the main survey collection, 60 respondents participated in the pilot study along with 11 interviewees.

The results from the empirical study revealed that the hypothesised model is valid and significant, in which all the antecedents of trustworthiness had a significant loading as well as the model corollaries. These loadings vary in its significance and strength; this created a clearer picture on the expected impact of each of these determinants once the model being applied within service organisations.
I would like to acknowledge the contribution of the following people, without whose help, guidance and motivation this thesis would not have been completed.

I would like to acknowledge the guidance and support from my two supervisors, Professor Tom Donnelly and Dr. Harjit Sekhon. For their honest guidance and continued support without which it would have been difficult if not impossible to complete this thesis. I am indeed very proud and privileged to be supervised by them.

Thanks to Tom and Harjit.

My heartfelt gratitude goes to my parents for ever believing in me.
THESIS RELATED LIST OF PUBLICATIONS


Kharouf, H, (2004), Relationship marketing: A Cross Cultural Examination of Trust in the Hotel Sector, Academy of Marketing Conference (doctoral colloquium), UK.
# Table of Contents

**CHAPTER ONE: INTRODUCTION TO THE THESIS**

1.1 Introduction ................................................................................................................... 1
1.2 Theoretical Background ............................................................................................... 1
1.3 Research Aim and Objectives ....................................................................................... 4
1.4 Research Hypotheses ..................................................................................................... 5
1.5 Structure of the Thesis .................................................................................................. 7
1.6 Research Approach ....................................................................................................... 9
1.7 The Nature of Service Organisations .......................................................................... 10
  1.7.1 Relationship Marketing within a Services Context .................................................. 12
1.8 The Jordanian Hotel Sector ........................................................................................ 12
1.9 Contributions of the Study .......................................................................................... 15
Summary ........................................................................................................................... 17

**CHAPTER TWO: THE DEVELOPMENT OF THE RELATIONSHIP MARKETING CONCEPT**

2.1 Introduction ................................................................................................................. 18
2.2 Early Development of Marketing Thought ............................................................... 19
  2.2.1 The Marketing Mix ................................................................................................. 21
2.3 The Emergence of Relationship Marketing .............................................................. 24
2.4 Theoretical Foundations of Relationship Marketing .................................................. 29
  2.4.1 Business Marketing and The Interaction Network Approach ............................... 30
  2.4.2 The Services Marketing Approach .......................................................................... 30
  2.4.3 Marketing Channels ................................................................................................ 31
  2.4.4 Database Marketing and Direct Marketing .............................................................. 32
2.5 Defining Relationship Marketing ................................................................................ 32
  2.5.1 Relationship Marketing: A Paradigm Shift .............................................................. 37
  2.5.2 Relationship Marketing as a European or American Model ..................................... 38
2.6 The Core Elements of Relationship Marketing ........................................................ 40
  2.6.1 Trust ....................................................................................................................... 40
  2.6.2 Commitment ........................................................................................................... 42
Summary ........................................................................................................................... 42

**CHAPTER THREE: THE CONCEPT OF TRUST**

3.1 Introduction ................................................................................................................. 43
3.2 The Concept of Trust ................................................................................................. 44
3.3 The Meaning of Trust ............................................................................................... 45
List of Tables

Table 1.1: Number of hotels in Jordan ................................................................. 14
Table 1.2: An overview of the Jordanian Hotel Sector ........................................ 14
Table 2.1: Comparison between the Major Schools of Relationship Marketing ... 26
Table 2.2: Key Relationship Marketing Definitions ............................................. 34
Table 3.1: Key Definitions of Trust ..................................................................... 47
Table 4.1: Classification of Trust by Discipline with Key Authors ....................... 70
Table 4.2: Key Themes of Trust .......................................................................... 80
Table 4.3: Mapping the Dimensions of Trustworthiness .................................... 91
Table 5.1: Marketing Research: Main Scientific Paradigms and Their Elements .... 104
Table 5.2: Assumptions of the Quantitative and Qualitative Research Paradigms .... 109
Table 5.3: Differences between Qualitative and Quantitative Research Strategies ... 111
Table 5.4: Different Research Methodologies ..................................................... 113
Table 5.5: Breakdown of the Research Approach ................................................ 121
Table 6.1: Main Empirical Studies on Trust and the Scales Used ......................... 159
Table 6.2: Detailed view of the Data Analysis Strategy ....................................... 162
Table 6.3: Examples of the Literature Supporting the Research Constructs .......... 164
Table 6.4: The Final Research Items .................................................................. 170
Table 7.1: Survey Response Rate ....................................................................... 177
Table 7.2: 5% Trimmed Mean ............................................................................ 180
Table 7.3: Tests of Normality ............................................................................ 181
Table 7.4: Gender of Respondents .................................................................... 182
Table 7.5: Nationality of Respondents ............................................................... 183
Table 7.6: Age Groups ..................................................................................... 184
Table 7.7: Purpose of the Visit ......................................................................... 185
Table 7.8: Type of Used Service ....................................................................... 185
Table 7.9: Service Used vs. Purpose of Visit .................................................... 186
Table 7.10: Length of the Relationship between Customers and the Hotel .......... 187
Table 7.11: Frequency of Service Usage ........................................................... 187
Table 7.12: Mean and Standard Deviation for the Model Constructs .................... 188
Table 7.13: Mean and Standard Deviation for the Integrity Construct .................. 189
Table 7.14: Mean and Standard Deviation for the Benevolence Construct .......... 189
Table 7.15: Mean and Standard Deviation for the Competence Construct .......... 190
List of Figures

Figure 1.1: The Research Focus of the Thesis in Relation to the Literature.................................2
Figure 1.2: The Proposed Model and Hypotheses .......................................................................6
Figure 2.1: The Development of Marketing Over the Past Sixty Years ......................................20
Figure 2.2: The Disciplinary Roots of Relationship Marketing ..................................................29
Figure 2.3: The Key Mediating Variables of Relationship Marketing .........................................41
Figure 4.1: Antecedents and Outcomes of Trust.........................................................................77
Figure 4.2: Mayer et al.’s (1995) Model of Trust .......................................................................81
Figure 4.3: Various Relationship Forms....................................................................................84
Figure 4.4: Forms of Dependence, Risk and Qualities of Trustworthiness ................................85
Figure 4.5: Trust Continuum .....................................................................................................86
Figure 4.6: Classification of Different Trust Typologies .............................................................87
Figure 4.7: Trust and the Mediating Lens ...................................................................................88
Figure 4.8: Conceptual Framework ...........................................................................................93
Figure 5.1: Overview of the Methodology Chapter ....................................................................102
Figure 5.2: Blocks of Research ................................................................................................103
Figure 5.3: The Key Research Paradigms ..................................................................................106
Figure 5.4: Deductive and Inductive Logics..............................................................................108
Figure 5.5: Data Collection Process .........................................................................................114
Figure 6.1: Overview of the Scale Development Process and the Pilot Study ...........................155
Figure 8.1: The Process of SEM Analysis in This Chapter .........................................................204
Figure 8.2: The Hypothesised Model and the Relationships between Constructs ..................207
Figure 8.3: Part One of the Hypothesised Measurement Model .............................................210
Figure 8.4: Part Two of the Hypothesised Measurement Model .............................................211
Figure 8.5: Integrity Regression Weights..................................................................................229
Figure 8.6: Competence Regression Weights .........................................................................230
Figure 8.7: Value Alignment Regression Weights ....................................................................231
Figure 8.8: Communication Regression Weights ....................................................................232
Figure 8.9: Benevolence Regression Weights .........................................................................233
Figure 8.10: Consistency Regression Weights .........................................................................234
Figure 8.11: Trustworthiness, Attitudinal and Behavioural Loyalty Regression Weight .........235
Figure 8.12: Complete Path Diagram with the Hypothesised Measurement Specifications .240
Figure 8.13: The Path Loadings Diagram..................................................................................242
Figure 8.14: Alternative model A ................................................................. 244
Figure 8.14: Alternative model B ................................................................. 245
Figure 8.14: Alternative model C ................................................................. 246
Figure 8.14: Alternative model D ................................................................. 247
CHAPTER ONE: INTRODUCTION TO THE THESIS

1.1 Introduction

Service organisations invest vast sums of money in the development of their customer relationships in order to improve their overall business performance. Nevertheless, there is limited academic and practitioner research regarding how these ‘customer–organisation’ relationships’ can be built and maintained, explicitly in terms of relationship trustworthiness. This thesis aims to explore relationship trustworthiness and its determinants within the arena of the Jordanian hotel sector.

Firstly, this chapter will present the aims and objectives of the research. Secondly, it will develop the rationale of the research initiative, and finally, it will outline the structure of the thesis. Section 1.2 provides a brief theoretical background for the research in the thesis. Section 1.3 explains the specific aim and objectives of the thesis, while section 1.5 outlines the structure of the thesis and provides a summary of the chapters to follow with their intended objectives and main research contributions. An overview of the approach to the research is presented in section 1.6, followed by the nature of service organisations in section 1.7, and then the overall contribution to knowledge gained from the research is presented in section 1.8.

1.2 Theoretical Background

Emerging from both the empirical and theoretical debates surrounding relationship marketing, the concept of trust is accepted as a key component in successful relationships (Mayer et al. 1995; Doney and Cannon 1997), and it is often seen as an important factor in defining the strength of customer relationships (Morgan and Hunt 1994). However, most of the current literature focuses on trust as an antecedent of customer loyalty (Buttle and Burton 2002; Bartelt 2002), effective communication (Anderson and Narus 1990), customer satisfaction (Jyh-Shen 2004),
customer commitment (Morgan and Hunt 1994) and risk reduction (Mayer et al. 1995).

Trust can be defined as “confidence in an exchange partner’s reliability and integrity” (Morgan and Hunt 1994:23). Similarly, it is also understood in terms of “the perceived credibility and benevolence of a target of trust” according to Doney and Cannon (1997:36). The importance of trust emerges from its presence as a central factor for all organisational transactions (Dasgupta 1988), reducing costs (Williams 1993), influencing the coordination of institutional organisations (Shapiro 1987) and enhancing the organisational decision making process (McAllister 1995). Figure 1.1 provides an illustration of how the concept of trust integrates with both relationship marketing and services marketing literature, a model that forms the theoretical basis for this thesis.

**Figure 1.1: The Research Focus of the Thesis in Relation to the Literature**

![Diagram](source: Author)

---

1 A full discussion of the various definitions of trust in the literature can be found in Chapter Three - Section 3.3.
In spite of the fact that trust in service organisations attracts considerable interest within various streams of research and related literature (see for example, Butler and Cantrell 1984; Lewicki et al. 1998), most authors draw upon a belief-based conceptualisation of trust; that is, perceived trustworthiness (Gefen et al. 2003). By this definition, the deciding factor in the creation of trust is trustworthiness, which is a characteristic of the service provider (the trustee). Therefore, trustworthiness is a subjectively determined value judgment about the behaviour of the party that is seeking to be trusted (Glaeser et al. 1999; Bews and Rossouw 2002; Caldwell and Clapham 2003).

Trustworthiness\(^2\) is described in the literature as the perceived probability that a particular trustee will maintain one’s trust (McKnight et al. 2002). Hardin (2002:28) defines trustworthiness by stating that “… your trustworthiness is your commitment to fulfil another’s trust in you”. Putting Hardin’s (2002) statement into context, trusting beliefs represent a “… sentiment or expectation about an exchange partner’s trustworthiness” (Moorman et al. 1993:315). Mayer et al. (1995) defined trustworthiness as an attribute of a trustee that is responsible for trust. According to Mayer et al. (1995), the perceptions of the trustor that affect their judgements about the trustee concern the trustee’s ability, integrity and benevolence. Doney and Cannon (1997) treat trust as a single construct incorporating trustworthiness, integrity, ability, and benevolence.

Most literature sources use the term trust, although sometimes the focus is on customer behaviour and sometimes on service provider attributes; the two foci are even used interchangeably. This is well described by Hardin (2002:29) when he notes that “much of the literature on trust hardly mentions trustworthiness, even though implicitly much of it is primarily about trustworthiness, not about trust”. Hardin’s (2002) argument was further confirmed by Caldwell and Clapham (2003) when they argued that the trust decision is evaluated upon one party’s assessment of the behaviours of another party, through what they described as a ‘mediating lens’ or complex filter through which each person views the world. In other words, in order for one party to trust, the trustee has to possess certain characteristics perceived as being trustworthy.

\(^2\) Full details on the discussion surrounding trustworthiness can be found in Chapter Three-Section 3.6.
Trustworthiness, however, is a more salient issue with high-risk transactions (for example when purchasing an accommodation in a different country). It is important to conceptualise and distinguish trustworthiness from trust because: 1) trust may be an enduring condition of the customer, i.e. relying on the customer to initiate trust or distrust, with the implication that he/she is ultimately making the trust decision, 2) trust is also an outcome of the evaluation of the trustworthiness of the service provider. Hence, by refocusing on the strategic organisational value of developing a trustworthy attribute(s), it is easier for the service provider to be able to influence and predict trust, particularly in a new business context.

1.3 Research Aim and Objectives

While the issue of trust attracts significant attention within the literature in a marketing sense, the theoretical understanding of the construct is both varied and ambiguous. In addition to this ambiguity, a gap exists in terms of our understanding of the notion of trustworthiness. This lack of understanding was recognised by Hardin (2002:29) when he noted that “… much of the literature on trust hardly mentions trustworthiness, even though implicitly much of it is primarily about trustworthiness, not about trust”.

Given trust’s accepted importance within relationship marketing (see for instance, Morgan and Hunt 1994), there appears to be a significant research gap regarding a coherent framework for trustworthiness in the literature. This is a subject addressed by this thesis; by doing so, this research will extend the body of knowledge by contributing to our understanding of the construct of trustworthiness and its attributes (for example, competence and value alignment).
This thesis aims: to explore relationship trustworthiness and its determinants within the arena of the Jordanian hotel sector.

The primary objectives of the thesis are:

1. To develop a theoretically grounded framework and develop a scale to measure the determinants of trustworthiness and its outcome.
2. To investigate the factors which influence the determination of trustworthiness between a service provider and its customers.
3. To carry out an empirical examination of the proposed model in the Jordanian hotel sector.

While there are numerous studies that have examined trustworthiness within the service sector, the main purpose of this thesis is to conceptualise and test the determinants of trustworthiness. The results of this thesis will provide insights into the importance of trustworthiness in the service sector, and will, therefore, provide a solid base from which to establish better customer relationships within service organisations. This, in turn, will enhance the overall service stability in the organisation’s operations, and ultimately increase customer loyalty.

1.4 Research Hypotheses

Based on the research aim and objectives stated above, nine hypotheses are proposed and a structural model will be developed and tested. The research in this thesis takes the stance that modelling trust and rationalising the proposed framework can be seen as establishing the foundation of trustworthiness by identifying the antecedents of trust – in other words, those aspects of trust that ultimately lead to trustworthiness. Customer loyalty is conceptualised in the model as an outcome of trustworthiness.

Initially, the proposed model (see Figure 1.2) assumes three main relationships and clearly defines the determinants of trustworthiness as well as the outcome of customer loyalty. The main relationships in the model place trustworthiness at the focal point, with various determinants of trustworthiness (classified as low and high level) having a direct relationship with the central characteristic. The importance of
Each determinant will be discussed at a later stage in this thesis, since the results from the empirical study will show which determinant is the most significant, and having the strongest regression coefficient paths with trustworthiness. The third part of the model involves the outcome of trustworthiness, measured by two types of customer loyalty; behavioural (low level) and attitudinal (high level) loyalty. The model also includes a prediction that behavioural loyalty can lead to attitudinal loyalty.

Figure 1.2: The Proposed Model and Hypotheses

As drawn from the above diagram (Figure 1.2), the research hypotheses are:

\( H_1 \): Consistency has a positive impact on trustworthiness.

\( H_2 \): Competence has a positive impact on trustworthiness.

\( H_3 \): Integrity has a positive impact on trustworthiness.

\( H_4 \): Benevolence has a positive impact on trustworthiness.

\( H_5 \): Value Alignment has a positive impact on trustworthiness.
Chapter One – Introduction

$H_6$: Communication has a positive impact on trustworthiness.

$H_7$: Trustworthiness has a positive impact on attitudinal loyalty.

$H_8$: Trustworthiness has a positive impact on behavioural loyalty.

$H_9$: Behavioural loyalty has a positive impact on attitudinal loyalty (a prediction).

These hypotheses will be further discussed and justified based on the relevant literature in Chapter Four section 4.6.1, and will be tested empirically in Chapter Eight.

1.5 Structure of the Thesis

To begin with, the thesis provides a brief introduction detailing the research setting and a theoretical background for the study (Chapter One). This introductory chapter is followed by a review of the literature surrounding relationship marketing (Chapter Two) and the concepts of trust and trustworthiness along with their various dimensions (Chapter Three). The major benefits of trust for a service organisation will be underlined, followed by a discussion of how trustworthiness is conceptualised (Chapter Four). Following this chapter, a detailed research methodology will be discussed (Chapter Five). The fieldwork and discussion of the research findings are presented in three chapters: the scale development and the pilot study (Chapter Six); the descriptive findings (Chapter Seven); and a multivariate statistical analysis of the proposed model (Chapter Eight). The final chapter outlines the main conclusions based on the research findings. In addition, this chapter includes a discussion of the managerial implications of the research, along with its limitations of the research (Chapter Nine). In more detail, the structure of the thesis is as follows:

Chapter One – Introduction to the Thesis

This chapter presents the aims and objectives of the thesis, demonstrating the significance of the study and presenting the structure of the thesis. The chapter provides an introduction to the research, as well as a brief overview of the approach and its main parameters.
Chapter Two – The Development of the Relationship Marketing Concept

This chapter introduces the concept of relationship marketing and demonstrates how relationship marketing has become a crucial part of the marketing domain. In addition, the chapter identifies how the concept of trust emerged in the literature and how it integrates with various marketing concepts (for example, the logic of service dominance).

Chapter Three – The Concept of Trust

This chapter provides a full discussion on the concept of trustworthiness and shows its development within the literature, including a variety of definitions, concepts and theoretical models within different academic schools of thought. Furthermore, a necessary distinction between trust and trustworthiness is discussed.

Chapter Four – Justifications of the Conceptual Model and the Research Hypotheses

The conceptual model and the research hypotheses are discussed during this chapter. In addition, the chapter identifies the antecedents of trustworthiness along with their effects as part of the proposed theoretical model. Nine hypotheses are developed and discussed within the model.

Chapter Five – Research Methodology

This chapter aims to provide an overview of the research design and approach, and to outline the data collection strategy for the empirical part of the study. It also justifies the data analysis strategy. A detailed explanation of the phases of the research (a qualitative study, expert judging, a pilot and finally the main study) is presented, along with a justification of the analysis stages (new measure development and validation, followed by assessment of the structural equation model). The discussion includes the reasons for using structural equation modelling as a key analysis tool to test the proposed model.
Chapter One – Introduction

Chapter Six – Scale Development and Pilot Study

This chapter provides an overview of the scale development process and a discussion of how the main research items have been generated and used to construct the research instrument and test the proposed model. The chapter also reports the results of the pilot phase of the research, and discusses the reliability of the proposed scale.

Chapter Seven – Descriptive Analysis of Measurement Scale Items

The aim of this chapter is to provide early results from the collected data and to examine the nature of the selected sample. There is a detailed discussion of how the raw data are treated and purified, and several descriptive analytical tests on the sample are also discussed.

Chapter Eight – Multivariate Data Analysis and Model Validation

All the analytical testing steps applied to the data, including the statistical validation and the structural path analysis, are evaluated in this chapter. In addition, the key results and a review of each hypothesis are fully examined.

Chapter Nine – Main Conclusions and Managerial Implications

This chapter discusses various considerations about the theoretical and managerial implications of the research results. Furthermore, the main contributions of the research are identified and discussed. The chapter also includes a reflection on the limitations of the study, and a discussion of future research.

1.6 Research Approach

After defining the concept of trustworthiness and clarifying its impact within service organisations, a critical realist approach was adopted. In the light of a multi-disciplinary review of the literature and after an initial qualitative study, nine hypotheses were developed and tested using a quantitative design.

Following the use of three expert judges (during the measure development phase) and a pilot study (60 respondents), a further 529 questionnaires were collected.
for the main empirical study. They answered a self-administered questionnaire designed to measure the proposed model. Subsequently, a structural equation modelling analysis technique was used to validate the measures and test the determinants and outcomes of trustworthiness.

1.7 The Nature of Service Organisations

Service organisations traditionally emerged from the industrial sector, supporting the production process by distributing products and ensuring sufficient profit at the same time (Zeithaml et al. 1985). However, the growth of service organisations influenced the range of the available services in different sectors, for example, in the hospitality sector, customers are clearly the main focus of the business, and, therefore, delivering the right service becomes the most important criterion for successful service organisations. Within service organisations a need for services marketing with an internal focus on service delivery was developed, as a method to increase customer base and compete with market rivals; this has been widely discussed in the marketing literature (see for example, Gummesson 1994; Piercy and Morgan 1989, 1991; Piercy 1995).

The notion of services marketing gathered momentum during the 1970s when several authors described its development (see for example, Grönroos 1978 and 1994; Fisk et al. 1994). The 1980s witnessed the development of the notion of service quality (Zeithaml et al. 1985), since the perceived quality of a service will be the result of an appraisal procedure, comparing the perception of service delivery and its results against customers’ expectations via a technical and functional quality outcome process (Grönroos 1993). However, academics, practitioners and customers all attach different meanings to the concept of services (Johns 1999); in an attempt to clarify this. Several new definitions for services marketing appeared in the marketing literature; for example, Mathe and Shapiro (1993:33) define services marketing as:

“Service is all of the activities undertaken by the firm to provide value in use over time, measured by increased customer satisfaction with a tangible product or series of products.”

Appendix Two provides a full elaboration on the milestones in the services marketing literature.
However, Mathe and Shapiro’s (1993) definition does not provide a clear indication of the characteristics of services. Furthermore, a simple increase in customer satisfaction is not a clear measure of service quality because other factors play a role in affecting customer satisfaction (for example, ease and efficacy of communication). Therefore, this thesis employs Johns’ (1999:961) definition of services marketing because it takes into account several other intangible characteristics of the service provider:

“Service as a process not only is the delivery of a core service, but also has a style or manner of its own imbued with artistic, dramatic or craftsman-like possibilities.”

Service encounters further influenced the integration of relationship marketing within services marketing. Bitner (1990) argued from a relationship perspective that the individual service encounter is seen as only one element in an ongoing sequence of relationship episodes that together form a process between the customer and the service provider. This concept emerged when marketing academics discussed the dyadic contact between a service provider and customers, and it is identified as a significant determinant of the customer’s general satisfaction with a service (Solomon et al. 1985). Bitner (1990) indicated that a service encounter can be seen as a period of time during which a consumer directly interacts with a service.

As has been proposed by Fisk et al. (1994), there are three main factors that inform the service encounter theory, namely: internal marketing; service design and relationship marketing. The outcome(s) of these concepts are often perceived as service quality with a direct influence on the service encounter. From this argument it can be concluded that relationship marketing plays a key role within services marketing, and, hence, it is acceptable to discuss relationship marketing within service organisations. This claim will be discussed below.
1.7.1 Relationship Marketing within a Service Context

By the end of the 1980s services marketing had been formally accepted as a new paradigm within the field of marketing, an area with different unique characteristics from other streams of marketing research (for example, industrial marketing; see Grönroos 1998; Zeithaml and Bitner 1996). Before long, academics started to apply services marketing research to the industrial (goods) sector in an attempt to study buyer-seller relationships within industrial marketing. This represented a significant shift within the general services marketing paradigm, and developed into what we know today as relationship marketing (Gummesson 1991; Grönroos 2000; Christopher et al. 1991). Hence, relationship marketing emerged from the conjunction between service marketing, industrial marketing and data base/direct marketing (Möller and Halinen 2000).

Still, it can be argued that services marketing has benefited most from the development of relationship marketing, since it has been suggested that relationship marketing is best viewed in the context of service organisations. This is evident in early work conducted by Crosby and Stephens (1987), who viewed relationship marketing as an instrument that adds value to the product or service by meeting certain peripheral demands (for example, making customers feel welcomed). However, these authors argued that customers are mainly concerned with the core product and service quality. Zineldin (1999) supported this stance when he argued that the need for relationship marketing emerged because most service organisations offer almost the same core service(s); therefore, differentiation will be of the greatest interest to organisations with the strongest capability to develop long-term customer relationships.

1.8 The Jordanian Hotel Sector

As mentioned earlier the research venue of this thesis is the Jordanian hotel sector. In recent decades the Jordanian tourism sector has played an important role in the Kingdom’s economy. The Jordanian hotel sector has grown by about seven percent a year since the early 1980s, comprising on average around eleven per cent of

---

4 A full discussion of the emergence of relationship marketing can be found in Chapter Two, Section 2.3.
the gross domestic economy. The Jordanian tourist industry exploits the wide range of tourist attractions and activities that are situated in Jordan, such as the Dead Sea, Wadi Rum, religious sites at Mount Nebo and al-Mazar, and mosques in Amman and Madaba. Petra’s spectacular Nabatean ruins, Roman theatres, tombs and monasteries are a major attraction for tourists (Jordanian Ministry of Tourism and Antiquities 2008).

Following a surge in tourism related to the 1994 peace agreement with Israel, Jordan’s hotel occupancy rate soared unexpectedly. Major hotel expansion plans have moved ahead in the hope that regional tensions will subside and lead to an increase of non-Arab tourists. However, as around fifty percent or more of Jordanian tourist arrivals are from within the immediate region, they are less disposed to have poor perceptions in regard to the regional crises (for instance, political problems in the neighbouring countries). Regardless of the uncertainty caused by regional instability the number of visitors, based on diversified sources, should follow long-term growth patterns. The overall trend is clearly positive, with hotel room occupancy up sixty percent during the period 2000–2008, and the number of visitors increasing from 3.9 million in 2003 to 5.1 million in 2006. Overall, the national tourism strategy expects the sector to contribute more than £1 billion annually to the economy, by 2010, and to create fifty thousand jobs (Jordanian Ministry of Tourism and Antiquities 2008).

Over the past eight years Jordan has entered a period of comprehensive political, social, and economic reform with the aim of building a modern state based on economic vitality with substantial potential for growth and prosperity, political inclusion and social stability. Jordan has made great strides in opening up and liberalising its economy in order to accomplish sustainable economic development, prompting export-led growth, and enabling the creation of a favourable environment for inwards FDI. This can be seen clearly in the hotel sector, in which one hundred percent of the five star hotels are owned by international chains and eighty percent of the four star hotels are either partially or fully internationally owned. Despite continuing regional instability, this sustained international investment is evident from the growth in the Jordanian economy, which remains strong. The fastest growing sectors in 2007 were: manufacturing industry (with an increase of 16.7%); hotels
(13.1%); telecommunications and transport (11.8%); construction (11.7%); electricity and water (9.9%); and the financial and real estate sectors (9.4%).

Table 1.1: Number of Hotels in Jordan

(Source: Jordanian Hotel and Tourism Association 2008)

The Jordanian hotel sector currently contains 474 hotels ranging in quality from five star to one star accommodation (see Table 1.1). These hotels are spread across the country, but 81% of the hotels are located in the capital city Amman (see Table 1.2). Examining the hotel classification reveals that five star hotels dominate the sector in terms of nights spent (see Table 1.2), which indicates the importance of this category of accommodation and suggests the benefit of further improving this specific category. Therefore, this study concentrates on this sector of the Jordanian tourism industry, focusing on five star hotels.

Table 1.2: An Overview of the Jordanian Hotel Sector

(Source: Jordanian Hotel and Tourism Association 2008)

5 These numbers include hotel apartments, hostels and unclassified hotels, which this study did not cover. Source: Jordanian Ministry of Tourism and Antiquities 2008.

6 The majority of the five star hotels in Jordan (90%) are franchised based. Source: Jordanian Ministry of Tourism and Antiquities 2008.
With average tourist numbers around 6.5 million in 2007 (including day trippers and overnight visitors), and with projections for this figure to climb by 12% in 2009 and 2010, the scene is set for business in the hotel sector to soar, backed up by complementary marketing by the Jordan Tourism Board (JTB) and private sector bodies such as the Jordan Incoming Tour Operators’ Association (JITOA). Enhancing visitor relationships is vital for the sector’s growth. Such enhancement will not only improve the level of customer satisfaction, but it will also contribute to building long-lasting relationships by creating high levels of trustworthiness for the service provider. This thesis applies the proposed model for trustworthiness within the Jordanian hotel sector, aiming to contribute to both service organisations in general and hotels in particular.

1.9 Contribution of the Study

The potential contributions of this study can be discussed from both a theoretical and a practical standpoint. Essentially, this thesis contributes to an increase in the current level of theoretical knowledge in the literature on trustworthiness. This is an important field of study because trustworthiness is a key element in enhancing and maintaining long-term relationships between the organisation and its customers (Spekman 1988), to the benefit of both involved parties as trustworthiness evolves (Hardin 2002). This contribution is achieved by exploring the various literatures surrounding the construct, and the development of a model to conceptualise the concept within service organisations and test it in within the Jordanian hotel sector.

In detail, the particular theoretical contribution of the thesis is wide-ranging. The established literature within the field of relationship marketing, for instance, research by Morgan and Hunt (1994) and Doney and Cannon (1997) focuses on the consequences of trust rather than its antecedents. Despite a more recent study by Sirdeshmukh et al. (2002) dealing with the notion of trustworthiness, the literature generally fails to make a distinction between the various types of trustworthiness, i.e. higher and lower forms. The higher form of trustworthiness relates to notions of benevolent behaviour and shared values, whereas the lower level is associated with

---

7 A detailed discussion on trustworthiness is presented in Chapter Three – Section 3.6.
traits such as competence, effective communication, integrity, consistency and so forth.

This thesis argues that higher level trustworthiness, allows the service provider to add more value to the provided service than do lower levels. The proposed model suggests that trustworthiness has different determinants; this addresses the existing gap in the literature and by doing so, it provides service organisations with the necessary information on how to apply and enhance their trustworthiness with their customers, which will result in reducing operational costs, widening the customer base and enhancing the organisation decision making process. Furthermore, the thesis provides a methodological contribution by developing and empirically testing a new scale to measure trustworthiness. The scale development comprises generated and validating a pool of items to measure the research constructs8.

Although it may be possible to debate whether trustworthiness is an attribute or construct, for the purposes of this thesis it is treated as a construct, which Diamantopoulos (2005) defines as an abstract entity. The features that allow an organisation to be perceived as trustworthy, i.e. the determinants of trustworthiness are the attributes that are conceptualised as part of the theoretical model.

In terms of a practical contribution, the findings of the study should provide several insights about building trustworthiness in relationships, as well as customer loyalty. The analysis and findings address the issue of clarity within the conceptualisation of relationship trust in the literature, and the meta-analysis of the theorised relationships includes a discussion of the construct’s impact and significance.

Finally, the systematic examination of structural relationships in the attributes helps to facilitate a clearer understanding of the nature of trustworthiness, its antecedents and outcomes. The results could provide information about building trustworthiness within service organisations, which might aid organisations in enhancing their customer relationship practices.

8 See Chapter Six – Section 6.3 for a full discussion on the scale development stages.
Summary

This chapter has presented the rationale underlying the research initiative that forms the subject of this thesis. The main research aim (to explore the concept of trustworthiness and its determinants within the venue of the Jordanian hotel sector) has been examined, along with the three main objectives around which the research and the thesis are structured. An outline of the thesis structure has been presented, showing how each chapter contributes to the main objectives. Finally, the chapter has presented an overview of the research approach and its main parameters.
CHAPTER TWO: THE DEVELOPMENT OF THE RELATIONSHIP MARKETING CONCEPT

2.1 Introduction

Several theorists contributed to the early development of marketing thought. Harvey et al. (1996) summarised these contributions as: the marketing concept, the marketing mix, and the generic marketing concept. Earlier, Webster (1992) argued that it was not until the 1950s that an increased emphasis on marketing management first appeared in the literature. Writing in 1972, Kotler was among the first to identify changes in the academic categorisation of marketing. He suggested that marketing had started originally as a branch of applied economics, before being embraced as a management discipline with the objective of engineering increased sales. Kotler (1972) also suggested, at that time, that marketing could be classified as an applied behavioural science, since there was no emphasis on understanding buyer-seller systems within the literature (Kotler 1972). Marketing practice has reacted to changing economic environments, and today marketing is still an evolving subject with a great deal of academic input.

The notion of relationship marketing has been debated several times in the literature focusing upon the shortfalls in the traditional concept of the marketing mix (Grönroos 1994), and has gone from being a novel paradigm shift to a new term for an old phenomenon (Petrof 1998). Moreover, marketing academics have debated the extent to which relationship marketing forms a unique concept within the marketing literature (for example, see Grönroos 1994). They also continue to question the relevance of such a concept in replacing the traditional marketing mix, while at the same time providing another dimension to manage relationships with customers.

---

1 See appendix Three for the key factors contributing to the marketing concept.
2 This is also a phrase Petrof (1998) used in his work to describe the development of relationship marketing.
Regardless of the extended debates in the literature, few would disagree about the benefits of practising relationship marketing within organisations (for example, improving customers’ loyalty).

This chapter explores the early development of marketing thought; more specifically, it then discusses the different concepts and marketing approaches that contributed to the emergence of relationship marketing. It will further explain how the focus of the marketing literature has shifted towards the emergence of relationship marketing as a method to establish and maintain a long-term customer relationship to create a competitive advantage\(^3\) for the organisation.

### 2.2 Early Development of Marketing Thought\(^4\)

Webster (1988; 1992) argued that marketing gradually evolved in the early 1950s to become a management discipline devoted to increasing a company’s sales. At that time marketing academics\(^5\) characterised marketing as an applied behavioural science that consisted of understanding buyer and seller behaviours in the marketing of goods and services. According to Vargo and Lusch (2004), the logic of marketing, at that time, was a focus on transactions and output, and how organisations performed marketing functions to add value to commodities (see also Levitt 1960; Webster 1992; Vargo and Lusch 2004).

Between the 1950s and 1980s (see Figure 2.1), the focus of marketing shifted from basic goods and services to a broader perspective with more emphasis on decision-making and problem solving, placing customers as the central focus for all organisational activities (Vargo and Lusch 2004). Four main approaches were linked to marketing at the time, namely: the commodity approach (manufactured goods and services); the institutional approach (wholesaler agents and retailers); the managerial approach (analysis, planning and organising); and the social or environmental approach (marketing effectiveness, quality and social impact) (Kotler 1972). Each of these approaches expanded and formed a separate field within marketing and

\(^3\) For a detailed discussion of competitive advantage please see Porter (1985); the research in this thesis adopts his definition.

\(^4\) See appendix Five for a full review on the consumer marketing theory.

\(^5\) For a full discussion on the development of marketing see Vargo and Lusch (2004).
contributes to the overall development of marketing theory (Kotler 1972). Figure 2.1 illustrates the development of marketing over the past sixty years.

**Figure 2.1: The Development of Marketing over the Past Sixty Years**

<table>
<thead>
<tr>
<th>1950s</th>
<th>1960s</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
<th>2000s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Marketing (mass marketing)</td>
<td>Business to business marketing</td>
<td>Non-profit and societal marketing</td>
<td>Services marketing</td>
<td>Relationship marketing</td>
<td>Marketing as a Social and Economic Process – relationship marketing</td>
</tr>
</tbody>
</table>

(Source: Adapted from Christopher *et al.* 1991; Vargo and Lusch 2004)

The development of marketing is clearly expressed in the definitions published by various marketing institutions. For instance, the Chartered Institute of Marketing (CIM) defined marketing in 2005 as follows:

“Marketing is the management process responsible for identifying, anticipating and satisfying customer requirements profitably.”

Another definition of marketing was offered by the American Marketing Association (AMA), viewing marketing as a social process along the lines suggested by Vargo and Lusch (2004) (see Figure 2.1). This is clearly reflected within the 2007 AMA definition:

“Marketing is the activity, set of institutions and process for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.”

It can be noted from these two often-quoted definitions of marketing that the American and the UK schools of thought are in contrast. In the UK, the CIM views marketing as a management process responsible for meeting customers’ requirements, while in the US the AMA considers marketing to be an activity involving set of institutions, aiming to offer value to customers, partners, clients and society. This thesis adopts the CIM definition as a working definition because of its focus on the
management process of marketing, and its emphasis on satisfying customers, an indication of the importance of building long-term relationships.

The direction of marketing in terms of the shift in its focus and purposes was criticised by a number of academics (for instance, see Vargo and Lusch 2004). Earlier, Levitt (1960) stated that the marketing concept at that time was ‘myopic’ because it was basically product oriented instead of customer oriented, and it did not consider the market environment. Therefore, an alternative model arose in the marketing literature to overcome the ‘myopic’ concept of marketing. This new concept became known as the marketing mix.

2.2.1 The Marketing Mix

The development of the ‘marketing mix’ came about in the early 1950s via Borden’s (1964) notion of ‘marketing ingredients’ or marketing as being a ‘mixer of ingredients’. Borden listed twelve such ingredients, namely: product planning, pricing, branding, distribution channels, personal selling, advertising, promotions, packaging, display, servicing, physical handling, and fact finding and analysis. Borden tried to combine the twelve ingredients, based on a suggestion from Culliton (1948), into a ‘marketing mix’ that would increase an organisation’s profitability (Grönroos 1994).

The marketing mix concept was reintroduced by McCarthy in the early 1960s. This reintroduction was based on managing the four Ps (Product, Price, Place and Promotion). McCarthy’s (1964) work summarised the notion of ‘marketing ingredients’. Soon, this concept became the most popular classification continuum for the marketing mix, because it covered all aspects of marketing at the time. Kotler (1972; 2003) regards the mix principally as an optimisation based theory, providing suggestions about how to achieve the most advantageous mix of the four Ps that act as controllable parameters, likely to influence consumer buying and decision-making.

---

6 Borden discussed this mixture of ingredients in his article ‘The Concept of the Marketing Mix’ in 1964.
7 For a more detailed discussion on the original twelve ingredients of the marketing mix, see Grönroos (1994).
8 Even though Borden published his article on the marketing mix in 1964, he addressed the concept of the marketing mix on several occasions, for example in 1953 in his American Marketing Association presidential speech.
processes (see also Webster 1992). Sheth et al. (1988) confirms this and argues further that the mix is a key element in the managerial school of marketing. According to Grönroos (1994), the main reasons the marketing mix dominated the marketing literature at that time are as follows:

1) The concept characterised marketing as an easy activity to perform.
2) It allowed the separation of marketing from other organisational activities (for example, sales), and, hence, encouraged the delegation of marketing activities to specialists.
3) The elements of the marketing mix can change an organisation’s competitive situation.

The concept of the marketing mix is not without its critics (see for example, Booms and Bitner 1982; Kent 1986; Rafiq and Ahmed 1995). Much of the criticism is based on the point of view that the marketing mix initially included a list of twelve elements, but was later oversimplified by McCarthy in 1964. Criticism of the model began when Kent (1986) contended that the marketing mix framework was too simplistic, and could be misleading as the ultimate strategic model to be applied in any organisation. Later Webster (1994) raised a different point when he claimed that the marketing mix did not emphasise the importance of buyer-seller relationships in industrial marketing.

Möller (2006:4) summarised the criticism of the marketing mix framework according to four key aspects:

1. The mix does not consider customer behaviour, but instead is internally oriented.
2. The mix regards customers as passive; it does not allow interaction and cannot capture relationships.
3. The mix is devoid of theoretical content; it works primarily as a simplistic device for focusing the attention of management.
4. The mix does not offer help for personification of marketing activities.

Regardless of all the criticism of the marketing mix, Grönroos (1994:4) argued that the framework remained the dominant marketing paradigm, and had become
“…the unchallenged basic model of marketing, overpowering previous models and approaches”. These models included the organic functionalist approach, the systems-oriented approach and parameter theory. Moreover, Grönroos (1994) quoted the most widely accepted definition of marketing, at the time, from the AMA (see section 1.2) in support of his claim. Grönroos (1994) also noted that a list can never include all the relevant elements, does not fit every situation, and can become obsolete. Other marketing academics (for example, Kotler 1986; Baumgartner 1991; Booms and Bitner 1982) stated, that more Ps should be added to the marketing mix to overcome all the criticism, either to modify it or to make it applicable to new areas of marketing. Subsequently, many attempts were made to add to and develop the marketing mix theory, but with little success. For example, MaGrath (1986) proposed the addition of three further Ps (personnel, physical facilities and process management), while Kotler (1986) suggested adding public relations and political power. Baumgartner (1991) put forward fifteen Ps, Judd (1987) argued that only one element (people) should be added to the mix, and Goldsmith (1999) suggested expanding the mix to eight Ps (adding participants, physical evidence, process and personalisation). Booms and Bitner (1982) proposed the most successful attempt to modify the four Ps model when they added three additional Ps to fit service marketing (people, physical support and process). Booms and Bitner’s (1982) additional three Ps are still evident in all modern academic marketing books (Möller 2006).

Debates about the marketing mix forced marketers to question the applicability and validity of the “holy” mix (Kent 1986:146). Vargo and Lusch (2004) argued that attention should be focused on the customer instead of the marketing mix, because the only purpose of the organisation is to satisfy customer needs. In an effort to introduce a new marketing paradigm, Vargo and Lusch (2004) labelled the period from 1980 to 2000 as being characterised by ‘Marketing as a Social and Economic Process’, a replacement of the pre-1980 marketing mix era. They argued that the ‘dominant logic’ shift in this period was towards marketing as primarily a social and economic process. They concluded, “…perhaps the central implication of a service-

---

9 For a full discussion of these theories, see Grönroos (1994).
10 For more detailed discussion see Möller (2006), who provides an up-to-date view of the existing debate surrounding the marketing mix based on a review of academic perspectives from five marketing management sub-disciplines.
11 Appendix Four elaborates on the strength and weakness of the marketing mix.
12 For a detailed discussion on this topic see Lusch and Vargo (2006).
centred dominant logic is the general change in perspective” (Vargo and Lusch 2004:12).

In summary, marketing has evolved from the ‘classical’ four Ps framework to centre around personalised relationships. Consequently, a new concept within marketing evolved in the last twenty-five years, known as relationship marketing.

2.3 The Emergence of Relationship Marketing

The concept of relationship marketing was first discussed by Berry in 1983 as part of a conference paper on service marketing. It was defined as “attracting, maintaining and in multi-service organisations enhancing customer relationships” (Berry 1983:25). Berry (1983) recognised that customer acquisition was and would remain part of the marketer’s responsibilities, but also emphasised that a relationship view of marketing implied that retention and development were of equal or even greater importance to the organisation in the long term. However, the concept of relationship marketing did not attract broader attention until the 1990s (Grönroos and Ravald 1996).

Marketing researchers (for instance, Berry 1983; Grönroos and Ravald 1996) argued that the need for a relational paradigm in marketing arose at the point when the changing business context had constrained organisations to the extent that the only way they could survive in the marketplace was to cut costs. The shift in focus was further fuelled by the realisation that retaining customers is more profitable than allocating huge marketing budgets to go after countless numbers of new customers. Therefore, keeping existing customers and market share, rather than looking for new customers and new markets, became paramount (see also Buttle 1996).

Berry (1995:236) continued his earlier work when he described relationship marketing as a “new-old concept”, meaning that “the idea of a business earning the customers’ favour and loyalty by satisfying their wants and needs was not unknown to the earliest of merchants”. At the centre of the relationship marketing perspective is the idea that customers have continuing value over the period they stay in a relationship with a specific company. Therefore, the focus is on the relationship rather

---

13 Appendix Six provides a review of the key propositions if relationship marketing over the past thirty years.
than on individual transactions. The duration of the exchange is a core element in distinguishing these two foci: a transactional exchange involves a single, short-term exchange with a distinct beginning and ending. In contrast, a relational exchange involves multiple linked exchanges extending over time and usually involves both economic and social bonds.

Relationship marketing was picked up, during the early 1990s, by marketing academics and organisations as a response to the shift in business contexts, away from mass marketing towards personalised or one-to-one marketing by building personal relationships. This shift caused a great number of organisations to restructure, establish partnerships and adopt cost reduction measures whilst devising strategies to retain their customers (Morgan and Hunt 1994; Palmer 1996). As a result, relationship marketing emerged as a promising way for marketing to enhance social relations with customers. In other words, relationship marketing was viewed as a method for organising marketing both within and outside the organisation. The basic proposition of relationship marketing is that selling organisations should take a long-term view of customer relationships, to ensure that those customers who are converted are also retained.

Several authors have embraced relationship marketing as a paradigm shift in marketing theory: “… we have to realise that it is a new paradigm, not just a new model” (Grönroos and Ravald 1996:315; see also, Gummesson 1996; Aijo 1996; Sheth and Parvatiyar 2001). Although the concept has been largely accepted in marketing, Backhaus (2000) formulated two crucial conditions that must hold for this new concept to be acknowledged as a paradigm shift in marketing theory. Firstly, a new paradigm must encompass all the theories and issues in the field; and secondly, novel methods and tools for theoretical analysis must be provided by the new paradigm. Relationship marketing is not a useful model in certain market exchanges (for example, consumer fast goods markets, when transactional strategies are more suitable), and it draws on pre-existing constructs and solutions (such as customer loyalty, trust, commitment and service quality) rather than creating new ones.

14 This topic will be discussed in detail in section 2.5.1.
15 This was also proposed by Lovelock in a keynote speech in the SERVSIG conference (2005, Singapore).
The development of relationship marketing theory and practice can be examined from a number of different perspectives (see Table 2.1), demonstrated by the existence of three schools of thought (Palmer et al. 2005:313): the Nordic school, the Industrial Marketing and Purchasing (IMP) Group and the Anglo-Australian approach (the Cranfield school).

Table 2.1: Comparison between the Major Schools of Relationship Marketing

<table>
<thead>
<tr>
<th>Key component</th>
<th>IMP group</th>
<th>Nordic school</th>
<th>Anglo-Australian approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis</td>
<td>Relationship between firms</td>
<td>Service</td>
<td>Service/quality/marketing</td>
</tr>
<tr>
<td>Time-frame</td>
<td>Short- and long-term</td>
<td>Long-term</td>
<td>Long-term</td>
</tr>
<tr>
<td>Organisation</td>
<td>N/A</td>
<td>Functional and cross-functional</td>
<td>Cross-functional, Process-based</td>
</tr>
<tr>
<td>Basis of exchange</td>
<td>Product/service, information, financial, and social</td>
<td>Less sensitive to price</td>
<td>Perceived value</td>
</tr>
<tr>
<td>Product/quality dimension</td>
<td>Technological</td>
<td>Interaction quality</td>
<td>Function of value and cost of ownership</td>
</tr>
<tr>
<td>Measurement</td>
<td>Customer profitability</td>
<td>Quality, value, customer satisfaction</td>
<td>Customer satisfaction</td>
</tr>
<tr>
<td>Customer information</td>
<td>Varies by relationship stage</td>
<td>Individual</td>
<td>Customer value and retention</td>
</tr>
<tr>
<td>Internal marketing</td>
<td>N/A</td>
<td>Substantial strategic importance</td>
<td>Integral to the concept</td>
</tr>
<tr>
<td>Service</td>
<td>Close seller/buyer relations</td>
<td>Integral to product</td>
<td>Basis for differentiation</td>
</tr>
</tbody>
</table>

(Source: Adapted from Palmer et al. 2005)\textsuperscript{16}

**The Nordic School**

The Nordic School was originally developed for services marketing research during the early 1980s, and was characterised by a shift in focus from ideas associated with traditional marketing concepts (Grönroos 1994; Gummesson 1996). These shifts included: stressing the importance and relevance of services marketing and industrial marketing over customers’ goods marketing; a gradual shift away from an emphasis

\textsuperscript{16} Palmer et al. based their analysis on the work of: Aijo (1996); Christopher (1996); Christopher et al. (1991); Ford (1994); Grönroos (1994); Kotler (1992); Ravald and Grönroos (1996); Turnbull et al. (1996).
on goods and services towards an emphasis on customer value; the integration of the marketing department function with other organisational functions and with general management; and less emphasis on quantitative research than on qualitative research (Egan 2004). According to the Nordic school approach, managing services was at the centre of relationship building and maintenance, although it was supported by other elements such as the construction of networks, the establishment of strategic alliances, the development of a customer database or what is referred to as Customer Relationship Management (CRM)\textsuperscript{17} and the management of relationship-oriented marketing communications (Grönroos and Ravald 1996).

**The IMP Group**

During the 1980s, the Industrial Marketing and Purchasing (IMP) group picked up on relationship marketing as a way to understand business-to-business markets, emphasising the specificity of the business-to-business sector and the necessity for new marketing techniques and the development of management tools. In such markets, transactions are not isolated, but occur instead as part of a continuous stream of interactions between organisations. The interactions between companies and many individuals establish the relationship, and the multiple relationships between buyers, suppliers and other firms aggregate into a network (Palmer et al. 2005:320). Competitive advantage can be gained from an adequate selection process and management of network partners.

**The Anglo-Australian approach**

The Anglo-Australian approach is based on the work of Christopher, Payne and Ballantyne, and emphasises the integration of quality management, services marketing concepts and customer relationships economics (Christopher et al. 2002:4). From this perspective, relationship marketing entails the following elements: 1) emphasis on establishing relationships, rather than a simple transactional approach to marketing, 2) understanding of the economics of customer retention, thereby ensuring that resources are properly allocated between the two tasks of retaining existing

\textsuperscript{17} Christopher et al. (1991) embraced CRM as the practical implementation of relationship marketing, containing technological tools in both the hardware and software sides. The aim of CRM is to help managing large number of customers’ data. Therefore, it is beyond the scope of this thesis to discuss the emergence of CRM in relationship marketing theory.
customers and attracting new ones, 3) a recognition of the important role of internal marketing in achieving external marketing success, 4) an extension of the principles of relationship marketing to encompass a range of diverse marketing domains (for example, customer markets, internal markets, influence markets and referral markets), 5) an acceptance that the traditional marketing mix concept (the four Ps\textsuperscript{18}) does not adequately capture all the key elements which must be addressed in building and sustaining relationships with customers, and 6) a consideration of marketing as a cross-functional process (Christopher \textit{et al.} 2002; Palmer \textit{et al.} 2005).

Although these schools of thought appear to have developed independently (see Table 2.1), a conflict occurred between the Nordic school and the IMP group when each claimed to have contributed the most to the foundation of relationship marketing; hence, each school defined relationship marketing according to its own perspective. The Anglo-Australian school initially followed the Nordic school in its ideas, but later attempted to differentiate itself by highlighting its own contribution to the subject (for example, the other schools’, such as the Nordic school, focus on quality management in contrast to the IMP’s emphases on customer profitability). There was also a later debate surrounding the origin of relationship marketing and whether it was first discussed in Europe or in North America; this will be discussed later in section 1.5.2.

Berry \textit{et al.} (1991) argue that relationship marketing is the preferred concept for services marketing (see also, Grönnroos 1994). Sheth and Parvatiyar (1995) built on Berry \textit{et al.}’s (1991) work, noting that by engaging in a long-term relationship with organisations, customers or other companies are able reduce the complexity of buying situations. In contrast, Palmer (1996) stated that customers often enter into relationships with marketers in order to increase the resulting number of choices available to them.

\textsuperscript{18} See section 2.2.1.
2.4 Theoretical Foundations of Relationship Marketing

Marketing academics (for example, Grönroos 1994; Möller and Halinen 2000) debated the theoretical foundations that have contributed to the development of relationship marketing. For instance, Gummesson (1994) proposed that theoretical models contributing the most to relationship marketing were: service marketing; the network approach to industrial marketing; quality management; and, indirectly, organisational theory. In his discussion about the theoretical foundations of relationship marketing, Grönroos (1994) argued that the main bases of relationship marketing are: the marketing of services; the network approach to industrial marketing; customer relationship economics; and market economies. Möller and Halinen (2000) have further developed and expanded on both Gummesson (1994) and Grönroos’s (1994) ideas to include database marketing and direct marketing as an additional key theories contributing to the development of relationship marketing as its illustrated in Figure 2.2 and discussed straight after.

Figure 2.2: The Disciplinary Roots of Relationship Marketing

(Source: Möller and Halinen 2000:32)

Building on the preceding discussion, the modern frameworks which could be viewed as the forerunners of relationship marketing are: the business marketing and interaction network approach; the services marketing approach; marketing channels;
and database and direct marketing. These theoretical models of relationship marketing are discussed below.

2.4.1 Business Marketing and The Interaction Network Approach

The business marketing and interaction network approach (the Nordic school) is mainly devoted to industrial marketing, and was developed in Sweden at Uppsala University in the 1960s (Grönroos 1994). Later it was adapted by the IMP Group in the early 1980s. The model developed by the IMP Group was based on the notion that various interactions take place in a network of buyers and sellers of industrial goods and services, including the flow of goods and services and financial and social exchanges (Johanson and Mattsson 1985). According to Johnson (1986:25) the network approach represents the “flow of goods and information as well as financial and social exchanges taking place in the network”. This applies mostly in business-to-business (B2B) and industrial situations, where such relations lead to shared value creation for both the seller and the buyer.

2.4.2 The Services Marketing Approach

The services marketing approach can be traced back to the mid 1970s, when Shostack (1977) published an article in the *Journal of Marketing* promoting service marketing as an interesting area of research (Fisk *et al.* 1994). This approach is based on the notion that the customer of a service typically interacts with systems, physical resources and employees of the service provider (see also Håkansson 1982; Zeithaml *et al.* 1985; Gummesson 1997). Hence, the customer becomes involved in the production of the service, a process which Langeard and Eiglier (1987) refer to as 'servuction'; their work was based on Gummesson’s (1978) research, where he argued that the marketing approach is focused on facilitating interactions with customers during their consumption process rather than on the exchange itself. This is also aligned with Grönroos’s (1978:596) argument that:

---

19 Gummesson (1998) provided a full ‘route’ to achieving total relationship marketing, this is illustrated in appendix Eight.

20 Eiglier and Langeard (1987) were the first to consider incorporating consumption within the services marketing field.
“The consumers are actively taking part in shaping the service offering, i.e. in product development ... the consumer himself can be considered part of the service he buys and consumes.”

Later, Grönroos (2006) argues that the services marketing approach is vital to organisations because marketers can observe consumption patterns during service encounters. This is a consequence of the fact that “…given the procedural nature of services, it follows that the consumption and production of services are at least partly simultaneous processes, and that the service provider at least partly enters into the consumption sphere. The production of services is an ‘open system’ for the consumer, but likewise the consumption of services is an open system for the service provider” Grönroos (2006:319).

2.4.3 Marketing Channels

Academic research involving marketing channels often involves examining how actors in these channels behave, and how and why various forms of channels evolve (Möller and Halinen 2000). The basic prescriptive goal for marketing channels is to define efficient relational forms between channel members. This goal is primarily theory-driven, attempting to combine economic, political (or power dependency) and social aspects (cooperation, trust, commitment, communication, and conflict behaviour).

It can be argued that marketing channels rely on transaction cost theory, relational law, social exchange theory, political economy, and power and conflict in organisational sociology (Anderson and Narus 1990; Williamson 1985). According to Möller and Halinen (2000) there are three essential points that should be considered when discussing the marketing channels approach: (1) both economic and political aspects and their interactions must be considered in examining channel behaviour; (2) a focal channel/dyad is the recommended unit of analysis; and (3) complex relationships cannot be understood outside of their context, since the ‘dyadic behaviour’ and the ‘channel’ are reciprocally interrelated (Möller and Halinen 2000).
2.4.4 Database Marketing and Direct Marketing

As discussed previously, Möller and Halinen (2000) agreed with Gummesson (1996) and Grönroos (1994) in their early views about the foundation of relationship marketing. However, they also argued that database marketing and direct marketing should be considered when discussing relationship marketing, and came to the conclusion that there is no universal theory that encompasses all the foundations of relationship marketing. Consequently, Möller and Halinen’s (2000) main thesis was that the process of establishing business relationships could not be characterised as a process of actions and reactions, but rather of interactions that happen at multiple levels in the organisation. This approach was neither purely management-focused nor consumer-driven; rather it espoused an inter-organisational orientation in its description of marketing processes (Möller and Halinen 2000).

2.5 Defining Relationship Marketing

A number of marketing academics have debated how to define relationship marketing. They often either attempt to provide a holistic definition (see for example, Gronroos 1994) or to define the term from a specific perspective (see for instance, Christopher et al. 1991). Harker (1999:13) examined the reasons for these different approaches, and summarised them as follows:

1. Because it is an emergent perspective, relationship marketing has only had a relatively short lifetime in which to develop into a fully-formed paradigm.
2. Contributors to the development of relationship marketing theory are extremely varied, both in terms of socio-political heritage and academic background.

Table 2.2 (page 34) summarises the key definitions of relationship marketing mentioned in the literature (adapted from Harker 1999). Some of the key definitions noted earlier will be discussed in detail in the following section. Moreover, the main key themes that appear in the definitions of relationship marketing are identified as: attracting new customers; retaining existing customers; mutual relational exchange; long-term relationships; added value; strategic focus; and ongoing assessment. These
themes vary depending on the researchers’ discipline and the time when the definition was put forward.

The definitions offered in Table 2.2 derive from a number of different research perspectives, and, hence, they focus on different elements within relationship marketing. For instance, Grönroos (1994) in his definition proposed a systematic method for the operation of relationship marketing. Buttle (1996) adapted this definition with a focus on strategic positioning. Gummesson (1994) focused on long-term interactivity and profitability between the organisation and its customers. O’Malley and Tynan (2006:33) stated that “which definition one chooses is likely to be influenced by the choice of empirical context, the focus of the study (for example, practical or philosophical), as well as the research stream to which the author belongs”. This thesis follows the definition proposed by Grönroos (1994) because of its wide acceptance and the applicability of this definition to the current research setting.

Despite the diversity in the academic definitions (see Table 2.2), O’Malley and Tynan (2006:33) identify four emergent issues as follows:

- Relationship marketing refers to commercial relationships between economic partners, service providers and customers at various levels in the marketing channel and the broader business environment.
- This recognition results in a focus on the creation, maintenance and termination of these commercial relationships, in order that parties to the relationships achieve their objectives (mutual benefit).
- Profit remains an underlying business concern and relational objectives are achieved through the fulfilment of promises.
- Trust is essential to this process of relationship development and centres upon the keeping of promises.
Chapter Two – The Development of the Relationship Marketing Concept

<table>
<thead>
<tr>
<th>Author</th>
<th>Source</th>
<th>Definition</th>
<th>Author</th>
<th>Source</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwyer et al. (1987)</td>
<td>Buyer/Seller</td>
<td>Longer in duration [than transactional marketing], reflecting an on-going process.</td>
<td>Grönroos (1994)</td>
<td>Services Marketing</td>
<td>Relationship marketing is to establish, maintain, and enhance relationships with customers, and other partners, at a profit, so that the objectives of the parties involved are met.</td>
</tr>
<tr>
<td>Christopher et al. (1991)</td>
<td>Services Marketing</td>
<td>Relationship marketing has as its concern the dual focus of getting and keeping customers.</td>
<td>Buttle (1996)</td>
<td>General Management</td>
<td>Relationship marketing is concerned with the development and maintenance of mutually beneficial relationships with strategically significant markets.</td>
</tr>
<tr>
<td>Shani and Chalasani (1992:34)</td>
<td>Interaction/Network</td>
<td>An integrated effort to identify, maintain and build up a network with individual consumers and to continuously strengthen the network for the mutual benefit of both sides, through interactive, individualised and value-added contacts over a long period of time.</td>
<td>Takala and Uusitalo (1996)</td>
<td>General Management</td>
<td>Customer relations are emphasised. The focus is on the profitable commercialisation of customer relationships, and the pursuit of individual and organisational objectives. Particular stress is placed on long-term and enduring relationships with customers.</td>
</tr>
<tr>
<td>Source</td>
<td>Type</td>
<td>Definition</td>
<td>Reference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathmarajah (1993)</td>
<td>Buyer/Seller</td>
<td>The process whereby the seller and the buyer join in a strong personal, professional, and mutually profitable relationship over time.</td>
<td>O’Malley et al. (1997)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morgan and Hunt (1994:22)</td>
<td>Buyer/Seller</td>
<td>Relationship marketing refers to all those activities directed towards establishing, developing and maintaining successful relational exchanges.</td>
<td>Ballantyne (1997)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harker (1999:16)</td>
<td>General Management</td>
<td>Relationship marketing occurs when an organisation engages in proactively creating, developing and maintaining committed, interactive and profitable exchanges with selected customers or partners over time.</td>
<td>Sheth and Parvatiyar (2000)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Relationship marketing involves the identification, specification, initiation, maintenance and (where appropriate) dissolution of long-term relationships with key customers and other parties, through mutual exchange, fulfilment of promises and adherence to relationship norms in order to satisfy the objectives and enhance the experience of the parties concerned.

Relationship marketing is an emergent disciplinary framework for creating, developing and sustaining exchanges of value between the parties involved, whereby exchange relationships evolve to provide continuous and stable links in the supply chain.

Relationship marketing is the on-going process of engaging in cooperative and collaborative activities and programs with immediate and end-user customers to create or enhance mutual economic value, at a reduced cost.

(Source: adapted from Harker 1999)
As shown in Table 2.2, there are numerous ways of defining relationship marketing. In an attempt to provide a general definition to suit all the various disciplines connected to relationship marketing, Grönroos (1994) proposed a definition based on his earlier description in 1990. Grönroos (1994:14) viewed relationship marketing as a process that involves establishing, maintaining and enhancing long term relationships with customers. His definition implies that the relationship is a reciprocal process with mutual benefits for both parties over the long term. Hence, the relationship is a dynamic process with stability as an important goal. Therefore, a fundamental principle is that organisations engage in relationship marketing, firstly, because it enhances customer satisfaction, and, secondly, because it helps to improve other long-term results (Bejou et al. 1998).

Shani and Chalasani’s (1992) definition is almost identical to Grönroos’s (1990) formulation; both definitions state the importance of individuality in buyer-seller relationships (Peterson and Smith 1995). In contrast, Morgan and Hunt (1994) highlighted the importance of relationship trust and commitment in their definition. However, several marketing academics criticised this description. Roa and Perry (2000) argued that Morgan and Hunt’s (1994) definition is limited because some of the details in relationship marketing trees may be lost. For instance, the definition does not specify the nature or purpose of the relational exchanges. Furthermore, Peterson (1995) criticised Morgan and Hunt’s (1994) definition and argued that they might be guilty of an error of commotion in terms of the differences between ‘relational exchanges’ and ‘transactional exchanges’.

Harker (1999) attempted to identify seven conceptual categories extracted from twenty-six definitions of relationship marketing in the literature. Harker’s (1999) categories were: creation, development, maintenance, interactive, long-term, emotional content, and output. This emergent definition emphasised the management of a number of relationships. However, Harker’s (1999) definition is merely a summary of all the previous definitions, which makes it very broad in scope. It lacks any focus on a particular aspect of relationship marketing; in other words, it is theory driven and cannot easily be implemented.

---

21 Grönroos’ (1994) definition is one of the most often-quoted definitions of relationship marketing.
Gummesson (1997:270) pointed out that no definition of relationship marketing can ever be precise and all-inclusive because social phenomena are not in themselves precise. He argued that definitions of relationship marketing can only be used as vehicles for thought, as perspectives, or as indicators of essential properties of a phenomenon. It is difficult, if not impossible, to form a holistic, operational and all-encompassing definition because the boundaries are limitless rather than clearly delineated, and perspectives within the research field differ widely. In short, as with any other social phenomenon, relationship marketing is vague and ambiguous in nature, making it difficult to define and conceptualise.

2.5.1 Relationship Marketing: A Paradigm Shift

The debate in the marketing literature about whether relationship marketing is a paradigm shift or an old phenomenon has attracted significant attention from numerous marketing academics (for instance, Gummesson 1994; Petrof 1998). On the one hand, several support relationship marketing as a paradigm shift, which occurred due to a movement from a transaction-based approach towards a relational approach (Grönroos 1994, 1997; Gummesson 1994, 1996). On the other hand, different researchers contend that relationship marketing is not a paradigm shift because it has its roots in the marketing literature (see for example, Egan 2004 and Petrof 1998); therefore, “relationship marketing is an old idea but a new focus … the forefront of services marketing practice and academic research” (Berry 1995: 236).

In particular, Gummesson (1994) advanced an argument in support of relationship marketing as a paradigm shift. He offered a thirty Rs approach within an operational perspective. The approach emphasised customer retention, the value of interaction, operational and practical aspects, linkage to organisational structure and management, and collaboration to compete. However, he also noted that “…the claim of a paradigm shift in marketing was controversial” (Gummesson 1997:267). As a result, relationship marketing can be seen as a paradigm shift because it provides a new foundation for thinking. As a counterbalance Gummesson (1994) also argued that existing knowledge can be incorporated into a new paradigm, but if a new model cannot provide its own novel foundation, it is not possible to claim a paradigm shift; the new approach must be applicable in action. These claims seem partially contradictory, bearing in mind that relationship marketing is epistemological (i.e. still
attempting to establish its foundation and create a valid knowledge base) according to Gummesson (1994).

This thesis takes the stand that relationship marketing is neither a new paradigm nor a shift in an existing one. This is because that the elements that contribute to the foundation of the relationship marketing philosophy remain at the core of marketing thought (Grönroos 1994). These are internally consistent, and unite harmoniously in order to providing a marketing continuum to propel an organisation into well-sustained growth. Therefore, to claim a paradigm shift, relationship marketing would have to be revealed as a phenomenon that does not revolve on an existing fulcrum (the marketing mix, on which the approach currently rests). From the perspective of this thesis, such a demonstration of independence is not occurring. Marketers will continue to introduce new products, set prices, find distribution channels and promote their products; clearly consideration is being given to customers in these processes, but this is consistent with the current marketing orientation and not because of any paradigm shift. Therefore, relationship marketing should not be viewed as a new paradigm. Instead, it should be viewed as an improved and evolving paradigm with a new name.

2.5.2 Relationship Marketing as a European or American Model

As mentioned earlier, there is a debate among academics as to whether relationship marketing is a new paradigm or a new name for an old phenomenon. Takala and Uusitalo (1996:45) attributed the emergence of relationship marketing solely to northern European researchers, claiming:

“Researchers in northern Europe and within the fields of industrial and service marketing found in the 1970s that a new concept of marketing was needed, one which stresses the relationship between the seller and the customer.”

Grönroos (1994) credited the emergence of relationship marketing to European and Australian academics, but he also gave some of the credit to North American researchers and the IMP Group in Europe. Gummesson (1997) suggests that both services and quality are viable areas of research and practice in North America, but pointing out that this has not yet occurred with the network approach to industrial marketing (see also, Palmer et al. 2005). What is evident in this perspective
is the fact that Europe is leading the development of the theory, but research and literature are by no means exclusive to it (see for example, Håkansson 1982; Johanson and Mattsson 1985).

This argument probably stems from the contributions made by European researchers, shown in the interpretations of the history of services marketing presented by Berry and Parasuraman (1993) and Fisk et al. (1994). This interpretation contradicted the previously-accepted scenario wherein US thinking about marketing was better known than its European equivalent (Gummesson 1997; Palmer et al. 2005).

It can be argued that current thinking about relationship marketing has become universal through effective distribution via journals, publishers, associations, and conferences. Relationship marketing and its roots are seen as European models because European thinking in these fields seems to have been disseminated more effectively than that emanating from the United States.

From an analytical point of view, the idea that relationship marketing is an old phenomenon is not specifically European or American. It may be a new current direction in the literature, but it is accepted that the practices associated with relationship marketing have long been applied in many countries, as well as by previous generations (see for instance, Grönroos 1994). However, it is acknowledged that Europeans did a great deal of work to create the term relationship marketing as it is known today – but this doesn’t make the phenomenon, or for that matter the model, exclusively a European creation.
2.6 The Core Elements of Relationship Marketing

The relationship marketing concept, as discussed earlier, is based on the creation of a mutual long-term relationship between the engaged parties (see for example, Grönroos 1994, 2000; Shani and Chalasani 1992; Palmer et al. 2005) in conjunction with certain concepts designed to fulfil the needs and wants of the parties engaged in the relationship. These features, such as the concept of trust, are discussed next.

2.6.1 Trust

Trust has been defined as “a willingness to rely on an exchange partner in whom one has confidence” (Moorman et al. 1993:3), and it is viewed as an essential ingredient for successful relationships (Berry 1995; Dwyer et al. 1987; Morgan and Hunt 1994). The development of trust occurs when individuals have “confidence in an exchange partner’s reliability and integrity” (Morgan and Hunt 1994:23). However, this development does not take place over a short period; time is needed to establish trust (Garbarino et al. 1991; Morgan and Hunt 1994; Garbarino and Johnson 1999). Therefore, organisations should expect that it might take a long time to capture customers’ trust (Malecki and Tootle 1996; Macintosh 2002).

The concept of trust has been discussed from many different perspectives. Economists tend to view trust as either calculative or institutional (Korczynski 2000), psychologists tend to focus on the attributes of the trustors and the trustees (Rotter 1980), and sociologists often find trust in the social bonds resulting from relationships between people (Wicks et al. 1999). Morgan and Hunt’s (1994) work is considered to be the foundation of trust and commitment research within marketing; they proposed some key mediating variables for relationship marketing (see Figure 2.3).

22 The concept of trust and will be discussed in greater detail in the following chapter.
There are many different levels of trust. Perhaps the most common types of trust are: multi-level trust (between individuals, groups, firms and so on); trust within and between organisations; and new or emerging trust. Nevertheless, the risk involved in any exchange or relationship between organisations and customers depends mainly on the form and depth of the relationship between the service provider and its customers (Sheppard and Sherman 1998; Macintosh 2002). Furthermore, trust has
been recognised as a means for reducing operational problems, both between employees and managers and across organisations (Rousseau et al. 1998).

Trust is the key element binding relationship marketing together leading to relationship commitments. Therefore, the concept will be discussed at greater length in the next chapter.

2.6.2 Commitment

Commitment is seen as a central element in creating an effective relationship because it leads to important outcomes such as decreased turnover (Porter et al. 1974; see Figure 2.3), higher motivation (Farrell and Rusbult 1981), and increased organisational citizenship behaviours (Williams and Anderson 1991). However, it also results from organisational support (Eisenberger et al. 1990). Morgan and Hunt (1994:23) defined commitment as “an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it.” However, it has been noted that commitment in a relational exchange is an important element in relationship marketing. Moreover, commitment between two exchange parties should be based on trust as an antecedent. The seller should commit to deliver a high level of quality and to stabilise the relationship in the long run, and the customer should commit to maintaining and value such a relationship (Morgan and Hunt 1994). In other words, the future prospect of a buyer-seller relationship is based on commitment.

Summary

The shift from transactional-based marketing to social and relational marketing, as discussed earlier, illustrated the significant role of the relationship marketing concept in the modern marketing literature. Nevertheless, much of the published work in the area of relationship marketing has been criticised because it gave the impression that the model is suitable for many marketing contexts, even though little empirical evidence has been provided.

The next chapter explores the concept of trust and its development across various areas of the academic literature. It will go on to discuss the important of this concept within marketing research.
3.1 Introduction

The concept of trust has been examined in various contexts over the years; for instance, in industrial buyer-seller relationships (Doney and Cannon 1997), distribution channels (Dwyer et al. 1997), strategic alliances (Das 1998) and marketing research (Moorman et al. 1992). Within these differing contexts academics have examined trust from several perspectives. For example, psychologists defined trust as a foundation for social exchange between interacting parties to examine why and how people trust within a social context (Spekman 1988), while economists conceptualised trust in terms of economic theories such as the prisoner’s dilemma and game theory (Axelrod 1984). General research on trust also viewed the concept as a foundation for interpersonal relationships (Rempel et al. 1985; Svensson 2001) and as the basis for stability in organisational operations (Ennew and Sekhon 2003).

The previous chapter investigated the concept of relationship marketing and how it came to prominence. This chapter will discuss the concept of trust – its components, forms and outcomes. The discussion will also highlight different perspectives on trust, and will conclude that trust is vital for creating long-term relationships. Finally, it will provide a primary base for proposing a conceptual framework for trust.
3.2 The Concept of Trust

It is widely agreed that trust is an elusive concept that means different things to different people, with the consequence that it is relevant to several academic disciplines (Nootboom 2002; Lane and Bachmann 1998). For instance, economists tend to focus on the cost or cheat factor in developing trust, and also claim that trust may be linked to precise situations in which the perceived risk depends on the behaviour of the different parties involved (Korczynski 1994). Rousseau et al. (1998:395) stated, from a psychologist’s point of view, that “…the meaning of trust, as the willingness to be vulnerable under conditions of risk and interdependence, is a psychological state that researchers in various disciplines interpret in terms of ‘perceived probabilities’, ‘confidence and positive expectations’.

Because of this variation in perspectives among trust researchers, it can be argued that, trust as a concept, is complex and has several meanings, and consequently there is no universal definition of the concept (Rousseau et al. 1998). However, there are several characteristics that span the different discipline domains; Mayer et al. (1995) identified five key issues that summarise the difficulties in conceptualising trust:

- The complexity of defining the concept of trust.
- Confusion in agreeing on the antecedents and corollaries of the concept of trust.
- Vagueness in expressing the correlation between trust and the associated risk.
- Confusion in levels of analysis due to the lack of specificity of trust referents.
- Failure to provide an accurate identification of the attributes and behaviours of both parties (the trustor and trustee), to which they behave accordingly.

From the above, it is clear that the concept of trust is difficult to explore, and as a result it is hard to measure. Nevertheless, several studies have managed successfully to provide reliable qualitative and empirical evidence on how trust is perceived in the various domains (Young 2006); these works will be discussed in greater detail later in this chapter, as will the different definitions, typologies and classifications of trust.
3.3 The Meaning of Trust

The literature on trust demonstrates that the concept of trust is diffuse. According to Williamson (1993:453), “trust is a term with many meanings”, while White (1992; 174) sees it as “a term for a clustering of perceptions”. The compound nature of the concept of trust and the vagueness within the concept is well stated by Porter et al. (1974:497), who propose:

“Trust … tends to be somewhat like a combination of the weather and motherhood; it is widely talked about, and it is widely assumed to be good for organizations. When it comes to specifying just what it means in an organisational context, however, vagueness creeps in.”

From the above quotation it is clear that the meaning of trust differs in the literature according to the perspective from which it is originally defined. More specifically, most of the marketing literature on trust conceptualises and examines two main views; these are the calculative view (following an economic model) and the social and affective view (Huemer 1998). These two approaches can be seen as a platform for conceptualising and understanding trust within organisations.

Trust is often viewed as a key variable in the foundation of a relationship, and is an antecedent to the corollary of commitment, defined as “confidence in an exchange partner’s reliability and integrity” (Morgan and Hunt 1994:23). Trust is also defined as “the perceived credibility and benevolence of a target of trust” according to Doney and Cannon (1997:36). Another definition of trust has viewed it as “the confidence that the other party to an exchange will not exploit one’s vulnerabilities” (Korczynski 2000:4). A final alternative definition can be expressed as “… [the] willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform (or not perform) a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer et al. 1995:712).

---

1 Porter et al. (1975) clearly recognised the vagueness within the concept. However, trust does not essentially have to be well defined within the field of marketing.

2 This view is a mixture of the psychological and sociological schools of thought.
Therefore, capturing a universal definition is by no means easy because of the multiplicity of different perspectives. In addition, it must be borne in mind that definitions of trust in the literature tend to reflect the paradigms of the particular academic field of the researcher (Lewicki and Bunker 1995). For instance, while sociologists tend to see trust as structural in nature, several psychologists have defined trust as a personal attribute (Rotter 1967). Social psychologists are more liable to define trust as an interpersonal phenomenon (Svensson 2001), whereas economists tend to view trust more as a rational choice attitude (Williamson 1993).

From the discussion so far it is apparent that a universal definition of trust does not exist, and that there are competing definitions. These are summed up in the typology in Table 3.1.
<table>
<thead>
<tr>
<th>Author</th>
<th>Source</th>
<th>Definition</th>
<th>Author</th>
<th>Source</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis and Weigert</td>
<td>General management</td>
<td>Trust exists in a social system insofar as the members of that system act according to and are secure in the expected futures constituted by the presence of each other or their symbolic representations.</td>
<td>Zaheer and Venkatraman</td>
<td>General management</td>
<td>Trust reflects the extent to which negotiations are fair and commitments are upheld.</td>
</tr>
<tr>
<td>Koller</td>
<td>General management</td>
<td>A person’s expectation that an interaction partner is able and willing to behave promotively towards the person, even when the interaction partner is free to choose among alternative behaviours that could lead to negative consequences for the person. The degree of trust can be said to be higher the stronger the individual holds this expectation.</td>
<td>Mayer et al.</td>
<td>General management</td>
<td>Willingness of one party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.</td>
</tr>
<tr>
<td>Anderson and Weitz</td>
<td>General management</td>
<td>One party’s belief that its needs will be fulfilled in the future by actions undertaken by the other party.</td>
<td>Doney and Cannon</td>
<td>Marketing Buyer/seller</td>
<td>The perceived credibility and benevolence of a target of trust.</td>
</tr>
<tr>
<td>Anderson and Narus</td>
<td>General management</td>
<td>The organisation’s belief that another company will perform actions that will result in positive outcomes for the organisation, as well as not take unexpected actions that would result in negative outcomes for the organisation.</td>
<td>Rousseau et al.</td>
<td>General management</td>
<td>Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another.</td>
</tr>
</tbody>
</table>
### Chapter Three – The Concept of Trust

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Field</th>
<th>Definition</th>
<th>Author(s)</th>
<th>Field</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crosby <em>et al.</em> (1990:70)</td>
<td>Marketing Economic</td>
<td>A confident belief that the salesperson can be relied upon to behave in such a manner that the long-term interest of the customer will be served.</td>
<td>Lewicki <em>et al.</em> (1998: 439)</td>
<td>General management Psychology</td>
<td>Confident positive expectations regarding another’s conduct.</td>
</tr>
<tr>
<td>Morgan and Hunt (1994:23)</td>
<td>Marketing Buyer/seller Social exchange</td>
<td>Trust exists when one party has confidence in an exchange partner’s reliability and integrity.</td>
<td>Korczynski (2000:41)</td>
<td>General management Social exchange</td>
<td>Trust is the confidence that the other party to an exchange will not exploit one’s vulnerability.</td>
</tr>
<tr>
<td>Mohr and Spekman (1994:137)</td>
<td>General management Psychology</td>
<td>The belief that a party’s word is reliable and that a party will fulfil its obligation in an exchange.</td>
<td>Falcone and Castelfranchi (2001:236)</td>
<td>General management Psychology</td>
<td>Trust … is a mental state, a complex mental attitude of an agent x towards another agent y about the behaviour/action relevant for the result (goal) g. Trust is the mental counterpart of delegation.</td>
</tr>
<tr>
<td>McAllister (1995:25)</td>
<td>General management Social exchange</td>
<td>The extent to which a person is confident in, and willing to act on the basis of words, actions, and decisions of another.</td>
<td>McKnight and Chervany (2000:1)</td>
<td>General management Social exchange</td>
<td>The subjective assessment of one party that another party will perform a particular transaction according to his or her confident expectations in an environment characterised by uncertainty.</td>
</tr>
</tbody>
</table>
As can be noted from Table 3.1, Rousseau et al.’s (1998) definition of trust is one of the most quoted definitions in the psychology literature. Their definition lists two key dimensions of trust, namely vagueness and expectation. However, their definition does not consider the risk in a relationship incurred by creating trust. In an earlier work, Lewis and Weigert’s (1985) view of trust presents the idea that members of a system have expectations of their relationships within that system. Nonetheless, this definition (like that of Rousseau et al. 1998) seems to assume that customer’s expectations are always positive.

Morgan and Hunt’s (1994) definition implies a significant degree of reliance by all related parties. This involves a mutual relationship between the trustor and the trustee. Mayer et al. (1995) focus on vulnerability, willingness and expectations as the foundation for trust, with vulnerability representing the fact that losses can increase when trust is misplaced.

From a marketing perspective, Doney and Cannon (1997) provide a much simpler definition of trust; they focus on two main dimensions, credibility and benevolence. Although this definition is intended to describe trust, in fact it implies trustworthiness rather than trust (a more detailed discussion will follow later on in this chapter). McKnight and Chervany (2000:1) attempted to build on all the previous work; their definition captures two significant characteristics of trust. These are the confident expectation of a possibility of mutual benefits, and the uncertain environment in which trust can take place.

To put it briefly, as can be seen from Table 3.1 the majority of the definitions of trust contain three common themes, which Milne and Boza (1999) summarised as:

1. A level of interdependence between the trustor and the trustee.
2. Trust as a way to cope with risk or uncertainty.
3. A belief or expectation that the other party in a relationship will not take advantage of the vulnerability that arises when the risk of trust is accepted.

The first common theme is that trust implies interdependence, based on the analysis that the need to trust arises from the existence of social relationships, since individuals would not have a need to trust without such relationships (Lewis and Weigert 1985). Expectations about another person’s trustworthiness only become
relevant when an individual’s activities depend on the fact that the other individual cooperates or acts in a certain way (Lane and Bachmann 1998).

Trust can be related to relationship risk in situations where individuals stand to lose something, for example, reputation, information and so on (Mayer et al. 1995; Sztompka 1999). Therefore, trust is often associated with risk, but it is not treated from the same perspective (Mayer et al. 1995). Consequently, trust can be seen in terms of risk, since it relies on the readiness of the engaged parties to undertake risk (Luhmann 1988).

The third theme implies that a corollary of risk and uncertainty is vulnerability (Korczynski 2000). When forming trust in a new relationship, individuals expose themselves to the risk that the other party will fail to match with their preconceived expectations, which as a consequence implies vulnerability (Mayer et al. 1995). In this definition the level of each feature varies depending on the exchange partner’s characteristics, and, therefore, the formation of trust and the perception of the value of that trust changes accordingly (Korczynski 1994).

It can be argued that trust cannot be equated with confidence, since confidence applies to a situation in which there is no necessity for an individual to consider alternatives. Also, the definition implies that in situations of trust, risks are recognised and a conscious decision is made to accept these risks (McAllister 1995). Hence, in situations where confidence has been established, individuals will not consider alternative options and will simply accept all risks (Deutsch 1960; Luhmann 1988).

Owing to the different schools of thought within trust research, the concept of trust has been defined in various ways (Corritore et al. 2003). However, what is common across the various definitions of trust is that they all view trust in terms of a trustor’s psychological state, such as confidence (Morgan and Hunt 1994) or positive expectations (Rousseau et al. 1998). The definitions generally contain two involved parties, the trustor and trustee (Crosby et al. 1990), focusing on the fact that trust is necessary to reduce risk (McKnight and Chervany 2000) and minimise any exploitation in the ongoing relationship (Korczynski 2000).
This thesis takes the definition of trust provided by Mayer et al. (1995) as a working definition, because it has been widely accepted among researchers in the area of relationship marketing and trust (for example, Castaldo 2003).

### 3.4 Different Perspectives on Trust

Various disciplines view the concept of trust in a different manner; for example, philosophy (Williams 1988), political science (Dunn 1988) and social science (Hart et al. 1986). McAllister (1995) distinguished between two main types of trust; cognitive trust and affective trust (or calculative trust and non-calculative trust). These two types can be seen as the basis of a conceptualisation of trust, and will be briefly described below.

*Cognitive based trust* is a belief, a feeling, or an expectation about an exchange partner’s trustworthiness that is influenced by the partner’s expertise, reliability or dependability (McAllister 1995; Moorman et al. 1992; Rempel et al. 1985). Cognitive trust is similar to economic theory, in that the customer can calculate the benefits arising from their interaction with an organisation based on reputation and cost; within this perspective opportunism is often associated with trust, in terms of maximising opportunism through calculating the result of an exchange (Korczynski 2000). Accordingly, the cognitive or calculative perception of trust emphasises the associated risk in addition to the assumption that the engaged parties are able to calculate and predict the potential consequences (profits or losses) of a certain exchange. This form of trust develops via the development of familiarity where the customer’s reliability and dependability and expectations concerning the service provider have been demonstrated (Huemer 1998).

*Affect based trust* is a behavioural intent or a behaviour that expresses the dependable nature of the engaged parties, in a relationship where one party relies on the other and the dependence includes a level of vulnerability and uncertainty (Moorman et al. 1993). The trustor makes an emotional investment in the relationship, expresses actual care and concern for the other party, and believes that those sentiments are reciprocated (McAllister 1995). Affective trust can be seen as the opposite of cognitive trust, since it is based on emotional ties in relationships and is often built on elements such as concern and benevolence. Additionally, affective trust
focuses on the motives and intentions of the exchange partner (Ganesan 1994; Spekman 1988), instead of on their precise behaviour (Huemer 1998).

In summary, McAllister (1995) distinguishes between trust’s cognitive and emotional aspects. His study found evidence for a clear distinction between affective and cognitive trust, both in terms of factor separation, and in terms of distinct relationships with other concepts. McAllister (1995:49) concluded that “affect-based trust and cognition-based trust represent distinct forms of interpersonal trust.”

From the standpoint of this thesis, McAllister’s (1995) classification does not encompass the entire concept of trust, and is seen as an over-simplification of the concept. The reason for this is that the concept of trust has been explored in detail in various other domains (economics, sociology and psychology); each viewed trust according to related theories within that particular field. These differing views of trust are further elaborated below.

### 3.4.1 Calculative (Economic) View of Trust

The calculative view of trust reflects an economic perspective (Huemer 1998). In this viewpoint, individuals are seen as rational actors who are keen to gain maximal utility from the other party (Huemer 1998). Within this perspective, opportunism is often associated with trust, in terms of maximising opportunism by calculating the consequences of the exchange (Korczynski 2000; Williams 1988). Therefore, the calculative view highlights the risk associated with trust, in addition to the assumption that the engaged parties are able to calculate and predict the potential consequences (whether profit or loss) of a certain exchange.

Williamson (1993) suggested three essential sources of trust in the business world: familiarity, calculative-ness and values. A clearer identification was developed by McAllister (1995) to conceptualise the different forms of trust within the calculative view (McAllister 1995). These are:

- **Knowledge based trust**: trust takes place when enough information for predicting others’ behaviour is available.

---

3 Williamson’s (1993) work will be discussed in more detail below.
• Process based trust: this form of trust, discussed by Zucker (1986), relies on a common base of knowledge, which means that common background expectations are required for its production. Nonetheless, “…the development of trust relies on the formation of a trustor’s expectations about the motives and behaviours of a trustee, because of the broad nature of trust and its varied conceptual roots” (Doney et al. 1998:37).

• Fragile trust: fragile trust is based on an individual’s judgments about the probability of the other party’s actions. Ring (1996) indicates that this type of trust is similar to McAllister’s (1995) definition of cognitive based trust, which is also related to predictability. It is argued that fragile trust allows economic actors to deal with each other in guarded ways, relying on formal or contractual means and on institutional safeguards.

The classical theory of transaction cost economics shows that decisions about whether trust is produced in a relationship rely on ‘asset specificity’; this notion emerged in conjunction with the idea of reducing the costly effects of opportunistic behaviour (Williamson 1993).

Moreover, Williamson (1993) contended that if an appropriate ‘contractual safeguard’ exists then economic exchange does not depend on trust. Williamson (1993:467) provided examples of a few situational antecedents for economic (calculative) trust: the engaged parties (1) are aware of the range of possible outcomes and their associated probabilities; (2) take cost-effective actions to mitigate hazards and enhance benefits; (3) proceed with the transaction only if expected net gains can be projected; and (4) if X can complete the transaction with any of several Ys, the transaction is assigned to that Y for which the largest net gain can be projected.

Other economic practitioners, such as Dasgupta (1988), argued that the creation of trust takes place in a calculative manner, with the focus on the outcome of the relationship. According to the neoclassical approach, a perfectly competitive market is populated by large numbers of anonymous, sensitive buyers and sellers who meet for an instant to exchange standardised goods. All actors in a perfectly competitive market seek to maximise their own welfare, but the model does not allow

---

4 Williamson (1985:55) defines asset specificity as “durable investments that are undertaken in support of particular transactions, the opportunity cost of which investments is much lower in best alternative uses or by alternative users should the original transaction be prematurely terminated”.

-53-
for the pursuit of self-interest through acts of deceit or the withholding of relevant information. Even if agents are permitted to have a desire to behave dishonestly, the assumption of perfect competition includes a secondary assumption of perfect information, so that the opportunity for dishonest behaviour never arises. Under the conditions of a perfectly competitive market, there is no need to trust or distrust (Platteau 1994).

Based on Platteau’s (1994) discussion, the concept of trust cannot occur within and as a consequence of the model of perfect competition. However, in reality markets are not perfect and opportunities for untruthful behaviour flourish. Without a conceptual framework that includes these features of trust, as this thesis argues, the concept stays beyond the scope of classic economic examination (Platteau 1994).

An alternative view to the neoclassical analyses of the coordination of economic activity is provided by transaction cost theory. This school of thought forms the cornerstone of ‘new institutional economics’, and is most notably associated with Williamson (1985). Unlike neoclassical economists, Williamson (1993) does not treat transactions as costless, but recognises that costs are incurred in “obtaining relevant information, the cost of bargaining and making decisions, and finally, the costs of policing and enforcing contracts” (Hodgson 1988:180).

Under certain circumstances transaction costs may appear insignificant, but in others they balance the advantages of the exchange. Moreover, economic theory introduced several economic models, for instance, the prisoner’s dilemma model and game theory⁵, in relation to how trust is formed in situations calling for cooperation or competition (Macy and Skvoretz 1998).

The concept of the prisoner’s dilemma, according to Macy and Skvoretz (1998), is based on the notion that in everyday life the prisoner’s dilemma exists in the context of communication between individuals. They give the example of marriage, suggesting that partners may be living in a constant prisoner’s dilemma situation if trust doesn’t exist between them to a sufficient degree. Otherwise the option of advantageous alternatives will constantly exist.

⁵ Game theory; according to (Axelrod 1984), is based on the counter-factual assumption that actors’ behaviour is exclusively determined by calculation. This is not only an extremely simplified view of the socio-economic world, but no matter whether the model is meant to function as an heuristic device or an empirically testable hypothesis, the assumption places game theory models way beyond the scope of realistic empirical research perspectives.
Trust in exchange relationships has been conceptualised to fit with different economic perspectives because it has been shown to be a significant antecedent to effective inter-organisational collaboration (Sake 1991; Smith et al. 1995). Furthermore, trust within an economic context often has the following results:

1. Lower transaction costs and the potential for greater flexibility to react to changing market settings (Dyer 1997).
2. Superior information systems that enhance harmonisation within organisations and reduce inefficiencies (Dyer 1997).
3. Facilitation of investments in transactions or relation-specific assets that enhance productivity.

In short, economists are inclined to view trust as a rational choice mechanism (see Williamson 1993). However, the economic theory of trust has been criticised both from a conceptual perspective and from a methodological viewpoint; for instance, some of the economic theories were criticised as being methodologically questionable, since it is only in the repetitive version of the pure prisoner’s dilemma that trust becomes relevant. The level of trust during the period of the relationship does not remain constant. Clark and Sefton (2001) argue that the level of trust is negatively influenced by any negative experience within the transaction; this is called distrust, as discussed in section 3.5.

3.4.2 Social View of Trust

The social view of trust emphasises social bonds, individuals’ interactions and their willingness to maintain respectful relationships (Huemer 1998; Rousseau et al. 1998; Jackson 1985). According to the social view, human relationships are expressed from the perspective that the feelings that individuals hold towards trust are social in nature, and therefore, the purely calculative conceptualisation of trust is an inadequate explanation (Spekman 1988; Zucker 1986). According to McAllister (1995) there are several types of trust that are defined in terms of the social view of the concept; these types can be expressed as:

Affect-based trust: trust that is built on interpersonal care and concern for the welfare of individuals, rather than on self-interest. McAllister (1995) proposes that this type of trust is based on emotional bonds between individuals; consequently,
relationships between the people concerned as well as communication are of great importance for the development of affect-based trust.

**Characteristics-based trust:** called ‘free trust’ by Zucker (1986), implying that this form of trust cannot be invested in or deliberately formed. It depends on the social similarities or cultural agreements between the engaged parties; consequently, information about social similarity is necessary for characteristic-based trust (McAllister 1995).

**Institutional-based trust:** this type of trust does not depend on personal characteristics (such as cultural values) or on past history exchange, but instead it relies on formal social structures, individual or organisation-specific attributes (Zucker 1986).

Sako (1992) also identified three forms of trust within a social context:

- Contractual trust;
- Competence trust; and,
- Goodwill trust.

Contractual trust is the belief that the engaged parties in a relationship will adhere to universal ethical standards (i.e. maintain promises). However, these beliefs emerge from basic notions concerning human nature, social organisation and business relationships. Competence trust is the belief that the engaged parties in a relationship will be capable of effectively delivering the contracts and promises they have made. The third form of trust identified by Sako (1992) is goodwill trust which is the belief that the engaged parties in a relationship will perform towards a common interest in addition to their official promises, and will avoid opportunism. Moreover, the three forms of trust support each other and may stabilise or destabilise each other.

### 3.4.3 Psychological View of Trust

From a psychological perspective trust is defined mainly in terms of ‘interpersonal trust’. It is stressed that in everyday situations one relies on expectations related to the behaviour of another person, on his or her promises and willingness to cooperate. Thus, trust becomes a central precondition for the formation of a positive interpersonal relationship (Rotter 1967; Zand 1972). The complex nature
of trust has been explored by psychologists, and different characteristics of trust have been associated with the concept; for instance, aspects of uncertainty, as well as the risk of disappointment from existing relationships (for example, see Rotter 1967).

Empirical research has showed that psychological violation is relatively common in relationships and that it is associated with various negative consequences for the relationship, such as a decrease in perceived obligations and reduced commitment and satisfaction between the engaged parties (Rousseau et al. 1998).

Psychological contract theorists assert that the effect of disrupting a psychological contract involves more than unmet expectations, because it involves not only a loss of something expected but also erosion of trust and of the foundation of the relationship between the two parties (Rousseau et al. 1998). As Rousseau et al. (1998:396) stated, “… the intensity of the reaction [to violation] is directly attributable not only to unmet expectations of specific rewards or benefits, but also to more general beliefs about respect of persons, codes of conduct and other patterns of behaviour associated with relationships involving trust.”

3.4.4 Sociological View of Trust

The sociological concept of trust is illustrated by the notion that in terms of one party’s manner toward another party in a precise setting (Mayer et al. 1995); trust is situated within a complex social organism (Andaleeb 1996; Spekman 1988; McAllister 1995; McKnight et al. 1998; Yamagishi and Yamagishi 1994). The trustor is engaged towards a trustee, and the entire relationship takes place within a setting and/or a context (Clark and Payne 1997).

Socially defined trust relationships can exist not only between individuals, but also between individuals and organisations. This type of trust, which exceeds the boundaries of purely personal trust relationships, will expand to become ‘system trust’ if the engaged parties include the entirety (or at least the central elements) of an institutional environment. In a social sense, trust has been considered predominantly in terms of a central belief about the motives or intent of another party (Andaleeb 1996). Further, as a social construct, trust relies on relationships and contracts which act to influence each party’s behaviour towards the other (Spekman 1988).
Several authors (for example, Grönroos 1985 and Mayer et al. 1995) have emphasised the importance of personal relationships in the process of creating trust (see also Granovetter 1985; McAllister 1995). Furthermore, Granovetter (1985) noted that the most fundamental factor in the creation of trust is not institutional arrangements, but instead is the social relations between the engaged parties. Granovetter (1985) continued this debate and proposed that individuals are concerned with the level of confidence that the trustee is going to carry out their part of the agreement, which is linked to whether former contacts between the parties have been satisfactory.

Lorenz (1988) emphasised the importance of personal relationships when he proposed that trust can be created intentionally by focusing on long-term relationships rather than short-term ones. This can be achieved by mutual exchange between the engaged parties.

It is widely accepted that personal relationships do not necessarily require friendship when forming trust. Lorenz (1988) stresses the need for personal contacts as well as geographical proximity for an individual to determine whether to trust or not. In addition, Lorenz (1988) postulates that an individual cannot exclusively depend on reputation to determine trustworthiness, but that time and their own experience are crucial elements. The presence of a personal relationship is more important in relation to affect-based trust (McAllister 1995). However, affect-based trust depends on the emotional bonds between the engaged parties, and is consequently most likely to develop and deepen through personal relationships that occur over a long period of time (McAllister 1995). Hence, mutual knowledge and the sharing of information are crucial for the development of this form of trust.

The sociological view of trust has been criticised by several academics. For instance, Korczynski (2000) argues that politeness (a dimension that is often discussed within sociological research on trust) will not be relevant if the engaged parties do not meet because they cannot show their politeness to each other. Consequently, there is no opportunity for the development of trust based on personal relations. Furthermore, it is not clear how far all the situational determinants, even in primary relationships, can be satisfactorily replicated in these scenarios (Korczynski 2000).
Rempel et al. (1985) proposed a conceptual framework of trust dynamics in romantic relationships. They explored the issue of trust production by proposing a model consisting of three components that reflect increasing levels of behavioural attributes. The ingredients of the model are predictability, dependability and faith. These dimensions are discussed in detail below.

**Predictability**: this can be perceived as a precise behaviour (the formation of general expectations) from one party towards another party’s potential behaviour, based on conclusions drawn from experience and past history. It refers to the other party’s consistency of behaviour (Doney et al. 1998). This consistency can be affected by the social setting in which the relationship takes place (for example, in relationships between different social classes). Accordingly, the stability of the psychosocial setting should also be considered when assessing another party’s predictability (McKnight et al. 2002). Rempel et al. (1985) propose that the judgement about another party’s predictability is facilitated if one party possesses specific information about the other party’s potential or past behaviour, for instance, in terms of reinforcements and restraints.

**Dependability**: Rempel et al.’s (1985) framework of trust states that with time there is a shift from assessing another party’s specific behaviours to evaluating the qualities and characteristics attributed to that party. As they put it, “… trust is placed in a person, not his or her specific actions”. Thus, dependability refers to the partner’s moral integrity, encompassing factors such as benevolence, reliability, honesty, and concern with providing expected rewards (Blois 1999; Mayer et al. 1995; Larzelere and Huston 1980). The evaluation of such personal qualities will largely be informed by experiences involving risk and personal vulnerability. The dependability component is clearly related to predictability, although it is more involved with a “sub-class of behaviours that involve personal vulnerability and conflicts of interests” (Rempel et al. 1985:95). As with predictability, dependability also assumes that a relationship lasts long enough to allow for a detailed analysis of the other party’s trustworthiness. When faced with novel situations within an existing relationship, or when starting a new relationship, one must consider the third component, faith.

---

6 See also: Coleman 1990; Gambetta 1988; Deutsch 1973.
Chapter Three – The Concept of Trust

**Faith:** in the context of trust, faith refers to pre-existing or simulated trust that is not based on past experience. It is utilised when there is no evidence from previous interactions by which one party can assess another party’s trustworthiness (Moorman *et al.* 1992). First impressions will give rise to beliefs, which in turn can become convictions. According to Rempel *et al.* (1985), people expect that future events will prove their convictions to be correct. Faith is seen as an emotional security that allows individuals to go beyond shared experiences and hope they will not be harmed by entering into a new relationship. Reputation is based on information about a potential party’s behaviour (Malaga 2001; McKnight *et al.* 1998; Yamagishi and Yamagishi 1994; Sztompka 1999). This kind of information is not as reassuring as direct information, which arises via an accumulation of experience within a certain situation.

According to McKnight *et al.* (1998), parties with a strong and positive reputation are perceived as being trustworthy, and parties with a poor reputation are seen as untrustworthy. However, in order to be trusted, individuals endeavour to establish a favourable reputation (Malaga 2001); all trust is explicitly based on reputation (Dasgupta 1988:53). Furthermore, reputation can play a major role in forming the first impressions that are held by people entering new relationships. Although reputation does not necessarily imply direct interaction, it can be utilised as information on which to base one’s judgement of trustworthiness (predictability and dependability) (Coleman 1990; Sitkin and Roth 1993; Malaga 2001). Misztal (1996) argues that beliefs (values and ethics), conforming to social expectations (reciprocity of exchange) and formal control (rewards, monitoring and discipline) are the three basic elements that provide the foundation for building a reputation.
3.5 Trust and Distrust

In spite of these different perspectives on trust, the achievement of trust in relationships has been shown to have several benefits. For instance, it lowers transaction costs (Williams 1988). However, there is also a negative side of trust, known as distrust (Rotter 1967; Bromiley and Cummings 1995; Coleman 1990). Distrust can be expressed as “a belief that a person’s values or motives will lead them to approach all situations in an unacceptable manner” (Sitkin and Roth 1993:373).

Several researchers (for example, Lewicki et al. 1998; Lewicki and Bunker 1995; Sitkin and Roth 1993) have viewed distrust as the opposite of trust; although the concepts are related, these researchers, (for instance, Lewicki et al. 1998:439) agree that:

“…both trust and distrust are understood in behavioural terms, with little attention given to the confidences, intentions, and motives that promote trusting/distrusting and trustworthy/untrustworthy behaviour”.

However, Lewicki et al. (1998) also note that although trust and distrust are separate terms, they have related dimensions. Further, there are different factors that can affect distrust negatively or positively, and these depend on the individual’s perceptions and experiences.

For psychologists, psychological conflicts are characterised by simultaneous trust and distrust, a situation which is unstable and temporary in nature (Lewicki and Bunker 1995). Sociologists recognise the importance of trust and distrust as instruments for reducing social complexity and uncertainty (Lewis and Weigert 1985). Economists view distrust by focusing on ‘cheating’ in sense of the calculative perception of trust, while viewing distrust in relationships as, for example, switching to a an inferior product (Axelrod 1984).

Nevertheless, there are two main criticisms of the theoretical differences between trust and distrust. Firstly, the differentiation between trust and distrust is undermined by the observation that positive and negative assessments of influence might represent responses to different measures. Secondly, it is insufficient to define a
trustor’s attitude in terms of its antecedents⁷, because antecedents might indicate why an individual trusts, but not how much they trust (Mayer et al. 1995). Because trust is a personal assessment, the importance of any known antecedent to a trustor’s attitude within a relationship will vary based on the perceived conditions of the situation in which trust is bestowed (Lewicki et al. 1998). The importance of a precise antecedent is not likely to differentiate between trust and distrust, because when considered from the trustor’s perspective, the importance of any given antecedent is a personal matter.

Although trust and distrust are not different attitudes, they represent different evaluations of influence; trust represents an optimistic positive attitude towards the relationship, while distrust represents an unfavourable attitude. As such, trust is balanced in nature, in that each trustor’s attitude includes a judgment about whether influence is positive or negative. Given the inherent symmetry of this judgment, trust and distrust represent opposing standpoints on the same underlying dimension of the perceived quality of influence (Clark and Payne 1997; Gambetta 1988).

⁷ From the standpoint of this thesis, it is not appropriate to define trust’s antecedents or corollaries individually, because any resulting definition of trust would be inconsistent and depend on the form/context of trust, the characteristics of the engaged parties and whichever factors can influence both the antecedents and the corollaries of trust.
3.6 Trustworthiness

As highlighted in the previous discussion, academics vary in their conceptions of trust, including its definition and proper object. For instance, while some academics see trust as a belief, others view it in more active terms. Hardin (2002, 2006), who is a political scientist, argues that trust is a belief about another party based on accumulated evidence of that party’s trustworthiness. Hence, the distinction between trust and trustworthiness is that trust is the trustor’s psychological state, while trustworthiness is a characteristic of the trustee (Corritore et al. 2003).

In their work, Mayer et al. (1995) suggested that perceived trustworthiness is the trustor’s perception of how trustworthy the trustee is, while trust is the trustor’s willingness to engage in risky behaviour that stems from the trustor’s vulnerability to the trustee’s behaviour. Trustworthiness is a characteristic of the trustee, and may stem from several perceptions about the trustee held by the trustor.

Trustworthiness is described in the literature as the perceived probability that a particular trustee will maintain one’s trust (McKnight et al. 2002). Hardin (2002:28) defines trustworthiness by stating that “… your trustworthiness is your commitment to fulfil another’s trust in you”. Putting Hardin’s (2002) argument into context, trusting beliefs represent a “… sentiment or expectation about an exchange partner’s trustworthiness” (Moorman et al. 1993:315). Mayer et al. (1995) defined trustworthiness as an attribute of a trustee who is responsible for trust. According to Mayer et al. (1995), the perceptions of the trustor that affect their perception of the trustee concern the trustee’s ability, integrity and benevolence. Doney and Cannon (1997) treat trust as a single construct dealing with trustworthiness, integrity, ability, and benevolence.

According to Hardin (2002), trust is established in the context of ongoing interpersonal relationships, because it is only through such relationships that customers can accumulate sufficient evidence to form trusting intentions (i.e. to trust or not to trust). For this reason, trust cannot be a generalised expectation of all people. In contrast to Hardin (2002), Sztompka (1999) describes trust in more general terms. He argues that trust has its basis in beliefs about another person; he indicates that individuals use their beliefs to make a bet about a person’s future actions. In this way,
trust requires an active commitment from the trustor, who has to observe a certain level of trustworthiness before making the decision to trust.

It is widely accepted that trust is the cornerstone in long-term relationships (Spekman 1988), and, consequently, is a key determinant in successful relationship marketing (Morgan and Hunt 1994). Furthermore, trust is a central factor in reducing uncertainty and risk prior to engaging in relationships (McKnight and Chervany 2000) and is the main driver for customer loyalty (Reichheld and Schefter 2000). However, these benefits for both individuals and organisations (such as creating loyal customers) occur only when trustworthiness is warranted (Baier 1986; Hardin 2002). Therefore, it becomes necessary to evaluate a party’s trustworthiness before extending one’s trust. Hardin (2002) explains that trustworthy people follow through on their commitments to others. Govier (1994) identifies two dimensions of trustworthiness; competence and motivation. When there is reason to believe that a person is both able and willing to follow through on a commitment, we are likely to extend our trust. If either competence or motivation is called into question, we may withhold trust. While such a stance may be protective, it precludes the possibility of realising the benefits of trust. Conversely, if trust is extended and either competence or motivation proves to be lacking, we may be reluctant to extend our trust in future situations. Thus, trust is only beneficial when it is accompanied by trustworthy behaviour.

Kumar et al. (1995) see trust in terms of honesty and benevolence. Building on the work that has been conducted by Mayer et al. (1995), McKnight et al. (2002) undertook a mapping exercise of the various studies on trustworthiness. They concluded that there are three main dimensions of trustworthiness across the different literature; these are:

- **Benevolence**: indications that an organisation has positive intentions towards its consumers beyond merely generating profits, such as demonstrating genuine care about their customers.
- **Integrity**: confidence that the organisation has particular ethical, moral and professional standards, such as honesty and fairness, to guide its interactions with its customers.

---

8 Mayer et al. (1995:717) used the term “egocentric profit motive” in their study.
Chapter Three – The Concept of Trust

- Ability; the consumer’s confidence that the organisation possesses sufficient skills to deliver the required service.

These trusting beliefs are related but distinct. For example, consumers may believe that an organisation cares about its customers and thus intends to deliver a smooth, error-free transaction (in this case the organisation is benevolent), but they may also believe that the organisation lacks the expertise to do so. Similarly, although beliefs about integrity and benevolence are similar, the former focuses on meeting objective standards of corporate citizenship, while the latter focuses on customer benefits that go beyond normal business activity. For instance, even though consumers believe that an organisation follows a professional code of conduct (i.e. it has integrity), they may still question the organisation’s genuine concern for its customers (i.e. its benevolence).

Even though ability, benevolence, and integrity are acknowledged as being conceptually distinct (for example, see Kumar et al. 1995), they are often combined into a global measure of trusting beliefs (see for instance, Doney and Cannon 1997). Where a combination of these beliefs into a single variable is used as a simple approach to studying trust, it can be difficult to identify what action should be taken in order to build trust (Doney and Cannon 1997).

From a sociological point of view, Sztompka (1999) argues that enhancing trustworthiness increases the level of trust. For this reason, Sztompka (1999) identified three indicators of trustworthiness; reputation, performance and appearance. Reputation is a record of past acts, and trust built on this conception can lead to several advantages (such as increasing word-of-mouth effectiveness). Performance represents actual acts, current conduct and those results that are observable. Appearance provides an indication regarding trustworthiness. This is a sociological level at which humans assume trustworthiness from appearance and pre-conceived stereotypes. For example, certain ethnic groups may not be trusted because of a historical incident9 (Sztompka 1999). These three indicators of trustworthiness are important, but it appears that they need to act in concert to achieve profound trustworthiness.

9 For instance, the Germans aren’t trusted by some groups because of World War II.
From a psychological perspective, Rousseau et al. (1998) argue that trustworthiness encompasses four forms of attribute; competence; positive intentions, ethics and predictability. The effect of each of these attributes is to build up the trustor’s confidence that the trustee is willing and able to fulfil the trust.

- **Competence**: Butler (1991) argues that competence requires that the trustee possesses the knowledge, expertise or skill to fulfil the needs of the trustor. A related attribute is credibility, which implies the extent to which information offered by the trustee can be believed (Doney and Cannon 1997).

- **Positive intentions**: according to Mayer et al. (1995), these symbolise the trustee’s feelings toward the trustor. Positive intentions may include goodwill (Blomqvist 1997), benevolence (McKnight et al. 1998) and customer loyalty (Butler and Cantrell 1984).

- **Ethics**: the honest values to which the trustee adheres; these values differ from positive intentions in that both parties are engaged toward others in general, rather than toward a precise trustor. Ethical values concerning trust include integrity (Mayer et al. 1995), honesty (Rampel and Holmes 1985), fairness (Butler 1991), mutual commitment (Morgan and Hunt 1994) and the achievement of any stated commitments (Zaheer et al. 1998).

- **Predictability**: the extent to which the trustee’s behaviour matches the other party’s expectations (Butler 1991; Zaheer et al. 1998). This is similar to reliability (Sheppard and Sherman 1998) or consistency (Butler 1991). However, these expectations are often based on previous experience of the other party’s behaviour, but both engaged parties might also derive predictability information from expectations related to a particular social position (Doney and Cannon 1997).

Mutual competence and predictability are naturally related to the cognitive dimension of trust (McAllister 1995), while positive intentions are normally related to the affective dimension of trust. In addition, beliefs concerning the ethics of a trustee may be embedded in either the cognitive or the affective dimensions of trust, depending on whether they are based on objective evidence or on an emotional bond (Mayer et al. 1995).
Based on both Rousseau et al.’s (1998) and Mayer et al.’s (1995) categorisation and description of trustworthiness, it can be argued that trustworthiness relates to the set of ‘confident positive expectations’ customers have about the intentions and expected future actions of an organisation that they are intending to interact with (Lewicki et al. 1998). In other words, trustworthiness is a trait of a party in a relationship that inspires confidence for those who rely on the good intentions of others to perform services competently and in their best interests (Caldwell and Clapham 2003).

In a marketing sense, trustworthiness is a key determinant for successful relationships (Butler and Cantrell 1984; Mayer et al. 1995; Lewicki et al. 1998; Morgan and Hunt 1994; Rousseau 2005). However, there is a lack of unified understanding in the literature concerning the differences between trust and trustworthiness and how both constructs should be perceived (Gefen et al. 2003). This thesis views trustworthiness as a personally formed value judgment about the behaviour of another party who wants to be trusted. This view is aligned with the some of the well established theories on trustworthiness (for example, Glaeser et al. 1999; Bews and Rossouw 2002; Caldwell and Clapham 2003).

Hardin (2002:29) noted that “… much of the literature on trust hardly mentions trustworthiness, even though implicitly much of it is primarily about trustworthiness, not about trust”. Hardin’s (2002) argument was further supported by Caldwell and Clapham (2003) when they argued that the decision to trust is made based upon one party’s assessment of the behaviour of another party, through what Caldwell and Clapham (2003) described in their proposed model as a ‘mediating lens’ or complex filter through which each person views the world. In other words, the decision to trust has to pass through a trustworthiness filter. However, trustworthiness becomes an even more salient assessment in high-risk transactions (Eysenbach et al. 2002). Furthermore, the majority of scales used to measure trust (for example, Sirdeshmukh et al. 2002) are research specific (Büttner and Göritz 2008). These scales do not distinguish whether perceived trustworthiness is a uni- or multidimensional construct.
Despite efforts to map the determinants of trust in the literature (for example, see Rousseau *et al.* 1998), there is still a lack of general agreement about these determinants. This relates to the fact that most of these studies did not take into consideration the contribution of relationship marketing.\(^{10}\)

This thesis follows the argument put forward by Hardin (2002) and empirically tested by Caldwell and Clapham (2003), according to which the majority of the existing literature on trust is actually about trustworthiness. Hence, the dimensions of trustworthiness are related, if not identical, to the dimensions of trust (for instance, shared values). This implies that the perceived benefits of trust can also be seen as perceived benefits of trustworthiness; this will be discussed in the following chapter on conceptualising trustworthiness.\(^{11}\)

**Summary**

Trust is a very complex term, with several levels and determinants. Therefore, it is unwise to use the term ‘trust’ and assume its meaning is fully and properly understood within one perspective, due to the term’s different meaning in another perspective. While the concept of trust in a marketing sense attracts major attention within the marketing literature, our understanding of the construct can be both varied and ambiguous. Most authors in marketing research draw upon a belief-based conceptualisation of trust – that is, perceived trustworthiness. Furthermore, there is no published work incorporating trustworthiness as a conceptual construct (with the exception of Gefen (2002) and Caldwell and Clapham (2003)), despite Mayer *et al.*’s (1995) conceptual emphasis on its importance. The next chapter will rationalise the foundations of the conceptual framework for the current research, which aims to identify the antecedents and outcomes of trustworthiness.

---

\(^{10}\) Some studies did take into consideration the contribution of relationship marketing; however, these studies are rather limited (for example, Morgan and Hunt 1994).

\(^{11}\) In this thesis, however, for clarity the term trust will be used hereafter to indicate trustworthiness unless otherwise stated.
CHAPTER FOUR: JUSTIFICATION OF THE
CONCEPTUAL MODEL AND THE RESEARCH
HYPOTHESES

4.1 Introduction

The concept of trust has been examined in various contexts over the years; for instance, research has been carried out in industrial buyer-seller relationships (Doney and Cannon 1997), distribution channels (Dwyer et al. 1997) and market research (Moorman et al. 1993). Other researchers conceptualised trust as a foundation for interpersonal relationships (Rempel et al. 1985; Svensson 2001) and as the basis for stability in organisational operations (Rousseau et al. 1998). However, most academics agree that relationships that are viewed as highly trust-oriented (or affective) are greatly valued by the exchange parties (see for example, Swan et al. 1985; Zaltman and Moorman 1988; McAllister 1995). It seems that the trustee is more willing to commit to a relationship if trust is present (Morgan and Hunt 1994). Moreover, some organisations employ trust as a method of reducing risk and uncertainty (Young 2006).

Despite the general agreement on the benefits of trust, there are several perspectives in the literature, regarding the nature of trust, as discussed in the previous chapter. Each perspective characterises trust to fit within its domain (for instance, the contrasting views in economics and psychology). Furthermore, each proposes a different cluster of characteristics within which trust can be formed. In spite of the variations in the different academic perspectives, however, the overall objective is to provide an appropriate understanding of the concept of trust in order to achieve a competitive advantage. Hence, all of these schools of thought agree about the importance of developing trust to produce efficiency, productivity and effective relationships. As discussed previously, the various strands of literature

---

1 Chapter Three - Section 3.6.
Chapter Four – Justification of the Conceptual Model and the Research Hypotheses

acknowledged the importance of trustworthiness as a key factor for successful long term relationships. Therefore, this thesis proposes a conceptual model of trustworthiness. The model explains how trustworthiness is formed by proposing several antecedents to conceptualise trustworthiness and its hypothesised outcomes.

4.2 Characteristics of Trust

Academics from a range of social science disciplines have attempted to define the nature of trust (see Table 4.1 for a review of the key authors). For example, Butler and Cantrell (1984) proposed five characteristics of trust, which are: integrity (the reputation for honesty and truthfulness on the part of the trusted individual); competence (the technical knowledge and interpersonal skills needed to perform the job); consistency (reliability, predictability and good judgment in handling situations); loyalty (benevolence, or willingness to protect, support and encourage others); and openness (mental accessibility, or the willingness to share ideas and information freely with others). Butler and Cantrell (1984) proposed that trust emerges through these characteristics, although the precise mixture of the five characteristics in any situation might vary depending on the exchange parties’ personal acceptance of trust.

Table 4.1: Classification of Trust by Discipline with Key Authors

<table>
<thead>
<tr>
<th>Meanings</th>
<th>Marketing Lit.</th>
<th>Management Lit.</th>
<th>Psychology and Sociology Lit.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Crosby et al. (1990)</td>
<td>Lewicki et al. (1998)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anderson and Narus (1990)</td>
<td>McKnight et al. (1998)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Piercy and Morgan (1991)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Andaleeb (1995)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doney and Cannon (1997)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------</td>
<td>------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Reliance</td>
<td>N/A</td>
<td>N/A</td>
<td>Curral and Judge (1995)</td>
</tr>
<tr>
<td>Psychological state</td>
<td>N/A</td>
<td>N/A</td>
<td>Rousseau et al. (1998)</td>
</tr>
<tr>
<td>Perception</td>
<td>N/A</td>
<td>N/A</td>
<td>Anderson et al. (1987)</td>
</tr>
<tr>
<td>Subjective probability</td>
<td>N/A</td>
<td>N/A</td>
<td>Noteboom (1996)</td>
</tr>
<tr>
<td>Feeling</td>
<td>N/A</td>
<td>N/A</td>
<td>Tyler and Degoley (1996)</td>
</tr>
<tr>
<td>Assumption</td>
<td>N/A</td>
<td>N/A</td>
<td>Robinson (1996)</td>
</tr>
<tr>
<td>Judgement</td>
<td>N/A</td>
<td>N/A</td>
<td>Webb (1996)</td>
</tr>
</tbody>
</table>

*N/A = Not Available

(Source: Adapted from Castaldo 2003)

Butler (1991) extended the earlier work by Butler and Cantrell (1984) on the characteristics of trust by adapting the characteristic of general benevolence into an implicit promise from a party to fulfil its obligations, and not to mistrust the other engaged party; Butler (1991) also focused on customer loyalty as a main dimension of trust. Other academics had the same idea as Butler and Cantrell (1984) and tried to identify the nature of trust (see Table 4.1). For instance, Lewicki et al. (1998) identified three key dimensions in their model to describe the fundamental characteristics of trust: risk, vulnerability and interdependence.
These characteristics can be seen as an essential key to understanding the nature of trust, and are accepted as the main drivers for trust formation. They are defined below.\(^2\)

1. **Risk**

Sztompka (1999) proposes that their very nature trust and risk are inextricably associated with each other. If risk doesn’t exist, there is no need for the existence of trust (Sztompka 1999)\(^3\). Despite the diverse nature of trust, there are two important elements that are always associated with it; these are uncertainty and risk (Moorman et al. 1992; Mayer et al. 1995; Rousseau et al. 1998). Koller (1988:265) proposes that the level of trust increases “…as the degree of risk that is present in the situation becomes higher”. In addition, “…risk creates an opportunity for trust, which leads to risk taking” (Rousseau et al. 1998:393).

However, since it is a basic logical premise that if there is no risk there is no need for trust, the existence of trust reduces risks (Mayer et al. 1995; Rousseau et al. 1998). In other words, trust would not be necessary if actions could be accepted with complete confidence and no risk. Within a relationship context, the trustor and trustee interaction is characterised by dependency\(^4\) under specific levels of uncertainty and risk. Some scholars have distinguished between trust, defined as the willingness to undertake risk, and trusting behaviour, demonstrated by the actual assumption of risk (Mayer et al. 1995). The decision to form trust can be affected by cognitive and emotional elements (McAllister 1995). Using rational thinking, an individual will form criteria for calculating the different aspects, and preferably the positive advantages, of any relationship. Hence, a calculation of risk utility is often employed, estimating the potential loss or profit and multiplying by the total probability of that situation occurring. However, people do not always take the most rational decisions (Lewicki et al. 1998).

---

\(^2\) Lewicki et al.’s (1997) characteristics were adapted to include more recent literature.

\(^3\) This is well illustrated by the economic view of trust, particularly free market theory.

\(^4\) Ideally this is a mutual dependency. However, in reality the dependency level varies depending according to the context of the relationship and the characteristics of the engaged parties.
2. **Vulnerability:**

“Being vulnerable implies that there is something of importance to be lost ... making oneself vulnerable is taking risk” (Mayer et al. 1995:712). Economists have viewed the vulnerability feature of trust from three main angles: 1) market vulnerability; 2) investment vulnerability; and 3) transactional vulnerability. Market vulnerability is similar to environmental or primary uncertainty (Williamson 1993). Investment vulnerability has been linked to the transaction costs of conducting an exchange; further, investment vulnerability represents the risk of the transaction process, or what Williamson (1993) called asset specificity; transaction validity is concerned with the interaction in the buying selling process. In a marketing sense, vulnerability is a key dimension of trust, since individuals must be willing to be vulnerable in order to trust (Mayer et al. 1995). Other researchers have focused on vulnerability implicitly through the reliance on an exchange partner (Chaudhuri and Holbrook 2001), and explicitly by stating that “…without vulnerability, trust is unnecessary” (Moorman et al. 1992:82).

3. **Interdependence:**

Lewicki et al. (1998) notes that interdependent relations are complex. They argue that when individuals are dependent on others, they have to accommodate the demands of the other exchange parties. When the involved parties are interdependent, however, they have an opportunity to influence each other (this can be a positive or negative influence – regarding the decision to purchase a service or not to deal with a certain service provider, for instance). Interdependent relationships are characterised by connected aims, so that the parties need each other to accomplish their goals. Lewicki et al. (1998) comment that the possession of interdependent goals does not mean that everybody shares the same objectives. The latter may comprise different personal or group objectives. At times these goals and objectives may even be contradictory. Nevertheless, Sheppard and Sherman (1998) argue that both risk and interdependence are essential for producing trust, but the very nature of risk and trust may well change as the level of interdependence in relationships increases risk decreases.
Even though Lewicki et al. (1998) produced their work in the late 1990s, it is evident from their research that they were greatly influenced by Dwyer et al.’s (1987) work on interdependent relationships when they suggested structuring the interdependence process into five stages:

1. Full mutual awareness.
2. Exploration, a phase in which the buyer tests the seller.
3. Expansion, during which contacts, interdependence levels and opportunities for expanding the relationship are more frequent.
4. Commitment, characterised by high mutual satisfaction, trust and (implicit and explicit) commitment to maintain the relationship.
5. Dissolution of the relationship, determining the end of the relational experience, often caused by unilateral behaviour.

Based on the fact that trust is a key factor in human interactions, and more precisely in market exchange as part of the process of developing and maintaining customer relationships in any organisation, the formation of trust relies on shaping the trustee’s expectations about the motives and behaviours of the trustee (Doney and Cannon 1997). However, since service organisations provide intangible services, the formation of trust might seem to be relatively difficult, because different customers perceive services differently and so the nature of trust will change accordingly.

Despite the fact that there are several schools of thought within the trust literature (see Chapter Three section 3.5), the characteristics of trust mentioned in Table 4.1 generally overlap between them. For example, psychology research can adopt the same conceptualisation as marketing. Larzelere and Huston (1980) treat trust in terms of benevolence and integrity, while Rempel (1985) and Doney and Cannon (1997) regard trust as a combination of integrity, benevolence, ability, and trustworthiness. This overlap makes trust difficult to measure from the point of view of one single perspective. Therefore, this thesis does not adopt the view of any particular discipline regarding how to perceive trust or trustworthiness, it, however, draws on several views, for instance, economics, sociology and psychology. This allows the proposed model to benefit from the various strands of literature without being biased towards a particular domain.
The main debate emerging from the above discussion is not about whether the different schools of thought overlap in their views or not; neither Mayer et al. (1995) nor McKnight et al. (1998) are entirely accurate in their propositions on how to conceptualise trust. Instead, the issue is that there is confusion about whether the dimensions characterise trust or trustworthiness. This is evident from various studies on trust in which researchers’ utilised dimensions which explicitly include trustworthiness in their definition of trust (for example, see Gefen (2000), Tung et al. (2001), Grazioli and Wang (2001) and Pavlou 2001). The specific wording of the items varies in different studies. For instance, Tung et al. (2001) use the phrase ‘trustworthiness of vendor’, while Grazioli and Wang (2001) ask ‘whether the subject felt that the store was trustworthy’. Gefen (2000:740) included the statement ‘I believe that Amazon.com are trustworthy’ in their initial conceptualisation of trust, but removed it after it did not achieve the required level of significance in their structural equation modelling analysis. It is clear that in these studies there is no distinction between trust and trustworthiness, and there is little justification for why these items were chosen. Therefore, this thesis treats trust and trustworthiness as different concepts, although they are similar in their meaning unless stated otherwise.

4.3 Advantages of Trustworthiness

As discussed in Chapter Three section 3.4, the literature on trust often mixes trust with trustworthiness, a confusion which Hardin (2002) illustrates in his book. Therefore, the benefits of trustworthiness are seen to be similar to the benefits of trust in the various strands of the literature. This is the argument this thesis has considered when dealing with the benefits of trustworthiness.

Determining the advantages of trust in any context should be associated with the level of trust, because each level of trust has associated expectations about the results of that trust. The advantage of trust for any organisation is illustrated by Fukuyama (1995: 27), who noted that:

---

It noted that online trust and trustworthiness is a separate field of study which is beyond the scope of this thesis.

6 See section 4.5 for more detailed discussion on Mayer et al.’s (1995) work.
“If people who have to work together in an enterprise trust one another because they are all operating according to a common set of ethical norms, doing business costs less. Such a society will be better able to innovate organizationally, since the high degree of trust will permit a wide variety of social relationships to emerge. Hence highly sociable Americans pioneered the development of the modern corporation in the late nineteenth and early twentieth century, just as the Japanese have explored the possibilities of network organisations in the twentieth.”

The importance of trust can be explained by the fact that “we trust [others] to use their discretionary powers competently and non-maliciously” (Baier 1986:240), and it is seen as a phenomenon which contributes to the strength of interpersonal relationships as well as intra- and inter-organisational relationships (Svensson 2001:431). Trust is seen as a central factor for all organisational transactions (Dasgupta 1988); it enhances relationships within the organisation (Shapiro 1987), reduces operational costs (Williams 1993) and improves the organisational decision-making process (McAllister 1995). From an economist’s point of view, trust is often a prerequisite for:

1. Lowering transaction costs (Dyer 1997).
2. The development of superior information systems (Dyer 1997).
3. Assisting investments in business transactions.

According to Rousseau et al. (1998), the qualities of trust can be observed at different levels within an organisation. At a macro level, trust is considered to be the basis of a stable collective existence, “since complete contracting is impossible, and some degree of uncertainty is unavoidable” (Ennew and Sekhon 2003:8). At a micro level, the formation of trust can be seen as a method of for “promoting cooperation and reducing conflict in a variety of different settings, including within work groups, between employees and managers and across organisations” (Ennew and Sekhon 2003:8). In brief, the benefits of trust to individuals and organisations vary according to the complex nature of trustworthiness and the different views of how trust is formed.
4.4 Dimensions of Trust in The Literature

The theory surrounding the concept of trust examines several factors that are seen as the antecedents of trust, and, hence, they affect the outcome of the trust; this is often mentioned in terms of relationship commitment (Morgan and Hunt 1994) or customer loyalty (Reichheld and Sasser 1990). However, the antecedents of trust may include several dimensions depending on the nature of the research setting (see Figure 4.1).

Figure 4.1: Antecedents and Outcomes of Trust

<table>
<thead>
<tr>
<th>Main trust antecedents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
</tr>
<tr>
<td>The other party’s skills and competencies</td>
</tr>
<tr>
<td>Non-opportunistic motivations and benevolence</td>
</tr>
<tr>
<td>Subject’s personal characteristics</td>
</tr>
<tr>
<td>Fairness and justice</td>
</tr>
<tr>
<td>Cooperative behaviour</td>
</tr>
<tr>
<td>Communication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other antecedents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of specific investment</td>
</tr>
<tr>
<td>Similarities between partners</td>
</tr>
<tr>
<td>Value sharing</td>
</tr>
<tr>
<td>Organisational structure and culture of the partners</td>
</tr>
<tr>
<td>Features of the transaction object</td>
</tr>
<tr>
<td>Brand value</td>
</tr>
<tr>
<td>Partner’s degree of customer orientation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trust</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Main trust consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncertainty reduction</td>
</tr>
<tr>
<td>Commitment increase</td>
</tr>
<tr>
<td>Conflict containment</td>
</tr>
<tr>
<td>Non-coercive power</td>
</tr>
<tr>
<td>Fairness and justice</td>
</tr>
<tr>
<td>Satisfaction</td>
</tr>
<tr>
<td>Cooperative behaviour</td>
</tr>
<tr>
<td>Communication</td>
</tr>
<tr>
<td>Loyalty</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability to allocate resources</td>
</tr>
<tr>
<td>Length of relationship</td>
</tr>
<tr>
<td>Easiness to convince the other party</td>
</tr>
<tr>
<td>Greater sales</td>
</tr>
</tbody>
</table>

(Source: Adapted from Castaldo 2003)

-77-
Figure 4.1 highlights the main determinants of trust and the predicted consequences. It can be argued that the key common determinants of trust are:

1. Past experiences with the other exchange party, i.e. the length of the relationship.
2. "The trustee’s perceived capabilities and competences, allowing him/her to act in line with the expectations" (Castaldo 2003:193).
3. Both the trustor and trustee pursue a joint aim without opportunistic behaviour (i.e. expressing a degree of benevolence); this can also be expressed as shared values.
4. The trustor’s perception of the trustee’s integrity.

According to the literature\(^7\) these are the key determinants of trustworthiness. However, Castaldo (2003:193) pointed out that “in situations characterised by high content of interpersonal contacts these determinants are heavily influenced by behaviours and personal characteristics of the subjects involved in the relationship”; for instance, characteristics such as past experience and communication. It is worth noting that the antecedents shown in Figure 4.1 are not ranked according to importance; they influence trustworthiness depending on the context and the involved parties. For example, communication can be more important than integrity in situations where the trustor and the trustee speak different languages.

In addition to the antecedents mentioned in Figure 4.1, several other determinants have been mentioned in the literature, although they are considered residual because they are rarely quoted and closely related to the elements previously discussed. These residual determinants are:

- Levels of specific investment made in the relationship (Ganesan 1994).
- Similarity between the partners (Crosby \textit{et al.} 1990).
- Reputation (Ganesan 1994).
- Organisational structure and culture of the partners (Moorman \textit{et al.} 1993).
- Features of the transaction objects, in particular the degree of complexity and the difficulty of evaluating its qualitative level (Moorman \textit{et al.} 1993).
- Brand value (Schurr and Ozanne 1985).
- The partners’ degree of customer orientation (Swan \textit{et al.} 1985).

\(^7\) See section 4.6.1 in this chapter.
In light of this examination of trust dimensions in the literature, it appears that several common themes can be used to explain the nature of trustworthiness in past research. As shown in Table 4.2, these themes are:

1. Common values; the level to which the engaged parties have beliefs in common concerning what behaviours, attitudes, aims and procedures are significant or insignificant (Morgan and Hunt 1994).
2. Communication; encourages trust by supporting the resolution of disputes and doubts, and in aligning perceptions and expectations (Moorman et al. 1993).
3. Opportunistic behaviour; associated to the transaction cost theory.

---

8Even though these researchers did not discuss trustworthiness precisely, they often provided some indication of trustworthiness in their exploration of the concept of trust. This is explained by (Hardin 2002), as discussed in the previous chapter.

9 See Chapter Three - Section 3.3.2 for a more detailed discussion of transaction cost theory.
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Typologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust dimensions</td>
<td>Ideological, cognitive, emotional and routine trust (Lewis and Wiegert 1985)</td>
</tr>
<tr>
<td></td>
<td>Affective, cognitive and behavioural trust (Cummings and Bromiley 1996)</td>
</tr>
<tr>
<td></td>
<td>Behavioural and intentional trust (Nooteboom et al. 1997)</td>
</tr>
<tr>
<td></td>
<td>Affect-based and cognition-based trust (McAllister, 1995)</td>
</tr>
<tr>
<td></td>
<td>Reliability and emotional trust (Johnson-George and Swap, 1982)</td>
</tr>
<tr>
<td></td>
<td>Institutionalisation and habitualisation (Nooteboom et al. 1997)</td>
</tr>
<tr>
<td></td>
<td>Competence- and goodwill-based dimensions (Nooteboom 1996)</td>
</tr>
<tr>
<td>Relational layer</td>
<td>Calculative, institutional (‘hyphenated’) and personal trust (Williamson 1993)</td>
</tr>
<tr>
<td></td>
<td>Individual, inter-personal, institutional trust (Lewicki and Bunker 1995)</td>
</tr>
<tr>
<td></td>
<td>Calculative, relational and institutional trust (Rousseau et al. 1998)</td>
</tr>
<tr>
<td></td>
<td>Dispositional, personal/interpersonal and system trust (McKnight and Chervany 1995)</td>
</tr>
<tr>
<td>Contents and antecedents</td>
<td>Calculative, knowledge-based and institutional (Lewicki and Bunker 1996)</td>
</tr>
<tr>
<td></td>
<td>Deterrence-based, knowledge-based and identification-based trust (Shapiro et al. 1992; Sheppard and Tuchinsky 1996)</td>
</tr>
<tr>
<td></td>
<td>Predictability and explorative trust (Huemer 2000)</td>
</tr>
<tr>
<td>Development processes</td>
<td>Characteristic-based, process-based, institutionally-based (Zucker 1986)</td>
</tr>
<tr>
<td></td>
<td>Calculative processes, predictive processes, intention-based processes, knowledge-based processes, transfer-based processes (Doney and Cannon 1997; Doney et al. 1998)</td>
</tr>
<tr>
<td>Other classifications</td>
<td>Basic trust, guarded trust and extended trust (Brenkert 1998)</td>
</tr>
<tr>
<td></td>
<td>Deterrence, obligation, discovery and internalization (Sheppard and Sherman 1998)</td>
</tr>
<tr>
<td></td>
<td>Task-focused, fiduciary and relational forms of trust (Barber 1983)</td>
</tr>
<tr>
<td>Contiguous concepts</td>
<td>Trust, faith, confidence and reputation (Luhmann 1988; Hart 1989)</td>
</tr>
<tr>
<td></td>
<td>Trust, power and commitment (Gambetta 1989; Anderson and Weitz 1993; Morgan and Hunt 1994)</td>
</tr>
<tr>
<td></td>
<td>Rational prediction, probable anticipation, uncertainty, panic, fate, faith (Lewis and Wiegert 1985)</td>
</tr>
</tbody>
</table>

(Source: Adapted from Castaldo 2003)

It can be concluded from Table 4.2 that there are wide gaps between the emerging themes of trust in the literature, with the consequence that agreeing on one perspective for the study of trust is difficult. However, there appears to be a general agreement regarding the existence of cognitive and affective levels for the dimensions of trustworthiness. Consequently, the proposed model acknowledges these levels, as will be discussed below.
4.5 The Production of Trust

Academics hypothesised different models to conceptualise trust in different domains. For instance, one of the classic trust models was proposed by Mayer et al. (1995). Their model characterised trust as a willingness to be vulnerable to another exchange party (see Figure 4.2).

Figure 4.2: Mayer et al.’s (1995) Model of Trust

(Source: Mayer et al. 1995:715)

Mayer et al. (1995) argued, in their model (Figure 4.2), that trust is based on two types of antecedents: (a) a tendency to trust; and (b) a cluster of three views regarding the other person’s trustworthiness, incorporating their ability, benevolence and integrity. This model also includes risk as a mediator of the relationship between trust and the perception of risk. Figure 4.2 illustrates the three factors of perceived trustworthiness according to Mayer et al. (1995), these are:
1. Ability refers to the capacity to perform the predicted action. Whitener et al. (1998) express the elements of trust, including ability elements such as not avoiding the issue and getting on with the job.

2. Benevolence is a sense by virtue, according to which one party has the other’s welfare at heart and so will not act to damage it.

3. Integrity means that the trustee follows a set of desirable principles.\(^{10}\)

From a psychological perspective, Koller (1988) proposed three ways to measure trust in relationships. These are:

- Measuring the individual’s dependence or expectation that the other party will take actions towards this interaction (this element was later developed further by Mathe and Shapiro (1993)).
- Assessing several dimensions displayed by individuals (for instance, reliability, honesty and sincerity).
- The creation of a number of scenarios (notional situations) and examination of individual reactions during simulations.

Lewicki and Bunker (1996) proposed a model of the progression of trust through different stages. At the first stage in the model, individuals are keen to take risks when entering into dependence relationships with others since they know of the existence of institutional safeguards (Lewicki and Bunker 1996). If the validity of the trust is managed and repeated interaction and transaction is encouraged, the actors will develop a knowledge base about each other, thereby creating the conditions for a transition to cognitive trust. At this stage the other partner in the relationship has proven to be consistent and reliable; the trustor can feel comfortable because the partner is predictable.

The accumulated experience of a calculative relationship is crucial for individuals to form cognitive trust. When their acquired mutual knowledge has deepened and mutual confidence has developed, there may be a new transition to normative trust based on shared values and identification (Lewicki and Bunker 1996). The actors may be encouraged to

\(^{10}\) McKnight et al. (1998) built upon this model and included a fourth dimension the predictability of the trustee’s behaviour.
identify with each other’s goals and interests, and mutual benefit will probably emerge. At this stage the engaged parties may become friends, but this form of trust is not very common in business transactions where there is usually a difference in interest. Following the production of trust in relationships, both parties will shift the relationship to a higher level – what scholars describe as relationship commitment or customer loyalty. However, in some situations this shift might have a negative direction, a transition that is sometimes described as resolving the relationship11.

Despite the fact that some academics have treated trust as a single dimension that can be observed directly without the need to use indicators to help measure it (for example, Rotter 1971), other researchers began to conceptualise trust as a multidimensional construct (for instance, Rousseau et al. 1998; White 1992; Williamson 1993). Parvatiyar and Sheth (1997:241) examined some criteria of trust in their work, based on:

- The nature of the actors involved in the relationship, be they customers, suppliers or competitors;
- The relational objective, which can be configured either as strategic or tactical/operational; and,
- The orientation of the firm, which is defined as either relational or transactional.

Sheppard and Sherman (1998) adopted a similar approach, but in a different context; they aimed to explore the different trust requirements in various relational settings. They differentiated between inter-organisational relations on the basis of more abstract dimensions than those examined by Parvatiyar and Sheth (1997), considering different relational forms and the levels of interdependence that are established between parties. In their discussion of these two dimensions, Sheppard and Sherman (1998) proposed, four different typologies were defined and reported (shown in Figure 4.3).

---

11 For more details, see Chapter Three - Section 3.5.
Sheppard and Sherman (1998) suggest a grammar of trust as a foundation to allow a better understanding of the extent to which trust can be formed and adopted. The grammar involves relational form, depth and risks. Relationships vary in terms of their form and depth: “… we can conceptualise relational form as either dependent or interdependent and relational depth as either shallow or deep” (Sheppard and Sherman, 1998:424). Previously, Fiske\textsuperscript{12} (1990) had defined four essential forms of human relationships: (1) communal sharing, (2) authority ranking, (3) equality matching, and (4) market pricing. These forms establish an initial foundation for understanding the nature of human relationships, thereby producing trust. In their projected model, Sheppard and Sherman (1998) built on the work by Fiske (1990) and proposed four different forms of trust as shown in Figure 4.4.

\textsuperscript{12} In Sheppard and Sherman (1998:423).
As can be noted from Figure 4.4 Sheppard and Sherman (1998) associated qualities of trustworthiness with four types of relationship dependence (*shallow dependence, deep dependence, shallow interdependence and deep interdependence*), they also conceptualised different types of risk as a moderating factors for these relationships. These forms of dependence are:

*Shallow dependence:* while forming trust in any relationship, Sheppard and Sherman, (1998:424) stated that “… it is most meaningful to approach interdependence from the vantage point of the person or entity engaged in trusting behaviour (i.e. in agency theory the ‘principal’, and in this article the ‘trustor’).”

*Shallow interdependence:* two perspectives are associated with shallow interdependence. Firstly, when one individual is attempting to manage the relationship, behaviour seems to be interdependent (Sheppard and Sherman, 1998). Secondly, when an individual engages in trusting behaviour, there seems to be unidirectional dependency. Still, Sheppard and Sherman, (1998) suggest that the two main risks for the trustor in simple dependence are unreliability and indiscretion.

*Deep dependence:* “… in deep dependence relationships a trustee’s behaviour is often outside the trustor’s purview and, therefore, is difficult to monitor” (Sheppard and Sherman
Within this form of relationship there is a great focus in the transaction cost economics literature on ‘cheating’ from a customer point of view. In other words, Sheppard and Sherman (1998) applied economic theory to this form of relationship.

**Deep interdependence:** “... in deep interdependence relationships the capacity of parties to communicate is essential” (Sheppard and Sherman, 1998:424). However, under certain circumstances communication between the engaged parties is not always possible (for instance, when there is a large distance between the parties). The key risk in deep interdependence relationships is failure of anticipation; that is, the risk that one party will not be able to fulfil the other party’s needs or actions or that one party will not be able to produce commitment towards the relationship (Sheppard and Sherman 1998).

In an earlier work, Andaleeb (1992) proposed four typologies of trust based on crossing the dimensions later used by Sheppard and Sherman (1998). These typologies comprise a ‘trust continuum’, between the two extremes of strong trust and distrust (see Figure 4.5).

![Figure 4.5: Trust Continuum](Source: Andaleeb 1992:15)

Discussing this ‘trust continuum’, Andaleeb (1992) proposes, four trust typologies classified on a trust continuum (Figure 4.5), between the two ends of strong trust and distrust. The first is full trust, where the trustee has no opportunistic motivations and possesses a set of competencies that are coherent with the task. Distrust is characterised by the low presence of both these dimensions. The intermediate cases are represented by two typologies defined as hopeful trust and unstable trust. In the first situation the trustor is convinced of the other
party’s supportive motivation, but aware that the trustee does not possess the knowledge required to properly execute the assigned task. However, the trustor hopes that the trustee will be able to increase their knowledge base and produce the expected output. On the other hand, in the case of unstable trust, the other party is perceived to be capable of producing the expected results, but is moved by opportunistic motivations rather than supportive ones (see Figure 4.6).

Figure 4.6: Classification of Different Trust Typologies

(Source: Andaleeb 1992:12)

Recently, several frameworks have started appearing in the various strands of literature to measure trustworthiness in particular. For example, there is the ‘trust and the mediating lens’ framework put forward by Caldwell and Clapham (2003) (see Figure 4.7). In their model, Caldwell and Clapham (2003) argue that the decision to trust is evaluated based upon one party’s assessment of the behaviours of another party, through what is described as a ‘mediating lens’ or complex filter through which each person views the world. In other words, the decision to trust has to pass through a trustworthiness filter; one party has to appear trustworthy in order for people to trust them.
This mediating lens consists of seven characteristics, as explained by Caldwell et al. (2008:108):

- *It is based upon a six beliefs model*; six beliefs form the foundation for an individual’s value system and interpretation of reality, including beliefs about self, others, the nature of the Divine, the past, current reality, and the future (see also Caldwell et al. 2002).

- *It is both cognitive and affective*; perceptions include both cognitive and affective elements that are closely related (Mackie and Hamilton 1993).

- *It is contextually interdependent*; the decision to trust is seen as contextually based and profoundly complex (Mayer et al. 1995).

- *It is ethically founded*; trust within an organisational context involves a continuous set of ethically-based social and psychological contracts. The subtle nature of the assumptions that make up those contracts is often tacit and implicit (Rousseau 1995).

- *It is goal directed*; the purposes of perception are both instrumental and normative as people seek to achieve goals individually, with others, and in organisations.

- *It is behaviourally attributive*; the common phenomenon of assigning attributive causation to others’ behaviours applies to the lens. When behaviours are seen as negative, a common tendency is for the observer to infer malevolent intentions or motivations (Rousseau 2005).
• It is systemically dynamic; the iterative process of information processing is acknowledged to be a complete and dynamic system with inputs, outputs, analysis, assessment, and feedback (Carver and Scheier 1998). The mediating lens is systemically dynamic, and feedback impacts beliefs, perceptions, relationships, attitudes, and behaviours on a continuous basis.

Caldwell and Clapham’s (2003) model did not explore trustworthiness and discuss its dimensions; rather, they focused on the ‘mediating lens’ as the main point in their model. In addition, they did not extend the model towards the outcome of achieving trust; their argument is simply built on Mayer et al.’s (1995) work.

Perhaps, one of the most comprehensive marketing models in the recent literature that explores trustworthiness as a multidimensional construct is Sirdeshmukh et al.’s (2002) model. Sirdeshmukh et al. (2002) proposed a framework that distinguishes between trustworthiness and trust. They used two dimensions to measure trustworthiness, described as the cognitive and affective dimensions. Moreover, Sirdeshmukh et al. (2002) focused on specific behavioural dimensions for two key facets – frontline employee (FLE) behaviours, and management policies and practices (MPPs). The dimensions in Sirdeshmukh et al.’s (2002) model are well documented within a strong theoretical framework. However, two issues can be raised regarding the model; firstly, their model was constructed from the organisation’s point of view in the analysis of the source of trust. This does not follow from the principles of long-term relationship marketing, in which both the customer and the organisation contribute equally to the relationship (Grönroos 1994). Secondly, Sirdeshmukh et al. (2002) did not distinguish between different forms of loyalty (Rundle-Thiele and Bennett 2001).

Based on the above, this thesis builds on the previous research on trust and trustworthiness, and proposes a conceptual framework to measure trustworthiness. This will be discussed in the following section.
4.6 Modelling Trustworthiness

As discussed previously, several researchers have attempted to explain trust and trustworthiness as two similar concepts (Hardin 2002). However, this thesis argues that trust and trustworthiness are different because:

- Trust represents cognitive or emotional investment in the trustee, while trustworthiness often goes against the trustee’s self interest by putting the trustor self interest first.
- Trust can be perceived as a risky decision, and consequently it may be dependent mainly on risk aversion. Trustworthiness is affected by psychological, moral or ethical factors.
- Trust is linked to the trustor’s perception of their own vulnerability to the actions of others, while trustworthiness is not.

A number of models have been developed to describe perceived trustworthiness based on the characteristics of a trustee that are perceived as influencing their trustworthiness (Caldwell et al. 2008). Examples of such characteristics are the trustee’s perceived truthfulness, ability and skill. Table 4.3 comprises several characteristics that are generally considered to be characteristics of trustworthiness, sometimes called the antecedents of trustworthiness (Mayer et al. 1995).

As a result of the review of different models and theoretical concepts of trust in the literature in section 4.5 above, the main dimensions of trustworthiness – a mapping for the dimensions of trust – has been generated, in an effort to provide a better understanding of the importance of each construct. This is an attempt to clarify the problem identified by Mayer et al. (1995:711) when they noted that “…one of the difficulties that has hindered previous research on trust has been a lack of clear differentiation among factors that contribute to trust, trust itself, and outcome of trust”. Table 4.3 presents a mapping exercise of the different trust dimensions. These emerging dimensions will act as a working framework for the proposed model in this thesis.
Table 4.3: Mapping the Dimensions of Trustworthiness

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Definition</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>The formal and informal sharing of meaningful and timely information between two exchange parties</td>
<td>Dwyer <em>et al.</em> (1987), Anderson and Narus (1990)</td>
</tr>
<tr>
<td>Loyalty13 (behavioural and attitudinal)</td>
<td>A partner is not only reliable, but also performs well in extraordinary situations</td>
<td>Butler and Cantrell (1984), Friedland (1990), Dick and Basu (1994) Rempel and Holmes (1995) Rundle-Thiele and Bennett (2001)</td>
</tr>
</tbody>
</table>

13 Dick and Basu (1994) provided four categories of loyalty highlighted in appendix Nine.
Chapter Four – Justification of the Conceptual Model and the Research Hypotheses

<table>
<thead>
<tr>
<th>Integrity</th>
<th>Morgan and Hunt (1994)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mayer et al. (1995)</td>
</tr>
<tr>
<td></td>
<td>Cummings and Bromiley (1996)</td>
</tr>
<tr>
<td></td>
<td>Sheppard and Sherman (1998)</td>
</tr>
<tr>
<td></td>
<td>Gefen et al. (2003)</td>
</tr>
<tr>
<td>Value alignment</td>
<td>Sitkin and Roth (1993)</td>
</tr>
<tr>
<td></td>
<td>Morgan and Hunt (1994)</td>
</tr>
<tr>
<td></td>
<td>Hess (1995)</td>
</tr>
<tr>
<td></td>
<td>Siegrist (2000)</td>
</tr>
</tbody>
</table>

(Source: adapted from Handfield and Bechtel 2004)

4.6.1 The Proposed Model and Research Hypotheses

This section covers the proposed model and the associated hypotheses for each of the conceptualised construct. Primarily, the proposed model for this thesis (illustrated in Figure 4.8) assumes three main relationships, and clearly defines the determinants of trustworthiness as well as an outcome. Secondly, the framework is a static dyadic model that assesses relationships at a given moment. The main relationships in the model place trustworthiness at the focal point, with determinants of trustworthiness (classified as operating at low and high levels) having a direct relationship with the central concept. The importance of each determinant will be discussed at a later stage in this thesis, since the results from the empirical study will show which determinant is most significant and which has stronger regression coefficient paths with trustworthiness.\textsuperscript{14} The third part of the model covers the outcome of trustworthiness, which is illustrated by two types of customer loyalty, behavioural (low level) and attitudinal (high level) loyalty, with a prediction that behavioural loyalty can lead to attitudinal loyalty.

\textsuperscript{14} Trustworthiness determinants are listed with no particular ranking.
4.6.2 Trustworthiness

The model’s central focus, trustworthiness\textsuperscript{15}, is defined in the literature as the perceived probability that a particular trustee will maintain one’s trust. For example, Mayer \textit{et al.} (1995) illustrate trustworthiness as an attribute of a trustee who is responsible for trust. Trustworthiness includes four forms of attributes, comprising competence, positive intentions, ethics, and predictability. The effect of each of these attributes is to build up the trustor’s confidence that the trustee is willing and able to fulfil that trust.

Butler (1991) claims that competence entails that the trustee has the knowledge, expertise and skill to fulfil the needs of the trustor. A related attribute is credibility, which describes the extent to which information offered by the trustee can be believed (Doney and Cannon 1997). Mayer \textit{et al.} (1995) took a different view from Butler (1991) and suggest that positive intentions symbolise the trustee’s feelings toward the trustor. Positive intentions may

\textsuperscript{15} In the proposed model trustworthiness has been treated as a multidimensional construct.
also include goodwill (Rousseau et al. 1998), benevolence (Doney and Cannon 1997) and customer loyalty (Butler 1991). Another element within trustworthiness is ethics, often conceptualised as the values to which the trustee remains loyal. These values vary from constructive intentions in that both parties are engaged toward others in general, rather than toward a precise trustor. Furthermore, ethical values relating to trust embrace integrity (Mayer et al. 1995), honesty (Rempel et al. 1985) and fairness (Butler 1991).

The final attribute of trustworthiness is predictability, which is the extent to which the trustee’s behaviour meets with the trustor’s expectations in a particular interaction (Butler 1991). This is similar to reliability (Sheppard and Sherman 1998) and consistency (Morgan and Hunt 1994). Additionally, predictability and mutual competence are naturally related to the cognitive dimension of trust (McAllister 1995)\(^\text{16}\), while positive intentions are normally related to the affective dimension of trust.

4.6.3 Determineants of Trustworthiness Hypotheses

The proposed model distinguishes between two levels in the definition of determinants of trustworthiness. High level determinants (integrity, benevolence, value alignment and communication) deal with the emotional aspects of trustworthiness, while the low level determinants (consistency and competence) cover the economic view of trustworthiness, i.e. through calculating the costs and benefit of the relationship. These determinants will be examined below.

4.6.3.1 Low Level Determinants

_Determinant 1. Competence_

Butler (1991) viewed competence from the stance that the trustee possesses the knowledge, expertise or skills required to fulfil the needs of the trustor. Competence is based on the belief that others are dependable and reliable. When individuals trust they believe that the other exchange party will behave as expected and meet their obligations. In other words, competence is linked to the service provider’s ability to deliver on their promises (Doney and Cannon 1997). In contrast, customers have to be willing to accept the risks associated with

\(^{16}\text{See the argument surrounding cognitive and affective trust in Chapter Three - Section 3.5.}\)
service provider competence; in other words, customers have to show willingness to accept that the service provider is capable of delivering what has been promised (Doney and Canon 1997; McAllister 1995).

**Hypothesis 1**: Competence has a positive impact on trustworthiness.

Determinant 2. Consistency

Ennew and Sekhon (2003:8) propose that “consistent behaviour over time contributes to trust because it increases the predictability of future behaviour”. Therefore, consistency is crucial since honesty as a single determinant of trustworthiness is unlikely to be enough to reduce uncertainty and risk, making the achievement of trustworthiness less likely. This is aligned to notions of honesty and promise (Butler and Cantrell 1984) to the extent that the trustee can be confident that a trustor is honest, and will fulfil their committed obligations (Hess 1995).

**Hypothesis 2**: Consistency has a positive impact on trustworthiness.

4.6.3.2 High Level Determinants

Determinant 3. Benevolence

The third determinant, benevolence, is related to the trustee’s perceived willingness to establish mutually fulfilling interactions rather than maximising profits. Benevolence is only present when the trustee has opportunities for opportunistic behaviour (for example, purchasing a reduced priced service) (Mayer et al. 1995). The importance of benevolence is illustrated by the definition put forward by Doney and Cannon (1997:36) when they defined trust as “perceived credibility and benevolence of a target of trust”. Furthermore, affective trust is often preceded by benevolence (Sheppard and Sherman 1998). Benevolence promotes the effective aspects of the relationship by indicating the service organisation’s intention to care for the well being of its customers (Doney and Cannon 1997; Mayer et al. 1995). Therefore, it is categorised as a high level determinant in the current model.

**Hypothesis 3**: Benevolence has a positive impact on trustworthiness.
Determinant 4. Communication

Marketing academics have stressed the importance of communication between customers and organisations. For instance, Anderson and Narus (1990) noted that the practice of relationship marketing is centred on nothing more than good communication which leads to trust. Grönroos (2000) recommended that organisations should create a ‘relationship dialogue’ through participation from the engaged parties, in order to deliver the planned message to customers – or, in other words, organisations should be able to communicate with their customers in order to enable a high level of interaction between both parties.

Anderson and Narus (1990) argue that communication is an antecedent to trust, indicating that it has a positive impact on trust as it assists in the resolution of conflicts and ambiguities, as well as managing perceptions and expectations (see also Morgan and Hunter 1994; Dwyer et al. 1987). The underlying principle is that communication provides insight into the specific roles (for example, communication initiator and receiver) that the trustor and the trustee are willing and able to take throughout the potential interaction (Anderson and Narus 1990). This is in line with research on trust in ongoing relationships, where it was found that communication manages the expectations that parties have concerning the other’s role or, for example, to keep customers updated with the organisation’s latest services (Morgan and Hunt 1994).

Effective communication has been recognised as an important part of relationship marketing (Dwyer et al. 1987), although these authors stated that trust is an antecedent of communication. The current model not only embraces the standpoints of Anderson and Narus (1990) and Morgan and Hunt (1994), who contend that open communications lead to trust, but also argues that effective communication is a high level determinant of trust rather than low level one.

From the organisation’s view it should be able to accept feedback from customers and listen to their suggestions or complaints (via personal interaction) in addition to establishing a good contact channel to deliver and market any future products or even deliver messages to its customers. From the customers’ perspective, such a dialogue will provide them with an effective method to express their opinions regarding the service they receive. However, the
dialogue should also include the possibility of learning in order to develop and maintain communication, thereby developing the relationship between the involved parties (Grönroos 2000).

_Hypothesis 4_: Communication has a positive impact on trustworthiness.

**Determinant 5. Value alignment**

In their 1993 study Sitkin and Roth indicated that value alignment is a key factor in developing trust. Their study associated value alignment with distrust from the perspective that a lack of congruence in values could lead to mistrust (Siegrist 2000). Morgan and Hunt (1994) viewed value alignment (or as they refer to it as shared values) from the perspective that exchange parties with common beliefs about what behaviour, goals, and policies are important or unimportant, appropriate or inappropriate, and right or wrong.

Morgan and Hunt (1994) found that shared ethical values were significant for enhancing trust within a particular relationship exchange. Therefore, the current model suggests that the formation of value alignment has to be initiated by the trustor, aligning towards the trustee (Siegrist 2000).

_Hypothesis 5_: Value alignment has a positive impact on trustworthiness.

**Determinant 6. Integrity**

Integrity often implies that the trustee will demonstrate and stick to a set of principles and values that the trustor finds acceptable (Mayer and Davis 1999). Integrity can be expressed in terms of several concepts such as honesty, predictability, nature, credibility, and dependability (Mayer and Davis 1999). Therefore, it is often thought of as a boundless dimension. Trustee integrity requires that service providers extend a consistent approach to their services. From an organisational standpoint, integrity entails that the different departments of the organisation display a harmonised approach when dealing with the trustor’s perception.

_Hypothesis 6_: Integrity has a positive impact on trustworthiness.
4.6.4 Customer Loyalty (Model Outcome)

In marketing theory, loyalty has often been discussed interchangeably with its operational definition to refer to repeat purchases, preference, commitment, retention and allegiance. Liljander and Strandvik (1996) argue that customer satisfaction and repurchase intentions correlate positively, and it might be more beneficial to concentrate on influencing customers’ experiences rather than altering their expectations. However, Buttle (1996) viewed customer loyalty as an interactive feature of relationship marketing, which results in a commitment from the customer to the organisation. Reichheld and Sasser (1990) and Reichheld (1996) studied the value of building customer loyalty, and proposed that customers remain loyal because of the value they receive from the service provider. Zeithaml and Bitner (1996) argue that service quality and customer satisfaction positively affect customer behaviour, and customers who have no service problems show the highest levels of loyalty intentions. However, their loyalty intentions are not significantly higher than those of customers who have experienced service problems that have been solved satisfactorily. Therefore, organisations that are willing to improve services, particularly beyond their own desired service level, should do so in a cost-effective manner. Organisations aiming for customer loyalty should tailor their offers to fit customer demands.

Customer loyalty can be seen as a means to express feelings or attitudes toward brands, services, store products and activities (Uncles et al. 2003). From the current literature (see for example, Oliver 1999), customer loyalty can be divided into two main types, known as behavioural loyalty and attitudinal loyalty. Attitudinal loyalty is a higher-order or longer-term commitment from a customer towards an organisation. Behavioural loyalty, on the other hand, addresses the customer’s intention to make repeat purchases (Mayer and Davis 1999; Chaudhuri and Holbrook 2001; Moore and Sekhon 2005). Thus, customer loyalty in the proposed model is seen as bi-dimensional, including both attitudinal and behavioural aspects of loyalty. Both attitudinal and behavioural loyalty are outcomes of trustworthiness, with the additional factor that behavioural loyalty can lead to attitudinal loyalty.
Chapter Four – Justification of the Conceptual Model and the Research Hypotheses

**Outcome 1. Attitudinal loyalty**

Attitudinal loyalty in this model is seen as the higher level of loyalty, and is considered to be an antecedent of relationship commitment (Morgan and Hunt 1994). Attitudinal loyalty is often defined as having a positive effect since it enhances a relationship’s continuance and the need to remain in the relationship. Attitudinal loyalty is significant because it indicates a tendency to exhibit certain behaviours, such as the possibility of future purchase (Dick and Basu 1994). Rundle-Thiele and Bennett (2001) argue that this type of loyalty reduces the level of expectations set by customers and the tendency to search for alternatives (Rundle-Thiele and Bennett 2001).

*Hypothesis 7: Trustworthiness has a positive impact on attitudinal loyalty.*

**Outcome 2. Behavioural loyalty**

The repeat purchase of services or products is often seen as one of the characteristics of behavioural loyalty, which is seen as a lower form of loyalty. It is normally accepted that behavioural acts are an end variable in consumer behaviour models (Rundle-Thiele and Bennett 2001). Reichheld (1996) argues that the effectiveness of relationship marketing efforts should be evaluated in terms of the behavioural changes they bring about. As a result, it is not surprising that behavioural loyalty is generally accepted as a relationship outcome that will lead ultimately to attitudinal loyalty (Pine *et al.* 1995).

The proposed model hypothesises that trustworthiness is linked directly to behavioural and attitudinal loyalty, with each type of loyalty as an indicator of the extent of trustworthiness. Moreover, it is predicted that behavioural loyalty can lead to attitudinal loyalty.

*Hypothesis 8: Trustworthiness has a positive impact on behavioural loyalty.*

*Hypothesis 9: Behavioural loyalty has a positive impact on attitudinal loyalty (a prediction).*
Chapter Four – Justification of the Conceptual Model and the Research Hypotheses

Summary

After examining several dimensions of trust, this chapter proposes a conceptual framework to identify the components of trustworthiness within service organisations. The model attempts to identify the antecedents of trust as a method of measuring trustworthiness, and thereby predict some corollaries of the concept, mainly connected with customer loyalty. Furthermore, customer loyalty is classified into two main forms, namely behavioural and attitudinal loyalty. Each form of loyalty is linked with special attributes of the customer.

The next chapter will explore the methodological aspects of the research in order to provide a solid base for an empirical examination of the proposed model.
CHAPTER FIVE: RESEARCH METHODOLOGY

5.1 Introduction

A piece of research can be defined as any attempt to study a problem logically, or to add to knowledge surrounding a problem; research is often implicitly assumed to be the work of professional scientists and academics (Reber 1995). Neuman (1997) postulates that in order for the researcher to make his or her research clear and accessible, he or she should construct the research in such a way that it could be carried out by non-academics, creating knowledge in the process. Research, therefore, should become an activity that is accessible to all, instead of an activity that is carried out by a select few people within the academic world (Neuman 1997).

All research has its own unique characteristics and ways for determining the appropriate process to identify what the research is aiming to investigate and achieve, i.e. how the research will contribute to the body of knowledge. The general structure underlying any research is known as its methodology, and the process of conducting the research is referred to as its research method.

This chapter aims to:

- Rationalise the research design of and the philosophical stand point the thesis.
- Examine the employed sampling techniques, sampling procedure and the used measurement methods.
- Introduce the analyses strategy and the main analysis techniques for the main data collection stage. Furthermore, the chapter will provide a full explanation of the different research methods and strategies that will be utilised.
- Discuss the limitations of the research. (See Figure 5.1 for an overview of the structure of this chapter).
Several methods were used to achieve the aim and objectives of this thesis, these are:

- Research philosophy: post-positivism
- Research logic: deductive
- Research approach: mixed methods by combining semi-structured interviews and survey questionnaire
- Analysis method: multivariate analysis using structural equation modelling

These methods are discussed in greater detail in this chapter, each of which has a full justification of why it was selected.
5.2 The Research Philosophy

5.2.1 Choice of Philosophy

There are several competing views or paradigms concerning knowledge, regarding how it is perceived and how it developed (Grix 2004). However, in the field of marketing, it appears that two main paradigms dominate the majority of the academic research; these are the positivist\(^1\) and the interpretivist paradigms. The selection of a research philosophy is influenced by the researcher’s preferred method of tackling the research (Baker 2001). The positivist paradigm views reality as objective, existing independently of human beings (Grix 2004). The interpretive paradigm views reality as ‘constructed’ by human beings, and consequently it does not and cannot exist independently from the researcher who is aiming to comprehend it. Figure 5.2 provides a general view of the process of selecting the research methodology followed in this thesis.

Figure 5.2: Blocks of Research

(Source: Grix 2004:66)

The classic distinction between positivism and interpretivism creates corresponding distinctions in terms of ontology (the ‘reality’ being investigated), epistemology (the relationship between reality and the researcher) and methodology (the techniques used to investigate reality); that is to say, researchers construct epistemological assumptions using certain methodologies to support their ontological theories. Table 5.1 provides additional information about each of these differences. Positivism is the dominant paradigm within the natural sciences, while interpretivism is the dominant paradigm in the social sciences.

---

\(^1\) Different scholars use different terms when referring to phenomenology and positivism, depending on the scholars’ perspectives (see Table 5.2 for more expressions).
Guba and Lincoln (1994:108) provided a simplified way of understanding the relationships between epistemology and ontology; they argued that the researcher should answer three questions in order to identify his or her inquiry paradigm:

*The ontological question:* what is the form and nature of reality and, therefore, what is there that can be known about it?

*The epistemological question:* what is the nature of the relationship between the knower (or would-be knower) and what can be known?

*The methodological question:* how can the inquirer go about finding out whatever he or she believes can be known?

Some scholars (for instance, Polkinghorne 1983; Baker 2002) claim that the choice of paradigm has a direct link with the research question(s) that has been proposed at the start of the research, and all other methodological choices depend on how the researcher is intending to address these question(s). Foxall (1998), using radical behaviourism as an example, suggested that broad theories of consumer behaviour rest on both positivist and interpretive pillars. In the case of radical behaviourism, positivists support the search for ‘laws’ of behaviour within the confines of laboratory settings, while interpretivists support the elaboration and explanation of more complex consumer behaviours in natural settings. These two dominant philosophical paradigms are discussed in detail below.
5.2.1.1 The Epistemological and Ontological Paradigms

The term epistemology is expressed in the literature as a “theory of knowledge” (Harding 1987:3), or in more detail as “a theory of knowledge embedded in a theoretical perspective” (Creswell 2003:4). Rather than asking who can be a knower and what can be known, epistemology illustrates how knowledge is formed; it is the foundation for the knowledge building process. The conscious and unconscious questions, assumptions and beliefs that the researcher brings to the research, all form the preliminary basis for an epistemological position (Creswell 2003). Actions within the research process are influenced by the researcher’s previous experiences.

Science from the positivist tradition holds several basic beliefs about the nature of knowledge, which together form a positivist epistemology that is the foundation of the quantitative paradigm. Positivism entails that there is a foreseeable reality that exists independently of the research process (Grix 2004). The social world, like the natural world, is governed by rules, which result in patterns. Accordingly, causal relationships between variables exist and can be identified, proven, and explained. Thus, patterned social reality is predictable and can potentially be controlled. This describes the nature of social reality from the positivist perspective (Hollis 1996; Creswell 2003). In fact, both the qualitative and quantitative approaches are located within this epistemological structure (Hesse-Biber and Leavy 2004:2), as will be discussed later in this chapter.

5.2.1.2 The Post-positivist Paradigm

Although this thesis takes the stand point of post-positivist paradigm (as will be discussed further on), it acknowledges the debate surrounding the meaning of science in the literature, particularly in the social sciences, (Creswell 1994). This debate has argued that the different methodologies that are employed in seeking knowledge often rely on differing philosophical assumptions and principles (Neuman 1997). Therefore, each methodology employs different methods of investigation and embodies different basic assumptions about what comprises truth and knowledge. Figure 5.3 illustrates the position of the post-positivist paradigm in comparison to positivist and interpretivist paradigms.
These paradigms place the social sciences in a complex position when it comes to investigation. Polkinghorne (1983) illustrates this complication by reference to the shift in thinking that has taken place over thirty years, moving research from a predominately positivist paradigm to one that can be considered to be post-positivist in nature. However, the positivist approach is defined here as “one which embraces any approach which applies scientific methods to human affairs, conceived as belonging to a natural order open to objective enquiry” (Hollis 1996:24).

The post-positivist philosophy is similar to positivism. The fundamental difference is that when examining social reality, post-positivism recognises that researchers cannot be completely positive about their knowledge claims (Creswell 2003:7). Building on the positivist notion of proving fundamental relationships that compose the social world, the post-positivist approach proposes evidence to support a pre-existing theory; in other words, post-positivists rely on deductive logic and hypothesis testing, to create evidence that will confirm or disprove a theory, though not in absolute terms (unlike in the positivist tradition).

Overall, post-positivist philosophy assumes that there is an objective reality ‘out there’, composed of testable cause and effect relationships (Creswell 2003). Social reality thus exists independently of the researcher and the research question. Relying on deductive logic, these researchers engage in measurement and hypothesis testing in order to create evidence in support of, or against, an existing theory (Creswell 2003).
Within a post-positivist perspective, the researcher can use whatever means are appropriate for the specific question and subject matter to be explored (Sarantakos 1998). This is possible because post-positivism provides an alternative to the traditions and foundations of positivism in conducting a disciplined inquiry. For the post-positivist researcher, reality is not a firm entity; instead it is a creation deriving from those individuals involved in the research. Reality does not exist within nothingness; its composition is influenced by its context, and many constructions of reality are therefore possible (Crossan 2002:48).

To that extent as it has developed a conceptual model which it wishes to test; this research is anchored between the positivist and interpretivist paradigms – in other words, it adopts a post-positivist approach because such a philosophy assumes that reality is multiple, subjective, and mentally constructed by individual human beings.

“The use of flexible and multiple methods are desirable as a way of studying a small sample in-depth over time that can establish warranted assertibility as opposed to absolute truth. The researcher interacts with those being researched, and findings are the outcome of this interactive process with a focus on meaning and understanding the situation or phenomenon under examination” (Crossan 2002:48).

Furthermore, this thesis also aims to triangulate the development of hypotheses with a deeper understanding of how customers perceive trustworthiness and its antecedents and corollaries. In particular, in the measures used to test the conceptual model, the research wants to incorporate the experiences of customers and perspectives on how they rank the factors contributing to trustworthiness.

For the purpose of this research post-positivism appears to be more applicable because it emphasises on the importance of multiple measures, each of which may possess different types of error(s) (Grix 2004). Furthermore, this approach does admit that the researcher cannot be entirely objective, and allows for the expression of the researcher’s personal perspective in the research and facilitates the use of any available instruments to achieve the research objective.
5.3 Research Logic

There are three logical frameworks that can be applied by the researcher; these are inductive, deductive and abductive logic (a combination of the inductive and deductive). In inductive logic, the researcher gathers empirical data and attempts to form a theory based on the results of the collected data. There are no theories upon which the researcher relies; instead, the researcher attempts to generate a theory to explain the observed facts. In contrast, the object of deductive logic is to examine an existing theory and find data that accommodates this theory (see Figure 5.4).

Based on the aims and objectives of this research (see Chapter One section 1.3), the logical arguments in this thesis are deductive because they build on previous theories surrounding trustworthiness and introduce a new model to be examined in a specific situation. In addition it is aligned with the adopted research philosophy of the thesis in being post-positivism, see Chapter Five section 5.2.1.2

5.3.1 Qualitative vs. Quantitative Methods

The terms quantitative and qualitative are often used to represent different positions in research, and both methodologies are related to several different dimensions\(^2\) that control the process of any research (Cavana \textit{et al.} 2001; Miles and Huberman 1984). Furthermore, both methodologies can be implemented in conjunction with other research paradigms, depending on formulation of the research (see Table 5.2).

\(^2\) The terms dimensions and constructs are used interchangeably in this research.
Table 5.2: Assumptions of the Quantitative and Qualitative Research Paradigms

5.3.1.1 Quantitative Research

Quantitative research attempts to measure a phenomenon by converting it into figures and numbers that can then be analysed using a range of statistical methods (Collis and Hussey 2003). Furthermore, qualitative research “is often privileged as “hard” science, a quantitative researcher relies on numbers, rates, and percentages typically presented in a table, grid, or chart in order to communicate meaning” (Hesse-Biber and Leavy 2004:1). Huysamen (1997) suggests that quantitative research distinguishes between a cycle of successive stages comprising hypothesis formulation, data collection and analysis.

Employing deductive logic, quantitative research seeks to establish facts, make predictions, and test hypotheses; a large part of quantitative data analysis is
statistical (Huysamen 1997). The research is driven by the researcher’s notions about which dimensions are of interest, and the data is thought to exist independently of the researcher (Miles and Huberman 1984; Sarantakos 1998).

Easterby-Smith et al. (1997) suggest that in the case of the quantitative methodology and positivist philosophy, the main advantages consist of providing a broad coverage of the range of situations. Such an approach to research can be fast and economical, particularly when statistics are collected from a large sample; also, quantitative methods allow researchers to measure and control their research variables, with the consequence that their results are statistically reliable and can be projected from the sample to the population (Miles and Huberman 1984). There are several types of quantitative methods; examples are experiments, quasi-experiments and surveys.

Criticism of the quantitative methodology consist of the fact that quantitative research is neither suitable nor cost-effective for learning why people act or think as they do (McCullough 1995), i.e. such research is unsuitable for investigating human actions, behaviours and attitudes. Theories resulting from quantitative studies often fail to provide a complete and rounded view of individuals (Edwards 1998). Also, in order to permit reliable statistical analysis the research questions must be clear, simply stated and often open-ended, as well the sample being relatively large (Edwards 1998). Finally, a serious disadvantage of quantitative research is that concerns are only measured if they can be formulated prior to the beginning of the study (McCullough 1995).

5.3.1.2 Qualitative Research

Qualitative research, in contrast to quantitative research, focuses on the fundamental idea that it is possible to obtain knowledge about an individual’s world through descriptive language (Sarantakos 1998), i.e. phenomena are observed and examined by being converted into words (Baker 2001). Qualitative methods offer a range of theoretical and methodological possibilities (Crossan 2002).

In short, qualitative methodology is the practice of qualitative research (see Table 5.3). While quantitative research is positivist in its foundation, qualitative
research takes mainly a phenomenological perspective. Quantitative research consists mainly in the collection of numerical data, but the qualitative researcher mainly employs verbal (non-numerical) data, for instance, observations and interviews (Gay and Airasian 1999). Furthermore, quantitative research attempts to find evidence which supports or refutes an existing proposition, while qualitative research allows propositions to emerge from previously existing situations (Huysamen 1997) (see Table 5.3).

Table 5.3: Differences between Qualitative and Quantitative Research Strategies

(Source: Bryman and Bell 2003:25)

Despite the specific advantages and drawbacks of both the qualitative and the quantitative methodologies, the application of a particular method may not be appropriate for the purpose of this thesis because this thesis attempts to collect and analyse data using different perspectives (questionnaire survey and in-depth interviews). In addition, Nau (1995:47) states that “...qualitative and quantitative methods used in conjunction may provide complementary data sets which together give a more complete picture than can be obtained using either method singly.” Consequently, this research will look to the theory of triangulation in order to choose the appropriate methodological foundation for this research.
5.3.1.3 Combined Methods/Triangulation

The use of multiple research methods is called triangulation (Easterby-Smith et al. 1997), and it is often employed because “no single method will ever meet the requirements of interaction theory” (Denzin and Lincoln 1998:25). The term is used in surveying and cartography, where “a minimum of three reference points are taken to check an object’s location” (Easterby-Smith et al. 1997:133). Abrahamson (1983) suggested that mixing methods prevents research becoming method-bound. In addition, the strength of the research is increased by the counterbalance of qualitative and qualitative methods; i.e., mixing methods avoids disadvantages of both the qualitative and qualitative methods (Collis and Hussey 2003) (see Table 5.3).

There are four categories for triangulation research; these can be summarised as:

- **Theory triangulation**: the adaptation of existing models from different fields, and employing them in the current research area (Denzin and Lincoln 1998).
- **Investigator triangulation**: where several researchers collect data in the same area, and then compare all their results. This triangulation grants all the researchers a deeper insight, bringing different perspectives to the same problem.
- **Data triangulation**: where data is collected over different time scales or from different sources (Collis and Hussey 2003).
- **Methodological triangulation**: where both quantitative and qualitative methods are applied during the same research. There are various methods to achieve this, including questionnaires, interviews, telephone surveys and field studies (Easterby-Smith et al. 1997).
To summarise, qualitative and quantitative research attempts to examine phenomena by applying different research methods (see Table 5.4). These methodologies are divided according to whether the researcher’s assumptions are thought of as being subjective or objective (Denzin and Lincoln 1998). By mixing methodologies the research captures both perspectives; the subjective perspective will provide a full explanation of the researched phenomenon, while the objective perspective will allow a further exploratory examination of the phenomena. The results may be understood both in terms of the statistical and numerical (quantitative) data, and in terms of the descriptive (qualitative) data.

This study adopts a multi-methodological perspective by conducting semi structured interviews and a survey questionnaire; this is discussed in detail in section 5.4.1 and 5.4.2. According to Denzin (1970), triangulation is a methodological combination, or it is a research design that combines dissimilar methods (both qualitative and quantitative) to measure the same phenomenon (Denzin and Lincoln 1998). The use of triangulation research is advocated by LeBlanc (1996), who suggests that such research provides greater reliability of results. Also, Denzin and Lincoln (2000) argue that the use of the triangulation approach enhances the validity and reliability over and above that for a single methodological approach for the same research.
5.4 Data Collection

The data collection for any research passes through several steps in order to build a valid and reliable method (see Figure 5.5). Furthermore, data collection consists mainly of two types, resulting in secondary and primary data. Secondary data refers to information that already has been documented about a certain phenomenon, but which has not been gathered primarily for the researcher’s specific study (Creswell 1994). Primary data, on the other hand, is information that has been collected from the original source for the researcher’s particular study (Creswell 1998).

Figure 5.5: Data Collection Process

(Source: Collis and Hussey 2003:152)

The secondary data in this research consists of materials related to scientific research publications from established journals and books. Sarantakos (1998) stated that it is essential to have a critical attitude towards this type of data, since the researcher has not collected it and the precise collection process is, therefore, not exactly replicable (Aaker et al. 2001).
Chapter Five – Research Methodology

The process of collecting primary data for any research depends on the nature of both the researcher and the phenomena under investigation. For instance, if the researcher intends to collect in-depth information from a small sample of people, especially concerning their emotions, experiences and sensations, conducting interviews are a good option, but if the researcher seeks to generalise the findings, questionnaires are more suitable (Collis and Hussey 2003).

For the purpose of this research it is necessary to gain a reflective insight regarding relationship marketing and its association with trustworthiness from the customers’ perspective, as well as to test the proposed model. Therefore, this research uses semi-structured interviews to refine the generated pool of items (see chapter Six section 6.5), followed by a survey questionnaire to allow the collection of a large sample in order to facilitate the generalisation of the proposed model as stated in the first aim of the thesis (see chapter One section 1.3). Grix (2004) contends that surveys are the main form of primary research undertaken, and suggests that the technique’s popularity is due to the following factors:

1. The objectives of most research require factual, attitudinal and/or behavioural data. Survey research provides the researcher with the means of gathering qualitative and quantitative data, both of which are required to meet such objectives.

2. One of the greatest advantages of survey research is its scope: a great deal of information can be economically collected from a large population.

3. Questionnaire survey confirms to the specifications of scientific research: it is logical, deterministic, general, parsimonious and specific.

5.4.1 Interviews

Easterby-Smith et al. (1991) argued that interviews are often seen as the best method for gathering information, although they are complex and this complexity is occasionally underestimated by researchers. They are also time-consuming to conduct and analyse, and they have sometimes been used where research should have been conducted in other ways (Robson 2002). For example, if the researcher wants to obtain answers to a very simple question, a questionnaire might be more appropriate.
In a very basic sense, an interview is a series of questions that a researcher asks respondents in person (Macionis and Plummer 1998). However, there are several types of interviews; an interview can be structured (the researcher asks clearly defined and precise questions) or semi-structured (the researcher can alter the question type or number depending on the interviewee). Floyd and Fowler (1993) also argued that interviews can be unstructured, mainly by allowing some of the questioning to be assumed by the responses of the interviewee. Comparatively, structured interviews are prepared and can be shaped by closed questions, whereas unstructured interviews are relatively unsystematic and can be shaped by open questions.

The semi-structured interviews for this thesis are designed to qualitatively analyse respondents’ comments on the main subject without constraints (Robson 2002). It will allow exploring “… the actor’s definition and how people act which gives meaning to their own lives” (Eyles 1989:380). It also have been used to validate, improve, and path the way to the data collection for the survey stage.

5.4.2 Survey Questionnaires

Questionnaires are central to surveys (Baker 2002:185) and they are the main used method of data collection in field research (Stone 1978). The key aim of a questionnaire is to collect a large sample of people’s views (Stroh 2000); therefore, they can be used to achieve a broad image of the factors influencing customers’ decisions regarding a certain incident (House 1985). From a statistical perspective, the large sample size needed for questionnaire studies is designed to produce unbiased statistical results, which can then be implied for the whole population (Easterby-Smith et al. 1991; Robson 2002). Additionally, other advantages of questionnaires are: cost efficiency when working with large sample sizes (Robson 2002); simplicity of analysis; and effectiveness as a way of decreasing researcher bias. Data collection and analysis can even be completed using computer software packages (Easterby-Smith et al. 1991; House 1985).

Survey questionnaires often examine the preferences, attitudes, practices, concerns, or interests of a particular group of people (Gay and Airasian 1999). Surveys can also include cross-sectional and longitudinal studies using questionnaires or interviews for data collection, with the aim of assessing the features of a large
sample of interest based on a smaller sample from that population (Easterby-Smith, et al. 1997).

In most cases, survey research allows the researcher to obtain data about practices, situations or views at a specific point in time through conducting questionnaires or interviews (Robson 2002). Creswell (1994) argued that the advantages of surveys include: economy of design; the rapid turnaround in data collection; and the ability to identify attributes of a population based on examination of a smaller group of individuals.

Alreck et al. (1985) argues that the most important advantages of surveys are that they are comprehensive, customised, versatile, flexible and efficient. Interpretive surveys are employed in specific circumstances where the respondent is asked to describe what they do, how, when, where and so on (Robson 2002). Interpretive surveys are often described as the first step in primary data collection when the researcher is attempting to gain an insight about the topic under investigation (Robson 2002). In-depth interviewing and focused group interviews are widely used, often to define the questions which will later be included in a formal questionnaire for use in a factual or opinion survey (Denzin and Lincoln 1998).

The reason behind adopting a survey questionnaire in this thesis is because a survey provides one way of obtaining and validating knowledge. Moreover, surveys are a means of going from observation to theory validation, a process that has three purposes: description, explanation and exploration. This research is aiming to cover a large population in the empirical stage of the data collection; therefore, it would achieve significant benefit from the use of survey questionnaire.
5.5 Sampling

A sample is expressed as a small cluster of units selected from a larger cluster, known as the population (Robson 2002). A sample is defined as: “...the entire group under study as specified by the objective of the research” (Pedhazur and Schmelkin 1991:63). A population refers to “a body of people or to any other collection of items under consideration for research purposes” (Collis and Hussey 2003:155). By investigating a selected sample, it is expected that the researcher will be able to present valid results and conclusions that will allow either a general view of the entire population (if the researcher is following a quantitative method), or an in-depth view about the selected sample (if the researcher is following a qualitative method). There are many different sampling methods, but a good sample should always be randomly selected, unbiased and large enough to satisfy the needs of the investigation being undertaken (Collis and Hussey 2003).

Prior to collecting the sample, it is important that the researcher defines the population, including a description of the members to be included (Czaja and Blair 1996). Nevertheless, there are several methods of sampling and ways to determine the appropriate sampling size for any research. The most common methods of sample selection are random and non-random sampling.

Non-random sampling is widely employed as a method for case selection in qualitative research, and also in quantitative studies of a preliminary and exploratory nature where random sampling is impossible or too expensive. However, random sampling techniques are always strongly preferred, because they allow statistical conclusions to be drawn (Robson 2002). In particular, there is no technique to measure the validity of the results from non-random samples.

Random sampling relates to data collection where each member in the population has a pre-determined possibility of being selected for inclusion in the sample. In general this is an equal chance of being selected. There are various types of random sampling, such as: simple random sampling, equal probability systematic sampling, stratified simple random sampling, and cluster sampling.
Simple random sampling was chosen as the most appropriate method for this research, since customers and hotels were approached randomly without any prior knowledge or expectations about their behaviours or attitudes. The population in this study was defined as all hotel customers. All customers from four- and five-star hotels in Jordan were selected as a sampling frame.

The selected hotels[^3] were targeted after discussing the nature of the research with the Jordanian Hotel Association; they facilitated contact with the hotels. In order to obtain management approval for the research, initial contact was through the Human Resources Departments in the respective hotels. Consent was given for the researcher to conduct the research and contact customers directly in order to distribute the questionnaire in the hotel’s lobby. Also, three assistant researchers were recruited, whose role was to facilitate questionnaire completion and ensure the usability of the questionnaires. The assistants were paid a daily fee of £50, and the research covered a period of three days, from 8am to 6pm.

### 5.5.1 Sample Size

Hair *et al.* (2006) recommended obtaining a sample of three to five hundred in order to be sufficient for data analysis, particularly when applying multivariate analysis techniques. Therefore, respondents were approached until the sample reached the target of five hundred completed questionnaires (n=556 to be exact). Obtaining the recommended number of questionnaires ensured a ratio of fifteen responses to each item in the questionnaire; the questionnaire contains thirty-six items (Tabachnick and Fidell 2006). Moreover, other studies with similar levels of complexity used comparable sample sizes (see for example, Anderson and Weitz 1989; Moorman *et al.* 1992; Morgan and Hunt 1994; Mayer *et al.* 1995; Sirdeshmukh *et al.* 2002; Caldwell and Clapham 2003).

In summary, a total of 556 responses were collected for the main study[^4]. The sample was used to validate the measurement model and test the research hypotheses. A detailed analysis of the questionnaires and how the data was coded and then analysed is contained in the analysis chapters (chapters six, seven and eight).

[^3]: The participated hotels did not want to be identified.
[^4]: The pilot study had its own sample and will be discussed in Chapter Six.
5.6 Measurement Development

This section outlines the strategy used to obtain robust and reliable measures for the research instrument. The American Psychological Association (1995) stated that research measures should provide strong evidence of content validity, criterion-related validity, construct validity, and internal consistency (as will be discussed later on in this chapter in details). In order to achieve these criteria, several steps were followed to build a robust scale and a strong measurement instrument to test the proposed model, these are summarised in Table 5.5.
Table 5.5: Breakdown of the Research Approach

<table>
<thead>
<tr>
<th>Step</th>
<th>Analytical technique(s) used</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| Specify domain of construct | Literature search  
Conceptualisation based on extensive exploratory study | To clearly delineate the area of the construct, so as to determine what ‘belongs’ to the construct and what does not. |
| Generate sample of items | Review of existing scales  
Review of exploratory study transcripts  
Item editing | To generate a large pool of items for each construct (90 items) |
| Expert judging (3 judges) | Sorting task (judges asked to allocate items to the construct they believed it tapped) | To select items with the highest level of agreement among experts (Rossiter 2002) |
| Questionnaire pilot (60 respondents) | Inter-item correlations  
Exploratory Factor Analysis | To take out items which displayed poor item-total correlations or loaded poorly on the expected factor |
| Collect data (n=556) | | |
| Measure purification – internal consistency | Exploratory Factor Analysis  
Item-total correlations | EFA, load significantly on the same factor |
| Assess normality | Study of kurtosis and skewness | To ensure data suitable for Structural Equation Modelling |
| Verify unidimensionality | Confirmatory Factor Analysis (examination of residuals) | To weed out any items displaying high residuals with other items on their factor or with items on other factors |
| Assess reliability | Confirmatory Factor Analysis | Having weeded out items with poor reliability, to ensure that the Cronbach alpha reliability test of each factor is acceptable > .7 (Hair et al. 2006) |
| Assess face validity | Relate remaining items back to the construct definition | |
| Assess convergent validity | CFA – to ensure that all factor regression coefficients are statistically significant and substantial, in a well-fitting mode | |
5.7 The C-OAR-SE Procedure for Scale Development

There are several scale development procedures in the field of marketing. These scales have been developed to measure various attitudes, perceptions, or opinions of customers/consumers in various organisational settings in order to examine a set of hypothesised relationships with other constructs or behaviours (Netemeyer et al. 2003). Churchill’s (1979) pioneering data driven model was the most common approach for over two decades. However, this model has been criticised by several authors; for instance, Flynn and Pearcy (2001) noted three main problems with the model:

1. The sample size used in scale development;
2. The fact that Churchill’s (1979) procedure contains insufficient replications; and,
3. Issues surrounding the problem of when exploratory factor analysis is appropriate (regarding theoretical vs. applied scales) (Flynn and Pearcy 2001).

Rossiter (2002) proposed, what he claims, a paradigm shift in the field of marketing with the development of a new measurement scale, the C-OAR-SE procedure for scale development. This new scale is an attempt to overcome the limitations inherent with Churchill’s (1979) procedure.

The C-OAR-SE procedure consists of a six-fold model. The aspects of the model are:

(C) Construct definition.

(O) Object classification.

(A) Attribute classification.

(R) Rater\(^5\) identification.

(S) Scale formation.

\(^5\) Rater(s) is a term Rossiter (2002) uses to describe respondents; this originated from the idea that respondents ‘rate’ the scale items in the questionnaire.
This model consisted of a scale development procedure and mainly based on one type of validity (content validity). Rossiter’s (2002) approach criticised much of the existing scale development literature in marketing, by arguing against the logic behind adopting and following the classic procedure for developing scales (for instance, Churchill 1979).

This thesis mainly adopts the C-OAR-SE procedure in order to develop a robust scale to test the proposed model; this procedure will allow increasing the content validity of the proposed model over relying entirely on data analysis for model validation. However, it is also necessary to take on board the criticism of Rossiter’s (2002) work particularly in relation to items selection. Hence, all the traditional scale development procedure steps (for example, exploratory factor analysis tests) were also considered, in order to add further validity to the process. It is also worth noting that there is a great emphasis in this thesis on content validity. After an examination of Rossiter’s (2002) rationale of why the C-OAR-SE procedure is effective and valid, the research in this thesis was designed to follow the new process for reasons that will be outlined in section 5.7.7.

5.7.1 The Construct Definition

The construct definition is defined according to Edwards and Bagozzi (2000:156) as: “...a conceptual term used to describe a phenomenon of theoretical interest.” However, the constructs should be defined and illustrated in terms of: (1) the object, including its components; (2) the attribute, including its components; and (3) the rater entity (Rossiter 2002:308). Failure to conceptualise these components will result in insufficiency concerning how the construct should be operationally measured, and will therefore lead to misleading definitions (Rossiter 2002).

5.7.2 Object Classification

The object classification in the C-OAR-SE procedure can have three forms: a singular form, (which will require just a single-item part); a collective of constituents (multiple-item parts identifying the main constituents); or multiple components (an
abstract form). Rossiter (2002) illustrates the object classification differently; these classifications are:

a) **Concrete singular objects**: contrasts with the assumed understanding in traditional scale development procedures, where assumption is that almost all raters know what the object is, and, hence, there is only one object. When applying C-OAR-SE, a group of expert judges is used to approve the classification of the object (Rossiter 2002).

b) **Abstract collective object**: objects that are mixed from the raters’ perspectives; they are seen as separate ingredients, but form a set at a higher categorical level in the eyes of the researcher (Rossiter 2002).

c) **Abstract formed object**: this type of object occurs in general when people’s explanations of the object are in opposition, or where people perceive the object as containing different components. An abstract formed object is not simply a collection of concrete objects, and, therefore, it is not an abstract collective object (Rossiter 2002).

In the current research, measures were developed for each of the seven constructs in the proposed model\(^6\). These include: *consistency, competence, integrity, benevolence, value alignment, communications* (the independent variables) and *trustworthiness* (the dependent variable). Items from published scales were augmented with items developed from the pilot study, and the measures were developed, purified and validated following a rigorous process (graphically represented in Chapter Six). Definitions for the nine constructs were presented in Chapter Four Table 4.3 and section 4.6.1. Each construct was clearly defined, and compared and contrasted to similar constructs in the literature. The definitions also prompted the development of further items; consequently theoretical discriminate validity was prevented.

### 5.7.3 Attribute Classification

The third component in C-OAR-SE is the classification of the attribute in each construct, i.e. the dimension on which the construct is to be judged (Rossiter 2002). Attribute classification is generally seen as the most complicated step in the C-OAR-\(^6\) See Chapter Four for more details regarding the proposed model section 4.3
SE scale development procedure because of the difficulty of classifying some attributes. The three types of attribute are concrete (singular), (abstract) formed, and (abstract) eliciting:

a) **Concrete attribute**: according to Rossiter (2002), several of the attributes that are measured in marketing are concrete. As with concrete singular objects, a concrete attribute has almost complete agreement from raters, who clearly understand that there is only one feature being referred to when the attribute is created and applied to the object being rated in a questionnaire or interview.

b) **Formed attribute**: this type of attribute consists of those that are abstract, in which raters’ answers vary if they are asked what the characteristic is, and formed attributes that are composite and multi-componential (Rossiter 2002).

c) **Eliciting attribute**: here the attribute is abstract (raters’ answers would differ moderately if asked what the characteristic is) but in this case the attribute is an ‘internal’ characteristic (Rossiter 2002).

### 5.7.4 Rater Identification

The last part of the construct definition is the rater identification, referring to the rater by entity; however, it should be noted that constructs vary according to whose perception they represent. Rossiter (2002) postulated three types of rater entity, namely, individuals, experts and groups:

a) **Individual raters**: consist mainly of one type of rater entity, seen as an individual. However, “the rater entity is the INDIVIDUAL for all individual difference constructs that involve self reports” (Rossiter 2002:318). Experts and peers may rate individual differences; however, individual self reports are the most common type of rater entity for constructs in the marketing field (Rossiter 2002).

b) **Expert raters**: these are required in some situations when the constructs require experts to conduct the ratings. Fundamentally, the expert raters are conducting a content analysis, and, therefore, the reliability of the ratings depends on achieving high inter-judge agreement (Rossiter 2002:319).

c) **Group raters**: the third classification for the rater entity of a construct is the group. According to Rossiter (2002), the group, in marketing, is often seen as
a sample of consumers or industrial buyers, but in certain situations it can be a sample of managers, or general employees. However, the reliability of scores depends mainly on the group sample size (Rossiter 2002).

Rossiter (2002) argued that during the scale development procedure the researcher has to consult with expert judges; this enables the research to benefit from deeper insight into the research items, which allows for rigid item purification. The exact role of the judges is explained in detailed in Chapter Six - section 6.4.

5.7.5 Scale Formation and Instrument Description

The scale formation in the C-OAR-SE procedure consists of four levels:

a) *Object item parts and attribute item parts:* scale formation in C-OAR-SE is a matter of putting together object item parts with their corresponding attribute item parts to form scale items, since the response alternatives have to be added for each item (Rossiter 2002). The number of items required to outline the scale remains the same regardless of whether the rater entity is an individual, a group of experts, or a large sample. The content (wording) of the scale items is not independent of the rater entity; thus, the items must be easily understood by the target raters, and a pre-testing phase is required to ensure this (Rossiter 2002:319).

b) *Pre-testing scale items:* as recommended by Rossiter (2002), the most effective method for pre-testing scale items is cognitive interviewing, which includes extensive searching and rating questions, to make certain they are understood as planned (Schwarz 1999). However, the central step of pre-testing items for meaning is conducted during the development of marketing scales in academic research.

c) *Response formats:* Rossiter (2002) suggests that Likert response systems should not be implemented because they cannot provide definite, precise item scores (Rossiter and Percy 1987:547). In typical items for which Likert responses are used, the strength of response is built into the item stem. This thesis followed an alternative method in which it built intensity of response into the leaves of the item (the response alternatives). For numerical scales, which can be used for probability, frequency, or degree, five to seven
categories seems to best fit the number of psychological discriminations that most consumers can make with regard to an attribute.

d) Randomised order: Rossiter (2002) postulated that with multiple-item scales, the order of the items should be randomised to minimise response-set artefacts in the obtained scores. This means a randomised presentation across multiple items for objects (constituents or components) as well as for attributes (items within components should be separated).

The main study questionnaire consisted of a three-page paper document. A copy of the full questionnaire is shown in Appendix 1. There were five main sections in the questionnaire, as described below:

- Section one: contained instructions on how to complete the questionnaire, with a statement explaining the aims and objectives of the research and reassuring respondents that their answers were anonymous and confidential.
- Section two: contained four questions to ascertain whether respondents had visited the hotel before, what type of service(s) they had used and how frequently they used the hotel and the hotel’s facilities.
- Section three: the main part of the questionnaire, containing the scales. This section contained a series of statements with 5-point Likert scales to indicate levels of agreement with the statements. The items were presented in a random order, to avoid response bias and the false inflation of reliability, i.e. questionnaire fatigue.
- Section four: contained demographical information about the respondents, specifically, age, gender and nationality.

A full description of the questionnaire items is included in the discussion of the scale development (in Chapter Six).

5.7.5.1 The Generation of the Initial Research Items

Once each of the nine constructs had been clearly defined, a sample of items related to the constructs was developed. The aim of this stage was to capture all aspects of a construct, while building some redundancy into the instrument (DeVellis 1991). The items were generated in four different ways:
From the existing literature: items were developed on the basis of various discussions in the literature.

From published scales: these were gathered and individual items were considered for adoption or adaptation. Only often-cited scales were considered; journal ranking and frequency of citation was taken into consideration.

From in-depth interviews: these consisted of card-sort exercises and open discussion with nine interviewees. This process enabled the researcher to access the terminology favoured by actual consumers, and to generate extra items based on their personal experience with the service provider.

From the researcher’s personal assumptions: items were created based on the definitions of each construct, to ensure that all aspects had been considered.

Once the pool of items had been developed, they were edited. DeVellis’ (1991) recommendations were followed concerning item length, reading difficulty and double-barrelled items (which express more than one idea).

5.7.6 Enumeration

Rossiter (2002) argued that there are two factors to consider within enumeration these are:

a) Indexes, averages, and single-item scores: because of the different object and attribute types that can be combined in a construct, enumeration rules will vary between constructs (Rossiter 2002).

b) Reporting scale scores: the enumeration rules imply that indexes will receive absolute total scores and items for eliciting attributes will receive averaged scores (Rossiter 2002).

5.7.7 Criticism of C-OAR-SE

The C-OAR-SE procedure is an innovative scale development procedure in the field of marketing. In fact, at the time of writing the scale has not yet been tested empirically or even reviewed by many scholars and academics. There do exist one or two examples in the literature; see for instance, Diamantopoulos (2005) and Finn and Kayande (2005). Diamantopoulos (2005) identified several problems with Rossiter’s
(2002) model; one of these arguments was that the procedure goes against the fact that constructs are abstract entities by their nature (Diamantopoulos 2005:2). Bearing the above in mind, the notion of construct definition as used by C-OAR-SE would benefit from some clarification. Such clarification is important for two reasons:

- The degree of acceptable aggregation during construct definition according to C-OAR-SE is not entirely clear.
- The foundation of the object classification under C-OAR-SE is not clear; in that denotative and connotative meaning appear to be confused.

Furthermore, Diamantopoulos (2005) argues that if the denotation of an object is open to several interpretations, then its conceptual clarity will be negatively affected. However, in the case of concrete singular and abstract collective objects, the classification is less clear (Diamantopoulos 2005). Finally, the distinction between abstract collective and abstract formed objects is hazy in that the ‘constituents’ comprising the former and the ‘components’ comprising the latter are both deemed to be concrete singular objects (Diamantopoulos 2005).

Diamantopoulos (2005) suggests that a way to solve these problems would be to classify objects into concrete singular and abstract collective categories, but at the same time allow that the constituents of abstract collective objects may themselves be multi-componential (Diamantopoulos 2005).

In addition, further criticism of the C-OAR-SE procedure was provided by Diamantopoulos (2005) in terms of attribute classification, concrete attributes, and the fact that the fundamental relation between attribute and measure is not considered when discussing formed attributes. Still, the main point to be noted here is the problem of how to select a single ‘good’ item. Diamantopoulos (2005) suggested applying the index construction procedure developed by Diamantopoulos and Winklhofer (2001), where a ‘good’ item is one that (a) captures a particular facet of the construct’s domain of content, (b) is not collinear with other items, and (c) its link with the latent variable has a non-zero coefficient. This research took on board all the criticism to the C-OAR-SE in particularly selecting the research items as it has been discussed in Chapter Six.
5.8 The Structure of the Data Collection

This section covers the parameters used to ensure the robustness of the study design, it examines the internal consistency, uni-dimensional, measurement validation, and normality evaluation of the research items. However, the data collection process is reported in detail in Chapter Seven. 529 usable responses were obtained. The main study served to purify and validate all measures, as well as test the hypothetical framework.

For the first objective, the sample of 529 responses was split into two half samples, using the random function in SPSS. The first half sample (n=265) was used to purify the measures and explore uni-dimensionality. The second half sample (n=264) was used to validate the measures, verifying uni-dimensionality and assessing reliability and validity. The analysis of the remaining two objectives was conducted on the full sample of 529 cases.

5.8.1 Internal Consistency

Inter-item correlation tables were inspected to identify and delete items with poor inter-item correlations. The domain sampling model rests on the assumption that items which belong to the same domain share the same amount of “common core” (Churchill 1979:68); consequently, items which correlate poorly with other items cannot share the same amount of common core and cannot be related to the same construct. Likewise, items with a low item-total correlation were candidates for deletion. It was important to use both methods since, for example, the item-total correlation method does not account for external consistency (Gerbing and Anderson 1988). Also, since several constructs were expected to correlate highly, items belonging to several factors may still have displayed high item-total correlations.
5.8.2 Unidimensionality Exploration

Unidimensionality is a cornerstone of measurement theory and the homogeneity of items (Netemeyer et al. 2003). As Hattie (1985: 49) points out, “that a set of items forming an instrument all measure just one thing in common is a most critical and basic assumption of measurement theory.” Netemeyer et al. (2003:9) confirmed Hattie’s (1985) statement when they stated: “when the measure is multidimensional, items tap more than one factor ... Hence, the scale used to operationalise the construct should reflect the hypothesised dimensionality.” While Exploratory Factor Analysis (EFA) cannot verify unidimensionality in the strict sense of the term (Gerbing and Anderson 1988), it can be used as a first-cut test, to identify any items tapping a separate construct.

The items which seemed to reflect the same construct were factor analysed, factor by factor, to ensure they all loaded on the expected factor. When a second factor was extracted, the items loading on the second factor were studied to decide whether the factor was conceptually meaningful and was to be retained or added to the conceptualisation. When this was not the case, then items loading the highest on the second, unwanted factor(s) were removed and the analysis was re-run. This process repeated until it returned a single factor.

Once this procedure had been applied to all dimensions expected to load on the same construct (Sense-making potential and exploratory potential), the retained items of all factors for each construct were submitted to another EFA, to ensure that all items loaded on the expected dimension. Items which loaded on several factors, or which did not load on any factor, were removed, since these two situations were indications of items which did not relate to one and only one factor, thereby preventing the measure from being both unidimensional and internally consistent. Items which loaded on a dimension other than which was expected were reviewed alongside the definition of the dimension they loaded on. They were either retained in the ‘new’ dimension or removed, based on an assessment of their content validity.
5.8.3 Measure Validation

The validation of the measures was carried out on the half of the main study’s sample that was not used during the item purification stage. By using this method, the chance of basing decisions purely on a sample’s idiosyncrasies was reduced. The size of the validation sample was 264.

5.8.4 Normality Assessment

It is crucial to ensure that there are no fundamental departures from normality. For this purpose, the kurtosis and skewness of each item were analysed and confirmed, showing that all measures had skewness and kurtosis statistics within the -1.96 to +1.96 range. The boundaries of this range are the points for rejecting the freedom from skewness or kurtosis assumptions at the .05 error level (Hair et al. 2006). Furthermore, the chosen estimation method, Maximum Likelihood, remains robust in situations where the assumption of multivariate normality is moderately violated, as long as the sample size exceeds 100 (Gerbing and Anderson 1985).
5.9 Quality of Research

Any discussion of research methods often leads to two essential topics, namely the reliability and validity of the research. The research reliability refers to issues of consistency and dependability, while the validity of the research consists of the existence of an attribute (such as the characteristics of a determinant of the model) that influences the outcome of the measurement procedure (Borsboom et al. 2004).

5.9.1 Research Validity

The validity of the research is examined by assessing the process of the research and making sure there are no rational errors in drawing conclusions from the obtained data (Easterby-Smith et al. 1991). However, Pedhazur and Schmelkin (1991) distinguished between validity of the research and validation, where validity is about ontology and validation is about epistemology. With this distinction in mind, it is apparent that most of the validity literature has not dealt with the problem of validity but with the problem of validation. Borsboom et al. (2004) continued this discussion and argued that there is nothing wrong with describing, classifying, and evaluating validation strategies. However, if one concentrates on the epistemological problems long enough, one will move away from the validity concept rather than toward it. Nonetheless, Messick (1989:13) defines validity as follows:

“Validity is an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores or other modes of assessment.”

There are two ways of examining the validity of the research; empirical and theoretical validation. Empirical validity assesses the validity of the measures checked against empirical evidence, while theoretical validation examines the theoretical concepts that are the basis for the research (Sarantakos 1998). However, both types of validity have to take account of threats and biases that could weaken the aim of the research (Easterby-Smith et al. 1991).

In this thesis several types of validity are considered, namely: translation validity, convergent validity and discriminant validity (Netemeyer et al. 2003). The
following sections will address each of these types of validity and how they were addressed in this research.

5.9.1.1 Translation validity

Translation validity contains two main dimensions: content validity and face validity. Content validity is achieved when “a measure’s items are a proper sample of the theoretical domain of the construct” (Netemeyer et al. 2003:12). Content validity is also defined as: “a measure is supposed to have content validity if it covers all possible aspects of the research topic” (Sarantakos 1998:79). In content validity, the researcher is also anxious to make sure the items measure the full implicit area (Sheppard 1993).

Creating content validity is mainly a subjective operation that relies on the judgment of experts. This process varies in the levels of requirement, but in general a researcher will want a panel of experts to appraise the provisional research variables and indicators to determine their relevance and representativeness to the research (Sheppard 1993). The term ‘expert’, in this context, refers to someone who has experience, knowledge of the construct, and familiarity with the context in the research discipline and the specific field in which the research is situated (Rossiter 2002). This was achieved by having a panel of three judges examining the research constructs and items as it’s reported in Chapter Six.

In contrast, face validity centres on the need to ensure the research instrument is valid from the perspective of the respondent. Face validity assesses the accuracy and thoroughness with which measures represent a phenomenon. One way of addressing the danger of poor content validity is to access the way customers perceive the constructs in their own ‘language’.

5.9.1.2 Construct Validity Assessment

Construct validity (of which convergent validity is a component) refers to the closeness of the resemblance between the constructs of the theory being tested, and the measurement of the data collected from a sample: do the data and measurement tools chosen faithfully represent the original constructs? Moreover, construct validity resides in the logic of items that comprise measures of social concepts (Sarantakos
1998). Fine construct validity should have a theoretical basis that is translated through explicit theory (Pedhazur and Schmelkin 1991). In contrast, weak construct validity may be characterised by a lack of theoretical agreement about its content. Construct validity is a method of defining something, and it is related to the extent that a researcher’s construct is at odds with the existing literature on related hypothesised relationships using other measures.

Construct validity is usually assessed by considering *convergent and discriminant validity*, and *criterion and nomological validity*.

*Criterion-related validity*, according to Netemeyer et al. (2003), relates to the extent to which processes external to the proposed research instrument are utilised. A formal criterion validity assessment would have required the administration of too many additional scales for comparison with the measures being developed. An alternative was to study the correlations between factors, to verify that the highest correlations were between the factors expected to load on the same higher-order construct. This was achieved in Chapter Eight – Table 8.5.

*Nomological validity* refers to “the degree to which predictions from a formal theoretical network containing the concept under scrutiny are confirmed” (Netemeyer et al. 2003:13). In other words, nomological validity examines the degree to which the constructs of the research which are theoretically linked are also empirically related. Hence, nomological validity is primarily empirical because its validity is based on investigations and constructs in terms of formal hypothesis derived from theory, and require statistical techniques to assess it. Therefore, nomological validity was tested using AMOS programs as been recommended by various authors (for example, Anderson and Gerbing 1988; Bollen 1989; Schmucker and Lomax 2004). Specifically, nomological validity was assessed when the full structural path model was estimated[^7].

*Convergent validity* assesses the extent to which each item ‘contributes’ to the meaning of the construct being measured. A weak condition for convergent validity is that the regression coefficient of each item loading on a particular latent variable (or dimension) is statistically significant. A more powerful condition is that these

[^7]: See Chapter Eight for a full discussion.
coefficients are substantial. Both conditions need to be met under acceptable model fit (Steenkamp and van Trijp 1991). Convergent validity refers to the principle that the indicators for a given construct should be at least moderately correlated among themselves (Embretson 1983). However, Cronbach’s alpha is broadly associated with convergent validity. Convergent validity was tested in this thesis in Chapter Seven, Section 7.6.

5.9.1.3 Discriminant Validity Assessment

Discriminant validity concerns the principles that the indicators for different constructs should not be so highly correlated as to lead one to conclude that they measure the same phenomenon. Some researchers use the norm that the correlations testing convergent validity should be higher than those testing discriminant validity, based on the rationale that items measuring the same thing should correlate more highly among themselves than with other things. However, exploratory analysis is commonly used to establish discriminant validity (Borsboom et al. 2004).

Discriminant validity assesses whether the newly-developed scales measure something different from other scales. Discriminant validity in this thesis was approached in two ways. First, each construct was assessed against every other dimension using a set of nested models. For each pair of dimensions, two models were tested in succession, where the correlation between the dimensions was first left free to vary, and then set to 1. Since the two models were nested (the second being a special case of the first), a Chi-Square difference test could statistically assess whether the correlation between the two constructs was different from 1, i.e. whether there was discriminant validity between the two dimensions.

Second, a confidence interval of +/- 2 standard deviations around each correlation was calculated. Any confidence intervals of 1 would have indicated a lack of discriminant validity.

In summary, in this thesis all the various forms of validity were important. In particular, content validity was considered to be especially significant during the scale development process because the procedure followed Rossiter’s (2002) model that focused on content validity over external validity.
Since the current research relies on the C-OAR-SE procedure, in line with Rossiter (2002) the validity of the research relies mainly on its content validity. However, other validity tests were also considered as will be reported later on. Furthermore, the reliability of the results arising from the survey questionnaires were tested using the Cronbach’s alpha reliability and composite reliability to measure the internal consistency of the research items. However, the “content validity of the scale must be convincingly established before precise scores can be taken to mean what they are supposed to mean” (Rossiter 2002:328). Tabachinick and Fidell (1983) suggest that data defects may lead to a mistaken analysis, and warn that examining data for these defects is a prerequisite for mature analysis (Sarantakos, 1998). Therefore, problems surrounding missing data, outliers, multi co-linearity and violations of statistical assumptions were identified and corrected before applying statistical procedures.

Additionally, the reliability of the research consisted of two broadly accepted tests, examining temporal stability and internal consistency (tested using Cronbach alpha test). This discussion will be the research foundation to allow us to proceed and examine the scale development process.

5.9.2 Reliability Assessment

Reliability represents the stability and dependability of the research. Reliability of the research is defined as: “the extent to which it is free from random error components” (Judd et al. 1991:51). The necessity of stability does not imply that all data must be stable in the sense that over an extended period a researcher will get the same answers to the same questions (Easterby-Smith et al. 1991). However, stability must be illustrated within the theoretical framework within which the study is situated. The reliability test should permit only a small margin of variation between sets of data (Cronbach 2004).

Consequently, the selection of tests for reliability must be made on the basis of meeting the data demands of the assumptions. There is a relationship between the concept of stability, the reliability test and the theoretical framework. Particular procedures for examining reliability can be found in valuable sources such as Cronbach (1954), Guetzkow (1950), and Cronbach (2004). However, there are four
main methods to test the reliability of research: the test retest method; the split-halves method (Brennan 2001); the internal consistency method; and inter-rater reliability, which assesses the degree to which different raters give consistent estimates of the same phenomenon (Bryman and Bell 2003). There are various models for reliability testing employed by most researchers; these are Cronbach’s Alpha, Split-half, Guttman, Parallel and Strict Parallel reliability testing.

In a marketing sense, reliability is the extent to which a variable or set of variables are consistent with what they intended to measure (Hair et al 1998:90). This essentially means that reliability deals with the proportion of variance attributed to the true score of the latent variable (DeVellis 2003:27). Within the psychometric literature relevant to marketing there are two main forms of reliability that need to be considered, namely temporal stability and internal consistency (Netemeyer et al 2003).

In the case of this thesis, temporal stability is concerned with the stability of a respondent’s item responses over a period of time (Netemeyer et al 2003). In contrast, internal consistency in this thesis is assessed using Cronbach’s widely accepted coefficient alpha ($\alpha$) as well as composite reliability, which evaluates the average correlation between items in a test and is commonly used in marketing methodologies (DeVellis 2003).

---

8 For more information about each type of reliability test, see Netemeyer et al. (2003).
5.10 Methods of Data Analysis

The issue of data analysis is concerned with ensuring that the appropriate analysis is carried out. Multivariate methods have been used for the research in this thesis.

Scientific enquiry is an iterative learning process; the object of research, in this case the explanation of social phenomena, must be specified and then evaluated by gathering data. Because of the fact that data collection normally includes simultaneous measurements of numerous variables, there is a need to complete multivariate analyses, i.e. multivariate analysis refers to any statistical method employed to analyse a data set that contains more than one variable (Byrne 2001; Hair et al. 2006). The main analysis method that this thesis relied upon is Structural Equation Modelling, as it will be discussed in details in the following section.

5.10.1 Structural Equation Modelling

Structural Equation Modelling (SEM) is a prevailing multivariate analysis technique, also called simultaneous equation models. SEM’s are divided into two parts, i.e. a measurement model and a structural model. The measurement model deals with the relationship between measured variables and latent variables. In contrast, the structural model covers the relationships between latent variables only. One of the key advantages of SEM is that latent variables are free of random error.

The significance of SEM for the current thesis emerges from the fact that SEM is a general, primarily linear, cross-sectional statistical modelling technique (Byrne 2001). Factor analysis, path analysis and regression are all contained within SEM, and furthermore, SEM is mainly a confirmatory, rather than an exploratory, technique. Explicitly, a researcher is more likely to apply SEM to determine whether a certain model is valid, rather than using SEM to discover a suitable model, although SEM analyses do often involve an exploratory aspect.

The following sections outlines the assumptions and choices made in relation to the SEM method employed to validate the empirical research measures and test the propositions and hypotheses of this research.
5.10.1.1 SEM vs. Regression

All SEM techniques share two main traits: (1) they estimate several interrelated dependence relationships; and (2) the relationships can include unobserved phenomena, for which measurement error is taken into account during the estimation (Hair et al. 2006). The latter characteristic gives SEM an advantage over multiple regression, because regression estimates may be biased since they do not take account of measurement error.

Furthermore, the multiple regression method allows for the estimation of direct effects on only one dependent variable at a time, whereas with SEM the researcher can estimate relationships between several independent and several dependent variables simultaneously (Hoyle 1995). These two points are of particular importance for this study, since the conceptual model consists of unobserved constructs (including two higher-order constructs which, in essence, are two steps removed from being observed constructs), and two of these (behavioural and attitudinal loyalty) are dependent variables. Therefore, SEM was chosen over multiple regression because it enables a more rigorous and stringent testing of the entire nomological network in one simultaneous estimation.

This thesis applied SEM because other multivariate modelling techniques fall short in terms of fully addressing and assessing the proposed model. For example, multiple regression analysis deals only with one dependent variable at a time without calculating latent constructs and error scores (Hair et al. 2008). MANOVA only compares the mean scores of several variables without providing any indication of the regression weight of these scores; while discriminant analysis does not take into account error scores (Hair et al. 2008). Hence, SEM is found to be more relevant because it examines all the constructs in the model simultaneously and calculates their error scores.

5.10.1.2 SEM: Assumption Criteria

SEM grows out of and serves purposes similar to multiple regression, but in a more powerful way which takes into account the modelling of interactions. This includes:
• Nonlinearities;
• Correlated independents;
• Measurement error;
• Correlated error terms;
• Multiple latent independents (each measured by multiple indicators), and,
• One or more latent dependents (also each with multiple indicators).

SEM may be used as a more powerful alternative to multiple regression, path analysis, factor analysis, time series analysis, and analysis of covariance. That is, these procedures may be seen as special cases of SEM, or, to put it another way, SEM is an extension of the general linear model (GLM) of which multiple regression is a part.

The advantages of SEM compared to multiple regression include more flexible assumptions (particularly allowing interpretation even in the face of multicollinearity). This includes:

✓ The use of confirmatory factor analysis to reduce measurement error by having multiple indicators per latent variable.
✓ The attraction of SEM’s graphical modelling interface, the desirability of testing models overall rather than coefficients individually.
✓ The ability to test models with multiple dependents, the ability to model mediating variables.
✓ The ability to model error terms, the ability to test coefficients across multiple between-subjects groups.
✓ The ability to handle difficult data (time series with auto correlated error, non-normal data, incomplete data and so on).

As said earlier, SEM is usually viewed mainly as a confirmatory rather than an exploratory procedure and uses one of three approaches:

1. **Strictly confirmatory approach**: A model is tested using SEM goodness of-fit tests to determine if the pattern of variances and covariances in the data is consistent with a structural (path) model specified by the researcher. However,
as other unexamined models may fit the data as well or better, an accepted model is only a not disconfirmed model.

2. **Alternative models approach**: One may test two or more causal models to determine which has the best fit. There are many goodness-of-fit measures, reflecting different considerations, and usually three or four are reported by the researcher. Although desirable in principle, this alternative models approach run into the real-world problem that in most specific research topic areas, the researcher did not find in the literature two sufficiently well developed alternative models to test.

3. **Model development approach**: In practice, much SEM research combines confirmatory and exploratory purposes: a model is tested using SEM procedures is found to be deficient, and an alternative model is then tested based on changes suggested by SEM modification indexes. This is the most common approach found in the literature. The problem with the model development approach is that models confirmed in this manner are post-hoc ones that may not be stable (may not fit new data, having been created based on the uniqueness of an initial dataset). Researchers may attempt to overcome this problem by using a cross-validation strategy, under which the model is developed using a calibration data sample and then confirmed using an independent validation sample. This approach was used in this research. A full discussion of the approach with the related results is included in Chapter Eight.

The use of SEM relies on a number of assumptions: (1) independent observations; (2) linearity of all relationships (Hair et al. 2006); (3) distributional normality of the data; and (4) continuous data. These assumptions are now reviewed in the context of the study. Firstly, the assumption of independent observations was met since the design of the study precluded the collection of more than one questionnaire per respondent.

Secondly, much of marketing research is based on the assumption of linear relationships. Some relationships used in marketing clearly are not linear, such as the relationship between arousal and hedonic value (Tabachnick and Fidell 2007). However, in the absence of evidence to the contrary, marketing researchers
commonly assume that the relationships they hypothesise are linear. The same assumption was made here.

Thirdly, normality assumptions were considered, testing in particular for the skewness and kurtosis of the distribution of the variables in the SEM (Tabachnick and Fidell 2007). The results of these tests (reported in Chapter Seven) show that all indicators were within an acceptable range from the ideal 0, and, therefore, the data approximates a normal distribution.

Fourthly, although strictly speaking Likert scales (which were the only measures used to test the model) are ordinal and, therefore, cannot be continuous, they are assumed to be categorised reflections of an underlying continuous variable (Jöreskog and Sörbom 1996). Ordinal variables with at least five categories which do not depart widely from normality have been found to be suitable for SEM (Hair et al. 2006).

5.10.1.3 Measurement Model

Specifically, there are two distinct components in SEM: 1) the measurement model; and 2) the SEM. The measurement model is the component of the general model in which latent constructs are prescribed.

The latent constructs are unobserved variables implied by the covariances among two or more observed indicators (Hoyle 1995). By using confirmatory factor analysis for the measurement model, a priori hypotheses regarding relationships among and between observed indicators and their underlying latent constructs are evaluated. Thus, the measurement model specifies the posited relationships between the observed indicators and the latent constructs, while describing the freedom of random error and uniqueness associated with their indicators.

According to Anderson and Gerbing (1988), confirmatory measurement models should be evaluated and re-specified before measurement, and structural equation models should be examined simultaneously to allow the assessment of the overall model fit before making any assumptions on the proposed model. Thus, before testing the overall measurement model, each construct in the model was analysed separately. Furthermore, when each construct had an acceptable fit based on the fit
indices, a pair of constructs was evaluated in order to confirm that the theoretically
pre-specified variables or indicators do in fact measure what is believed to be their
underlying construct. The model is modified so that the final model becomes
theoretically meaningful as well as being statistically acceptable. This also ensures
that the final model represents the theoretical model of interest for the study. After
assessing the overall model, the psychometric properties of each latent construct were
evaluated separately by examining the completely standardised loading, the error
variance, the construct reliability, and the variance extracted.

5.10.1.4 Structural Model

The structural model is the hypothetical model that prescribes relationships
among latent constructs and observed variables that are not indicators of latent
constructs (Hoyle 1995). Generally, this model is known as the component of a
general model that relates the constructs to other constructs by providing path
coefficients (parameter values) for each of the research hypotheses. Specifically, each
estimated path coefficient can be tested for its respective statistical significance in
terms of the hypothesised relationships, while including standard errors and calculated
t-values (Bollen 1989; Byrne 1998; Hair et al. 2006).

In the structural model, a specific structure between latent endogenous and
exogenous constructs must be hypothesised, and the measurement model for latent
endogenous and exogenous constructs must be determined (Hair et al. 2006). Commonly, maximum likelihood (ML) or generalised least squares (GLS) techniques
are utilised for model estimation because these methods allow for the analysis of
models involving latent constructs and non-zero error covariances across structural
equations (Kline 1998). If a relationship can be specified in terms of directions, a one-
tailed significance test can be employed. Otherwise, a two-tailed significance test
must be used in cases where there exists an unknown direction for a pre-specified
relationship. If the reported p-value is greater than a certain critical value, the null
hypothesis that the associated parameter is equal to zero can be rejected. This p-value
is determined by dividing the appropriate coefficient by its standard error. In general,
if an estimated t-value is greater than 1.96, the parameter indicates statistical
significance for a two-tailed test at the .05 level of significance (Tabachnick and
Fidell 2007). The coefficient is significant at the .01 level if the p-value exceeds .05.
These critical values (the beta and gamma coefficients) are utilised and evaluated for testing relationships between the constructs.

As another evaluation of the structural model, the standardised solution, where the estimated coefficients all have equal variances and a maximum value of 1.0, must be examined (Bollen 1989; Hair et al. 2006). In order to measure the entire structural equation, an overall coefficient of determination ($R^2$) must be calculated to explain the variance. As a result, the structural model provides a meaningful and parsimonious explanation for observed relationships within a set of measured variables (Tabachnick and Fidell 2007). The model also enables explanations of direct, indirect, and total structural effects of the exogenous latent constructs on the endogenous constructs.

**5.10.2 Confirmatory Factor Analysis**

Confirmatory factor analysis (CFA) seeks to determine whether the number of factors and the loadings of measured (indicator) variables on them conform to what is expected on the basis of pre-established theory. Indicator variables are selected on the basis of prior theory and factor analysis is used to see if they load as predicted on the expected number of factors. The researcher’s priori assumption is that each factor is associated with a specified subset of indicator variables. A minimum requirement of confirmatory factor analysis is that one hypothesizes beforehand the number of factors in the model, but usually also the researcher will posit expectations about which variables will load to on which factors (Kim and Mueller 1978b:55). There are two approaches to confirmatory factor analysis:

1. *The Traditional Method*: CFA can be accomplished through any general-purpose statistical package that supports factor analysis. Note that for SEM CFA one uses principle axis factoring (PAF) rather than principle components analysis (PCA) as the type of factoring. This method allows the researcher to examine factor loadings of indicator variables to determine if they load on latent variables (factors) as predicted by the researcher’s model. This can provide a more detailed insight into the measurement model than can the use of single-coefficient goodness of fit measures used in the SEM approach. As such, the traditional method is a useful analytic supplement to the SEM CFA approach when the measurement model merits closer examination.
2. *The SEM Approach*: CFA can mean the analysis of alternative measurement (factor) models using a SEM package such as AMOS. While SEM is typically used to model causal relationships among latent variables (factors), it is equally possible to use SEM to explore CFA measurement models.

This is done by removing from the model all straight arrows connecting latent variables, and adding curved arrows representing covariance between every pair of latent variables. The straight arrows from each latent variable to its indicator variables, as well as the straight arrows from error and disturbance terms to their respective variables, are all left in the model. Such a measurement model is run and evaluated like any other model, using goodness of fit measures generated by the SEM package. By using SEM in this thesis, the study explored CFA models with the assumption of certain correlations among the error terms of the indicator variables. Such measurement error terms represent causes of variance due to unmeasured variables, as well as random measurement error.

For data analyses, in this research AMOS\(^9\) software package was used to perform confirmatory factor analysis of the measurement items that were used to capture the items of the constructs. Using AMOS for confirmatory factor analysis provided a rigorous assessment of the fit between the collected data and the theoretical factor structure, and satisfied the minimum requirements for assessing the measurement properties.

### 5.10.3 Statistical Methods for Hypotheses Testing

The properties of the nine research constructs and the nine hypotheses in the proposed structural model were tested using AMOS 8.0, and the maximum likelihood (ML) method as an estimation technique for model evaluation and procedures (for details, see Anderson and Gerbing 1988; Bentler 1983; Byrne 1998). The one stage testing processes was also utilised.

SEM is designed to evaluate how well a proposed conceptual model containing observed indicators and hypothetical constructs explains or fits the collected data (Bollen 1989; Hoyle 1995). It also provides the ability to measure or

---

\(^9\) The reason of using AMOS software is because it’s the standard package provided by Coventry University.
specify the structural relationships among sets of unobserved (latent) variables, while describing the amount of unexplained variance (Byrne 1998; Hoyle 1995).

Clearly, the hypothetical model in this study was designed to measure structural relationships among the unobserved constructs that are set up on the basis of relevant theories and prior empirical research and results. Therefore, the SEM procedure is an appropriate method for testing the proposed structural model and hypotheses for this study.

According to Byrne (1998:3), the SEM approach is “a statistical methodology that takes a confirmatory (i.e. hypothesis-testing) approach to the multivariate analysis of a structural theory bearing on some phenomenon”. A structural theory is used to explain relationships among multiple variables or constructs. The processes in SEM are represented by a series of structural equations and relations that can be modelled pictorially to enable a clearer conceptualisation of the theory under study.

Schumacker and Lomax (2004:233) laid out a set of recommended steps for data preparation before applying SEM, as follows:

- Establish a sound theoretical basis for the measurement models and structural models in the study. This was set out in Chapter Four of this thesis.
- Clearly state the hypothesis for testing the structural model and/or alternative models. This was also set out in Chapter Four of this thesis.
- Specify the type of correlation or variance-covariance matrix used in the computer program (in this case, AMOS), and check for missing data, outliers, non-normality and any issues that affect correlations. This will be done in Chapter Seven.
- When using a correlation matrix, also include the means and standard deviations of the observed variables to obtain the correct estimates of standard errors for the parameter estimates. All those tests are reported in Chapter Seven.
- Identify the estimation technique based on type of data matrix. This was considered during the analysis.
Thus, through the SEM procedure, it is possible to achieve the simultaneous examination and explanation of the pattern of a series of inter-related dependence relationships among a set of latent (unobserved) constructs (Reisinger and Turner 1999).

### 5.10.4 Estimation Method

The Maximum Likelihood method was selected for each stage of the analysis. It is the most common estimation method (Bollen 1989) in view of its reliance on sample sizes in the 200–400 region (as opposed to the larger sample sizes required by other estimation methods), and its reliability in situations with mild departures from distribution normality (Gerbing and Anderson 1985).

#### 5.10.4.1 Structured Models Comparison

There are several means of comparing structured models according to Steiger et al. (1985) where researchers can assess the overall model fit by:

- Hypothesis testing using inferential statistical tests
- Likelihood ratio chi square test of exact fit – Compares target model to a saturated (just identified model)
- Nested chi square tests for competing models
- Fit indices that indicate degree of fit

The two most common techniques used are the nested models and fit indices that indicate degree of fit (Hair et al. 2008). According to Byrne (2002:128) nested models are “...hierarchically related to one another in the sense that their parameter sets are subsets of one another (i.e. particular parameters are freely estimated in one model, but fixed to zero in a second model)”. The basic idea of comparison indices is that the fit of a model of interest is compared to the fit of some baseline model. Even though any model nested hierarchically under the target model (the model of interest) may serve as a comparison model. The independent model is used most often because it assumes that the observed variables are measured without error, i.e., all error variances are fixed to zero and all factor loadings are fixed to one, and that all variables are uncorrelated. However, nested models have their limitations because the $\chi^2$ test is not only sensitive to sample size but also sensitive to the violation of the
multivariate normality assumption; hence, this study focused on fit indices because of the large sample size \( n = 529 \).

In support of the above, Steiger et al. (1985) noted that the majority of methodological papers using SEM have focused mainly on using measures of fit indices rather than on any other method (for example, nested models). They concluded that the commonly used measures based on model comparisons are: the Normed Fit Index (NFI), the Non Normed Fit Index (NNFI), the Comparative Fit Index (CFI), the Goodness-of-Fit Index (GFI), and the Adjusted Goodness-of-Fit Index (AGFI), which this study has followed while applying SEM (see also, Jöreskog and Sörbom, 1993).

5.10.5 Missing Data Treatment

Missing values can affect the input data matrix (the correlation or covariance matrix) used by SEM. Missing data is usually dealt with through either imputation (replacing missing data with a value chosen by the researcher), or pairwise or listwise deletion (removing the cases for which some data is missing from some or all of the analysis). Missing data were scrutinised to ensure they were not organised into any particular pattern. In view of the small percentage of missing data (which ranged from 0 to 1.3\%) and its apparent randomness, it was decided to choose imputation rather than any deletion method, in order to preserve the sample size and avoid the estimation problems often associated with the use of matrices of different sizes engendered by pair-wise deletions.

5.10.6 SEM: Two-Step Method

In their pioneering article Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach, Anderson and Gerbing (1988) proposed a two-step model building approach. Their approach focused on the analysis of two different models: the measurement model as a first step, followed by the structural model. The measurement model specifies the relationships among the constructs and their respective items. The structural model specifies relationships between the constructs as described and identified by theory. Furthermore, the measurement model tests discriminant and convergent validity while the structural model tests the nomological validity of the research (Schumacker and Lomax 2004).
There have been several attempts in the literature to extend the two-step approach to include further steps; for example, Mulaik and Millsap (2000) proposed a four-step approach. Nevertheless, the majority of marketing related literature focuses on one-step and two-step approaches, and, therefore, the research in this thesis only examine these approaches as opposed to the other models.

While strictly speaking AMOS allows for both measurement and path models to be tested (and re-specified) at once, many authors have advocated a two-step approach (for example, Anderson and Gerbing 1988; Diamantopoulos and Winklhofer 2001; Schumacker and Lomax 2004). The first reason for this preference is a compelling theoretical argument made by Jöreskog and Sörbom (1993:113): “the testing of the structural model, i.e. the testing of the initially specified theory, may be meaningless unless it is first established that the measurement model holds. If the chosen indicators for a construct do not measure that construct, the specified theory must be modified before it can be tested. Therefore, the measurement model should be tested before the structural relationships are tested”.

The second reason stems from the manner in which AMOS models are assessed. Since most of the relationships estimated in a AMOS model are those leading from an observed variable to a latent variable (i.e. the measurement part of the model) rather than the relationships linking latent variables (i.e. the structural part of the model), the measurement part of the model plays a larger role than the structural part in the overall fit of the model (Mulaik and Millsap 2000). Therefore, misspecifications in the measurement model are best addressed and minimised before the path model’s fit is estimated.

Even though existing literature suggests using the two-step method, this study used a one-step approach as a consequence of the model fitting without the need to be modified. This was a result of the initial development and validation of scales. A degree of misspecification was expected; therefore, testing the whole model at once would inevitably have led to poor fit indices, and the overall size of the model would have made it difficult to trace the source of the main misspecifications.
5.11 Research Limitations

5.11.1 Procedure Error during Data Collection

Hair et al. (2006) pointed out a number of errors that may threaten the reliability and validity of research (such as coding errors). These errors may lead the researcher into drawing spurious conclusions. This section reviews the main types of potential error, and the actions that can be taken to prevent them taking place. The researcher’s potential source of bias is also examined.

5.11.2 Researcher Error

Any research can be affected by errors such as myopia (gathering the wrong data because the problem has not been defined well), inappropriate analysis (omitting relevant analysis, or conducting analysis in an inappropriate manner, or with data not suitable for that type of analysis), misinterpretation (misunderstanding the implications of the research, or being influenced by strong a priori ideas), or communication (translating results in a manner which can be misunderstood, or cannot be verified). Actions taken to prevent these potential errors include:

- An extensive review of the trustworthiness literature across various academic disciplines. This resulted in the uncovering of a high level of convergence between phenomena, supporting the structure of the conceptual model.
- The presentation of the conceptual model at several conferences (nationally within the United Kingdom and internationally, for example, at ANZMAC), to solicit reviewer and participant feedback and suggestions. This led to the discovery of other relevant parts of the literature, and to the search for additional support for the development of the hypotheses in Chapter Four.
- An extensive exploratory study, undertaken with the objective of investigating all aspects of customer perceptions and understanding of trustworthiness.
- Providing exhaustive information and data about the collected results, and detailing the steps taken to ensure the employed methods were used appropriately. Furthermore, the thesis details all the results and tests carried out in the analysis chapter, to enable readers to make their own assessments regarding the final results.
5.11.3 Measurement Process

Measurement process errors may be due to conditioning (respondents may behave differently from usual when their attention is drawn to a topic, and they may over-elaborate), process bias (when respondents choose to answer questions in a manner which is different from their true opinion), or errors in recording (when the wrong answer is recorded).

Errors due to conditioning are the hardest to detect and correct or attenuate, and to some extent all the social sciences are subject to this source of error. In contrast, process bias and recording error situations are easier to detect. Steps taken to guard against these errors included a consideration of individual cases of possible process or recording bias. For example, if any case contained a clear indication from the respondent of not wanting to answer all the questions and/or having answered the questions in a clear systematic order, this case was identified as a case process bias and excluded from the analysis.

5.11.4 Instrument Bias

Instrument bias is caused by individual questions (which can be ambiguous, difficult to understand or confusing) or by the instrument and in particular the order of the items. To minimise the sources of instrument bias in individual items, the following measures were adopted. Items were developed using guidelines provided in the literature (DeVellis 1991) about the wording of items:

- The wording of certain items from existing scales was adjusted to make sure the wording of the questionnaire was jargon-free, so the respondents could understand the questions easily.
- Items written for scales developed in this study were submitted to three expert judges\(^\text{10}\), and one of the tasks required of them was to suggest which items should be omitted if they were unclear or had other flaws that would limit their validity.

\(^{10}\) See appendix Ten for the judges description.
- The very thorough scale development and validation process also screened out further confusing items, for example, during the EFA and reliability test stages.

Conscious of the possibility that respondents can be ‘led’ to answer in a specific way when items related to specific scales are presented in the same order as the sequencing of the hypothesised relationships, items from all scales were presented in a random order, with no two items from the same scale presented one after another.

5.11.5 Respondent Error

Respondent error may be due to response styles, which are “tendencies to respond systematically to questionnaire items on some basis other than what the items were specifically designed to measure” (Grix 2004:120) or response error (which may include uncertainty when respondents are unsure about their real opinion, in articulation, or mistakes). Response styles can contaminate respondents’ answers, and in the process jeopardize the validity of conclusions drawn about the validity of new measures or the relationships between measures.

Summary

Since the current research is using a mixed method, applying survey methods (interview and questionnaire) in both its parts appears to make it easier to rationalise the research, because any researcher who wants to view a phenomenon in its broadest sense, with a large population, would achieve significant benefit from the use of surveys.

Concerning the scale procedure, this thesis adopted the C-OAR-SE scale development procedure since it appeared to be applicable to the rationale of the research, keeping in mind different criticisms of the scale and the fact that the scale has not been empirically tested and applied in different disciplines. Furthermore, in view of this research applying the C-OAR-SE procedure, content validity will be examined over the other forms of validity.
CHAPTER SIX: SCALE DEVELOPMENT AND PILOT STUDY

6.1 Introduction

Empirical social scientists focus on measuring attributes of objects that are abstract in their nature (Netemeyer et al. 2002). Such abstract objects and their associated attributes cannot be observed or quantified directly, and are often considered to be latent. Latent constructs can also be variable, i.e. their attributes may change over time; for example, changes in customer satisfaction over a period of time. Therefore, the measurement of latent constructs requires the researcher to develop a scale to estimate the actual value at a given point in time (Netemeyer et al. 2002). It is generally agreed that latent constructs require multiple items or statements to fully capture the meaning of the latent variable (DeVellis 2004).

This chapter reports the different stages in the development and validation of the measurement scale for this thesis used to test the main hypotheses established in Chapter Four. Initially, a pool of ninety items was generated from the literature describing previous research on trustworthiness and its proposed antecedents. Next a pilot study was carried out to purify the pool of items and to assess the reliability of the remaining items. The pilot consisted of three stages, namely; interviews with a panel of judges; semi-structured interviews with customers; and a structured questionnaire to test the reliability of the research scale. The results of the three stages were positive, which affected the research direction and provided a solid base on which to build the next stage of the study.
6.2 Methods of Enquiry

Research methodology attempts to achieve an “examination of the possible plans to be carried out, the journeys to be undertaken (in research), so that understanding can be obtained” (Polkinghorne 1983:5). These methodologies include aspects such as sampling principles, statistical analysis and, most importantly, issues surrounding the validity and reliability of the research.

It is accepted that the methodological procedures that a researcher might employ are significantly influenced by the assumptions, interests, values and goals of the researcher. Positivists and interpretivists, for instance, hold different assumptions, interests, values and goals, and therefore, they would apply different methodologies due to their different approaches to problems and their search for different answers (Creswell 1994).

A methodology that has been developed for use in this thesis is a multi-method triangulated approach towards data collection. This approach entails several stages to ensure the appropriateness of the data collection, which in turn helps to enhance the validity and reliability of the research. These stages are demonstrated in Figure 6.1.

Figure 6.1: Overview of the Scale Development Process and the Pilot Study
6.3 Scale Development

The important parameters of this thesis have already been outlined, but any attempt to test the proposed framework\(^1\) requires a set of measurement instruments for the key construct and formed attributes. Rossiter (2002) questioned Churchill’s (1979) traditional approach to the development of scales for measuring marketing constructs, based on a multi-trait multi-method approach, and instead proposed a six-step procedure called C-OAR-SE. Churchill’s (1979) procedure allowed the internal reliability of a scale to be measured in an objective manner by using Cronbach’s alpha coefficient, but this test of reliability does not necessarily imply that the scale is valid. As Rossiter (2002) argues this shortcoming throws into doubt the validity of some well-known scales, for example SERVQUAL, with its emphasis on exploratory factor analysis. The C-OAR-SE approach focuses on the conceptualisation of constructs, thereby addressing a weakness in Churchill’s (1979) procedure. In their work, Finn and Kayande (2005) critically examine The C-OAR-SE; they support the attention to conceptualisation and content validity, but criticise the extreme context dependence, which is a point also raised by Diamantopoulos (2005).

To avoid these limitations, this thesis embraces content validity as a main validity indicator, and follows Rossiter’s (2002) approach to scale development. However, the thesis attempts to achieve a balance between the two approaches by reporting some tests from Churchill’s (1979) procedure that were thought suitable to add greater reliability and validity to the research instrument, for example, EFA analysis. However, the C-OAR-SE scale development method advocated by Rossiter (2002) was the main procedure used for scale development\(^2\) in this thesis, because it relies on content validity to support the proposed constructs over being data driven as been advocated by Churchill (1979).

According to Rossiter’s (2002) C-OAR-SE procedure, the traditional scale development process normally involves the generation of a number of potential scale items and the completion of a confirmatory factor analysis to identify which items to include or exclude. Rossiter (2002) puts forward a compelling argument to indicate

---

1 See Chapter Four - Section 4.6.
2 See Chapter Five - Section 5.7 for a full discussion on the C-OAR-SE scale development procedure.
that this approach is inconsistent because it can lead to the inclusion of scale items that have little relevance to the construct. The key to the validity of a scale is its content validity, and therefore, an open-ended approach is suggested to identify which items to include.

Table 6.1 shows some of the empirical studies on trust and trustworthiness. A detailed view of these studies is reported, including information about the measurement instrument, the research context and method of analysis. This thesis follows in the footsteps of these studies, applying a Likert scale, using Cronbach’s alpha for reliability assessment, and employing SEM for the main analysis.

In line with Rossiter’s (2002) suggestion, the first stage of the scale development procedure involved interviews with a panel of three judges/experts to assess the scale items that were generated from the existing literature. The second stage involved eleven individual one-to-one in-depth interviews concerning the nature of trustworthiness for service organisations. This led to the next phase that involved each respondent taking part in a card sort exercise. To develop the scale items for the card sort, an initial pool of ninety items (drawn from qualitative work and existing studies) was subjected to screening techniques to create a revised pool of thirty-six items. Each member was asked to sort the items into piles according to how they felt each item related to specific determinants of trustworthiness in the proposed model, as well as the attribute trustworthiness and the construct of trust. The results of the card exercise produced a distribution of items that was broadly consistent with the thesis assumptions. These findings were taken to indicate a good degree of content validity.

Table 6.1 lists some key empirical studies in the field of marketing. The table reports how these studies were conducted; more specifically, it reports the items that were accepted as being relevant for the construct of trustworthiness. The pilot questionnaire uses an interval scale to assess the construct, its attributes and determinants. This table is important because it clearly shows the interests of the key researchers in marketing and how they carried out their research; this gave clear

---

3 See appendix Ten.

4 The participant selection procedure for this second stage consisted of randomly selecting customers from two hotels in Jordan.

5 More details in Section 6.4.1.
direction in the development of this thesis on how to conduct the research, which scale to adopt and which statistical tests to use.
Table 6.1: Main Empirical Studies on Trust and the Scales Used

<table>
<thead>
<tr>
<th>Author/s</th>
<th>Research context</th>
<th>Dimensionality of the construct</th>
<th>Number of items</th>
<th>Employed measurement scales</th>
<th>Data analysis methods and principal results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson and Weitz (1989)</td>
<td>Data collection from 95 sales agencies with reference to their relationships with 690 manufacturers in the electronic components sector (from the perspective of the sales agencies)</td>
<td>Trust</td>
<td>2 items</td>
<td>7-point scale:</td>
<td>System of equations estimated via three stage least square. Cronbach alpha = 0.84. The correlation coefficients between trust, on one hand, and perceived competency and goal congruence, on the other, are 0.51 and 0.69 respectively.</td>
</tr>
<tr>
<td>Anderson and Narus (1990)</td>
<td>Data collection from 249 distributors and 213 manufacturers (from the perspective of both firms)</td>
<td>Trust (on the distributors' side) 3 multi-item indicators (on the manufacturers' side) 4 multi-item indicators</td>
<td>7-point scale: 1 = don't trust X; 7 = trust X completely</td>
<td>Structural equations models – Lisrel. In both samples, both measurement and structural model required several re-specifications</td>
<td></td>
</tr>
<tr>
<td>Morgan and Hunt (1994)</td>
<td>Study of 204 relationships between automobile tyre retailers and their suppliers (from the perspective of the buyers)</td>
<td>Reliability integrity</td>
<td>7 items</td>
<td>7-point scale: 1 = strongly disagree 7 = strongly agree</td>
<td>Structural equations models – Lisrel. Cronbach alpha = 0.95 The correlation coefficient between trust and opportunistic behaviour is -0.759</td>
</tr>
<tr>
<td>Mohr and Spekman (1994)</td>
<td>Study of 102 vertical relationships between personal computer retailers and their suppliers (from the perspective of the retailers)</td>
<td>Trust</td>
<td>3 items</td>
<td>5-point scale: 1 = strongly disagree 5 = strongly agree</td>
<td>Multiple regression. Cronbach alpha = 0.75.</td>
</tr>
<tr>
<td>Nielsen (1998)</td>
<td>Study of 163 relationships between manufacturers and distributors of intermediate products such as components parts, raw materials etc. (from the perspective of the seller)</td>
<td>Trust</td>
<td>3 items</td>
<td>5-point Likert scale: 1 = strongly disagree 5 = strongly agree</td>
<td>Structural equations models – Lisrel. Cronbach alpha = 0.87 The measurement scale of trust is judged to be acceptable for testing the causal model</td>
</tr>
<tr>
<td>Selnes (1998)</td>
<td>Study of 177 relationships between restaurants and their suppliers (from the perspective of the buyer)</td>
<td>Trust</td>
<td>1 item</td>
<td>Scale: 1–10 1 = strongly disagree 10 = strongly agree</td>
<td>Structural equations models – Lisrel. Correlation between competence and trust is 0.464. Competence does not have any effect on trust (it acts through communication, highly correlated)</td>
</tr>
<tr>
<td>Study</td>
<td>Trust</td>
<td>Scale</td>
<td>Notes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crosby Evans and Cowles (1990)</td>
<td>Study of 151 relationships between insurance policies buyers and sales agents (from the perspective of the buyer)</td>
<td>Trust</td>
<td>9 items</td>
<td>7-point scale: 1 = strongly disagree; 7 = strongly agree</td>
<td>Structural equations models – Lisrel. Cronbach alpha = 0.89 CFA validated the hypothesised factor structure</td>
</tr>
<tr>
<td>Moorman et al. (1992) Moorman et al. (1993)</td>
<td>Study of 779 relationships between providers and users of market research (from the perspective of the users)</td>
<td>Belief behavioural intention</td>
<td>5 items</td>
<td>5-point scale: 1 = strongly disagree; 5 = strongly agree</td>
<td>Regression analysis, with results then used as inputs for a path analysis. When subjected to factor analysis, all items of trust loaded highly on a single factor, supporting the uni-dimensionality of the construct. Cronbach alpha = 0.84</td>
</tr>
<tr>
<td>Doney and Cannon (1997)</td>
<td>Study of the relationships between a sample of 210 industrial firms with supplier firms and their salespeople (from the perspective of the buyer)</td>
<td>Credibility benevolence Trust towards the firm: 8 items; trust towards the salespeople: 7 items</td>
<td>7-point scale: 1 = strongly disagree; 7 = strongly agree</td>
<td>CFA with Lisrel and system of equations estimated with three-stage least squares. Cronbach alpha towards supplier firm = 0.94, towards the salespeople = 0.90. The measures used show good psychometric properties. Trust towards the firm and trust toward salespeople are distinct constructs.</td>
<td></td>
</tr>
<tr>
<td>Sirdeshmukh et al. (2002)</td>
<td>Two service organisation, retail clothing (n = 264) and non-business airline travel (n = 113)</td>
<td>Trustworthiness</td>
<td>4 items</td>
<td>10-point scale Semantic Scale</td>
<td>Path analysis using EGS software reporting Cronbach alpha for reliability testing</td>
</tr>
</tbody>
</table>
6.4 Overview of the Pilot Study

A pilot study is often referred to as a small-scale research project that collects data from respondents similar to those which will be used in the full data collection (Zikmund and Babin 2007:62). This type of study is a critical technique in refining research measures and reducing the risk that the full study will be fatally flawed. Hence, the pilot study is seen as an early indicator of potential effectiveness of the research by developing a mini sample and attempting to test the research objectives. The pilot study for this thesis aimed to test:

- How respondents interpreted the questionnaire.
- The level of their understanding of the questions and whether there was any misleading wording (Creswell 1994).
- The reliability of the measurement scale by applying Cronbach’s coefficient alpha (α)\(^6\).

As mentioned earlier, the pilot study incorporated four distinct but interrelated data collection phases. Using a mixed method instrument, interviews with a panel of three judges took place in order to purify the generated pool of items \((n=90)\) and to comply with the research procedure advocated by Rossiter (2002) (see Table 6.2 for a full overview of the data analysis in the pilot study).

During the first stage, semi structured interviews were carried out independently with three judges to review the list of the generated items in order to eliminate similar items from the original pool. The panel of three judges consisted of two academics and one industry expert in marketing. The selection of judges\(^7\) was based on availability and expertise; each judge was free to alter, delete or add any item to the list. They were required to fulfil two main tasks:

- Indicate which items they felt should be omitted because of some flaw (and they were invited to provide further information/suggestions about these items).

\(^6\) See the discussion in Chapter Five - Section 5.9.2.
\(^7\) See appendix Ten for the judges position and country description.
• Sort the items based on the definition of each construct. The items were supplied to them in a random sequence.

A number of items were recorded for the pilot, based on expert feedback and the importance of including negatively-worded items in each scale. Following this, the panel of judges were required to evaluate the relationship between the research items and the proposed constructs in order to assess the pertinence of the items. It is worth noting that none of the changes were adopted unless at least one more judge agreed on the alteration of the item(s). The results were significant in that several items were deleted (delete items = 49, new pool = 41) and adapted because they were thought to be too similar, too repetitive, or not relevant to their respective construct.

Table 6.2: Detailed view of the Data Analysis Strategy

<table>
<thead>
<tr>
<th>Activity</th>
<th>Analytical technique(s) used</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| Identify the research constructs | Literature review  
Conceptualisation based on extensive exploratory study | To clearly identify the construct of trust in the context of the surrounding theory, to determine the relevant theory for this research |
| Generate a pool of items      | Review of existing scales  
Review of exploratory study  
Item editing | To generate a large pool of items for each construct (n=90) |
| Expert judging (3 judges)     | Sorting task (experts asked to allocate items to the construct they believed they are related to the relative construct) | To refine the pool of items in the light of the judges’ views |
| Questionnaire pilot (60 respondents) | Scale reliability  
Questionnaire clarity  
Exploratory Factor Analysis | To examine the extent of the reliability of the scale, along with detecting any vagueness in the questionnaire |
| Collected data (n = 556)      |                                                               |                                                                         |
| Measure purification – internal consistency | Exploratory Factor Analysis  
Construct Reliability | To obtain, for each measure, a set of items which are internally consistent |

During stage two, interviews were carried out with randomly selected customers who had experience with the service provider (n = 11). Card sort exercises were carried out to ask customers about the importance of the generated pool of items (n = 41) in terms of to what degree they see the items significant and applicable to the
related construct. Card sorting is a technique used for exploring how individuals group and prioritise items, so that the researcher can develop structures that maximise the probability of customers being able to find and rank items, and can also identify whether customers understand the terminology of the research. Card sorting is an easy and cheap method to employ, and it enables the researcher to understand how ‘real people’ are likely to group items, identify items that are likely to be difficult to categorise, and find terminology that is likely to be misunderstood.

The collected data demonstrated a clear indication of the relevant items that measure the components of trust. This identification led to stage four of the pilot study, where a questionnaire was developed and administered based on the previous three stages to assess the internal consistency of the scale \( n = 60 \). The final results of the pilot study indicated general approval of the projected scale and its reliability, and resulted a pool of the items \( n = 36 \) that measure the proposed constructs of the study.

### 6.4.1 The Interviews

Interviewing was selected as a technique for the pilot study because it “can provide a greater depth of data than the other types, given its qualitative nature” (Denzin and Lincoln 2000:652). A semi-structured format was chosen to incorporate the formulation of open questions \(^8\) based upon the initial conceptual framework \(^9\) and the review of the literature, while at the same time encouraging participants to provide a greater depth of information on issues that they perceived to be of relevance.

The semi-structured sections of the interviews were intended to gather information on themes derived from the initial conceptual framework in the first stage of the pilot study, while the second part of each interview consisted of card sort exercises where the participants were asked to rank items according to their importance and match them with associated constructs. However, both stages aimed to assemble information on a range of topics drawn from the literature (see Table 6.3).

---

\(^8\) Open questions were employed to allow respondents to freely express their views on the study.

\(^9\) See Chapter Four – Section 4.6.
Table 6.3: Examples of the Literature Supporting the Research Constructs\textsuperscript{10}

<table>
<thead>
<tr>
<th>Construct</th>
<th>Supporting literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrity</td>
<td>De Wulf \textit{et al.} (2001)</td>
</tr>
<tr>
<td></td>
<td>Cummings and Bromiley (1996)</td>
</tr>
<tr>
<td>Benevolence</td>
<td>Bhattacherjee (2002)</td>
</tr>
<tr>
<td></td>
<td>Bearden and Netemeyer (1999)</td>
</tr>
<tr>
<td>Competence</td>
<td>Cummings and Bromiley (1996)</td>
</tr>
<tr>
<td>Value alignment</td>
<td>Siegtist \textit{et al.} 2002</td>
</tr>
<tr>
<td></td>
<td>Hess (1995)</td>
</tr>
<tr>
<td>Consistency</td>
<td>Anderson and Narus (1990)</td>
</tr>
<tr>
<td></td>
<td>Cummings and Bromiley (1996)</td>
</tr>
<tr>
<td></td>
<td>Garbarino and Johanson (1999)</td>
</tr>
<tr>
<td>Communication</td>
<td>Anderson and Narus (1990)</td>
</tr>
<tr>
<td></td>
<td>Morgan and Hunt (1994)</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>Bhattacherjee (2002)</td>
</tr>
<tr>
<td></td>
<td>Cummings and Bromiley (1996)</td>
</tr>
<tr>
<td>Behavioural loyalty</td>
<td>Rundle-Thiele and Bennett (2001)</td>
</tr>
<tr>
<td></td>
<td>Dick and Basu (1994)</td>
</tr>
<tr>
<td>Attitudinal Loyalty</td>
<td>Dick and Basu (1994)</td>
</tr>
<tr>
<td></td>
<td>Rundle-Thiele and Bennett (2001)</td>
</tr>
</tbody>
</table>

The aim of the interviews was to reduce the initial set of items that were generated from the literature. No new items were generated for the current research based on these interviews because the set of items generated by an examination of the literature was adequate to cover the proposed variables of the study, remembering that in order to analyse each construct, SEM requires a minimum of three items for that construct. Since the literature generated a sufficient number and range of items, the generation and testing of further items did seem to be necessary.

The groups of participants for the interview stage of the pilot study were randomly selected at the time of the study, and initial contact at each stage was made by the use of simple random sampling in that each selection from the population was “entirely independent of the next” (Cohen \textit{et al.} 2001:100). Selected hotels were contacted in Jordan and arranged a time for the interviews with the hotel customers inside the hotel, to minimise disruption for both the participants and the hotel. The selected participants were approached in the hotel lobby and were introduced to the

\textsuperscript{10} This information is also available in an expanded form in Chapter Four - Section 4.6.
research idea. Once the participants had agreed to take part in the interview; the participant and a representative from the hotel proceeded to a meeting room in the hotel to begin the interview.

All eleven interviews were conducted individually, and a rapport was established with each participant so that they would feel comfortable sharing their thoughts and feelings. All the definitions of key terms were clarified, and an explanation of how participants’ comments would contribute to the overall research objectives. Initially some time was spent talking informally about background and interests, and then the card sort exercises were introduced, using cards and a white board pre-designed by the researcher. It was found that sharing the researcher’s background of professional practice within the hotel sector created a collegial atmosphere, and participants seemed to be drawn to divulge greater detail knowing that the researcher had an intimate understanding of the industry. A decision was made not to make audio recordings of the interviews since it was thought that participants might be less likely to be open and truthful if recorded. Instead, extensive interview notes were taken, and were then transcribed immediately following each interview.

Prior to the interview trials, the interview schedule was pre-tested with three respondents\textsuperscript{11}. They read the schedule and provided feedback on the intention, wording and sequencing of the instrument. Feedback on the schedule was considered and changes were made accordingly; for example, the respondents made some comments in relation to the terminology used, as a result of which the definitions of key terms were given and explained to each participant at the beginning of their interview. The language that had initially been used was altered to suit the participants and eliminate any possible misunderstanding of the questions.

Originally a list of ninety items was derived from previous studies surrounding trust and trustworthiness constructs. These items were linked to the constructs they were thought to refer to. The panel of three expert judges were interviewed

\textsuperscript{11} The three respondents were two friends and one family member.
individually to assess both the similarity of these items and the relationship between the items and their associated constructs\textsuperscript{12}.

Overall, the results of the expert interviews purified the list to forty-one items related to the construct of the study. This is still considered a large number of items according to Hair \textit{et al.} (2006). As an example of a deleted item, most participants ($n=11$) did not believe that the item ‘my … is truthful’ was important from their perspective, and it was ranked lowest in importance in the integrity construct, despite literature approval by Hess (1995) and Morgan and Hunt (1994). Therefore, this item was deleted in the context of the service sector; it’s not advocated in this thesis that this item is not effective in measuring integrity, but simply that it is not applicable to this study or the hotel sector.

The results of these expert interviews were carried forward to the next stage of the research involving the semi-structured interviews with customers from the hotel sector carrying out a card sorting exercise. The participants were asked to rank each item according to its importance from their perspective. The results from the semi-structured interview stage purified the pool of items to 36 items. In the next stage each construct was represented only by the four most relevant items.

\textbf{6.4.2 The Questionnaire}

The third stage of the pilot study contained a structured questionnaire administered to a randomly selected sample of customers in the hotel sector. The idea behind structuring a questionnaire grew from the fact that questions in such an instrument may be designed to collect either qualitative or quantitative data. Any question must be clearly described, but in particular questions that assess a qualitative measure must be carefully phrased to avoid uncertainty.

Participants responded to questions assessing their knowledge of the service provider, its values, staff, and any other issues related to the perceived trustworthiness of the service provider. Their responses were recorded on a 5-point Likert scale anchored using strongly agree and disagree. The mid-point of the scale was anchored using the word neutral, but there was no wording for points 2 and 4 of the scale.

\textsuperscript{12} See the earlier discussion in section 6.4 for more details.
Rossiter’s (2002) criticisms of Likert scales were taken into consideration, but piloting suggested that respondents were comfortable with this format and interpreted the anchors appropriately. Initially, customers responded to questions assessing the degree to which certain factors were important in influencing their decision to indicate the service provider’s integrity; these factors included; show fairness in transactions; consistency in service delivery; keeping promises; and presenting respect. The rest of the questions assessed the degree to which respondents perceived their service provider to display consistency, competence, benevolence, value alignment and trust; these questions documented the influence of experience, current service, autonomy, comfort, and personal values.

The second part of the questionnaire was designed to determine what, if any, external factors would influence a respondent to place their trust with the service provider. The questions assessed safety, brand, location, and atmosphere of the location of the service; these factors were not included in the trust literature, but they can be seen as an indication of customers’ loyalty towards the service provider.

The last section simply asked the respondents for some demographical information, which could be correlated with their views in order to identify in-depth relations; these questions were about age, gender and nationality. For the purposes of this study, it was decided not to ask further demographical questions, because the aim of the research was to confirm the proposed model rather than to explore the service sector.

Self-completion questionnaires were employed in the pilot. A sample of five “dummy” questionnaires was distributed to identify any problems in interpreting the questionnaire instructions or items. Since multivariate techniques are sensitive to sample size effects, larger sample sizes increase confidence in assessments of construct validity and reliability. Several item-to-sample ratios have been proposed, but as long as there is sufficient intercorrelation, a smaller sample size can be used (Hair et al. 2006). A total of sixty responses were collected, just above the cut-off

---

13 The questionnaire was administered in English with an Arabic version available upon request, however, all participants used the English version in both the pilot and the main study.

14 It is common practice to use “dummy” questionnaires prior to collecting the main data in order to avoid errors and misinterpretation of the questions (Creswell 2003).

15 The five respondents consisted of five friends.
point for factor analysis suggested by Hair *et al.* (2006). The sixty completed questionnaires were distributed to randomly selected hotel customers in two five-star Jordanian hotels.

In spite of Rossiter’s (2002) argument against the use of formal measures of reliability when developing scales to test formed constructs and attributes, the result of the reliability analysis is reported here as a further check on the quality of the proposed measurement structure. The reliability analysis test showed that the overall Cronbach alpha coefficient for the scale (α) is .79. In more detail, the reliability analyses showed that the Cronbach alpha coefficient (α) for the items related to consistency was .80, competence .78, integrity .91, benevolence .90, value alignment .76, communication .85, trustworthiness .75, behavioural loyalty .82 and attitudinal loyalty .76. All the reliability coefficients are considered to be acceptable (Hair *et al.* 1998).

Based on the stated objectives and the achieved results of the pilot study, the pilot stage was successful. This study paves the way for the main data collection and analysis stage of the research.

During the pilot study it was discovered that some respondents misinterpreted some questions in the questionnaire even though an Arabic explanation was offered. Therefore, immediate corrections were carried out to reword these questions to suit the respondents. In addition, it became apparent to the researcher that the questionnaire did not include a question on the hotel grade, which might have been useful in the main survey.
6.5 Scale Evaluation

The previous stages of scale development were devoted purely to the development of a new scale. DeVellis (2004) describes validation guidelines for scales, and make a distinction between techniques for: a) content validity; b) construct validity; and c) reliability. The C-OAR-SE procedure does not explicitly mention the need for an extra sample, but it does place emphasis on the content validity of the items. Churchill’s (1979) traditional procedure, in contrast, specifically advocates a second data set to assess reliability, i.e. the stability of the instrument across different measurements and preferably also across different methods. Construct validity should also be re-evaluated; CFA can be used to test discriminant and convergence validity.

In addition to the above, this thesis followed Hinkin’s (1995) recommendations by using CFA to test criterion-related validity (predictive or nomological validity). This was done by confirming some theoretically hypothesised relationships using SEM. Before the scale was developed a careful reanalysis of content validity was deemed to be necessary. This data analysis resulted in the omission of nearly half of the items from the scale (forty out of ninety). The next step, according to the C-OAR-SE procedure, is to assess content validity, which has been achieved in defining each of the proposed constructs. Furthermore, psychometric tests will be reported in the next two chapters. For each of the nine constructs, an evaluation was made concerning whether the remaining items are sufficiently representative of their respective constructs. The remaining items used in the main survey are reported in Table 6.4.

16 See Chapter Four - Section 4.6.1.
### Table 6.4: The Final Research Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Determinant</th>
<th>Reference/Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show fairness in transactions</td>
<td>Integrity</td>
<td>Bhattacherjee (2002)</td>
</tr>
<tr>
<td>Always achieves consistency in service delivery</td>
<td>Integrity</td>
<td>New item</td>
</tr>
<tr>
<td>Always keeps its word</td>
<td>Integrity</td>
<td>Cummings and Bromiley (1996)</td>
</tr>
<tr>
<td>The ….. employees treat me with respect</td>
<td>Integrity</td>
<td>Sirdeshmukh et al. (2002)</td>
</tr>
<tr>
<td>Is open to my needs</td>
<td>Benevolence</td>
<td>Bearden and Netemeyer (1999)</td>
</tr>
<tr>
<td>Keeps its customers’ best interest in mind during most transactions</td>
<td>Benevolence</td>
<td>Bhattacherjee (2002)</td>
</tr>
<tr>
<td>Is receptive to my needs</td>
<td>Benevolence</td>
<td>Bhattacherjee (2002)</td>
</tr>
<tr>
<td>Has adequate skills to deliver the right service</td>
<td>Competence</td>
<td>Jarvenpaa et al. (2000)</td>
</tr>
<tr>
<td>Is efficient</td>
<td>Competence</td>
<td>Sirdeshmukh et al. (2002)</td>
</tr>
<tr>
<td>The ….. employees can competently handle most of my requests</td>
<td>Competence</td>
<td>New item</td>
</tr>
<tr>
<td>The ….. employees can be relied upon to know what they are doing</td>
<td>Competence</td>
<td>Sirdeshmukh et al. (2002)</td>
</tr>
<tr>
<td>Shares the same values as me</td>
<td>Value alignment</td>
<td>Siegrist et al. (2002)</td>
</tr>
<tr>
<td>Is ethical while dealing with me</td>
<td>Value alignment</td>
<td>Morgan and Hunt (1994)</td>
</tr>
<tr>
<td>Is interested in more than just making profit out of customers</td>
<td>Value alignment</td>
<td>Hess (1995)</td>
</tr>
<tr>
<td>The employees act as if they value the customer</td>
<td>Value alignment</td>
<td>New item</td>
</tr>
<tr>
<td>Has stability in its operations</td>
<td>Consistency</td>
<td>New item</td>
</tr>
<tr>
<td>Is always reliable</td>
<td>Consistency</td>
<td>Hess (1995)</td>
</tr>
<tr>
<td>Always matches customers’ expectations</td>
<td>Consistency</td>
<td>Garbarino and Johanson (1999)</td>
</tr>
<tr>
<td>Always satisfies customers’ needs</td>
<td>Consistency</td>
<td>New item</td>
</tr>
<tr>
<td>Communicates clearly</td>
<td>Communication</td>
<td>Ennew and Sekhon (2005)</td>
</tr>
<tr>
<td>The ….. respond immediately when contacted</td>
<td>Communication</td>
<td>New item</td>
</tr>
<tr>
<td>Inform me immediately of any problems</td>
<td>Communication</td>
<td>Anderson and Narus (1990)</td>
</tr>
<tr>
<td>The ….. always communicates with me</td>
<td>Communication</td>
<td>New item</td>
</tr>
<tr>
<td>I will transact with this ….. again for future visits</td>
<td>Behavioural loyalty</td>
<td>Ruyter et al. (1998)</td>
</tr>
<tr>
<td>I will try new services that are provided by this …..</td>
<td>Behavioural loyalty</td>
<td>Rundle-Thiele and Mackay (2001)</td>
</tr>
<tr>
<td>I will recommend other people to visit this …..</td>
<td>Behavioural loyalty</td>
<td>Rundle-Thiele and Mackay (2001)</td>
</tr>
<tr>
<td>I will say positive things to other people about the services provided at this …..</td>
<td>Behavioural loyalty</td>
<td>Rundle-Thiele and Mackay (2001)</td>
</tr>
<tr>
<td>I will continue to visit this ….. even if the service charges are increased moderately</td>
<td>Attitudinal loyalty</td>
<td>Ruyter et al. (1998)</td>
</tr>
<tr>
<td>I have strong loyalty to this …..</td>
<td>Attitudinal loyalty</td>
<td>New item</td>
</tr>
<tr>
<td>I will keep visiting this ….. regardless of everything being changed somewhat</td>
<td>Attitudinal loyalty</td>
<td>Ruyter et al. (1998)</td>
</tr>
<tr>
<td>I am likely to pay a little bit more for using the services of this …..</td>
<td>Attitudinal loyalty</td>
<td>Ruyter et al. (1998)</td>
</tr>
<tr>
<td>The ….. employees are professional and dedicated to customers</td>
<td>Trustworthiness</td>
<td>New item</td>
</tr>
<tr>
<td>The ….. respond caringly when I share my problems</td>
<td>Trustworthiness</td>
<td>New item</td>
</tr>
<tr>
<td>My ….. is always honest with me</td>
<td>Trustworthiness</td>
<td>Morgan and Hunt (1994)</td>
</tr>
<tr>
<td>Overall I feel I can trust my …..</td>
<td>Trustworthiness</td>
<td>Ennew and Sekhon (2005)</td>
</tr>
</tbody>
</table>
Table 6.4 reports the final scale items after the purification process. Four items were selected to measure each of the proposed constructs which is the recommended number as suggested by (Hair et al. 2006), the majority of these items are theoretically supported, with the exception of eight new items (see Table 6.4) that were added in response to the judges and the in-depth interviews. A full discussion on each construct with its respective items follows below.

1. **Integrity**

The content validity of the items employed to measure construct integrity is acceptable. The original conceptualisation of integrity is contained by the items that load highly on the first factor. Four items were dropped during the interview process – for example, ‘my …. will not deceive’ and ‘my …. is truthful’. Three items were dropped after the judges’ feedback – for instance, ‘my …. always encompasses consistency in service delivery’. The EFA indicated that the remaining items are part of the same underlying construct17.

2. **Benevolence**

The content validity of the items used to measure the construct benevolence was achieved. The original conceptualisation of benevolence is still covered by the items that load highly on the first factor. Six items were dropped in the interview process – for example, ‘my …. acts in a caring manner’ and ‘my …. will act in goodwill’. Four items were dropped after the judges’ feedback – for instance, ‘my …. always has empathy’ and ‘my …. has policies that favour the customer’s best interest’. The EFA indicated that the remaining items are part of the same underlying construct.

3. **Competence**

The content validity of the items used to measure the construct competence is satisfactory. The original conceptualisation of competence is still covered by the items that load highly on the first factor. Six items were dropped in the interview process – for example, ‘my …. has the right knowledge’. Three items were dropped after the

17 The full EFA report is available in Chapter Eight – Section 8.3.1.
judges’ feedback – for instance, ‘my …. does not give unrealistic promises’ (reverse item), ‘my …. is able to meet customer needs’ and ‘my …. is efficient’. The EFA indicated that the remaining items are part of the same underlying construct.

4. **Value alignment**

The content validity of the items employed to measure the construct value alignment is satisfactory. The original conceptualisation of value alignment is still covered by the items that load highly on the first factor. Five items were deleted based on the judges’ recommendation – for instance, ‘my …. shares similar beliefs with customers’. The EFA indicated that the remaining items are part of the same underlying construct.

5. **Consistency**

The content validity of the items used to measure the construct consistency has met the requirements for defining this construct. The original conceptualisation of consistency is still contained by the items that load highly on the first factor. Nine items were dropped in the interview process – for instance, ‘for my …. there are no limits to how far they will go to resolve customers’ problems’. The EFA indicated that the remaining items are part of the same underlying construct.

6. **Communication**

The content validity of the items applied to measure the construct communication is acceptable. The original conceptualisation of communication is still covered by the items that load highly on the first factor. Thirteen items were agreed to be dropped by the judges as they did not relate to the construct of communication; therefore, they were all dropped. This may relate to the number of available published scales that measure communication. For example, the statement ‘my…. communicates steadily’ was dropped. The EFA indicated that the remaining items are part of the same underlying construct.
7. **Behavioural loyalty**

The content validity of the items employed to measure the construct behavioural loyalty was achieved. The original conceptualisation of behavioural loyalty is covered by the items that load highly on the first factor. No items were deleted due to general acceptance of their importance to the construct from all the interviewees and judges. The EFA further confirmed this and indicated that the items are part of the same underlying construct.

8. **Attitudinal loyalty**

The content validity of the items used to measure the construct attitudinal loyalty is acceptable. The original conceptualisation of attitudinal loyalty is still contained by the items that load highly on the first factor. No items were deleted due to general acceptance of their importance to the construct from all the interviewees and judges. The EFA further confirmed this and indicated that the items are part of the same underlying construct.

9. **Trustworthiness**

The content validity of the items employed to measure the construct trustworthiness is adequate. The original conceptualisation of trustworthiness is still covered by the items that load highly on the first factor. No items were deleted due to general acceptance of their importance to the construct from all the interviewees and judges. The EFA further confirmed this and indicated that the items are part of the same underlying construct.

The final table of items forms the basis of the main questionnaire for this thesis. The questionnaire was discussed in 6.4.2. The full results from the data collection will be reported and discussed in detail in the next two chapters.
Summary

A pilot study with three stages was carried out in order to validate the research and resolve some of the problems that may occur in the main survey. Stages one and two consisted of interviews, firstly with a panel of three judges who hold vast experience in the industry and who raised a number of essential points for the researcher to consider, and secondly with a randomly selected sample of customers in the service sector in order to gain an in-depth insight into their views on trustworthiness. The last stage comprised a survey questionnaire to assess the reliability of the measurement scale.

The pilot study found that there was consistency between the proposed constructs and their associated items. The pool of items started with ninety different statements to measure the different dimensions surrounding trust; these items were reduced to sixty after passing the panel of judges, the rejected items being not relevant or showing significant similarity with others. The pool of items was further reduced to contain only the four strongest items related to each variable; this proved to be the most adequate method in order to apply SEM. The scale reliability analysis showed a satisfactory result by scoring .79.

The adopted approach in the pilot study has several drawbacks; for example, the pilot study conducted a card sorting exercise with customers without any in-depth interviews to allow customers to express their views freely. Moreover, the pilot study was limited in the sample size (n = 60) which did not allow the application of further tests to EFA; for example multiple regression analysis.

The next chapter reports the outcome of the final questionnaire. It will start by exploring the different descriptive results, as well as applying confirmatory factor analysis and SEM.
CHAPTER SEVEN: DATA ANALYSIS AND RESULTS – DESCRIPTIVE ANALYSIS OF MEASUREMENT SCALE ITEMS

7.1 Introduction

Building on the qualitative data from the in-depth interviews and the results from the pilot study discussed earlier\(^1\), the purpose of this analysis is to generalise the results from the main survey and confirm the proposed model\(^2\). The main reasons for selecting a survey questionnaire are provided by Cramer (2003), who noted that carrying out a survey questionnaire holds distinctive advantages over other data collection techniques (for instance interviews), such as: “economy of the design, the rapid turnaround in data collection, and the ability to identify attributes of a population from a small group of individuals” (Creswell 1994:119).

This research used a self-completion survey technique established by the results of the pilot study\(^3\). Once the final measurement scale and the survey questionnaire had been developed, the survey was sent to the selected hotels in Jordan. When the responses had been gathered a detailed analysis was conducted to provide a thorough understanding of the results and the significant outcomes of the model.

The data analysis for this thesis is divided into two main parts. The first part is contained in this descriptive chapter, and is mainly concerned with the characteristics of the collected sample. The second part consists of the application of a Structural Equation Modelling (SEM) procedure forms the empirical examination of the proposed model and presented in Chapter Eight.

\(^1\) See Chapter Six for the pilot study and scale development.
\(^2\) The model is listed and discussed in Chapter Four section 4.6.1 and illustrated in Figure 4.8.
\(^3\) Contained in Chapter Six - Section 6.4.
In this chapter the collected data from the main quantitative survey will be presented. The chapter begins with the steps of designing, developing and administering the questionnaire, and then it describes the data screening process that took place prior to statistical analysis. Issues related to missing data and outliers will be addressed.

7.2 Data Collection Sample and Response Rate

According to the Jordanian Government statistics\(^4\), the number of tourists that used hotels in Jordan between April 2006 and April 2007 was approximately 1.1 million\(^5\). Based on this number, the study population was calculated to be approximately 2,334 customers who stayed in ‘five-star’ hotels in Jordan.

The targeted hotels were visited on randomly selected days to collect the data\(^6\). Customers\(^7\) were approached randomly, the aim of the research was explained to them, and then they were invited to participate in the study by completing the questionnaire. The response rate was 61%, a satisfactory percentage for this kind of research (Vaus 1999), giving a total number of 556 collected questionnaires. However, twenty-four cases were noted as outliers\(^8\) and have been excluded from the analysis, as will be explained shortly. The data collection stage took two months to complete\(^9\).

As noted above, a total of 556 questionnaires were returned. However, after eliminating unusable values \((n = 6)\) and respondents who did not provide at least five answers in the measurement scales \((n = 5)\) as well as deleting outliers \((n = 16)\), a total of 529 responses were carried forward for further statistical data analyses.

---

\(^4\) The Jordanian Hotel Association (2006 statistics).
\(^5\) There are 467 classified hotels in Jordan. Thirteen of these are ranked as five-star, seventeen hotels are four-star, and forty-one hotels three-star. The total tourist population was 1,509,320 based on arrival figures.
\(^6\) Based a pre-agreement with the hotels, the researcher was allowed to visit the hotels only on specific days.
\(^7\) The targeted hotels consisted of five five-star hotels.
\(^8\) Outliers are cases with values/scores either above or below the average values/scores by a considerable degree.
\(^9\) The data collection started on the 1\(^{st}\) of August 2007 and finished by the end of September 2007.
Table 7.1: Survey Response Rate

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total targeted population</td>
<td>2,335</td>
</tr>
<tr>
<td>Total returned questionnaires</td>
<td>556</td>
</tr>
<tr>
<td>Unusable observations</td>
<td>6</td>
</tr>
<tr>
<td>Missing data</td>
<td>5</td>
</tr>
<tr>
<td>Outliers</td>
<td>16</td>
</tr>
<tr>
<td>Total used in statistical analysis</td>
<td>529</td>
</tr>
</tbody>
</table>

7.2.1 Questionnaire Fatigue

For the purposes of overcoming questionnaire fatigue, the scale measurement items were shuffled and mixed randomly; four versions of the questionnaire were created and distributed in a random fashion. In addition, Chi-square tests were used to find out if there were different distributions between early respondents and late respondents\(^\text{10}\) in terms of their demographic characteristics, and also to distinguish if there were differences in mean scores between these two groups in terms of the measurement scale items. These tests were used to determine whether the groups were statistically different from each other. The results of the Chi-square tests revealed that there was no difference in distribution between the early respondents and the late respondents in terms of gender, age group or general behavioural attributes within the hotel (for example, the type of service used). The results of chi square also showed that there was no difference between the two groups for the measurement scale items. As a result, it can be concluded that there was an absence of questionnaire fatigue in the collected data.

7.2.2 Data Screening

Data screening prior to applying any analytical technique (in this case, SEM) provided a basic understanding of the relationships between the variables in the study. Furthermore, the screening ensured that the data underlying the analysis met all of the requirements for the intended multivariate technique (Hair \textit{et al.} 2006).

\(^{10}\) People who completed the questionnaire in August and people who completed it in September.
Several checks were carried out to screen the data before the analysis. These included: errors, missing data, normality, Skewness and kurtosis, outliers, reporting mean (M), standard deviation (SD) and range of scores. These screening methods will be discussed in detail below.

In addition to the screening methods mentioned above, this thesis acknowledges non response and its limitation to the research because; non-response causes bias in surveys by allowing only the views of the people who answered the survey to be accounted for in the results and this has been defined as “… the bias that exists when respondents to a survey are different from those who did not respond in terms of demographic or attitudinal variables” (Sax et al. 2003:411). Some researchers, for instance, Andrews (2009), have found that non-response bias can have a negative impact on the research because not all respondents participated in the study. However, it has been argued that non-response does not always mean a bias, it depends on how representative of the entire population the non responders are (see for example, Groves 2006; Cook et al. 2000).

To reduce the non-response bias, this study followed Andrews’ (2009) recommendations in face-to-face interactions; by taking the points of view of the respondents into consideration when explaining the purpose of the research to them. The research team described the questions in the questionnaire and showed how the results of the study could help service organisations to improve their provided service(s); hence, making it appear to be mutually beneficial (Andrews 2009). This has led to a response rate of 61% which is a representative sample according to (Vaus 1999).

7.2.3 Errors

The data screening process followed two steps for error intervention. First, errors in the data were identified by checking variables for scores that are out of range. Second, an error treatment process was applied, in which some of the values were deleted or altered depending on their scores and range; this method was advocated by Tabachnick and Fidell (2007), who argued that purifying the data prior to analysis yields clearer results by removing extreme values that might influence the data negatively.
The process of examining errors in the coded data was based on identifying the values that fell outside the range of possible values for a variable. For instance, males were giving a value of 1 and females a value of 2; no other values were possible for this variable, i.e. all answers had to be either 1 or 2. A similar logic was applied for the other socio-demographic questions and the scale items. All observations were checked for any values outside the range; this was been done by conducting frequency analysis for all the variables and examining the outcome in SPSS (minimum and maximum values, valid and missing values). After this analysis it can be concluded that the coded data is error-free.

7.2.4 Missing Data

Missing data is a problem that occurs when valid values for one or more variables are absent (Hair et al. 2006). Missing values did not reach a critical point, i.e. more than 10% per variable and/or observation. After identifying the nature of missing values by diagnosing the level of randomness, there were 10 random cases, which have been considered as ‘Missing at Random’ (MAR). These missing data were substituted using ‘imputation’ in SPSS to estimate their values.

7.2.5 Normality Tests

Since SEM was used for testing the proposed model in this thesis, any violation of the assumptions for multivariate normality could invalidate the SEM statistical results (Byrne 1995). Normality is often used to describe “…a symmetrical, bell-shaped curve, which has the greatest frequency scored in the middle with smaller frequencies towards the extremes” (Pallant 2007:57). Based on this definition, the normality of the data was verified through a series of tests as described below.

The first test was the ‘5% Trimmed Mean’ (Tabachnick and Fidell 2007), which comprises of a comparison between the trimmed mean (that is, a mean which has 5% trimmed from both of its ends) and the regular mean (a mean which has not been trimmed) of a variable. This comparison indicates whether there are any differences between the two means because the trimmed mean should exclude any extreme values associated with the variable. If both means are close in value, this

---

indicates that the data form a normal distribution without being biased towards either end of the scale (Tabachnick and Fidell 2007).

The results of the ‘5% trimmed mean’ test (see Table 7.2), showed that integrity has an original mean 17.51 and trimmed mean 17.67, benevolence 17.03 and 17.16, competence 16.96 and 17.09, value alignment 16.59 and 16.72, consistency 16.53 and 16.63, communication 16.81 and 16.907, behavioural loyalty 16.92 and 17.03, attitudinal loyalty 17.18 and 17.32, and trustworthiness 16.82 and 16.95. Based on these results, we can argue that the two mean values (original and trimmed) are not substantially different for any of the variables. In all cases, the extreme scores in the sample have less than 1% influence on the original mean, indicating that the data has a normal distribution without outliers (see Table 7.2).

Table 7.2: 5% Trimmed Mean

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>%</th>
<th>5% trimmed mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrity</td>
<td>17.51</td>
<td>0.9</td>
<td>17.67</td>
</tr>
<tr>
<td>Benevolence</td>
<td>17.03</td>
<td>0.74</td>
<td>17.16</td>
</tr>
<tr>
<td>Competence</td>
<td>16.96</td>
<td>0.7</td>
<td>17.09</td>
</tr>
<tr>
<td>Value alignment</td>
<td>16.59</td>
<td>0.68</td>
<td>16.72</td>
</tr>
<tr>
<td>Consistency</td>
<td>16.53</td>
<td>0.52</td>
<td>16.63</td>
</tr>
<tr>
<td>Communication</td>
<td>16.81</td>
<td>0.63</td>
<td>16.907</td>
</tr>
<tr>
<td>Behavioural loyalty</td>
<td>16.92</td>
<td>0.8</td>
<td>17.03</td>
</tr>
<tr>
<td>Attitudinal loyalty</td>
<td>17.18</td>
<td>0.73</td>
<td>17.32</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>16.82</td>
<td>0.76</td>
<td>16.95</td>
</tr>
</tbody>
</table>

A Kolmogrov-Smirnov test of normality was also conducted. This test suggests that “a non-significant\(^{12}\) result indicates normality” (Pallant 2007:62). In this case the significant value is 0 for all the scale variables (see Table 7.3), which shows that there is no violation of this assumption and the data has a normal distribution.

\(^{12}\) The level of significance was .05 (Hair et al. 2007).
Chapter Seven – Descriptive Analysis of Measurement Scale Items

Table 7.3: Tests of Normality

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kolmogorov-Smirnov(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
</tr>
<tr>
<td>Integrity</td>
<td>.158</td>
</tr>
<tr>
<td>Benevolence</td>
<td>.166</td>
</tr>
<tr>
<td>Competence</td>
<td>.142</td>
</tr>
<tr>
<td>Value Alignment</td>
<td>.140</td>
</tr>
<tr>
<td>Consistency</td>
<td>.135</td>
</tr>
<tr>
<td>Communication</td>
<td>.159</td>
</tr>
<tr>
<td>Behavioural loyalty</td>
<td>.192</td>
</tr>
<tr>
<td>Attitudinal loyalty</td>
<td>.144</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>.136</td>
</tr>
</tbody>
</table>

After examining several normality tests on the coded data, it can be concluded that the distribution of scores was reasonably normal, and none of the normality assumptions have been violated. Therefore, the collected data can be carried forward and subjected to multivariate data analysis methods.

7.2.6 Outlier Identification

As discussed by several scholars (for example, see Sweet and Martin 2003; Bryman and Cramer 1999), outliers negatively influence most statistical techniques. Four tests for identifying outliers in the coded data were utilised:

1. A histogram test: in which the tails of the distribution were checked to identify potential outliers. Here a total of 31 values from the variables were identified as outliers, but no action took place until further identification had confirmed or discarded these values.

2. A boxplot graph: here the values were plotted as circles with numbers attached ($n = 31$).

3. A scores check: within this test the scores range was checked to examine whether any outliers occurred within the range. This is often recommended with three standards deviations.

4. 5% Trimmed Mean: tested the normality of the data as well as outliers (3.3).
After being identified as outliers in the coded sample, 16 observations were excluded from the analysis. After excluding the outliers, the final observation number was 529; this forms the body of data for all the statistical analyses to follow (see Table 7.1).

7.3 Descriptive Findings

In the first phase of the descriptive analysis, frequency distributions were performed on selected sets of socio-demographic data. Several frequency distribution tests were conducted, for data concerning gender, age, nationality, length of relationship with the hotel, type of service used, purpose of visit, and length of relationship with the service provider.

7.3.1 Gender of Respondents

The results from the gender analysis are shown in Table 7.4. 235 (44.4%) of the customers were males and 294 (55.6%) were females, giving a total of 529 respondents with $M = 1.56$, $SD = .496$. There was no statistical difference between the male and female when applying Chi square test ($\chi^2$) $>.0$.

Table 7.4: Gender of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>235</td>
<td>44.4</td>
</tr>
<tr>
<td>Female</td>
<td>294</td>
<td>55.6</td>
</tr>
<tr>
<td>Total</td>
<td>529</td>
<td>100</td>
</tr>
</tbody>
</table>

7.3.2 Nationality of the Sample

It is evident from Table 7.5 below that the majority of the customers came from Jordan (42.5%). 14.8% of the customers came from Europe, and 22.7% from the United States of America (USA). This shows that the majority of the sample is made up of Jordanian ‘local tourists’ and travellers from USA and Europe. This will allow

---

13 See appendix eleven for a list of key statistical terminologies and definitions used in this chapter.
14 It was decided, in this thesis, not to apply t-test of the descriptive statistics because t-test is a statistical hypothesis test used when the standard deviation is not really a specific number, or if the data is very small.
further investigation of the differences between these groups, since they form the majority of the sample.

### Table 7.5: Nationality of Respondents

<table>
<thead>
<tr>
<th>Country</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>40</td>
<td>7.6</td>
</tr>
<tr>
<td>Egypt</td>
<td>22</td>
<td>4.2</td>
</tr>
<tr>
<td>France</td>
<td>9</td>
<td>1.7</td>
</tr>
<tr>
<td>Germany</td>
<td>13</td>
<td>2.5</td>
</tr>
<tr>
<td>India</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td>Iraq</td>
<td>14</td>
<td>2.6</td>
</tr>
<tr>
<td>Japan</td>
<td>16</td>
<td>3.0</td>
</tr>
<tr>
<td>Jordan</td>
<td>225</td>
<td>42.5</td>
</tr>
<tr>
<td>Kuwait</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td>Lebanon</td>
<td>24</td>
<td>4.5</td>
</tr>
<tr>
<td>Spain</td>
<td>16</td>
<td>3.0</td>
</tr>
<tr>
<td>Syria</td>
<td>18</td>
<td>3.4</td>
</tr>
<tr>
<td>UK (Wales and Scotland)</td>
<td>5</td>
<td>.9</td>
</tr>
<tr>
<td>USA</td>
<td>120</td>
<td>22.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>529</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

#### 7.3.3 Age Groups

The age of the participants who were involved in the study ranged from under 20 years old (18% of the sample), 20–25 (31.6%), 26–35 (23.3%), 36–45 (11.7%), 46–55 (10.8%) and 56–65 (4.7%). As can be seen from Table 7.6, the dominant age groups are those between 20–25 (31.6%) and 26–35 (23.3%) years of age. Therefore, the customers who participated in this research were mostly young people, who might perceive trustworthiness differently from the older age groups within the sample. A Chi-square test was conducted to determine whether any differences existed between the age groups. The test indicated that there are some significant differences within the age groups for the sample. These differences are related to the young customers (20-35), in which they appear to have different needs and expectations compared with the other age groups in the sample.
Table 7.6: Age Groups

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20</td>
<td>95</td>
<td>18.0</td>
<td>18.0</td>
</tr>
<tr>
<td>20–25</td>
<td>167</td>
<td>31.6</td>
<td>49.5</td>
</tr>
<tr>
<td>26–35</td>
<td>123</td>
<td>23.3</td>
<td>72.8</td>
</tr>
<tr>
<td>36–45</td>
<td>62</td>
<td>11.7</td>
<td>84.5</td>
</tr>
<tr>
<td>46–55</td>
<td>57</td>
<td>10.8</td>
<td>95.3</td>
</tr>
<tr>
<td>56–65</td>
<td>25</td>
<td>4.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>529</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

7.3.4 Hotel Services

To gain an insight into the attributes and social behaviour of the participants’ additional questions were added to identify the main contact areas and services that customers use within the hotel, and the associated areas from which trustworthiness may emerge.

7.3.5 Purpose of the Visit

Customers were asked to state the purpose of their visit in order to understand the type of stay. This is because, for example, business customers require different services compared with leisure customers, so that the process of building trustworthiness may differ between the two groups. As Table 7.7 shows, 51% of the customers used the hotel for leisure purposes, 32.3% for social events and 16.6% for business trips.

A $\chi^2$ test was conducted to determine whether any difference existed between customers based on their reason for visiting the hotel. The test indicated that there were no significant differences in terms of the purpose of visit and, therefore, no further actions were taken to differentiate between the groups.
Table 7.7: Purpose of the Visit

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>88</td>
<td>16.6</td>
<td>16.6</td>
</tr>
<tr>
<td>Leisure</td>
<td>270</td>
<td>51.0</td>
<td>67.7</td>
</tr>
<tr>
<td>Social event</td>
<td>171</td>
<td>32.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>529</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

7.3.6 Type of Used Service

Building on the previous section (7.3.5), a further breakdown of the areas that customers used in the hotel was carried out to facilitate an understanding of the main points of customer interaction with the hotel, thereby investigating whether the formation of trustworthiness occurs within a particular area(s).

From Table 7.8 below, it can be seen that the highest percentage of visiting customers (34%) visit the hotel mainly for its bar/coffee shop, which is not entirely surprising since most participants came from Jordan and they are normally do not require accommodation. This is also can be seen when the purpose of the visit is compared with the service used, as shown in Table 7.9.

Table 7.8: Type of Used Service

<table>
<thead>
<tr>
<th>Services Used</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>94</td>
<td>17.8</td>
<td>17.8</td>
</tr>
<tr>
<td>Restaurant</td>
<td>58</td>
<td>11.0</td>
<td>28.7</td>
</tr>
<tr>
<td>Conference Room</td>
<td>74</td>
<td>14.0</td>
<td>42.7</td>
</tr>
<tr>
<td>Bar/Coffee shop</td>
<td>180</td>
<td>34.0</td>
<td>76.7</td>
</tr>
<tr>
<td>Health Club</td>
<td>98</td>
<td>18.5</td>
<td>95.3</td>
</tr>
<tr>
<td>Banqueting</td>
<td>25</td>
<td>4.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>529</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 7.9: Service Used vs. Purpose of Visit

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Purpose of Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Business</td>
</tr>
<tr>
<td>Accommodation</td>
<td>15</td>
</tr>
<tr>
<td>Restaurant</td>
<td>10</td>
</tr>
<tr>
<td>Conference Room</td>
<td>22</td>
</tr>
<tr>
<td>Bar/Coffee shop</td>
<td>5</td>
</tr>
<tr>
<td>Health Club</td>
<td>24</td>
</tr>
<tr>
<td>Banqueting</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
</tr>
</tbody>
</table>

7.3.7 Longevity of Customer Relationships

The length and frequency of the visits point toward the strength of the already established relationship between the hotel and its customers (see Tables 7.10 and 7.11). 27% of the participants have less than one year’s relationship with the hotel, 15.1% have had a relationship lasting 1–2 years, 9.5% lasting 3–5 years, 24.2% lasting 6–10 years, 20% lasting 11–20 years, and 4.2% have had a relationship lasting over 20 years. This shows that the majority of customers 44.2% have a relatively long relationship with their hotel.

A Chi-square test was carried out to determine whether any differences existed between customers in terms of their relationship with the hotel. The test showed that there are some significant differences between the groups particularly when comparing short relationships (less than one year) with long relationships (over 20 years). However, it is considered in this thesis, that these significant differences may prove useful when investigating each relationship individually because each group is perceived to have unique characteristics that are different than the other groups; hence, it allows greater understanding of each group and how the relationship can be enhanced and managed. This is, however, beyond the scope of this thesis.
Table 7.10: Length of the Relationship between Customers and the Hotel

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>143</td>
<td>27.0</td>
<td>27.0</td>
</tr>
<tr>
<td>1–2 years</td>
<td>80</td>
<td>15.1</td>
<td>42.2</td>
</tr>
<tr>
<td>3–5 years</td>
<td>50</td>
<td>9.5</td>
<td>51.6</td>
</tr>
<tr>
<td>6–10 years</td>
<td>128</td>
<td>24.2</td>
<td>75.8</td>
</tr>
<tr>
<td>11–20 years</td>
<td>106</td>
<td>20.0</td>
<td>95.8</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>22</td>
<td>4.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>529</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 7.11: Frequency of Service Usage

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>92</td>
<td>17.4</td>
<td>17.4</td>
</tr>
<tr>
<td>1–2 times a year</td>
<td>134</td>
<td>25.3</td>
<td>42.7</td>
</tr>
<tr>
<td>3–5 times/year</td>
<td>168</td>
<td>31.8</td>
<td>74.5</td>
</tr>
<tr>
<td>6/10 + times/year</td>
<td>135</td>
<td>25.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>529</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

7.4 Means and Standard Deviation Analysis

The results of descriptive statistics analyses for the scale items that measured trustworthiness are presented in Table 7.12. The measurement scale consists of 36 items, aiming to measure the determinants of trustworthiness (competence, consistency, integrity, benevolence, communication and value alignment), trustworthiness (the model’s focal point), and attitudinal and behavioural loyalty (model outcome). This illustrates the fact that each variable is measured by four items, which is acceptable for SEM (Hair et al. 2006; Byrne 1995). Respondents were asked to provide answers on each item measured by a five-point Likert scale, ranging
Chapter Seven – Descriptive Analysis of Measurement Scale Items

from 1 (‘Strongly Disagree’) to 5 (‘Strongly Agree’), with 3 as a ‘Neutral’ point in the scale.

The mean of a data set is the arithmetic average of the values in the set, obtained by summing the values and dividing by the number of values. Therefore, the mean is a measure of the centre of the distribution and is a weighted average of the item scores, with the relative frequencies as the weight factors.

The standard deviation measures of the spread of the distribution about the mean. Standard deviation measures spread in the same physical unit as the original data, by calculating the square root of the variance.

Based on the mean score of each item\(^\text{15}\), respondents, for example, tended to strongly agree that the hotel always keeps its word (M = 4.42, SD = .67) and communicates clearly (M = 4.22, SD = .79). Moreover, they also agreed that they will say positive things to other people about the services provided at the hotel (M = 4.23, SD = .78), and they will continue visiting the hotel even if the service charges are increased moderately (M = 4.34, SD = .70).

Furthermore, respondents agreed that the hotel is always honest with them (M = 4.17, SD = .81), it responds caringly when they share their problems (M = 4.2, SD = .77), and overall respondents agreed that the hotel is trustworthy (M = 4.31, SD = .75). A more detailed discussion will follow below.

7.4.1 Proposed Model Constructs

Table 7.12: Mean and Standard Deviation for the Model Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level determinants*</td>
<td>33.50</td>
<td>3.35</td>
</tr>
<tr>
<td>High level determinants**</td>
<td>67.94</td>
<td>4.72</td>
</tr>
<tr>
<td>Integrity</td>
<td>17.51</td>
<td>2.02</td>
</tr>
<tr>
<td>Benevolence</td>
<td>17.03</td>
<td>2.32</td>
</tr>
<tr>
<td>Value alignment</td>
<td>16.58</td>
<td>2.54</td>
</tr>
</tbody>
</table>

\(^{15}\) The results of standard deviation and score mean for the items are reported later on in this chapter.
As can be seen from Table 7.12, the high level determinants of trustworthiness scored significantly higher than low level determinants. This is because two particular constructs, integrity and benevolence, appear to have higher scores compared with the rest of the constructs. There is also strong evidence for this phenomenon in the literature as a characteristic of trust (Larzelere and Huston 1980; Butler and Cantrell 1984; Rempel 1985). However, integrity is viewed here as a determinant of trustworthiness this is in line with the work of Sheppard and Sherman (1998) and Mayer et al. (1995).

It should also be noted that attitudinal loyalty scored higher than behavioural loyalty, which is an indication of high level involvement with the service provider (Rundle-Thiele and Bennett 2001).

### 7.4.2 Integrity

Table 7.13 shows how respondents evaluated the four scale items related to the construct of integrity.

<table>
<thead>
<tr>
<th>Integrity</th>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My … show fairness in transactions</td>
<td>4.32</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>My … always achieves consistency in service delivery</td>
<td>4.33</td>
<td>.67</td>
<td></td>
</tr>
</tbody>
</table>
The analysis in Table 7.13 shows that sample members rated the item ‘The … employees treat me with respect’ as the most significant item for integrity, followed by ‘My … always keeps its word’. These items are related to higher level determinants of trustworthiness, because they indicate a selfless characteristic in the service provider.

### 7.4.3 Benevolence

Table 7.14 shows how respondents evaluated the four scale items related to the construct of benevolence.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My … is open to my needs</td>
<td>4.22</td>
<td>.73</td>
</tr>
<tr>
<td>My … acts in a caring manner</td>
<td>4.32</td>
<td>.75</td>
</tr>
<tr>
<td>My … keeps its customers’ best interest in mind during most transactions</td>
<td>4.20</td>
<td>.78</td>
</tr>
<tr>
<td>My … is receptive to my needs</td>
<td>4.27</td>
<td>.75</td>
</tr>
</tbody>
</table>

The analysis in Table 7.14 indicates that the sample members rated the items ‘My … acts in a caring manner’ and ‘My … is receptive to my needs’ as the most positive items for benevolence. This is a similar result to that for the integrity items listed above, since these items also represent altruistic behaviour from the service provider.

### 7.4.4 Competence

Table 7.15 demonstrates how respondents evaluated the four scale items related to the construct of competence.
Table 7.15: Mean and Standard Deviation for the Competence Construct

<table>
<thead>
<tr>
<th>Competence Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My … has adequate skills to deliver the right service</td>
<td>4.22</td>
<td>.73</td>
</tr>
<tr>
<td>My … is efficient</td>
<td>4.28</td>
<td>.75</td>
</tr>
<tr>
<td>The … employees can competently handle most of my requests</td>
<td>4.19</td>
<td>.77</td>
</tr>
<tr>
<td>The … employees can be relied upon to know what they are doing</td>
<td>4.27</td>
<td>.75</td>
</tr>
</tbody>
</table>

It is evident from Table 7.15 that the sample members graded the item ‘My … is efficient’ most highly within the competence construct, followed by ‘the … employees can be relied upon to know what they are doing’. This suggests that, despite that fact that customers are concerned with the high level determinants of trustworthiness, they still require the service provider to be efficient.

7.4.5 Value Alignment

Table 7.16 illustrates how respondents evaluated the four scale items related to the construct of value alignment.

Table 7.16: Mean and Standard Deviation for the Value Alignment Construct

<table>
<thead>
<tr>
<th>Value alignment Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My … shares the same values as me</td>
<td>4.09</td>
<td>.76</td>
</tr>
<tr>
<td>My … is ethical while dealing with me</td>
<td>4.25</td>
<td>.82</td>
</tr>
<tr>
<td>My … is interested in more than just making profit out of customers</td>
<td>4.07</td>
<td>.82</td>
</tr>
<tr>
<td>The employees act as if they value the customer</td>
<td>4.16</td>
<td>.80</td>
</tr>
</tbody>
</table>

The analysis in Table 7.16 indicates that respondents rated the item ‘My … is ethical while dealing with me’ significantly higher than the rest of the items related to the construct of value alignment. This can be related to the growing interest from both academic and professional researchers regarding ethical considerations in business
transactions. However, this topic is beyond the scope of this research; it will be addressed in the future research section in the concluding chapter of this thesis.

### 7.4.6 Consistency

Table 7.17 demonstrates how respondents evaluated the four scale items related to the construct of consistency.

Table 7.17: Mean and Standard Deviation for the Consistency Construct

<table>
<thead>
<tr>
<th>Consistency Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My … has stability in its operations</td>
<td>4.09</td>
<td>.83</td>
</tr>
<tr>
<td>My … is always reliable</td>
<td>4.14</td>
<td>.79</td>
</tr>
<tr>
<td>My … always matches customers’ expectations</td>
<td>4.10</td>
<td>.83</td>
</tr>
<tr>
<td>My … always satisfies customers’ needs</td>
<td>4.19</td>
<td>.81</td>
</tr>
</tbody>
</table>

It is evident from the results in Table 7.17 that the sample members graded the item ‘My … always satisfies customers’ needs’ most positively in relation to consistency, followed by ‘My … is always reliable’. This shows that satisfaction is still important to customers as a low level determinant of trustworthiness, as well as the higher level determinants mentioned above.

### 7.4.7 Communication

Table 7.18 indicates how respondents evaluated the four scale items related to the construct of communication.

Table 7.18: Mean and Standard Deviation for the Communication Construct

<table>
<thead>
<tr>
<th>Communication Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My … communicates clearly</td>
<td>4.22</td>
<td>.79</td>
</tr>
<tr>
<td>The … respond immediately when contacted</td>
<td>4.28</td>
<td>.70</td>
</tr>
<tr>
<td>My … inform me immediately of any problems</td>
<td>4.12</td>
<td>.77</td>
</tr>
</tbody>
</table>
Chapter Seven – Descriptive Analysis of Measurement Scale Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The … always communicates with me</td>
<td>4.17</td>
<td>.77</td>
</tr>
</tbody>
</table>

The analysis in Table 7.18 shows that respondents rated the items ‘the … respond immediately when contacted’ and ‘My … communicates clearly’ significantly higher than the rest of the items related to the construct of communication. This suggests that communication is an important issue, with customers expecting an immediate response from the hotel when they are contacted regarding an extra service or a complaint. However, customers are not only concerned with an immediate response; they also require clarity of communication, and an assurance that their problem(s) have been fully addressed.

7.4.8 Behavioural Loyalty

Table 7.19 shows how respondents evaluated the four scale items related to the construct of behavioural loyalty.

Table 7.19: Mean and Standard Deviation for the Behavioural Loyalty Construct

<table>
<thead>
<tr>
<th>Behavioural loyalty</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will transact with this … again for future visits</td>
<td>4.22</td>
<td>.75</td>
</tr>
<tr>
<td>I will try new services that are provided by this …</td>
<td>4.30</td>
<td>.72</td>
</tr>
<tr>
<td>I will recommend other people to visit to this …</td>
<td>4.16</td>
<td>.77</td>
</tr>
<tr>
<td>I will say positive things to other people about the services provided at this …</td>
<td>4.23</td>
<td>.78</td>
</tr>
</tbody>
</table>

It is clear from Table 7.19 that the sample respondents rated the item ‘I will try new services that are provided by this …’ the most highly with regard to consistency, followed by ‘I will say positive things to other people about the services provided at
this …’. This is an indication that once behavioural loyalty is established, customers show willingness to recommend the service provider by word of mouth, and at the same time they show confidence in trying new services offered by the service provider because at this stage they perceive the service provider to be trustworthy.

7.4.9 Attitudinal Loyalty

Table 7.20 shows how respondents evaluated the four scale items related to the construct of attitudinal loyalty.

Table 7.20: Mean and Standard Deviation for the Attitudinal Loyalty Construct

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will continue to visit this … even if the service charges are increased moderately</td>
<td>4.34</td>
<td>.70</td>
</tr>
<tr>
<td>I have strong loyalty to this …</td>
<td>4.33</td>
<td>.66</td>
</tr>
<tr>
<td>I will keep visiting this … regardless of everything being changed somewhat</td>
<td>4.25</td>
<td>.74</td>
</tr>
<tr>
<td>I am likely to pay a little bit more for using the services of this …</td>
<td>4.25</td>
<td>.73</td>
</tr>
</tbody>
</table>

The analysis in Table 7.20 shows that the sample respondents rated the items ‘I will continue to visit this … even if the service charges are increased moderately’ and ‘I have strong loyalty to this …’ significantly higher than the rest of the items related to the construct of attitudinal loyalty. This represents the attitudinal attachments between customers and the service provider, by which they have established strong ties. These strong relationships are resilient in the face of many influential factors – such as price, clearly demonstrated by the positive response to the first item.
7.4.10 Trustworthiness

Table 7.21 illustrates how respondents evaluated the four scale items related to the construct of trustworthiness.

Table 7.21: Mean and Standard Deviation for the Trustworthiness Construct

<table>
<thead>
<tr>
<th>Trustworthiness</th>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The … employees are professional and dedicated to customers</td>
<td>4.13</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>The … respond caringly when I share my problems</td>
<td>4.20</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>My … is always honest with me</td>
<td>4.17</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Overall I feel I can trust my …</td>
<td>4.31</td>
<td>.75</td>
<td></td>
</tr>
</tbody>
</table>

It is evident from the results in Table 7.21 that the sample respondents rated the items ‘The… respond caringly when I share my problems’ and ‘Overall I feel I can trust my …’ as the two most positive items related to the trustworthiness construct. These results signify that the service provider has to act in a trustworthy manner in order to gain customers’ trust; this is achieved by applying all the previous antecedents at both the construct and item levels.

The above analysis only constitutes a general overview of the individual scale items, and provides a simple descriptive analysis to establish an initial understanding of these items and their relative importance within their respective constructs. The scale items will be further analysed and tested in the discussion of path analysis in the next chapter.
7.5 Additional Influential Factors

From Table 7.22 below we can conclude that the service provider’s brand name is an important factor for both male and female participants (responses indicated that 208 strongly agreed and 226 agreed with the statement). Building a strong brand for the hotel improves the chances of building trust between service provider and customer. In this context the role of the international hotel chain is crucial, because the majority of five- and four-star hotels in Jordan are part of international chains. It is also the case that applying high security standards increases the chance of customers trusting the service provider (Table 7.23).

Table 7.22: Brand Name vs. Gender

<table>
<thead>
<tr>
<th>The hotel brand name is very important</th>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>Neutral</td>
<td>22</td>
<td>39</td>
</tr>
<tr>
<td>4</td>
<td>105</td>
<td>121</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>81</td>
<td>127</td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td>294</td>
</tr>
</tbody>
</table>

Table 7.23: Security of the Hotel vs. Gender

<table>
<thead>
<tr>
<th>I trust the hotel more if the hotel applies higher security standards</th>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>6</td>
</tr>
<tr>
<td>Neutral</td>
<td>32</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>96</td>
<td>78</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>82</td>
<td>156</td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td>294</td>
</tr>
</tbody>
</table>
From the results from Table 7.22 and 7.23 we can argue that there are other factors contributing to the creation of trust in a hotel context. These include higher security, atmosphere, and brand name. However, none of these factors have been investigated in the existing literature surrounding trustworthiness. Therefore, further investigation will be suggested in the recommendations chapter, in order to explore the extent of the influence of these factors on trustworthiness within the hotel sector.

### 7.6 Reliability and Validity of Measurement Scales

#### 7.6.1 Reliability of Measurement Scales

Scale reliability is an essential factor in any latent measurement scale (Netemeyer et al. 2003). Reliability “is concerned with that portion of measurement that is due to permanent effects that persist from sample to sample” (Netemeyer et al. 2003:10). Reliability is often measured by an internal consistency test; this assessment of reliability shows the synchronisation of items comprising a measurement scale. The meaning of internal consistency is the extent to which its items are inter-correlated. High inter-item correlations indicate that the items in a scale have a strong relationship to the latent construct, and are probably measuring the same thing (Tabachnick and Fidell 2007).

The internal consistency of a measurement scale is assessed by Cronbach’s coefficient alpha (α). Calculating Cronbach’s alpha, along with the item-to-total correlation for each item, forms an examination of the overall reliability of the measurement scale (Tabachnick and Fidell 2007). It is accepted that if a measurement scale has a Cronbach’s α coefficient above .70; it is thought to be an internally consistent scale so that further analysis is possible. Conversely, if the scale has an alpha coefficient lower than .70 the scale should be investigated for any sources of measurement errors, such as insufficient sampling of items, administration errors, situational factors, sample characteristics, number of items, and conceptual errors in formulating the measurement scale (Netemeyer et al. 2003).

As an initial examination of the reliability of the measurement scales for the nine constructs of the proposed model, Cronbach’s alpha coefficients were computed in SPSS 16.0 and are presented in Table 7.24. All of the measurement scales for the
nine constructs achieved an acceptable level of Cronbach’s alpha (above .70), indicating that the scales are reliable and suitable for further data analysis (Hair et al. 1998).

Table 7.24: Reliability Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrity</td>
<td>4</td>
<td>.73</td>
</tr>
<tr>
<td>Benevolence</td>
<td>4</td>
<td>.76</td>
</tr>
<tr>
<td>Competence</td>
<td>4</td>
<td>.77</td>
</tr>
<tr>
<td>Value alignment</td>
<td>4</td>
<td>.80</td>
</tr>
<tr>
<td>Consistency</td>
<td>4</td>
<td>.76</td>
</tr>
<tr>
<td>Communication</td>
<td>4</td>
<td>.78</td>
</tr>
<tr>
<td>Behavioural loyalty</td>
<td>4</td>
<td>.82</td>
</tr>
<tr>
<td>Attitudinal loyalty</td>
<td>4</td>
<td>.76</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>4</td>
<td>.75</td>
</tr>
</tbody>
</table>

Since the integrity construct displays the lowest value for alpha, there was an attempt to increase its reliability. However, it was discovered that alpha decreased from .73 to .5, .61 and .45 on deletion of the first, second and third items. Therefore, it was decided to maintain all the items with no alteration, accepting that a Cronbach’s alpha of .73 is adequate to form a reliable scale.

The reliability and variance extracted for all the constructs will be reported in the following chapter. Composite reliability refers to a measure of the internal consistency of indicators for the construct, illustrating the level to which they support the corresponding latent construct (Hair et al. 1998). A commonly used value for the acceptance level for composite reliability is .70. If the calculated reliability is higher than .70, the indicators for the latent construct are reliable and are measuring the same construct. As a complementary measure of composite reliability, the variance extracted can be estimated to explain the total amount of variance in the indicators that is accounted for by the corresponding latent construct. A commonly used

---

16 Appendix thirteen provides the full reliability analysis, including: Cronbach's alpha if item deleted, corrected item-total correlation and scale variance if item deleted.
threshold of acceptability is .50. If the variance extracted values are high, the indicators are accepted as being representative of the latent construct.

7.6.2 Validity of Measurement Scales

As it has been discussed in Chapter Five – Section 5.9; reliability of the measurement scale is related to how dependable a set of items are, validity is associated with whether a particular construct is the primary cause of item co-variation (Netemeyer et al. 2003; Tabachnick and Fidell 2007). Validity often concerns the extent to which the measurement items or indicators measure what they are intended to measure (Hair et al. 1998). In particular, construct validity deals with the capability of a scale as a measure of a specific variable.

Content validity provides evidence of judgmental validity. To obtain empirical evidence, after the measurement scale is distributed the relationships between the items within the measurement scale are examined, as well as relationships between the items and constructs and between the constructs. Empirical evidence for validity can be obtained by calculating criterion-related validity and construct validity. In order to verify content validity, the measurement scales for the constructs were examined via a three step process as described in the pilot chapter. Through this procedure, the content validity of the measurement scales was ascertained by rooting the model’s constructs with the related literature. Moreover, face validity was also achieved by examining the research instrument from the perspectives of the three judges. Consequently translation validity was accomplished in this thesis.

For criterion-related validity, as discussed earlier in this thesis, concurrent validity analysis was performed to test whether there was a correlation between the criterion variables and the measurement scales. The results of the linear regression analysis will be explored in detail in relation to the results of the SEM procedure. Nomological and convergent validity analysis will be reported in the next chapter, along with the results of CFA, in view of the fact that CFA can provide empirical evidence of construct validity.

---

17 See Chapter Six - Section 6.3.
18 See Chapter Five - Section 5.9.1.
Discriminant validity refers to a measure of the indicators of different constructs that theoretically and empirically should not be associated with each other (Hair et al. 1998). Accordingly, the indicators that measure one construct should not be correlated with the indicators that measure another construct if the constructs have discriminant validity. This can be assessed by examining $\chi^2$ for every possible pair of estimated constructs.

Summary

This chapter examined the characteristics of the research sample. The socio-demographic data of respondents illustrated that the majority of respondents fall within two main age groups (20–25 years (31.6%) and 26–35 years (23.3%)). Respondents have had a relatively long relationship with the hotel (an average of 3–6 years), and come from three main destinations (Jordan – 42.5%, Europe – 14.8% and USA – 22.7%). Following the socio-demographic analysis, the statistical analysis of the questionnaire scale items will be presented. Data was analysed using SPSS. In the next chapter, the SEM procedure will be reported to analyse the overall fit and viability of the proposed model.
CHAPTER EIGHT: MULTIVARIATE DATA ANALYSIS AND MODEL VALIDATION

8.1 Introduction

The Structural Equation Modelling (SEM) procedure encompasses many statistical techniques, including regression, factor analysis and path analysis (Hair et al. 2006). According to Schumacker and Lomax (2004), the original concept for this type of modelling was developed in the early 1930s by Wright in 1934. He derived a mathematical way of describing correlations and theories regarding causal relationships. These relationships were illustrated as path diagrams, leading to the term path analysis (Schumacker and Lomax 2004). The purpose of this chapter is to provide a full discussion on the results of SEM, its validation, reliability and how it impacts the proposed model of this study.

Jöreskog (1973) noted the reintroduction of SEM in the early 1970s, as a combination of path analysis and factor analysis that enabled the examination of causal propositions by comparing the covariance of an original data set with that of a hypothesised model (Iriondo et al. 2003). The essential null hypothesis\(^1\) is that the covariance of an initial data set is equal to the covariance of the model, and in contrast to standard statistical techniques, the objective is to accept the null hypothesis (Hoyle 1995). In other words, if the theoretical framework provides a good fit for the data, and the parameters within the model have been estimated with no significant error, the model covariance will be equal to that of the original data, and the model should not be discarded (Hoyle 1995), this is discussed in section 8.2.

In general terms, SEM allows for the examination of hypotheses concerning relationships between observed and latent variables. It is in the use of latent variables that the strength of this statistical technique is demonstrated. Latent variables are theoretical concepts that connect phenomena under a particular term, and which can

\(^1\) Appendix eleven provides definitions of key statistical terms used in this chapter.
be expressed in terms of directly measured variables (Hoyle 1995). Using this technique it is possible to construct theoretical concepts and test their reliability, as well as hypothesis and test theories about their relationships (Byrne 2001).

In order to proceed with a SEM analysis, this chapter builds on the theory established in the previous chapters, arguing that every variable within the current model is conceptualised as a latent variable (because they cannot be observed directly), measured by four items (or indicators). The SEM model in this study contains two related models and proceeds through two steps: measurement model validation, and structural model fitting. The items are distinguished by their factor loading onto latent variables, and which of these latent constructs predict others was examined using AMOS 7.0\(^2\), a software package specifically designed to perform these statistical techniques.

The measurement model defines the constructs (latent variables) that the model will exploit, and assigns observed variables to each one. Furthermore, the measurement model employs Confirmatory Factor Analysis (CFA) to measure the degree to which the observed variables load on their latent constructs (Bollen 1989).

The structural model then defines the causal relationship between these latent variables (see Figure 8.2 below; the arrows between the latent variables represent these structural connections), in order to carry out a path analysis using the latent variables (Bollen 1989).

This chapter interprets and discusses the results of the SEM process for the hypothesised model testing (see Figure 8.1). It examines the model from two perspectives; the measurement model, and the structural model. The measurement model estimates the latent variables and associates them with their respective measured variables. Three points will be examined closely: 1) the measured variables, and to what extent they reflect the latent variables; 2) the relations between the observed variables and 3) the reliability of each measured variable. Following this stage, the structural model will be tested to distinguish how well it fits the data. This

\(^2\) LISREL, AMOS, and EQS are three popular statistical packages for conducting SEM. The first two are distributed by SPSS. The reason why AMOS has been utilised in this thesis is that fact that AMOS (Analysis of Moment Structures) has a more user-friendly graphical interface than LISREL or EQS (Kline 1998), and it’s the standard package at Coventry University.
will involve an analysis of the paths among the latent variables (the path coefficients). It is hopes that the outcome of the SEM analysis will be robust enough to allow general conclusion to be drawn.
Chapter Eight – Multivariate Data Analysis

Defining the Individual Constructs
What items are to be used as measured variables?

Develop and Specify the Measurement Model
Construct measured variables using constructs
Draw path diagram for measurement model

Designing Study to produce Empirical Results
Assess the adequacy of the sample size
Select the estimation method and missing data approach

Assessing Measurement Model Validity
Assess line of goodness of fit and construct validity of measurement model

Refine measures and design a new study
No Measurement Model Valid?
Yes Proceed to test structural model with stages 5 and 6

Specify Structural Model
Convert measurement model to structural model

Assess Structural Model Validity
Assess the goodness of fit and significance, direction and size of structural parameter estimates

Refine model and test new data
No Structural Model Valid?
Yes Draw substantive conclusions and recommendations

(Source: Adapted from Hair et al. 2006:759)
8.1.1 Analysis Strategy

This section details the data analyses strategies adapted to test the causal relationships in the model (the hypotheses), developed in Chapter Four section 4.6 and summarised in Table 8.1. A detailed discussion and examination of the results will follow in each respective section of this chapter.

<table>
<thead>
<tr>
<th>Step</th>
<th>New measure development</th>
<th>Exploring underlying relationships</th>
<th>Existing measures validation</th>
<th>Testing of the conceptual model</th>
<th>Hypotheses reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main aims</td>
<td>Measure development, purification and validation</td>
<td>Explore the data set to identify causal relationships</td>
<td>Measure validation</td>
<td>Assessment of theoretically-derived model</td>
<td>To draw conclusions based on the various performed tests</td>
</tr>
<tr>
<td>Statistical methods employed</td>
<td>Internal Consistency, CFA</td>
<td>EFA</td>
<td>CFA</td>
<td>SEM</td>
<td></td>
</tr>
<tr>
<td>Sections in this chapter reporting the analysis strategy</td>
<td>Section 8.2</td>
<td>Section 8.3.1</td>
<td>Section 8.3.2</td>
<td>Section 8.3.5</td>
<td>Section 8.6</td>
</tr>
</tbody>
</table>
8.2 The Measurement Model

As noted earlier, each construct in the measurement model can be examined through a process of CFA. CFA is employed to test the measurement model, defining the stated relationships between the observed variables and the underlying constructs (Hair et al. 2006). This approach examines whether the collected data are consistent with a very constrained hypothesised model, and it is applied before the specified model stage (Byrne 2001). Therefore, CFA allows the identification and clustering of the observed variables in a pre-specified theory-determined hypothesised model in order to evaluate to what extent a particular collected data set confirms what is theoretically believed to be its underlying constructs (Hair et al. 2006; Bollen 1989).

In this study, the measurement model underlying the hypothesised constructs was proposed and tested. As the detailed theoretical and empirical aspects of the construct and the observed indicators were discussed in Chapters Two, Three and Four, all of the measurement models’ observed and unobserved variables were developed on the basis of conceptual, theoretical, and empirical research (see Figure 8.2).

During the process of CFA, the measurement model was confirmed in terms of the measurement of the underlying constructs. Since CFA is performed on the principle that the observed variables are perfect indicators for the underlying constructs, all the constructs in the measurement model were tested simultaneously. As discussed in Chapter Four section 4.6, the model estimation process for the measurement model will be provided along with the statistical results. A number of indicators were used to estimate the goodness of fit of the measurement model, these were; goodness-of-fit index (GFI); adjusted goodness-of-fit index (AGFI); comparative fit index (CFI); relative fit index (RFI); Bentler Bonett index or normed fit index (NFI); parsimony normed fit index (PNFI); root mean square residual (RMR); parsimony goodness-of-fit index (PGFI); incremental fit index (IFI); and root mean square error of approximation (RMSEA).
In evaluating the CFA, the covariance matrices based on Product Moment Correlation and Standard Deviation were utilised as input data matrices to examine the data, with the proviso that the analysis of correlation matrix data may generate problematic results (Byrne 2001). Additionally, Maximum Likelihood (ML) was used as a method of parameter estimation because:

1) the collected usable sample was large \( (n=529) \);
2) the distribution of the observed variables is multivariate normal;
3) the hypothesised model is assumed to be valid; and,
4) the scales of the observed indicators were continuous (Bollen 1989; Byrne 2001).

The assumption of normal distribution in the observed variables was met according to an analysis of skewness and kurtosis, and the variables in the hypothesised model were believed to be valid (see Chapter Seven, section 7.2.5).
8.2.1 Testing the Measurement Model

This study began with the development of a theoretical model with clear relationships between the latent constructs and their associated (observable and therefore measurable) items. Supporting theories and discussion of the measurement items and their association with their respective constructs were provided earlier in this thesis, in the literature review and the chapters on methodology and conceptualisation. Following this model development stage, the structural model detailing how the constructs are interrelated with each other was defined by the proposed hypotheses. Subsequently, it was confirmed that SEM could be used to test the proposed hypotheses.

In SEM, the development of the hypothetical model describing the linkages between the latent constructs and their empirical observed indicators is seen as the measurement model, while the theoretical relationships between the constructs is referred to as the structural model (Bollen 1989; Byrne 1998). The measurement model can specify the patterns of how the observed indicators load on the constructs, and it also provides the measurement attributes of reliability and validity for the observed indicators.

During the SEM process, once the necessary information has been gathered and the requirements of the full structural model are met, the exogenous (independent) and endogenous (dependent) constructs can be defined. Changes in the values of the exogenous constructs are not explained by the model, but changes in the values of the endogenous constructs are influenced by the exogenous constructs. All the constructs fall into one of these two categories.

Based on the above discussion, nine theoretical constructs were discussed in terms not only of their posited relationships with the observed indicators, but also with regard to the structural relationships between the constructs (see Figure 8.3 and Figure 8.4). as shown in Table 8.2, the constructs are trustworthiness (TW), consistency (CO), competence (CP), integrity (IN), benevolence (BN), value alignment (VA), communications (CM), behavioural loyalty (BL) and attitudinal loyalty (AL).
Table 8.2: The Model Indicators (items) in Relation to the Model Constructs

<table>
<thead>
<tr>
<th>Constructs and Items</th>
<th>Communication (CM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrity (IN)</td>
<td>CM1: Communicates clearly</td>
</tr>
<tr>
<td>IN1: Show fairness in transactions</td>
<td>CM2: The ….. respond immediately when contacted</td>
</tr>
<tr>
<td>IN2: Always achieves consistency in service delivery</td>
<td>CM3: Inform me immediately of any problems</td>
</tr>
<tr>
<td>IN3: Always keeps its word</td>
<td>CM4: The ….. always communicates with me</td>
</tr>
<tr>
<td>IN4: The ….. employees treat me with respect</td>
<td></td>
</tr>
<tr>
<td>Benevolence (BN)</td>
<td>Behavioural Loyalty (BL)</td>
</tr>
<tr>
<td>BN1: Is receptive to my needs</td>
<td>BL1: I will transact with this ….. again for future visits</td>
</tr>
<tr>
<td>BN2: Acts in a caring manner</td>
<td>BL2: I will try new services that are provided by this …..</td>
</tr>
<tr>
<td>BN3: Keeps its customers’ best interest in mind during most transactions</td>
<td>BL3: I will recommend other people to visit to this …..</td>
</tr>
<tr>
<td>BN4: Is receptive to my needs</td>
<td>BL4: I will say positive things to other people about the services provided at this …..</td>
</tr>
<tr>
<td>Competence (CP)</td>
<td>Attitudinal Loyalty (AL)</td>
</tr>
<tr>
<td>CP1: Has adequate skills to deliver the right service</td>
<td>AL1: I will continue to visit this ….. even if the service charges are increased moderately</td>
</tr>
<tr>
<td>CP2: Is efficient</td>
<td>AL2: I have strong loyalty to this …..</td>
</tr>
<tr>
<td>CP3: The ….. employees can competently handle most of my requests</td>
<td>AL3: I will keep visiting this ….. regardless of everything being changed somewhat</td>
</tr>
<tr>
<td>CP4: The ….. employees can be relied upon to know what they are doing</td>
<td>AL4: I am likely to pay a little bit more for using the services of this …..</td>
</tr>
<tr>
<td>Value Alignment (VA)</td>
<td>Trustworthiness (TW)</td>
</tr>
<tr>
<td>VA1: Shares the same values as me</td>
<td>TW1: The ….. employees are professional and dedicated to customers</td>
</tr>
<tr>
<td>VA2: Is ethical while dealing with me</td>
<td>TW2: The ….. respond caringly when I share my problems</td>
</tr>
<tr>
<td>VA3: Is interested in more than just making profit out of customers</td>
<td>TW3: My ….. is always honest with me</td>
</tr>
<tr>
<td>VA4: The ….. employees act as if they value the customer</td>
<td>TW4: Overall I feel I can trust my …..</td>
</tr>
<tr>
<td>Consistency (CO)</td>
<td></td>
</tr>
<tr>
<td>CO1: Has stability in its operations</td>
<td></td>
</tr>
<tr>
<td>CO2: Is always reliable</td>
<td></td>
</tr>
<tr>
<td>CO3: Always matches customers’ expectations</td>
<td></td>
</tr>
<tr>
<td>CO4: Always satisfies customers’ needs</td>
<td></td>
</tr>
</tbody>
</table>

---

3 As noted previously (Chapter Six, Section 6.4.6.2), a five-point Likert scale was adopted to measure the items, in which: 1 = Strongly disagree, 3 = Neutral and 5 = Strongly agree.
Figure 8.3 illustrates the first part of the proposed model (determinants of trustworthiness). It shows the relationships between the model’s constructs, and how they are correlated with each other and it demonstrates the associated items with each construct to provide greater clarity in terms of how these items are linked to the constructs.

Figure 8.3: Part One of the Hypothesised Measurement Model

\[^{4}\text{‘E’ refers to the standard error for each item}\]
The second part of the model (the model outcome) is illustrated in figure 8.4 where the related items are linked to their constructs. Both parts of the model (Figure 8.3 and 8.4) will be explored in details in the following section.

8.2.2 Overall Measurement Model

The measurement model for the constructs and the observed indicators was determined on the basis of the statistical and theoretical dependability of the constructs. Therefore, each final model represents the initial model without alteration or adjustment with regard to their parsimony and essential meaningfulness.

In this context, thirty-six observed indicators, associated with nine constructs, were determined using CFA, as shown in Figures 8.3 and 8.4 and Table 8.2. The overall measurement model consisted of nine constructs (see Figures 8.3 and 8.4), with four items loading onto each construct.

This study followed a ‘strictly confirmatory approach’ as specified by Hoyle (1995), by which a model is tested using SEM goodness-of-fit tests to verify whether the pattern of variances and covariances in the data is consistent with a structural model. A cross validation method was used to check the validity of the sample; despite the fact that this method is most commonly used in the ‘model development approach’, it has been used here for the purposes of clarification.
As mentioned in Chapter Five - Section 5.10.2.1, the literature surrounding SEM debates the use of one-step modelling (Hayduk 1987; Fornell and Yi 1992) as opposed to two-step modelling (see for example, Anderson and Gerbing 1988). In the two-step modelling approach, researchers initially test the pure measurement model underlying a full structural equation model, and if the fit of the measurement model is acceptable, they then proceed to the second step of testing the structural model by comparing its fit with that of different structural models (for example, the null model). Others have argued that SEM researchers should apply a four-step modelling approach to allow a great control over the model fit (see for instance, Mulaik and Millsap 2000). This study follows a two-step approach, where the measurement model will be examined and after attaining acceptable results the structural model will be accepted. This method is used by the leading marketing academics and it permits the model to be altered (if needed) in order to have a better fit (see for example, Garbarino and Johnson 1991; Morgan and Hunt 1994).

In applying SEM, numerous approaches for cross validation have been introduced, depending upon the objective of the study (Anderson and Gerbing 1988). The split sample approach is commonly used to validate results, provided that the sample size is sufficient. The idea of cross validation is to address the question of whether the hypothesised model from one sample is replicated in a second independent sample from the same population, so that the cross validation of estimated parameters and relationships within and between the constructs can be measured. The procedure can also be used to see whether the estimated parameters and relationships within the constructs are meaningful and equal. Since the sample size for this study \((n = 529)\) is sufficient to split into two sub-samples to meet the basic sample size requirement for SEM, this study used the split sample method for validating the results (Anderson and Gerbing 1988).

Consequently, this study tested the replication of the overall measurement model, with nine constructs and thirty-six observed indicators, across the first sample \((n = 265)\) and the second sample \((n = 264)\). The first sample will be referred to as the...
calibration sample, and the second sample will be used for validation (Anderson and Gerbing 1988).

The two split samples were randomly chosen from the entire sample. Using this method, the overall measurement model was tested to see whether the results from the validation sample replicated the results from the calibration sample in terms of the estimated parameters and relationships among the constructs. The final model for the combined sample, obtained via CFA, was tested to see whether the hypothesised model fits the sample without any major changes in parameter estimation (Anderson and Gerbing 1988).

---

6 The only purpose for splitting the sample was to provide a measure of cross validation for the research.
8.3 Factor Analysis

This section outlines the choices made and the results associated with the Exploratory Factor Analysis and Structural Equation Modelling methods.

8.3.1 Exploratory Factor Analysis

This thesis follows the scale development procedure proposed by Rossiter (2002). Using SPSS software, the study utilised Exploratory Factor Analysis (EFA) during the measure purification step, to explore the underlying relationships between the items that are hypothesised to measure the same construct. EFA was also employed to ensure that all the hypothesised items for a construct emerged as separate factors. This section explores the principles used to perform EFA, along with the main results.

8.3.1.1 Factor Extraction

Factor extraction in EFA only makes conceptual sense when the correlations between individual items are high enough to justify the reduction of data to a smaller number of factors (Hair et al., 2006). Two tests are commonly used to assess the appropriateness of factor analysis: the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO), which is an index that reaches one when all variables are totally predicted by other variables; and Bartlett’s test of sphericity, which tests for the presence of correlations between variables. It is generally considered that factor extraction is possible for KMO values of .7 and above, and when Bartlett’s test of sphericity is significant, i.e. the significance value is .05 or higher (Hair et al., 1998). The KMO value and the significance of Bartlett’s test of sphericity for this study are reported below (see Table 8.3).

---

7 See Chapter Five - Section 5.7.
Table 8.3: KMO and Bartlett’s test of Sphericity

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>.733</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>561.43</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>630</td>
</tr>
<tr>
<td>Significance</td>
<td>.000</td>
</tr>
<tr>
<td>Cumulative covariance</td>
<td>60.72%</td>
</tr>
</tbody>
</table>

Once the suitability of factor extraction had been ascertained, the next decision concerned the number of factors to extract. There are three main ‘rules’ used in marketing to ascertain how many factors to extract; these rules are:

1. Number of Eigenvalues above 1, which is also known as the Kaiser criterion method;
2. Scree plot sudden drop; and,
3. Horn’s parallel analysis, where only the Eigenvalues obtained from the analysis which are higher than Eigenvalues produced by a set of random data are retained.

The three rules rarely concur, but recent simulation studies tend to suggest that Horn’s parallel analysis is the most suitable method for determining the correct number of components because it yields a better factor selection (Horn 1965; Zwick and Velicer 1986). While Horn’s parallel analysis results were given priority, all three criteria mentioned above were reviewed, and where they produced no clear consensus, analyses with a different number of factors to extract were also tested, and the most interpretable solution was retained.

With regard to factor rotation, oblique (or oblimin) rotation was selected in preference to orthogonal rotation, since the dimensions of the constructs were expected to be correlated (Hair et al. 2006). To facilitate interpretation, only loadings greater than .45 were requested and displayed in all rotation results.
The results of the EFA analysis indicate that the EFA test is valid, with a KMO score of .77 and a significance level of .000. The factor extraction demonstrates an emergence of nine factors with a total covariance of 60.72% (see Table 8.4). The results confirm all the hypotheses proposed in the main model.
### Table 8.4: Rotated Component Matrix

<table>
<thead>
<tr>
<th>Item</th>
<th>Construct</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
<th>F6</th>
<th>F7</th>
<th>F8</th>
<th>F9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show fairness in transactions</td>
<td>(IN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.70</td>
</tr>
<tr>
<td>Always achieves consistency in service delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.71</td>
</tr>
<tr>
<td>Always keeps its word</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.82</td>
</tr>
<tr>
<td>The ….. employees treat me with respect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.71</td>
</tr>
<tr>
<td>Is open to my needs</td>
<td>(BN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Acts in a caring manner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>Keeps its customers' best interest in mind during most transactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Is receptive to my needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Has adequate skills to deliver the right service</td>
<td>(CP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is efficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ….. employees can competently handle most of my requests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ….. employees can be relied upon to know what they are doing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares the same values as me</td>
<td>(VA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is ethical while dealing with me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is interested in more than just making profit out of customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ….. employees act as if they value the customer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has stability in its operations</td>
<td>(CO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is always reliable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always matches customers' expectations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always satisfies customers' needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicates clearly</td>
<td>(CM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respond immediately when contacted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inform me immediately of any problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always communicates with me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will transact with this ….. again for future visits</td>
<td>(BL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will try new services that are provided by this …..</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will recommend other people to visit to this …..</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will say positive things to other people about the services provided at this …..</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will continue to visit this ….. even if the service charges are increased moderately</td>
<td>(AL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have strong preference to this …..</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.72</td>
</tr>
<tr>
<td>I will keep visiting this ….. regardless of everything being changed somewhat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>I am likely to pay a little bit more for using the services of this …..</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>The ….. employees are professional and dedicated to customers</td>
<td>(TW)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.73</td>
</tr>
<tr>
<td>The ….. respond caringly when I share my problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.75</td>
</tr>
<tr>
<td>My ….. is always honest with me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.82</td>
</tr>
<tr>
<td>Overall I feel I can trust my …..</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.70</td>
</tr>
</tbody>
</table>

F = Factor number; Integrity (IN), Benevolence (BN), Competence (CP), Value Alignment (VA), Consistency (CO), Communication (CM), Behavioural Loyalty (BL), Attitudinal Loyalty (AL), Trustworthiness (TW)
8.3.2 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) has been utilised in this study to confirm that the items load onto their respective constructs. The CFA technique is employed to obtain the amount of measurement error in the model, to validate the multi-factorial model, and to determine group effects on the factors (Jöreskog 1993).

Initially the overall model sample was used for the CFA analysis (see Table 8.8). For the input file, after specifying four observed indicators, the variance/covariance matrix was assigned to a symmetric matrix with all parameters free to be estimated. Finally, fitted variance/covariance matrix errors were tested.

The results of the CFA were acceptable since there was a Chi-square value of 635.830 with 570 degrees of freedom (p < .001). According to Wheaton et al. (1977), a ratio of approximately five or less is ‘beginning to be reasonable’. In the current study, however, degrees of freedom ratios in the range of 2:1 or 3:1 are indicative of an acceptable fit between the hypothetical model and the sample data. Carmines and McIver (1998:80) argue that “...different researchers have recommended using ratios as low as 2 or as high as 5 to indicate a reasonable fit”. Byrne (1998:55) proposed that a ratio greater than 2 represents an inadequate fit. As can be noted from Table 8.5, the $\chi^2$/df provides a ratio of 1.11, which is an acceptable ratio according to all the researchers mentioned above.

As shown in Table 8.5, the factor loadings of items are all high (above 0.7) and are significant for all constructs. The standard errors of variance associated with the factor loadings are all significant (p<0.001), with values of p ranging from 0.022 to 0.0517. In other words, the convergent validity of the constructs is confirmed (further discussion of these results will follow later in this chapter).

---

8 The model was split into two parts for the purposes of clarification; it is easier to illustrate the model in two parts rather than as one single model. However, it has been analysed as one complete model using the SEM procedure.
Table 8.5: Factor Loading and Standard Error for the Constructs

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor</th>
<th>Estimate</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trustworthiness</td>
<td>Consistency</td>
<td>.7</td>
<td>.048</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>Competence</td>
<td>.75</td>
<td>.022</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>Integrity</td>
<td>.89</td>
<td>.062</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>Benevolence</td>
<td>.91</td>
<td>.039</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>Value alignment</td>
<td>.75</td>
<td>.023</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>Communication</td>
<td>.74</td>
<td>.049</td>
</tr>
<tr>
<td>Behavioural loyalty</td>
<td>Trustworthiness</td>
<td>.82</td>
<td>.033</td>
</tr>
<tr>
<td>Attitudinal loyalty</td>
<td>Trustworthiness</td>
<td>.94</td>
<td>.043</td>
</tr>
<tr>
<td>Attitudinal loyalty</td>
<td>Behavioural loyalty</td>
<td>-.035</td>
<td>.051</td>
</tr>
</tbody>
</table>

According to Hair et al. (2006), high correlations between latent constructs indicate that discriminant validity of constructs may exist in the sample. In the case of this research, there was no high correlation between constructs, as shown in Table 8.6 below. The correlation between constructs ranged between -.066 and .173, which is an acceptable level of correlation between the constructs (Tabachnick and Fidell 2007).

Table 8.6: Correlations between the Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Construct</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Value alignment</td>
<td>.055</td>
</tr>
<tr>
<td>Communication</td>
<td>Benevolence</td>
<td>.033</td>
</tr>
<tr>
<td>Integrity</td>
<td>Communication</td>
<td>.079</td>
</tr>
<tr>
<td>Competence</td>
<td>Communication</td>
<td>-.004</td>
</tr>
<tr>
<td>Consistency</td>
<td>Communication</td>
<td>.050</td>
</tr>
<tr>
<td>Value alignment</td>
<td>Benevolence</td>
<td>-.001</td>
</tr>
<tr>
<td>Integrity</td>
<td>Value alignment</td>
<td>-.033</td>
</tr>
<tr>
<td>Competence</td>
<td>Value alignment</td>
<td>-.057</td>
</tr>
<tr>
<td>Consistency</td>
<td>Value alignment</td>
<td>.173</td>
</tr>
<tr>
<td>Integrity</td>
<td>Benevolence</td>
<td>-.016</td>
</tr>
<tr>
<td>Competence</td>
<td>Benevolence</td>
<td>.158</td>
</tr>
<tr>
<td>Consistency</td>
<td>Benevolence</td>
<td>-.002</td>
</tr>
<tr>
<td>Integrity</td>
<td>Competence</td>
<td>.015</td>
</tr>
<tr>
<td>Consistency</td>
<td>Integrity</td>
<td>.050</td>
</tr>
<tr>
<td>Consistency</td>
<td>Competence</td>
<td>-.066</td>
</tr>
</tbody>
</table>

Because the viability of individual estimated values should be determined at an initial stage when assessing the fit of individual parameters in a model, the estimated parameters were examined in terms of not only their correct sign and size, but also with regard to their consistency with the underlying theory. Unreasonable
estimates (with correlation values greater than one) were not found in the CFA results for the measurement model (Tabachnick and Fidell 2007).

As the second step in the assessment of parameters (shown in Table 8.7 below), the squared multiple correlations \( R^2 \) were examined to see whether the measurement model properly represented the observed items (Byrne 2001; Tabachnick and Fidell 2007). These correlations were also assessed to determine the indicator and construct reliability. As presented in Table 8.7, the squared multiple correlations ranged from .31 to .67, which according to Nagelkerke (1991) the value of \( R^2 \) should be between 0 and 1, with 0 denoting that model does not explain any variation and 1 denoting that it completely explains the observed variation, since achieving a perfect fit is impossible (Nagelkerke 1991) the results of \( R^2 \) are acceptable to explain the model.

The CFA results indicate a Root Mean Square Error of Approximation (RMSEA) of .015. RMSEA explains that the error of approximation in the population; values should be less than .05 for a good fit (Hair et al. 2006; Tabachnick and Fidell 2007). Similarly, other fit indices also indicated a good fit, which suggested that the estimate parameters need not be modified (see section 8.3.3 for a full discussion on fit indices). These results also indicated that the initial hypothesised model was reliable and valid (Hair et al. 2006). Therefore, it was decided that no modification indices need be employed to improve the general fit of the results and the overall measurement model (Hair et al. 2006).

Composite reliability has been calculated for each construct included in the proposed model. This form of reliability in similar to Cronbach’s Alpha\(^9\), it reflects the internal consistency of the items measuring a particular construct (Fornell and Larcker 1981). Both the composite reliability and the variance extracted estimates are shown in Table 8.7. Fornell and Larcker (1981) recommend a minimum composite reliability of .60. An assessment of the composite reliabilities showed that all constructs meet that minimum acceptable level advocated by (Fornell and Larcker 1981).

\(^9\) See Chapter Seven - Section 7.6.1, for a full discussion on Cronbach alpha reliability test.
The variance extracted assesses the amount of variance that is explained by an underlying factor in relation to the amount of variance due to measurement error. For instance, the variance estimate for integrity was 0.62, meaning that 62% of the variance is explained by the integrity construct, and 38% is subjected to measurement error. Fornell and Larcker (1981) argue that constructs should obtain estimates of .50 or larger. Estimates lower than .50 signify that variance due to measurement error is larger than the variance extracted by the construct. The variance extracted in Table 8.7 estimates all meet this minimum threshold; however, value alignment extracted variance was to some extent lower than the rest of the items, because it still met the required threshold level, it was decided not to take any action to improve the construct.

Based on the above argument, the validity of the latent construct as well as the related constructs is satisfactory. It should also be mentioned that Tabachnick and Fidell (2007), noted that the variances extracted estimate test is conservative; reliabilities can be acceptable even if variances extracted estimates are less than .50.
### Table 8.7: Results of CFA for the Overall Measurement Model

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Construct Reliability</th>
<th>Composite Reliability</th>
<th>Extracted Variance</th>
<th>Factor Loading</th>
<th>Squared Multiple Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrity (IN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.73</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>IN1</td>
<td></td>
<td></td>
<td>0.59</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN2</td>
<td></td>
<td></td>
<td>0.81</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN3</td>
<td></td>
<td></td>
<td>0.57</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN4</td>
<td></td>
<td></td>
<td>0.56</td>
<td>0.34</td>
<td></td>
</tr>
<tr>
<td>Benevolence (BN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.76</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>BN1</td>
<td></td>
<td></td>
<td>0.56</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BN2</td>
<td></td>
<td></td>
<td>0.78</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BN3</td>
<td></td>
<td></td>
<td>0.63</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BN4</td>
<td></td>
<td></td>
<td>0.70</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td>Competence (CP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.77</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>CP1</td>
<td></td>
<td></td>
<td>0.64</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CP2</td>
<td></td>
<td></td>
<td>0.78</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CP3</td>
<td></td>
<td></td>
<td>0.59</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CP4</td>
<td></td>
<td></td>
<td>0.71</td>
<td>0.41</td>
<td></td>
</tr>
<tr>
<td>Value Alignment (VA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.80</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>VA1</td>
<td></td>
<td></td>
<td>0.57</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VA2</td>
<td></td>
<td></td>
<td>0.85</td>
<td>0.41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VA3</td>
<td></td>
<td></td>
<td>0.64</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VA4</td>
<td></td>
<td></td>
<td>0.77</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>Consistency (CO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.76</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>CO1</td>
<td></td>
<td></td>
<td>0.63</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO2</td>
<td></td>
<td></td>
<td>0.57</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO3</td>
<td></td>
<td></td>
<td>0.77</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO4</td>
<td></td>
<td></td>
<td>0.71</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td>Communication (CM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.789</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>CM1</td>
<td></td>
<td></td>
<td>0.65</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CM2</td>
<td></td>
<td></td>
<td>0.75</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CM3</td>
<td></td>
<td></td>
<td>0.61</td>
<td>0.57</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CM4</td>
<td></td>
<td></td>
<td>0.74</td>
<td>0.42</td>
<td></td>
</tr>
<tr>
<td>Behavioural Loyalty (BL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.82</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>BL1</td>
<td></td>
<td></td>
<td>0.67</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BL2</td>
<td></td>
<td></td>
<td>0.83</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BL3</td>
<td></td>
<td></td>
<td>0.61</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BL4</td>
<td></td>
<td></td>
<td>0.82</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>Attitudinal Loyalty (AL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.76</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>AL1</td>
<td></td>
<td></td>
<td>0.71</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AL2</td>
<td></td>
<td></td>
<td>0.60</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AL3</td>
<td></td>
<td></td>
<td>0.71</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AL4</td>
<td></td>
<td></td>
<td>0.63</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>Trustworthiness (TW)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.75</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>TW1</td>
<td></td>
<td></td>
<td>0.57</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TW2</td>
<td></td>
<td></td>
<td>0.67</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TW3</td>
<td></td>
<td></td>
<td>0.81</td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TW4</td>
<td></td>
<td></td>
<td>0.57</td>
<td>0.32</td>
<td></td>
</tr>
</tbody>
</table>

10 See appendix Twelve for the full calculation of the composite reliability tests.
Next, the factor loadings were evaluated and found to fall within a range between .83 and .56. This calculation was employed to determine the relative importance of the observed variables as indicators of the constructs (Kline 1998). Lastly, the extracted variances that represent the overall amount of variance in the indicators accounted for by the latent constructs and values were calculated. For each construct, the values were: IN (.52); BN (.62); CP (.51); VA (.56); CO (.72); and CM (.64). These values all exceed the recommended level of .50 (Hair et al. 2006).

### 8.3.3 Goodness of Fit Indices Discussion

After completing the estimation the parameters of the measurement model, the hypothesised overall model was examined using three types of fit index: absolute fit indices; incremental fit indices; and parsimonious fit indices (Tabachnick and Fidell 2007). The results of the goodness-of-fit statistics were reported in Table 8.8.

**Table 8.8: Overall Model Fit Indices**

<table>
<thead>
<tr>
<th>Overall Model Fit</th>
<th>Goodness-of-Fit Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Absolute Fit Measures</strong></td>
<td></td>
</tr>
<tr>
<td>Chi-square ($\chi^2$) of the estimated model</td>
<td>$\chi^2 = 635.830$ DF= 570</td>
</tr>
<tr>
<td>Goodness-of-fit index (GFI)</td>
<td>.938</td>
</tr>
<tr>
<td>Root mean square error of approximation (RMSEA)</td>
<td>.015</td>
</tr>
<tr>
<td>Root mean square residual (RMR)</td>
<td>.021</td>
</tr>
<tr>
<td><strong>Incremental Fit Measures</strong></td>
<td></td>
</tr>
<tr>
<td>Adjusted goodness-of-fit index (AGFI)</td>
<td>.927</td>
</tr>
<tr>
<td>Normed fit index (NFI)</td>
<td>.91</td>
</tr>
<tr>
<td><strong>Parsimonious Fit Measures</strong></td>
<td></td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>.987</td>
</tr>
<tr>
<td>Relative fit index (RFI)</td>
<td>.878</td>
</tr>
<tr>
<td>Parsimony normed fit index (PNFI)</td>
<td>.805</td>
</tr>
<tr>
<td>Parsimony goodness-of-fit index (PGFI)</td>
<td>.803</td>
</tr>
<tr>
<td>Incremental fit index (IFI)</td>
<td>.987</td>
</tr>
</tbody>
</table>
First, the absolute fit index directly measures how well the a priori model reproduces the collected sample data. In other words, it is applied to measure how closely the model matches a perfect fit (Tabachnick and Fidell 2007; Maruyama 1997). These indices include: Chi-square ($\chi^2$) of the estimated model; goodness-of-fit index (GFI); root mean square residual (RMR); and root mean square error of approximation (RMSEA) (Byrne 2001; Kline 1998; Hoyle 1995).

The Chi-square ($\chi^2$) of the estimated model was examined to test the closeness of fit between the unrestricted sample covariance matrix and the restricted covariance matrix. The $\chi^2$ value of 635.830 with 570 degrees of freedom was not statistically significant with $p = .029$, thereby suggesting that the hypothesised overall measurement model with nine constructs and thirty-six indicators was appropriate and should be accepted at this statistical level.

The goodness-of-fit index (GFI) that was used to compare the hypothesised model with null model yielded a value of .938. This index takes a value from zero to 1.00, with values to close to 1.00 being indicative of a good fit (Byrne 2001). Accordingly, the result of the GFI for this study produced an acceptable level of fit.

The value of the root mean square residual (RMR) was .021. Since this index is used to estimate the average residual value derived from the fitting of the variance covariance matrix for the hypothesised model (nine constructs with thirty-six indicators) to the variance-covariance matrix of the sample data, a smaller value indicates a better fitting model. This value of .021 represents the average value across all standardised residuals, ranging from zero to 1.00. For a well-fitting model, this value should be less than .05. The RMR value of .021 for the current study represented the correlations to within an average error of .021, which was acceptable as a well fitting model for this study (Tabachnick and Fidell 2007).

Next, the root mean square error of approximation (RMSEA) is an index used to quantify model misfit; a value of less than .05 indicates a good model fit, and values higher than .08 indicate sensible errors of approximation in the population (Hair et al. 2006). The value of RMSEA for the hypothesised measurement model was .015, which falls inside the acceptable level. Furthermore, this value also conceded a 90% confidence interval, ranging from .00 to .037, and the p-value for the
test of closeness-of-fit equalled 1.00. Consequently, the value of RMSEA of .015, falling within the bounds of .00 and .037, represented an excellent degree of precision.

Generally, based on the examination of the absolute fit statistical indices, it can be concluded that the hypothesised measurement model constituted a well-fitting model for the collected data. Consequently, further analysis such as the execution of the measurement model was possible and proved valid (Anderson and Gerbing 1988; Tabachnick and Fidell 2007).

The incremental fit indices were examined as part of goodness of fit statistics, (Maruyama 1997). These tests were used to assess the proportional improvement in fit achieved by comparing the target model with a more restricted, nested baseline model (Maruyama 1997). These indices include the adjusted goodness-of-fit index (AGFI), the non-normed fit index (NNFI), and the normed fit index (NFI) (Kline 1998).

The adjusted goodness-of-fit index (AGFI) may also be conceived as an absolute goodness of fit index (Byrne 2001). This index is similar to the GFI, but is marginally different in that it is adjusted for the number of degrees of freedom in the specified model (Hair et al. 2006). Given that the value of the AGFI was .927, which exceeded the recommended level of .90, the hypothesised model was shown to fit reasonably well.

The NFI represents the proportion of the total covariance among the observed variables that is explained by a target model, using the null model as a baseline (Hair et al. 2006). The possible values of NFI range from zero to 1.00, with a value of greater than .95 being acceptable to indicate a well fitting model. For this study the value of NFI was .91, suggesting that the model fit the data fairly well (Hair et al. 2006). Overall, the hypothesised model demonstrated a healthy fit to the data.

Finally, the parsimonious fit indices represent information about an evaluation between models of differing complexity and objectives, by evaluating the fit of the model versus the number of estimated coefficients needed to achieve that level of fit (Tabachnick and Fidell 2007). These indices comprise the parsimony goodness-of-fit
index (PGFI), the parsimony normed fit index (PNFI), the comparative fit index (CFI), the incremental fit index (IFI), and the relative fit index (RFI).

The parsimony goodness of fit index (PGFI) relates to the parsimony of the model, and takes into account the complexity of the hypothesised model in the assessment of overall model fit (Tabachnick and Fidell 2007). The values vary between zero and 1.00, with higher values indicating greater model parsimony (Tabachnick and Fidell 2007). As shown in Table 8.5 above, the value of the PGFI was .803, suggesting that the hypothesised model fit the data parsimoniously. The parsimony normed fit index (PNFI) explains the complexity of the model in its assessment of goodness-of-fit. Essentially this index is used for the comparison of models with differing degrees of freedom. A higher value of the PNFI indicates a better model fit. The value of the PNFI in this analysis was .805, which is an acceptable value for a well fitting model.

The incremental fit index (IFI) represents the subjects of parsimony and sample size associated with NFI, and is used to compare a restricted model with a full model using a baseline null model (Byrne 2001). The value of the comparative fit index (CFI) measures the improvement in non-centrality by going from the least restrictive model to the most saturated model. The values of the CFI range from zero to 1.00. The relative fit index (RFI) is equivalent to CFI. Higher values of IFI, CFI, and RFI all indicate a better model fit to the data. As shown in Table 8.5 above, the values of IFI, CFI, and RFI were .987, .987 and .878 respectively, signifying that all these values were sufficient to indicate a well fitting model (Byrne 2001).

As a result of the above analyses, the review of the three types of goodness of fit indices for the overall measurement model revealed consistent patterns of values of fit indices, and showed that the model was well fitted to the observed data. This indicates that the measurement model is reliable and valid in representing the sample. In addition to these multiple criteria, the examination of the theoretical and practical aspects of the measurement model with nine constructs and thirty-six observed indicators supported the assessment that this measurement model was adequate in describing the collected data.
Chapter Eight – Multivariate Data Analysis

8.3.4 CFA with Calibration and Validation Sample

The evaluation of goodness-of-fit statistics for the calibration and validation sample was done by three types of fit indices for the entire measurement model; absolute fit indices, incremental fit indices, and parsimonious fit indices (Hair et al. 2006). As shown in Table 8.9 below, all the fit indices yielded acceptable levels to indicate a well-fitting model to the data.

The absolute fit index, which directly measures how well a priori model reproduces the collected sample data, showed that the $\chi^2$ of the estimated model is 613.190 with 570 degrees of freedom for the calibration sample, while the Chi-square for the validation sample was 625.425 with 570 degrees of freedom. The goodness of fit index (GFI) was .96 for the calibration sample and .90 for the validation sample. The root mean square residual (RMR) was .028 for the calibration sample and .031 for the validation sample, and the root mean square error of approximation (RMSEA) was .017 for the calibration sample and .019 for the validation sample. The incremental fit indices, which evaluate the proportional improvement in fit achieved by comparing a target model with a more restricted, nested base line model, produced a normed fit index (NFI) of .801 and .818 for the calibration and validation samples respectively.

Table 8.9: Results of CFA for Calibration and Validation Split Samples

<table>
<thead>
<tr>
<th>Overall model fit</th>
<th>Goodness-of-Fit Statistics (Calibration sample)</th>
<th>Goodness-of-Fit Statistics (Validation sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Fit Measures</td>
<td>$\chi^2 = 613.190$ DF = 570</td>
<td>$\chi^2 = 625.425$ DF = 570</td>
</tr>
<tr>
<td>Chi-square ($\chi^2$) of the estimated model</td>
<td>.93</td>
<td>.90</td>
</tr>
<tr>
<td>Goodness-of-fit index (GFI)</td>
<td>.017</td>
<td>.019</td>
</tr>
<tr>
<td>Root mean square error of approximation (RMSEA)</td>
<td>.028</td>
<td>.031</td>
</tr>
<tr>
<td>Incremental Fit Measures</td>
<td>.872</td>
<td>.865</td>
</tr>
<tr>
<td>Adjusted goodness-of-fit index (AGFI)</td>
<td>.801</td>
<td>.818</td>
</tr>
<tr>
<td>Normed fit index (NFI)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parsimonious Fit Measures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comparative fit index (CFI) & .982 & .980  
Relative Fit Index (RFI) & .780 & .798  
Parsimony normed fit index (PNFI) & .725 & .740  
Parsimony goodness-of-fit index (PGFI) & .762 & .757  
Incremental fit index (IFI) & .983 & .981  

Finally, the parsimonious fit indices provided information for comparison between models of differing complexity and objectives, by evaluating the fit of the model versus the number of estimated coefficients needed to achieve that level of fit. The parsimony goodness-of-fit index (PGFI) was .762 for the calibration sample and .757 for the validation sample; the parsimony normed fit index (PNFI) was .725 and .740 for the calibration and validation samples respectively, and the comparative fit index (CFI) was .982 and .980 for the calibration sample and the validation sample.

This review of the three types fit index comparing both samples reveals consistent patterns in the values of the fit indices, supporting the conclusion that the model fits the data well.

Despite these reliable results from the split sample, this study included a further analysis based on the entire sample (n=529) because the overall score in the goodness of fit indices were to some extent better with regard to the split samples than with the entire sample. Accordingly, additional analysis such as full structural equation modelling for the hypotheses tests was possible.

8.3.5 CFA analysis for the Model’s Constructs

In this section an in-depth discussion concerning each of the model’s nine constructs is presented individually, to enable insights to be gained into which item has the most influence on that particular construct in terms of the regression weights (factor loading). Analysis of the regression weights related to the paths from the latent variables to their respective indicator variables will increase our understanding about which item(s) have a higher influence, depending on their factor loading, on the respective construct (the paths in the measurement model). This will help to generate an understanding of how to control the model, enhancing or reducing the effects of different constructs.
8.3.5.1 Integrity

Integrity was measured in the model with four items (see Table 8.10 below). The respondents were asked to indicate how much each of the items reflected the level of integrity they attributed to their respective service provider. As can be seen from the factor loading of each item, all the items had a positive impact on integrity, which indicates that all the items were significant and related to the construct of integrity.

Table 8.10: Integrity Regression Weights

<table>
<thead>
<tr>
<th>Integrity (IN) items</th>
<th>Regression weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN1: Show fairness in transactions</td>
<td>.56</td>
</tr>
<tr>
<td>IN2: Always achieves consistency in service delivery</td>
<td>.57</td>
</tr>
<tr>
<td>IN3: Always keeps its word</td>
<td>.81(^{11})</td>
</tr>
<tr>
<td>IN4: The ….. employees treat me with respect</td>
<td>.59</td>
</tr>
</tbody>
</table>

The regression weights, in Figure 8.5, ranged from .56 to .81, in which item IN1 (‘Show fairness in transactions’) was found to be the least effective item among the observed indicators for integrity. In comparison, item IN3 (‘Always keeps its word’) was the most important item, having a loading of .81. The construct reliability

\(^{11}\) The highest values are highlighted.
for integrity is .73, which exceeds the recommended level of .70 (Hair et al. 2006). Overall the four indicators for integrity were sufficient to represent the construct.

### 8.3.5.2 Competence

Competence was measured in the hypothesised model with four items (see Table 8.11 below). The respondents were asked to express to what extent each of the items reflected the level of competence they expected from their respective service provider. As can be noted from the regression weights related to each item, all the items have a positive effect on competence, which confirms that all the items were significant and related to the construct.

**Table 8.11: Competence Regression Weights**

<table>
<thead>
<tr>
<th>Competence (CP) items</th>
<th>Regression weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP1: Has adequate skills to deliver the right service</td>
<td>.71</td>
</tr>
<tr>
<td>CP2: Is efficient</td>
<td>.59</td>
</tr>
<tr>
<td>CP3: The ..... employees can competently handle most of my requests</td>
<td>.78</td>
</tr>
<tr>
<td>CP4: The ..... employees can be relied upon to know what they are doing</td>
<td>.64</td>
</tr>
</tbody>
</table>

**Figure 8.6: Competence Regression Weights**

The regression weights, in Figure 8.6, ranged from .59 to .78, wherein item CP2 (‘is efficient’) was found to be the least effective item among the observed items for competence. In comparison, item CP3 (‘the ..... employees can competently
handle most of my requests’) was the most significant item, having a loading of .78. The construct reliability for competence is .77, which exceeds the recommended level of .7 (Hair et al. 2006). Generally, the four indicators for competence were sufficient to represent the construct.

8.3.5.3 Value Alignment

Value alignment was evaluated in the model by four items (see Table 8.12 below). The respondents were asked to indicate to what extent each of the items reflected the perceived level to which their values aligned with their respective service provider. As can be seen from the regression weights for each item, all the items had a positive impact on value alignment, which suggests that all the items were important and related to the construct of value alignment.

Table 8.12: Value alignment Regression Weights

<table>
<thead>
<tr>
<th>Value Alignment (VA) items</th>
<th>Regression weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA1: Shares the same values as me</td>
<td>.77</td>
</tr>
<tr>
<td>VA2: Is ethical while dealing with me</td>
<td>.64</td>
</tr>
<tr>
<td>VA3: Is interested in more than just making profit out of customers</td>
<td>.85</td>
</tr>
<tr>
<td>VA4: The ….. employees act as if they value the customer</td>
<td>.57</td>
</tr>
</tbody>
</table>

Figure 8.7: Value alignment Regression Weights

The regression weights, in Figure 8.7, ranged from .57 to .85. Item VA4 (‘The ….. employees act as if they value the customer’) was found to be the least effective item among the observed indicators for value alignment. In comparison, item VA3
(‘Is interested in more than just making profit out of customers’) was the most significant item, having a loading of .85. The construct reliability for value alignment is .8, which exceeds the recommended level of .7 (Hair et al. 2006). Overall, the specified four indicators for value alignment were sufficient to represent the construct.

### 8.3.5.4 Communication

Communication was measured in the model by four items (see Table 8.13 below). The respondents were asked to indicate how well each of the items reflected the level of communication from their respective service provider. As can be seen from the factor loading for each item, all the items had a positive correlation with communication, which signifies that all the items were related to the construct of communication.

**Table 8.13: Communication Regression Weights**

<table>
<thead>
<tr>
<th>Communication (CM) items</th>
<th>Regression weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM1: Communicates clearly</td>
<td>.74</td>
</tr>
<tr>
<td>CM2: The ….. respond immediately when contacted</td>
<td>.61</td>
</tr>
<tr>
<td>CM3: Inform me immediately of any problems</td>
<td>.75</td>
</tr>
<tr>
<td>CM4: The ….. always communicates with me</td>
<td>.65</td>
</tr>
</tbody>
</table>

**Figure 8.8: Communication Regression Weights**

The regression weights, in Figure 8.8, ranged from .61 to .75, with item CM4 (‘The ….. always communicates with me’) was found to be the least effective item among the observed indicators for communication. In comparison, item CM3
Inform me immediately of any problems’) was the most important item, with a loading of .75. The construct reliability for communication is .78, which exceeds the recommended level of .7 (Hair et al. 2006). Overall the four indicators for communication were sufficient to represent the construct.

8.3.5.5 Benevolence

Benevolence was measured in the model by four items (see Table 8.14 below). The respondents were asked to indicate how well each of the items reflected the level of benevolence they perceived in their respective service provider. As can be seen from the factor loading for each item, all the items had a positive impact on benevolence, which indicates that all the items were significant and related to the construct of benevolence.

Table 8.14: Benevolence Regression Weights

<table>
<thead>
<tr>
<th>Benevolence (BN) items</th>
<th>Regression weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>BN1: Is open to my needs</td>
<td>.7</td>
</tr>
<tr>
<td>BN2: Acts in a caring manner</td>
<td>.63</td>
</tr>
<tr>
<td>BN3: Keeps its customers’ best interest in mind during most transactions</td>
<td>.78</td>
</tr>
<tr>
<td>BN4: Is receptive to my needs</td>
<td>.56</td>
</tr>
</tbody>
</table>

Figure 8.9: Benevolence Regression Weights

The regression weights, in Figure 8.9, ranged from .56 to .78. Item BN4 (‘Is receptive to my needs’) was the least effective, with a factor loading of .563. In
comparison, item BN3 (‘Keeps its customers’ best interest in mind during most transactions’) was the most effective item, with a factor loading of .78. The construct reliability for benevolence is .73, which exceeds the recommended level of .7 (Hair et al. 2006). Generally, the four items for benevolence were sufficient to represent the construct.

8.3.5.6 Consistency

Consistency was measured in the model by four items (see Table 8.15 below). The respondents were asked to indicate how well each of the items reflected the level of consistency they expected from their respective service provider. As can be seen from the factor loading of each item, all the items had a positive impact on consistency, which indicates that all the items were significant and related to the construct of consistency.

Table 8.15: Consistency Regression Weights

<table>
<thead>
<tr>
<th>Consistency (CO) items</th>
<th>Regression weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO1: Has stability in its operations</td>
<td>.63</td>
</tr>
<tr>
<td>CO2: Is always reliable</td>
<td>.57</td>
</tr>
<tr>
<td>CO3: Always matches customers’ expectations</td>
<td>.77</td>
</tr>
<tr>
<td>CO4: Always satisfies customers’ needs</td>
<td>.71</td>
</tr>
</tbody>
</table>

Figure 8.10: Consistency Regression Weights

The regression weights, in Figure 8.10, ranged from .57 to .77. Item CO2 (‘Is always reliable’) was found to be the least effective item among the observed
indicators for consistency, with a factor loading of .57. In comparison, item CO3 (‘Always matches customers’ expectations’) was the most important item, having a loading of .77. The construct reliability for consistency is .76, which exceeds the recommended level of .7 (Hair et al. 2006). Overall the specified four indicators for consistency were sufficient to represent the construct.

### 8.3.5.7 Trustworthiness and Loyalty

Trustworthiness and loyalty were measured in the model by four items for each construct (see Table 8.16 below). The respondents were asked to indicate how well each of the items reflected the level of trustworthiness and loyalty they received from their respective service provider. As can be seen from the regression weights for each item, all the items had a positive impact on their constructs, which indicates that all the items were significant and related to the construct.

**Table 8.16: Trustworthiness Regression Weights**

<table>
<thead>
<tr>
<th>Trustworthiness (TW) items</th>
<th>Regression weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>TW1: The ….. employees are professional and dedicated to customers</td>
<td>.57</td>
</tr>
<tr>
<td>TW2: The ….. respond caringly when I share my problems</td>
<td>.67</td>
</tr>
<tr>
<td>TW3: My ….. is always honest with me</td>
<td>.81</td>
</tr>
<tr>
<td>TW4: Overall I feel I can trust my …..</td>
<td>.57</td>
</tr>
</tbody>
</table>

**Figure 8.11: Trustworthiness, attitudinal and behavioural Loyalty Regression Weights**
The regression weights, in Figure 8.11, for trustworthiness ranged from .57 to .81. Item TW4 (‘Overall I feel I can trust my ….’) was found to be the least effective among the observed items for trustworthiness, with a factor loading of .57. In comparison, item TW3 (‘My … is always honest with me’) was the most important item, with a loading of .81. The construct reliability for trustworthiness is .75, which exceeds the recommended level of .7 (Hair et al. 2006).

Table 8.17: Behavioural Loyalty Regression Weights

<table>
<thead>
<tr>
<th>Behavioural Loyalty (BL) items</th>
<th>Regression weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL1: I will transact with this … again for future visits</td>
<td>.82</td>
</tr>
<tr>
<td>BL2: I will try new services that are provided by this …</td>
<td>.61</td>
</tr>
<tr>
<td>BL3: I will recommend other people to visit to this …</td>
<td>.83</td>
</tr>
<tr>
<td>BL4: I will say positive things to other people about the services provided at this …</td>
<td>.67</td>
</tr>
</tbody>
</table>

Behavioural loyalty regression weights ranged from .61 to .83 (see Table 8.17 above). Item BL2 (‘I will try new services that are provided by this …’) was found to be the least effective item among the observed indicators for behavioural loyalty, with a factor loading of .61. In comparison, item BL3 (‘I will recommend other people to visit to this …’) was the most important item, having a loading of .83. The construct reliability for behavioural loyalty is .82, which exceeded the recommended level of .7 (Hair et al. 2006).

Table 8.18: Attitudinal Loyalty Regression Weights

<table>
<thead>
<tr>
<th>Attitudinal Loyalty (AL) items</th>
<th>Regression weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL1: I will continue to visit this … even if the service charges are increased moderately</td>
<td>.71</td>
</tr>
<tr>
<td>AL2: I have strong loyalty to this …</td>
<td>.6</td>
</tr>
<tr>
<td>AL3: I will keep visiting this … regardless of everything being changed somewhat</td>
<td>.71</td>
</tr>
<tr>
<td>AL4: I am likely to pay a little bit more for using the services of this …</td>
<td>.63</td>
</tr>
</tbody>
</table>
Attitudinal loyalty regression weights ranged from .6 to .71 (see Table 8.18 above). Item AL2 (‘I have strong loyalty to this …’) was found to be the least effective item among the observed indicators for behavioural loyalty, with a factor loading of .6. In comparison, item AL3 (‘I will keep visiting this … regardless of everything being changed somewhat’) was the most important item, with a loading of .71. The construct reliability for attitudinal loyalty is .76, which exceeds the recommended level of .70 (Hair et al. 2006).

8.3.6 Assessing Construct Validity

Convergent and discriminant validity can both be considered as subcategories of construct validity (Hair et al. 2006; Tabachnick and Fidell 2007). To achieve construct validity, the empirical evidence must be consistent with the theoretical logic about the concepts. Convergent validity refers to the confirmation of the measurement of a construct by the use of multiple methods. Convergent validity is demonstrated by highlighting that the different items tapping their respective latent variables correlate with each other to an acceptable degree. Acceptable goodness of fit measures for a model indicates convergent validity; it is also the case that the pattern coefficients should be at least .70 for all indicators using a common rule of thumb (Kline 1998).

Discriminant validity is an indication of the extent to which measures have a low correlation with other measures which are associated with dissimilar concepts. In other words, discriminant validity relates to the distinctiveness of constructs. The correlation between two scales for two distinct constructs should not be high if we are to infer discriminant validity. In applying this concept, the items employed to measure different constructs in models should provide different results.

Conversely in terms of convergent validity, if the indicators which are intended to measure a common underlying factor have comparatively high loadings on that factor, convergent validity is achieved (Tabachnick and Fidell 2007). These high loadings mean that strong correlations on the underlying theoretical construct are achieved, and the measurement scales can be said to be measuring what they are intended to measure (Kline 1998).
In SEM analysis, the standardised factor loading can be examined in order to evaluate convergent validity. As can be seen in Table 8.6, presented earlier in this chapter, the estimated standardised factor loading coefficients for the stated underlying constructs produced statistically significant results at the $p = .05$ level. The factor loading for each observed indicator exceeded the recommended level of $t (+1.96)$. Therefore, it can be concluded that the measurement scale achieved convergent validity of the constructs.

To examine discriminant validity, this study utilised the procedures suggested by Anderson and Gerbing (1988) to be sure that the constructs are not measuring the same concept or idea. Accordingly, taking one pair of constructs at a time, the outcomes of the unconstrained CFA were compared with similar results for a constrained model. The unconstrained CFA model was allowed to co-vary without restraint, while the constrained model fixed the factor covariance to zero, meaning that there was no correlation between two constructs (Anderson and Gerbing 1988). In other words, discriminant validity can be examined by constraining the estimated correlation parameter between each pair of constructs to zero (the fixed model).

In the constrained model, the correlation parameter of zero indicates that the two constructs are uncorrelated. Different parameters in the unconstrained model (the free model) indicate that the correlation between factors was estimated (Hoyle 1995). A Chi-square test between the constrained model and the unconstrained model was performed. A significant Chi-square difference between the models provided evidence of discriminant validity between the pairs of the constructs being tested (Anderson and Gerbing 1988).

Furthermore, a significantly lower Chi-square value for the unconstrained model indicates that discriminant validity is achieved, and the goodness of fit statistics is improved in the unconstrained model when discriminant validity is achieved (Klein 1998).
8.4 The Structural Model Process

As discussed earlier, this study adopted SEM in order to test its hypotheses. In particular, SEM has been applied to test the hypotheses concerning relationships among the observed and the unobserved variables (Hair et al. 2006). For the most part, in previous research SEM has been considered as a way of testing a specified theory about relationships between theoretical constructs (Tabachnick and Fidell 2007).

The structural equation model is used to test a hypothetical model that prescribes relationships between latent constructs and observed variables that are indicators of those latent constructs. The relationships between the constructs can be identified by providing path coefficients (parameter values) for each of the research hypotheses. Each estimated path coefficient can be tested for its respective statistical significance regarding the relationships between the hypotheses, including a consideration of standard errors (Hair et al. 2006).

The primary objectives of this study were to develop a theoretical model to measure trustworthiness. The proposed framework can be seen as establishing a theoretical foundation for trustworthiness by identifying the antecedents of trust – those factors that will ultimately lead to trustworthiness. Customer loyalty is proposed in the model as an outcome of trustworthiness.
The theoretical framework (shown in Figure 8.12) is a static dyadic model that assesses relationships at a given moment. The model places trustworthiness at the focal point, with determinants of trustworthiness classified as low and high level determinants having a direct relationship with the central concept. These determinants are listed with no particular ranking (integrity, competence, consistency, communications, value alignment and benevolence). The third part of the model covers the outcome of the model, illustrated by two types of customer loyalty (behavioural and attitudinal loyalty), with the prediction that behavioural loyalty can lead to attitudinal loyalty. The underlying theoretical importance of each construct has been discussed in a previous chapter in this thesis (see Chapter Four section 4.6). The results of the path analysis and structural model fitting will be discussed in the following section.
8.4.1 Path Analysis

Path analysis is an extension of the regression model, applied to test the fit of the correlation matrix against two or more causal models that are being compared by the researcher (Hoyle 1995). A path model is a diagram relating independent, intermediary, and dependent variables. Single arrows indicate causation between exogenous or intermediary variables and the dependent(s) (Hair et al. 2006). Arrows also link the error terms with their respective endogenous variables. Double arrows indicate correlations between pairs of exogenous variables (see Figure 8.5 above). A regression analysis is carried out for pairs of constructs where the theoretical model indicates causative relationships. The regression weights predicted by the model are compared with the observed correlation matrix for the variables, and a goodness of fit statistic is calculated.

Path analysis requires the standard assumptions of regression to be met. It is particularly sensitive to model specification, because failure to include relevant causal variables or the inclusion of extraneous variables can substantially affect the path coefficients, which are used to measure the relative importance of various direct and indirect causal paths among the dependent constructs. Such interpretations should be performed in the context of comparing alternative models after measuring their goodness of fit, as discussed in the section on SEM (see section 8.5 above). When the variables in the model are latent variables measured by multiple observed indicators, path analysis is termed SEM, and is treated separately (Tabachnick and Fidell 2007).

Exogenous variables in a path model are those with no explicit causes (no arrows going to them, other than the measurement error term). If exogenous variables are correlated, this is indicated by a double-headed arrow connecting them. Therefore, endogenous variables are those that have incoming arrows (Tabachnick and Fidell 2007). Endogenous variables include intervening causal variables and dependents. Intervening endogenous variables have both incoming and outgoing causal arrows in the path diagram. The dependent variable(s) have only incoming arrows (Tabachnick and Fidell 2007).
According to the standardised path coefficients presented in Figure 8.13, this model is specified by the following path equations. Trustworthiness is influenced by its antecedents, consistency, competence, benevolence, integrity, value alignment and communication, by loadings of .10, .60, .30, .25, .60 and .50 respectively. Furthermore, trustworthiness influences both behavioural and attitudinal loyalty by .40 and .50 respectively. All the constructs were found to be significant (0 > .05).

Through the path coefficients, it can be seen that both value alignment and integrity have more effect on the creation of trustworthiness compared with the rest of the variables. This finding has an impact on the study hypotheses in terms of accepting or rejected the hypotheses, as will be discussed later in section 8.6.

It is generally acknowledged that most theoretical models are useful estimates that do not fit perfectly in the population. In other words, the null hypothesis of a perfect fit is not credible to begin with, and will, in the end, be accepted only if the sample is not allowed to get too big. Jöreskog (1969: 200) noted that “such a hypothesis [of perfect fit] may be quite unrealistic in most empirical work with test
data. If a sufficiently large sample were obtained this statistic would, no doubt, indicate that any such non-trivial hypothesis is statistically untenable.” Furthermore, “...in very large samples virtually all models that one might consider would have to be rejected as statistically untenable. ... In effect, a non-significant chi-square value is desired, and one attempts to infer the validity of the hypothesis of no difference between model and data. Such logic is well known in various statistical research as attempting to prove the null hypothesis” (Bentler and Bonett 1980: 591).

8.4.2 Testing Alternative Models

When applying SEM, it is recommended to test the model against alternative models, to eliminate the possibility that the alternative models provide a better explanation for the phenomena being studied. This also provides the researcher with confirmation that the accepted model scores the best fit (Schumacker and Lomax 2004). The identification of each alternative model was based on theoretical grounds, and all the relationships in the alternative models were clearly identified. Specifically, four steps were followed for alternative model testing:

1. Generation of several theoretical models. These models have similar but distinct relationships compared with the main proposed model of the study, are based on the literature and the exploratory study surrounding the model’s constructs.
2. Path model specifications, in which all relationships between the constructs are clearly defined. This helped establishing the overall goodness of fit indices when applying CFA, and will thereby indicate which model(s) provide a better fit overall.
3. Best model fit: examined via SEM analysis and reporting the key goodness of fit indices.
4. Final model evaluation and interpretation: the models’ reliability and validity will be reported, as well as the significance levels for the path diagrams.

Several other models were developed, based on alternative path models and theoretical rationale. These models are described below.
8.4.2.1 Alternative Model A

In the first alternative model A (see Figure 8.14 below), the model outcome was consolidated into one construct labelled as ‘customer loyalty’. This is in agreement with the study by Sideshmukh et al. (2002), which examined loyalty as one construct regardless of several other studies that classified different levels of customer loyalty (for example, Rundle-Thiele and Bennett 2001).

The rest of the constructs in model A remain the same as the main hypothesised model in the study.
8.4.2.2 Alternative Model B

Model B (see Figure 8.15 below) examines the low level antecedents of trustworthiness. Model B is based on the argument that customers always seek the cognitive level of the provided service (McAllister 1995); if the emotional level exists it is an extra added value to the service, but it is not essential.

Figure 8.15: Alternative Model B

The two types of loyalty are retained as the model outcome, with a prediction that behavioural loyalty can lead to the higher level attitudinal loyalty.
8.4.2.3 Alternative Model C

The third alternative model C (see Figure 8.16 below) examines the opposite situation, looking only at the high level antecedents of trustworthiness. This model is based on the argument that customers always expect a cognitive level of trustworthiness, but if they want to develop the relationship with the service provider, several emotional factors has to exist in order to develop trustworthiness.

Figure 8.16: Alternative Model C

Once more, the two types of loyalty are retained as the model outcome, with a prediction that behavioural loyalty can lead to the higher level attitudinal loyalty.
8.4.2.4 Alternative Model D

The final alternative model, model D (see Figure 8.17 below), examines trustworthiness in terms of arguments presented by Mayer et al. (1995)\(^\text{12}\). This model assumes that trustworthiness can be conceptualised by the three main antecedents proposed in Mayer et al.’s (1995) classic work, and used extensively in various other studies on trust (although not trustworthiness). For instance, see Caldwell and Clapham (2003).

![Figure 8.17: Alternative Model D](image)

The model outcome consists of two types of customer loyalty, with no predicted relationship between the two types of customer loyalty.

\(^{12}\) See Figure 4.3.
8.4.3 Evaluation of Fit for the Alternative Models

All the four models were analysed using AMOS software (Byrne 2001). The Chi-squares of the four models compared with the main hypothesised model are shown in Table 8.19, and the Chi-square differences between the models are presented in Table 8.20. It is evident that the main proposed model has a much better fit with the data than any of the alternative models. The main model is the only model with fit indices within an acceptable range.

Therefore, it can be concluded that the main proposed model tested earlier in this chapter is statistically the most acceptable and appropriate model. Moreover, discussion and conclusions will be based upon this model. Criterion validity\(^\text{13}\) was also achieved when the instrument was compared with other models. In addition,

| Table 8.19: Goodness of Fit Indices for the Alternative Models |
|---------------------------------|-----|-----|-----|-----|-----|
| Model                          | $\chi^2$ | DF | RMSEA | CFI | PGFI | GFI |
| Main (9 constructs)            | 635.830  | 570 | .015  | .987 | .803 | .938 |
| A (8 constructs)               | 1426.329 | 572 | .053  | .833 | .737 | .858 |
| B (5 constructs)               | 1254.07  | 511 | .18   | .81  | .71  | .821 |
| C (7 constructs)               | 394.175  | 337 | .008  | .916 | .788 | .909 |
| D (6 constructs)               | 1090.797 | 346 | .064  | .814 | .731 | .857 |

| Table 8.20: Chi-square Comparison between the Models |
|-----------------------------------------------|-----|-----|
| Model comparison                             | $\chi^2$ | DF |
| Main – A                                      | 790.449 | 2  |
| Main – B                                      | 618.24  | 59 |
| Main – C                                      | 241.65  | 233|
| Main – D                                      | 545.97  | 224|

\(^{13}\) See the discussion in Chapter Five – Section 5.9.1.2.
8.5 Hypotheses Testing\textsuperscript{14}

In this study a total of nine hypotheses were generated and tested through SEM (see Figure 8.5 above). The results indicated that:

$H_1$: Consistency is positively correlated with trustworthiness.

$H_2$: Competence is positively related with trustworthiness.

$H_3$: Integrity is positively related with trustworthiness.

$H_4$: Benevolence is positively correlated with trustworthiness.

$H_5$: Value Alignment is positively correlated with trustworthiness.

$H_6$: Communication is positively correlated with trustworthiness.

$H_7$: Trustworthiness is positively related to attitudinal loyalty.

$H_8$: Trustworthiness is positively related to behavioural loyalty.

$H_9$: Behavioural loyalty is positively related to attitudinal loyalty (a prediction).

A detailed discussion of the hypotheses and their impact on acceptance of the general model follows.

$H_1$: Consistency is positively correlated with trustworthiness.

The results of the SEM analysis indicated that the path loading between consistency and trustworthiness was positive and significant ($p < .05$). This result supported the view that if service organisations wish to create or enhance trustworthiness in their services, their customers require consistency in the services provided within the organisation. This is especially true when the service provider matches the customers’ expectations, which is perceived to be the most important factor in forming consistency. This is not entirely surprising bearing in mind the

\textsuperscript{14} It’s important to note that this study tested the model in the hotel sector because it happened to be an interesting venue. Nevertheless, the results of the study will be generalised beyond the hotel context, even though the hypotheses will be discussed with regard to hotels.
nature of the services in the hotel sector, where customers often travel great distances in order to use the service. Moreover, stratification of customer needs is also seen as a crucial factor; this can be achieved by fast service, efficient request handling and quick check-in and check-out. The service provider’s reliability and stability in its services is also a factor in enhancing consistency.

H2: Competence is positively related with trustworthiness.

This hypothesis examined the relationship between competence and trustworthiness. The results of SEM demonstrated a strong positive relationship between the two constructs.

Customers viewed competence from the point of view that service providers should possess the right skills in order to be able to deliver the right service and handle all requests efficiently. This might be important for this particular sample because the data were collected in five star hotels, where customers’ expectation might be higher than lesser star-ranked hotels.

H3: Integrity is positively related with trustworthiness.

The third hypothesis concerned the relationship between integrity and trustworthiness, and the results from the analysis proved a positive correlation with p (< .05. Customers would like the service provider to show fairness in transactions (no extra charges or added taxes, sincerity and fair charges). Maintaining the promises that have been made to customers is very important due to the travel involved and the risk taken by customers in using the service provider. Moreover, showing respect for the customers’ point of view is regarded as a significant element in creating an impression of integrity.

H4: Benevolence is positively correlated with trustworthiness.

In this hypothesis, it was postulated that benevolence is positively related with trustworthiness. The results from the SEM analysis supported this hypothesis, revealing a positive relationship between the constructs (p < .05). According to the findings, it can be argued that benevolence can be enhanced when the service provider is open to customers’ needs, especially when they require additional services (for
example, medical care or special dietary requirements). At the same time the providers should deliver the service in a caring manner with the customers’ best interest in mind (not always calculated as being dependent on profit and cost).

\( H_5: \) Value Alignment is positively correlated with trustworthiness.

The results from SEM showed that this hypothesis is accepted, with a positive relationship between the constructs. Customers would prefer the service provider to share the same values as they do, and be ethical when dealing with them. Furthermore, customers favour the service provider where employees value their customers and are interested in more than just generating extra profits.

\( H_6: \) Communication is positively correlated with trustworthiness.

In hypothesis six, communication was linked positively with trustworthiness. As with the rest of the hypotheses, the results from the analysis confirmed this positive relationship between the constructs with significant \( p < .05 \). Customers prefer the service provider that communicates clearly, especially in the context of a wide variety of customers who from various backgrounds and speak different languages.

Informing customers immediately of any problems is seen as an important factor, which also supports the general security level for customers (in hotels where the region is politically unstable). From the customers’ perspectives, immediate response to customers when contacted and always keeping two-ways communication channels open are important factors for determining their trustworthiness.

\( H_7: \) Trustworthiness is positively related to attitudinal loyalty.

The results from SEM analysis confirmed that the path from trustworthiness to attitudinal loyalty was positive and significant \( p < .05 \). The results suggest that customers will pay a little extra in order to keep dealing with the service provider, since they agreed that ‘I am likely to pay a little bit more for using the services’, ‘I will continue to visit this service provider even if the service charges are increased moderately’ and ‘I have strong loyalty to this service provider’. Nevertheless, the service provider should not utilise this fact to exploit their customers (keeping the
importance of value alignment in mind). Based on the path diagrams, we can conclude that attitudinal loyalty can be seen as a model outcome.

\( H_8: \) Trustworthiness is positively related to behavioural loyalty.

Hypothesis eight examined the relationship between trustworthiness and behavioural loyalty. The results from the SEM analysis confirmed the hypothesis with significant \( p (< .05) \). Customers expressed a behavioural level of loyalty (Rundle-Thiele and Bennett 2001), according to which they would recommend the service provider to other people, try new services and say positive things about the service provider. These can all be seen as a signs of behavioural loyalty (Rundle-Thiele and Bennett 2001).

\( H_9: \) Behavioural loyalty is positively related to attitudinal loyalty (a prediction).

The ninth hypothesis predicted that behavioural loyalty will ultimately lead to attitudinal loyalty. However, the SEM results did not uphold this hypothesis; in fact, the results showed a negative correlation between the constructs with a significant \( p (< .05) \). The explanation can be drawn from the fact that different customer classifications have different expectations from the service provider; some customers are using the service provider simply because it fits with their budget, while other are interacting with the service provider because of their attitudinal loyalty. The selected sample contained a significant percentage (27%) of customers who had used the service provider less than once a year (see Chapter Seven); this may suggest that this percentage of customers might not have formed a higher level of loyalty, and their results affected the total sample and the path coefficient between the two constructs.

Overall, however, trustworthiness as the model focal point has been approved since it has been supported by the six proposed antecedent constructs. The model also proved that the outcome of trustworthiness can be demonstrated by the measurement of attitudinal and behavioural loyalty.
Summary

The SEM for this study was conducted via a two-step approach, with analysis of the measurement model followed by the structural model. Confirmatory Factor Analysis (CFA) was carried out to endorse the model’s fit; this was reported by several goodness-of-fit-indices. The results of the CFA indicated that the measurement model is valid after the definition of the underlying relationships between the constructs and the observed items.

The structural model was implemented after validation in the first part of the SEM process, and in turn it achieved an acceptable level. The path analysis clearly defined the relationships among the constructs, and reported the path coefficients that were used to test the study hypotheses.

The research proposed nine hypotheses; each hypothesis is linked to a construct in the conceptualised model. The results from the SEM analysis approved all the hypotheses excluding one predicted relationship.

The next chapter will discuss the general conclusions and provide a thorough discussion on the key findings, as well as providing recommendations for academics and practitioners.
CHAPTER NINE: CONCLUSIONS AND MANAGERIAL IMPLICATIONS

9.1 Introduction

Few would deny that trustworthiness in relationships plays a vital role in business, even though the definition of the term is, at times, masked in complexity and contradictions within the different schools of thought in marketing research. Most people have an instinctive awareness that trustworthiness is necessary for successful relationships. The various strands of literature all suggest that trustworthiness is a globally important concept across several disciplines, ranging from economic theory to different psychological schools of thought. As discussed in previous chapters, perceived trustworthiness has been and still is an important concept in marketing because of the many benefits it brings to service organisations, such as lowering operational costs and enhancing long-term relationships with customers.

As was noted in Chapter One (section 1.3), this thesis aims to explore trustworthiness and its determinants in service organisations. Hotels were chosen as the arena to explore these constructs, and Jordan was selected as a suitable country to test the model presented in the thesis. The primary objectives of the thesis, set out in Chapter One, are:

1. To develop a theoretically grounded framework and develop a scale to measure the determinants of trustworthiness and its outcomes.
2. To investigate the factors that influences the development of trustworthiness between a service provider and its customers.
3. To empirically examine the proposed model in the Jordanian hotel sector.

In order to achieve the set aim and objectives, this thesis asserts that trustworthy behaviour can be demonstrated by several characteristics (i.e. integrity, competence, value alignment, communication, benevolence and consistency). Effort
invested in such behaviour is well rewarded; an outcome which is illustrated in the behaviour and/or the attitudinal loyalty shown by the organisation’s customers.

The research was conducted to theoretically develop and empirically test a structural equation model to explore trustworthiness and its determinants within service organisations. The model was tested in the Jordanian hotel sector. The proposed hypotheses that attempted to identify the structural relationships between the nine constructs in the model were examined via a series of analyses using SPSS and AMOS statistical analysis programs.

The research aim and objectives were met by proposing and validating, theoretically and empirically, an operational model. All the main hypothesised relationships in the model were found positive and significant, in which they support the proposed model\(^1\). However, there are a number of drawbacks in the research, such as, focusing only on one industry rather than examining the model in different industries; these limitations are discussed in section 9.7.

The principle foundation for this study was based on the fact that trustworthiness is an antecedent to trust, and the concept should, therefore, be applied within service organisations rather than merely focusing on general organisational trust. Additionally, trustworthiness is seen, in this thesis, as a characteristic which contributes to the strength of interpersonal relationships, intra-organisational relationships and inter-organisational relationships. The qualities of trustworthiness can operate at different levels within an organisation. Trustworthiness is considered to be the basis of a stable collective existence, i.e. it helps to avoid uncertainty in relationships. Furthermore, trustworthiness can be viewed as a method for promoting cooperation and reducing risk in a variety of relationship settings, for example, within organisation departments and between employees and customers.

The aim of this final chapter is to draw conclusions, discuss the relevance the research findings and to point to the key managerial and theoretical implications of the research findings. There will also be a discussion of the limitations of the thesis, and to make some suggestions for future research. The chapter starts by providing a summary of the different phases and of the results achieved. The main contribution of

\(^1\) Full discussion in Section 9.3.
this research can be found in the hypothesised framework to measure trustworthiness and apply it in service organisations.

In brief, it is evident from measuring trustworthiness that two of the perceived characteristics of organisations, namely competence and value alignment, had the greatest impact on trustworthiness. Therefore, both these constructs should be seen as the key factors influencing trustworthiness. Some limitations of this research come from the broad coverage of the model and its restriction to service organisations in only one country. Future research should examine the proposed model of trustworthiness across several different countries in order to investigate any cross-cultural differences regarding perceived trustworthiness in service organisations.

9.2 General Findings and Discussion

Beginning with a discussion of the research question(s), this thesis then provided an overview of the theoretical background and empirical studies that already exist in the literature. The objective of the study was to develop a theoretical model about trustworthiness, and to empirically test the factors (or constructs) that are likely to affect the formation of trustworthiness between customers and a service provider. The corollary constructs (the outcomes of the model) include behavioural and attitudinal loyalty.

Closer examination of the relationships between the remaining observed indicators for the construct showed that the impact of trustworthiness was measured by four indicators that are related to the service provider’s perceived ability to be trustworthy. For example, the provider should maintain a high level of professionalism, respond caringly when contacted by customers, and be honest with its customers. In particular, being honest with the customer is seen as having the highest impact on trustworthiness.

In terms of the antecedents of trustworthiness, six constructs were proposed. Those constructs were divided into two groups, high level and low level antecedents, adapted from McAllister’s (1995) work on calculative and affective trust which refers to emotional and calculated benefits. In this model the low level group was related to calculated trust, while the high level constructs were related to affective trust.
The low level antecedents consisted of two constructs, consistency and competence, and each of these was measured by four items. Consistency items involved: showing fairness in transactions; consistency in service delivery; keeping promises; and showing a high level of respect. Matching expectations and satisfying needs were the two items which had the greatest impact on consistency. This could be seen to be linked with the risk associated with a service transaction – in other words, the customer wishes to receive something of an equivalent value to the amount he/she has paid.

Competence was also measured with four items. These included: acquiring the right skills to perform the service; being efficient; handling most of the customers’ requests; and being reliable. Similar to consistency, the lowest type of expectations was the major influence on competence. Possession of adequate skills and being able to handle customer requests were the most two important factors affecting competence; this it is suggested that this was because customers want their basic needs to be fulfilled first, before they are exceeded by the provision of extra services.

The high level antecedents were integrity, benevolence, communication and value alignment; each of these was measured with four items. The result implied that keeping promises is the most important element in building integrity for the service provider. Customers believe that the service provider should not always aim to make the maximum profit from a transaction; rather, the provider should also prioritise other matters even though this may affect their profit (for example, arranging celebrations for customers on special occasions).

In the case of communications, customers believed that the service provider should always keep them informed of any problems with the service, as they prefer being informed over not knowing what is happening with the service they purchased, i.e. getting involved with the service provider, and hence, the service process. On some occasions customers didn’t feel that the service provider was taking their interests into account during the service encounter; therefore, customers viewed this item as the most important when discussing benevolence.
Although most of these items could be seen as stating the obvious, the majority of the interviewed customers clearly expressed that on many occasions their service provider(s) had neglected these factors and did not consider these items of as important when providing them with the service. This had led to a perception of the service provider as untrustworthy.

Having confirmed the proposed relationships with the trustworthiness construct, the overall measurement model was tested to see if the theoretical measurement model fit the data. The CFA process used two split samples – a calibration sample \((n = 265)\) and a validation sample \((n = 264)\). After analysis of the calibration sample, the overall measurement model was not re-specified to describe a better-fitting model for the data because the model achieved an acceptable fit, therefore, there was no need to re-specify it. The theoretical measurement model was then validated using the validation sample.

Ideally, the results from the validation sample should replicate the results of the calibration sample. The theoretical model used for the calibration sample was the same as that used for the validation sample; the final model was re-tested to see if it described the validation data without any major re-specifications. During this test-retest procedure, the indicators with comparatively high measurement errors and low correlations in relation to the theoretical constructs were dropped. At the end, thirty-six indicators remained to measure the nine constructs of the conceptual model. These analyses were performed not only to confirm the uni-dimensionality of the constructs, but also to clarify the observed indicators for the associated construct.
9.3 Research Hypotheses and Recommendations

As noted previously, a structural equation model for trustworthiness was applied to test the research hypotheses and attempt to identify the structural relationships between the constructs. Eight of the nine hypotheses proposed in this study were supported, each generating a significant level in their respective standardised coefficient scores. Detailed discussions of the research findings associated with the individual research hypotheses are as follows. The hypotheses are ranked according to their impact on trustworthiness, hence, their importance to the research, using the path loading scores\(^2\) as a distinction factor.

**Antecedents of Trustworthiness**

1- Value alignment

The fifth proposed hypothesis (H5) states that *value alignment is positively correlated with trustworthiness*. This hypothesis was supported by the structural equation analysis. Furthermore, as the analysis indicated value alignment and competence had the highest impact on trustworthiness, and, hence, is seen as one of the most significant constructs in the model. However, because value alignment is one of the higher order antecedents of trustworthiness, it is harder to create and control this construct because the items related to value alignment require the service provider to align their attitudes and behaviours (including any ethical issues) with their customers. These items address such issues as the service provider sharing values with their customers (for example, having a strong position towards environmental issues and fair trade). Moreover, the service provider is expected to be ethical when dealing with his/her customers, and is interested in more than just making a profit – for instance, by supporting a local community and/or creating a community of customers.

Two additional issues need to be raised when discussing value alignment. Firstly, it is difficult to project these values to all customers through the normal communication channels that service providers often employ (for example, online newsletters and websites). Secondly, there are issues around the alignment of

\(^2\) See Chapter Eight – Section 8.4.1.
globalised and cross-cultural values to please all customers. These issues can be solved by regular staff training and the creation of personalised relationships with customers; here the concept of a part-time marketer is considered a key factor, by which all the service provider’s employees (both front and back office) should be trained to clearly deliver these values to customers, both on the organisation’s premises and outside the organisation. The significance of value alignment is demonstrated in the research findings of a number of academics, such as, Morgan and Hunt (1994); Mayer and Davis (1999) and Siegtist et al. (2002).

2- **Competence**

The second hypothesis \((H_2)\) states that *competence is positively related with trustworthiness*. The results from the structural equation analysis supported this hypothesis, and showed that this construct (along with value alignment) has the highest impact on trustworthiness. Therefore, in order for service providers to be perceived as trustworthy, they should have adequate skills in order to be able to perform the service. Customers expect these skills to signify a high level of efficiency, because even though the service provider might manage to excel in the provided service, a lack of knowledge about providing the right service will be negatively perceived by customers. In other words, the service provider should provide the right service first and on every occasion and then seek to distinguish him/herself in any additional or extra services.

Staff training is also an important aspect of competence, so that the organisation’s staff can be relied upon to handle most of customers’ requests. In cases where customers might not feel comfortable requesting extra services (i.e. services outside the provided one), the service provider should always seek to meet these requests. These findings are supported in the literature (see for instance, Jarvenpaa *et al.* 2000; Bhattacherjee 2002; Sirdeshmukh *et al.* 2002).
3- Communication

The sixth hypothesis in the proposed model ($H_6$) states that communication is positively correlated with trustworthiness. The results showed that customers prefer the service provider to maintain open communication channels, through which they expect to receive continuous and clear messages concerning the service(s) they have purchased. In this matter, there is a strong emphasis on ‘clear’ communication since customers may not speak the same language as the service provider; hence, the service provider should seek alternative ways to ensure clarity of communication – for example, providing messages in multiple languages. Another important element is responding promptly when contacted by customers; if the service provider doesn’t respond immediately, customers are less likely to perceive the organisation as trustworthy. This is due to the customer not feeling that they are the focus of the organisation’s attention. Several academics also agreed on the importance of communication in business to consumer markets, see for instance, Dwyer et al. (1987); Anderson and Narus (1990); Morgan and Hunt (1994) and Grönroos (2000).

4- Integrity

The third put forward hypothesis ($H_3$) states that integrity is positively related with trustworthiness. The findings supported this hypothesis; although the items used to measure this concept were seen by one of the judges used in this study as ‘stating the obvious’, customers clearly indicated that service provider(s) often do not perform these basic service elements. Therefore, in order to achieve integrity in service organisations, the service provider should keep his/her promises, show fairness when dealing with customers and show no favouritism (or else customers will not perceive the service provider as trustworthy). Even though service providers may employ various loyalty programs and/or premier services, these should not interfere with or influence regular customers (non-loyalty program users). This hypothesis is rooted in the literature (see, for example, Mayer et al. 1995; Cummings and Bromiley 1996; De Wulf et al. 2001).
5- Benevolence

The fourth hypothesis in the proposed model ($H_4$) states that *benevolence is positively correlated with trustworthiness*. This hypothesis indicates that benevolence is significantly and positively correlated with trustworthiness. Benevolence in service organisations can be expressed via seemingly insignificant characteristics in the service provider; these characteristics should be initiated by the service provider, and range from acting in a caring manner towards customers to having the customers’ best interest in mind and being receptive to customers’ needs in all situations. This attitude is exemplified in the basic service principle of ‘going the extra mile’, in which service providers establish strong ties with customers by creating personalised relationships with their customers and going beyond the image that the company only seeks profit from their customers. These findings were supported in the existing literature (for example, Mayer et al. 1995; Bhattacherjee 2002; Jarvenpaa et al. 2000).

6- Consistency

The first put forward research hypothesis ($H_1$) states that *consistency is positively correlated with trustworthiness*. The findings of the structural equation analysis supported this hypothesis, finding out that there is indeed a positive relationship between consistency and trustworthiness. Consequently, the results of the analysis concluded that consistency in service organisations should be perceived as an indication of stability in the overall provided service, i.e. the provided service should maintain certain standards all the time and these standards should not be influenced or negatively change with time. In addition, the service providers should always be in a state that customers perceive as being reliable either by being professional or by showing their competency skills. Moreover, the service provider should first strive to satisfy customers’ needs by matching their expectations and only then attempt to exceed customers’ expectations by providing additional value to the service, such as enhanced service quality and improved customer service. These findings are aligned with the previous literature (for instance, Hess 1995; Garbarino and Johnson 1999).
The Outcome of Trustworthiness

7- Attitudinal and Behavioural Loyalty

In the proposed model, trustworthiness was linked with attitudinal and behavioural loyalty via the seventh hypothesis \((H_7)\) and the eighth hypothesis \((H_8)\). These hypotheses state respectively:

\[
H_7: \text{trustworthiness is positively related to attitudinal loyalty.}
\]

\[
H_8: \text{trustworthiness is positively related to behavioural loyalty.}
\]

The model also suggests a prediction between behavioural loyalty and attitudinal loyalty, by which *behavioural loyalty is positively correlated with and leads to attitudinal loyalty* (hypothesis \(H_9\)).

Customers believe that the service provider should have certain quality in order to be perceived as trustworthy in addition to the mentioned antecedent above. For example, the service provider should respond caringly when approached by customers especially when dealing with problems or matters of urgency. Moreover, the service provider should always be honest with customer and be professional and dedicated to them.

Creating loyal customers is always a positive sign for organisations (see, Reichheld and Sasser 1990). By being behaviourally loyal to the organisation, customers are more likely to try new services and recommend the organisation to others (i.e. an effective world of mouth). This level of loyalty should allow service providers to further enhance their marketing activities through having customers spreading positive word of mouth about the organisation and the experience they had. Attitudinal loyalty is seen, in this study, as the highest form of loyalty in which customers have strong sense of belonging to the organisation, wherein they are less likely to switch to a different service provider even if the prices increase. This form of loyalty is certainly the ultimate aim for any organisation as it will create a life time customer.
The research findings supported $H_7$ and $H_8$, this is also shows in the work of Dick and Basu (1994) and Rundle-Thiele and Bennett (2001). However, hypothesis $H_9$ was rejected because the causal relationship was not significant. Despite this finding, this research will not disregard hypothesis $H_9$ from the model since it may be confirmed in a different setting or when it is applied and tested in a different industry. Therefore, it is suggested that this hypothesis should receive more attention in future studies to test its applicability.

Overall, the findings from the structural equation analysis supported all the research hypotheses with the exception of $H_9$. The analysis also clearly showed the items that had the highest impact on their respective construct(s), and, hence, it facilitated the model’s employment within a particular service organisation from a managerial perspective. This possibility will be examined in more detail in the following section.
9.4 Contribution of the Thesis

As noted earlier, the main contribution of this research is the establishment of a conceptual model to measure trustworthiness, employing distinct determinants and allowing the ability to predict the relationship outcome. By developing such a model, it becomes possible to understand and apply the concept of trustworthiness in any service organisation. On the theoretical side, trustworthiness was illustrated in detail with respect to its antecedents; this was achieved by examining the various schools of thought concerning trustworthiness in order to develop a marketing-specific model.

The empirical findings from the proposed model shows that the six proposed determinants of trustworthiness do, in fact, have a strong positive impact on the construct. In addition, trustworthiness has a positive impact on both behavioural and attitudinal loyalty. Hence, it can be argued that the model is appropriate for modelling trustworthiness within different settings; in other words, customer loyalty can be achieved by applying the six determinants of trustworthiness.

In brief, the compelling contributions of the study can be summarised by the following four key points:

- The research expands our knowledge of the concept of trustworthiness from a marketing perspective. A clear distinction is drawn between trust and trustworthiness. Moreover, trustworthiness is conceptualised along with a rationale for using the concept of trustworthiness rather than trust.
- The study identifies the determinants of trustworthiness and examines two types of customer loyalty. These are conceptualised as the outcome of trustworthiness, therefore, a theoretical model is formed.
- The research goes on to apply a new scale development procedure to assess the theoretical model; this was done by mainly using the C-OAR-SE scale development procedure.
- Finally, the study tests the model empirically within a new service venue (the hotel sector) and an unstudied region (the Middle East – Jordan).

The following sections will expand on these contributions and examine to what extent they represent the achievement of the aims and objectives listed above.
9.4.1 Theoretical and Methodological Contributions

With respect to building theory, this study represents at least three distinct contributions to the body of knowledge.

Firstly, because previous theories of relationship marketing, particularly concerning trust and trustworthiness, are distributed among different domains (for example, psychology and sociology), this study increases our understanding of the concept of trustworthiness within the domain of marketing by clearly separating trust from trustworthiness. The research highlights the fact that trustworthiness is an antecedent of trust, in contrast to the various studies which suggest that trust alone is the key factor in successful relationships.

Although the focus of this study is on the evaluation of trustworthiness, the concept of customer loyalty was also included in order to establish a practical outcome of trustworthiness. This focus has contributed to the body of knowledge by increasing our understanding of the method by which two separate types of customer loyalty (attitudinal and behavioural) are formed, and thus, by clarifying the ways that trustworthiness is associated with customer loyalty in a single setting. Other marketing literature, to date, has yet to conceptualise this relationship in a single model.

Secondly, the evaluation of trustworthiness within services marketing has been a neglected area in the existing marketing literature; it is argued that this neglect can be attributed to the complex nature of trustworthiness. This study has increased our knowledge about the formation of trustworthiness within service organisations by creating, clarifying and applying the model within this sector. This provided various insights on the hotel sector and how organisations can be improved by creating better customer relationships through trustworthy behaviour initiated by the service provider, rather than through a traditional reliance on customers to initiate such behaviour.

Thirdly, this study can be seen as the first attempt to measure and empirically test trustworthiness, using its antecedents and an outcome within the same model. Further discussion on the contribution follows.
Chapter Nine – Conclusions and Managerial Implications

The three areas of contribution mentioned above, can be seen as the largest areas in which this study has succeeded in making a contribution. However, there are also several minor contributions arising from the study. For example, there is a contribution to the theoretical discussion concerning the concepts of service quality and service encounters; this study suggests that these concepts are not easily separable, but work interchangeably to achieve better customer service (the scope of this thesis did not cover these concepts due to the focus on the main construct of the study). Relationship quality evaluation is present both in the content of the evaluation (i.e. the economic factor) and in the adjustment processes (i.e. fairness).

The methodological contribution of the study relates to the construction of the conceptual framework which can be used in both quantitative and qualitative studies. In this study the conceptual model was built by a three step process, from the initial preliminary framework, through a modified system to the final refined model. It is argued that the refined framework represents the first attempt to conceptualise the key constructs of the study – the determinants of trustworthiness and the different levels of customer loyalty – in a manner which could in the future be applied to different venues/sectors as well as to the hotel sector. The theoretical basis on which the refined framework was partly built, together with the empirical evidence of its validation, form reasonable justifications for its continued use in future studies.

Furthermore, this thesis can be seen as offering a methodological contribution by developing and testing a new scale to empirically measure the theoretical model. The examination of previous scales to measure the construct of trustworthiness as well as customer loyalty led to the generation of new items that are more suitable for use in service organisations. This provides future studies with guidance on how to conceptualise trustworthiness within the domain of services marketing.

Moreover, the adoption of a new scale development procedure, the C-OAR-SE procedure, is seen as a methodological contribution since it constitutes an empirical test of this new approach, providing insights on its practicality and validity. From the perspective of this thesis, applying the C-OAR-SE scale development procedure is treated as an adequate method for developing the measurement scale for the study because it grants the research the ability of relying on the well established theory (i.e. content validity) over relying on data scores as had been advocated by Churchill.
(1979). Still, several points have been taken into consideration when dealing with the new procedure. One such example is Diamantopoulos’ (2005) argument regarding scale adaptation which was used here in scale formation (for example, identifying the judges and providing empirical evidence as well as content validity).
9.5 Managerial Implications of the Research Findings

In an increasingly competitive marketplace, an understanding of how trustworthiness can be established and sustained may be a fundamental factor in achieving a competitive edge for successful service organisations. Since the service sector involves multi-faceted components, there is a need for a systematic analysis and framework for the creation of trustworthiness. Such an analytical model may also contribute to creating and integrating value added relationships in order to achieve greater customer loyalty.

This study focused on an investigation of the structural relationships between service organisation customers’ preferences about trustworthiness, what creates it (i.e. its antecedents), and the possible outcomes of establishing a perception of trustworthiness within service organisations. The most critical research finding from this study was the strong relationship (represented by the highest path coefficient score) between trustworthiness and value alignment and competence. Accordingly, the following discussion of the managerial implications of this study is focused on this finding, rather than on the influence of consistency and integrity (because of the low impact of their scores on trustworthiness).

Importantly, these research findings will help service organisations and service managers to understand how customers prefer to develop relationships with their service provider, and under what circumstances they perceive the service provider to be trustworthy. Therefore, the findings will help organisations and managers to plan and implement successful and competitive strategies. These results will help service organisations and marketers to collect information and plan appropriate strategies based on the type of customer loyalty they prefer to develop.

For service managers, it would be advisable to address the issue of trustworthiness as a starting point to assist in the process of achieving a high quality of service. In contrast with the majority of the existing literature, this thesis suggests that managers should focus on trustworthiness rather than trust, because trust is initiated from the customer’s side, while trustworthiness is established from the organisation’s side. Therefore, trustworthiness minimises the risk factor associated with relying on customers to make the decision to trust the organisation. Instead, an
attempt to establish trustworthiness will create a trustworthy image for the organisation, initially attracting customers to transact with the organisation, i.e. to purchase their service, and subsequently helping to retain customers if the service provider can demonstrate different aspects of trustworthiness (for example, competence and benevolence) to customers during their service experience.

There should also be a distinction between high and low level antecedents of trustworthiness, as suggested earlier in this chapter. Low level antecedents refer to customers’ rational decision-making, while high level determinants are associated with the emotional aspects of the relationship. Therefore, it could be suggested that service providers should establish a strong customer relations foundation based on the low level determinants (namely competence and consistency). This implies that managers should educate their staff and provide full training programs regarding the consistent delivery of good customer service over a period of time.

After establishing the cognitive or rational foundation for trustworthiness, managers should start to focus on the higher level determinants, namely communication, integrity, value alignment and benevolence. These constructs should be addressed and established depending on the service provider’s individual prioritisation; for instance, one manager might argue that communication is more important than integrity for that particular organisation at a given moment. Nevertheless, we can argue that these constructs should be treated on their path scores (i.e. their impact on trustworthiness), which means that managers should consider value alignment to be the most important factor for achieving trustworthiness, followed by communication, then integrity and finally benevolence.

It could be concluded from the findings of this study that strategies for building trustworthiness, supported by customer loyalty as a desirable outcome, can be seen as a method for creating a competitive advantage for service organisations. Such competitive strategies could be implemented based on the service provider’s resources and overall business objectives. Organisations could either apply some of the antecedents or all of them; for example, they could schedule regular staff training on the specific factors that were thought to be important by their customers.
9.6 Directions for Future Research

Future research on trustworthiness should take place in different service organisations to further confirm the findings of this research. Qualitative and quantitative examination of the concept should both be undertaken, focusing in particular on cross-industry analysis and cross-cultural differences between service organisations.

Several questions emerge from the discussion of trustworthiness presented in this thesis. For example, what are the specific factors that result in a loss of trust in service organisations? Future research could identify and rank these factors according to the impact they have on the environment of the service organisation, and how this might impact on customer loyalty. A cross-cultural examination of the model is important, in order to investigate the generalisation of the model across cultures; because this model has been developed and tested in the Middle East, it could be argued that a comparison of these results with a similar investigation in Europe or Africa would be an important addition to the body of knowledge surrounding trustworthiness. Furthermore, a cross-industry examination of the model is vital to if the model is to be applicable across a range of service organisations, such as banks, restaurants or tour operators.

Another question for further investigation could be the role of trustworthiness in daily organisational life and how this is been measured. For example, in what ways do individuals seek to confirm theories they hold about the trustworthiness of other people prior to entering into exchanges with them? Furthermore, do these preliminary tests of trustworthiness have the power to create suspicion in organisations characterised by asymmetrical power relationships? If trust is seen to have a moral dimension, what role could ethics play in the creation, maintenance and termination of relationships from the management side? Finally, to what extent do brand names impact the organisation’s perceived level of trustworthiness?
9.7 Study Limitations

As should be expected in all research, there were limitations to this study that should be addressed to provide a basis for more sound research in the future. As has already been discussed in the methodology chapter (see Chapter Five, section 5.12) the major limitations affecting this study were: 1) research scope and boundaries of the research; 2) the observed indicators and constructs’ 3) a lack of context specificity; and 4) an absence of longitudinal characteristics.

This study investigated the structural relationships between trustworthiness and its outcome and determinants. Data collection only took place in Amman, the capital city of Jordan. This meant that the survey was geographically limited, and, therefore, may have produced culturally specific results and conclusions in terms of the magnitude and direction of the relationships among the constructs in the model. Future research should address any differences between the Middle East (where this study took place) and other continents.

Trustworthiness and customer loyalty in other countries may have different drivers, and customers may reveal different perceptions, attitudes, and behaviours concerning how they develop a perception of trustworthiness in their service provider. Other cultures and geographical areas should be explored to see if similar findings and results can be obtained. Also, future research could collect data from other service industries (for example, banks) so that further comparison studies may be conducted.

In the current service sector, any service organisation may need to pay more attention to advanced technologies and techniques so that high quality products and services are delivered effectively and efficiently. In particular, the concept of self service technologies is a rapidly growing area. Therefore, future studies should address the antecedents of trustworthiness in relation to information technology and self service technologies, and examine their impact on the different levels of customer loyalty.

Another critical limitation of this study is related to the respondents. Generally, in hotels, customers may have different perceptions of trust in the organisation before and after they experienced the service. Therefore, it would be
extremely interesting to examine the development of their perceptions over time, investigating their expression of trust before they experience the service offered, and comparing this with their perceptions during and after the service encounter.

Accordingly, the conclusions that can be drawn from this study are somewhat limited in terms of their longitudinal characteristics. Such data would it make possible to analyse any potential time-lag for the hypothesised relationships and the structural model. The data in the current study were collected over a three month period. A longitudinal study might reflect ongoing transformations that could influence the relationships between the constructs for future research, as well as further refining and validating the model. However, cross-sectional studies are often based on capturing the researched problem at a given moment, which only validates the research during a certain period of time. Unlike cross-sectional studies, longitudinal studies track the same research units (such as sales or consumption patterns) over a longer period of time, and, therefore, longitudinal studies are useful for studying individual levels of change over time, in contrast to cross-sectional datasets, which provide a snapshot of a population at a single point in time (or at frequent intervals). Time, however, is itself one of the most significant explanations of change. Therefore, longitudinal studies can give answers to questions concerning change that cross-sectional studies cannot provide.

This study did not include any commitment and satisfaction variables to see how they relate to trustworthiness, its determinants and customer loyalty. Therefore, future research should address this limitation to further enable the creation of trustworthiness within the service sector. All the limitations mentioned above should be considered as essential and critical suggestions for future research. Future studies should take these limitations into account in order to produce more complete research results.

In light of the fact that there is a limited number of empirical studies of trustworthiness within the marketing domain, this study developed and empirically tested a structural equation model of trustworthiness, taking into account its determinants and outcome from the perspective of customers in the service sector. Accordingly, as discussed in the research findings, it is hoped that this study has made a valuable contribution to the understanding of the establishment of trustworthiness,
and has suggested some strategies for enhancing customer loyalty within service organisations.

From the results of the comprehensive data analyses, this study concludes that when a service organisation is interested in constructing trustworthiness by applying the antecedents proposed in the model, it is vital to consider not only the outcome (customer loyalty), but also the factors that influencing the antecedents. Nevertheless, a more thorough understanding of trustworthiness and its components in the marketing domain is necessary. Customers should always be seen as key players in influencing the types of service and relationship they will enter into; moreover, it is necessary to understand their preferences as well as their expectations for the types of relationship they engage in, so that more effective relationship marketing can be achieved.

Finally concluding, even though the results and the findings of this thesis are somewhat confirmatory in nature, it is hoped that the information produced and the implications of the study may be of help to service organisations, hotel managers, and marketers, enabling them to create more competitive customer loyalty relationships through the effective establishment and maintenance of their perceived trustworthiness.
REFERENCES


References


-278-


Culliton, W., (1948), *The Management of Marketing Costs*, Graduate School of Business Administration, Boston, Mass: Harvard University.


References


References


Appendix 1: The Study Questionnaire

Customer Evaluation of Hotel services Providers

Dear respondent:

The following questions relate with your personal evaluation of the current hotel you are dealing with. We would like some basic information about the relationship with the hotel we would like you to give us an indication of your perceptions of that hotel. Please can you spare approximately 5 minutes to complete this questionnaire. All information you provide will be treated in confidence.

Section I General Information

Q1 Can you please grade you MAIN HOTEL?

⭐⭐⭐⭐⭐

Q2 which of the following services do you use from your current hotel?

<table>
<thead>
<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Restaurant</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference room</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bar/Coffee shop</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Club</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banqueting</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q3 How long you been a customer with this hotel?

<table>
<thead>
<tr>
<th>Years</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 2 years</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 - 5 years</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 - 15 years</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 - 20 years</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - 25 years</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 26 years</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendices

Q4 How often you deal with the hotel named in Q1?

once a year  1
1 - 2 times/ years  2
3 – 5 times/ years  3
6 - 10 times/ years  4
First time  5
Once every 3 years  6

Section II Your Assessment of The Hotel

Q1. Each of the following statements relate to your personal rating to the hotel you have named in Q1.

Please read each of the following statements and then indicate the extent to which you believe the statement to be relevant to your hotel. Please circle the number that mostly strongly reflects your feeling in relation to your hotel.

<table>
<thead>
<tr>
<th>A</th>
<th>My main hotel …</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show fairness in transactions</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always achieves consistency in service delivery</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always keeps its word</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hotel employees treat me with respect</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>My main hotel …</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is open to my needs</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acts in a caring manner</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keeps its customers’ best interest in mind during most transactions</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is receptive to my needs</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C</th>
<th>My main hotel …</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has adequate skills to deliver the right service</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is efficient</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hotel employees can competently handle most of my requests</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hotel employees can be relied upon to know what they are doing</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>My main hotel …</td>
<td>Strongly Disagree</td>
<td>Neutral</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>---</td>
<td>-----------------</td>
<td>-------------------</td>
<td>---------</td>
<td>---------------</td>
</tr>
<tr>
<td>D</td>
<td>Shares the same values as me</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is ethical while dealing with me</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is interested in more than just making profit out of customers</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The hotel employees act as if they value the customer</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Has stability in its operations</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is always reliable</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Always matches customers’ expectations</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Always satisfies customers’ needs</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Communicates clearly</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respond immediately when contacted</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inform me immediately of any problems</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Always communicates with me</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>I will transact with this hotel again for future visits</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will try new services that are provided by this hotel</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will recommend other people to visit to this hotel</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will say positive things to other people about the services provided at this hotel</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>I will continue to visit this hotel even if the service charges are increased moderately</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have strong preference to this hotel</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will keep visiting this hotel regardless of everything being changed somewhat</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am likely to pay a little bit more for using the services of this hotel</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>I will transact with this hotel again for future visits</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will try new services that are provided by this hotel</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will recommend other people to visit to this hotel</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will say positive things to other people about the services provided at this hotel</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The hotel employees are professional and dedicated to customers | 1 2 3 4 5
---|---
The hotel respond caringly when I share my problems | 1 2 3 4 5
My hotel is always honest with me | 1 2 3 4 5
Overall I feel I can trust my hotel | 1 2 3 4 5

Q2 Please evaluate the following statements based on your personal view

<table>
<thead>
<tr>
<th>K</th>
<th>I Believe that........</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I trust the hotel more if the hotel applies higher security standards</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hotel decorations are very important to me</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hotel atmosphere reflects the level of the expected service</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The price of the hotel indicates its service level</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hotel brand name is very important to me</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I trust my favourite hotel brand</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section III Personal Information

Q1 Gender

Male 1  Female 2

Q2 Age group

Under 20 1  20-25 2
26-35 3  36-45 4
46-55 5  56-65 6
66+ 7

Q3 Nationality

Thank you for your time
**Appendix 2: Review of Services Marketing Literature**

<table>
<thead>
<tr>
<th>Author</th>
<th>Argument</th>
<th>Proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booms and Bitner</td>
<td>Recognising the special character of the services as products, they demonstrated the importance of Environmental factors (Physical Evidence) influencing the quality perception. They included the Participants (personnel and customers) and the Process of service delivery as the additional Marketing Mix factors.</td>
<td>The Services Marketing Mix includes next to the 4Ps three more P's: Participants Physical Evidence Process</td>
</tr>
<tr>
<td>Cowell (1984)</td>
<td>Three aspects justifying the revision of the original Marketing mix framework: the original mix was developed for manufacturing companies empirical evidence suggesting that marketing practitioners in the service sector find the marketing mix not being inclusive enough for their needs</td>
<td>Adopts the framework proposed by Booms and Bitner (1981).</td>
</tr>
<tr>
<td>Ruston and Carson</td>
<td>The unique characteristics of the services - intangibility, inseparability, perishability and variability - make the control of the marketing process, using the generalised tools of marketing, inadequate</td>
<td>New instruments and concepts must be developed to explain and manage the services intangibility</td>
</tr>
<tr>
<td>Fryar (1991)</td>
<td>Segmentation and differentiation is the basis of successful positioning of services. Furthermore the personal relationship with the customer and the quality of the service are important elements of the services Marketing</td>
<td>The Marketing of services requires: Differentiation based on segmentation and positioning Customer contact Unique vision on quality</td>
</tr>
<tr>
<td>Heuvel (1993)</td>
<td>Interaction between the one delivering the service and the customer is very important and has direct effect on the service quality and quality perception. The Product element can be better demonstrated as having two components, the primary and secondary service elements as well as the process</td>
<td>The Services Marketing Mix: • Personnel • Product Place • Price • Promotion</td>
</tr>
<tr>
<td>Doyle (1994)</td>
<td>While recognising that the content of the 4Ps in the service sector is somehow different from that of the tangibles he does accept the 4Ps as the elements of the services marketing mix. He identifies special difficulties in Promotion and Place preferring to replace them by the terms Communication and Distribution</td>
<td>Service Marketing Mix: • Product • Price • Communication • Distribution</td>
</tr>
<tr>
<td>Melewar and Saunders</td>
<td>The Corporate Visual Identity System (CVIS) is the basis of the corporate differentiation and the core of the company’s visual identity.</td>
<td>A new P must be added to the 4Ps of the Marketing Mix (and the 3Ps of the Services Mix) namely the Publications</td>
</tr>
<tr>
<td>English (2000)</td>
<td>The traditional Marketing has never been an effective tool for health services marketing</td>
<td>A new framework emerges, emphasising the 4 Rs: Relevance, Response, Relationships, and Results.</td>
</tr>
<tr>
<td>Grove et al. (2000)</td>
<td>Services Marketing can be compared to a theatrical production. How the service is performed is as important as what is</td>
<td>Four strategic theatrical elements constitute the Services Experience: Actors,</td>
</tr>
</tbody>
</table>
performed. Critical factor is therefore the customer experience. The traditional Marketing Mix does not adequately capture the special circumstances that are present when marketing a service product.

| Beckwith (2001) | Marketing services in a changing world requires focusing on increasing the customer satisfaction and rejecting old product paradigms and marketing fallacies. | The four keys of Modern (services) Marketing: Price, Brand, Packaging, and Relationships |

(Source: Lee Goi 2009: 11)

**Appendix 3: An Illustration of the Marketing Concept**  
(appendices 3-9 removed for copyright reasons)

(Kotler et al 2003:13)
Appendix 4: Strengths and Weakness of the 4Ps and 7Ps

(Source: Lee Goi 2009: 15)
Appendix 5: Review of Consumer Marketing Theory Literature

(Source: Lee Goi 2009: 8)
Appendix 6: Review of Relationship Marketing Literature

(Source: Lee Goi 2009: 9)
Appendices

Appendix 7: Sources of Communication Messages in a Relationship

Appendix 8: Route to a Relationship Marketing Concept

Source: (Gummesson 1998:244)
### Appendix 10: Judges Identification

<table>
<thead>
<tr>
<th>Judge</th>
<th>Position</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>Academic researcher</td>
<td>UK</td>
</tr>
<tr>
<td>Two</td>
<td>General hotel manager</td>
<td>Jordan</td>
</tr>
<tr>
<td>Three</td>
<td>Academic researcher</td>
<td>UK</td>
</tr>
</tbody>
</table>

### Appendix 11: Statistical Terms and Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>The entire collection of items that is the focus of the empirical investigation. The branch of Statistics called, provides us with ways to describe the characteristics of a given population by measuring each of its items and then summarizing the set of measures in various ways</td>
</tr>
<tr>
<td>Descriptive Statistics</td>
<td>A collection of statistical tests providing ways to describe the characteristics of a given population by measuring each of its items and then summarising the set of measures in various ways, for example frequency analysis.</td>
</tr>
<tr>
<td>The mean</td>
<td>The average of the scores in the population. Numerically, it equals the sum of the scores divided by the number of scores.</td>
</tr>
<tr>
<td>The median</td>
<td>A test indicates the point on the scale of measures where the population is centered. Half of the scores in a population will have values that are equal to or larger than the median and half will have values that are equal to or smaller than the median</td>
</tr>
<tr>
<td>The variance</td>
<td>A test used to characterise the spreading among the measures in a given population. It is necessary to first calculate the mean of the scores, then measure the amount that each score deviates from the mean and then square that deviation (by multiplying it by itself). Numerically, the variance equals the average of the several squared deviations from the mean.</td>
</tr>
<tr>
<td>The standard deviation</td>
<td>A test used to characterise the spreading among the measures in a given population. Numerically, the standard deviation is the square root of the variance. Unlike the variance, which is a somewhat abstract measure of variability, the standard deviation can be readily conceptualised as a distance along the scale of measurement.</td>
</tr>
<tr>
<td>The Standard Error</td>
<td>The Standard Error, or Standard Error of the Mean, is an estimate of the standard deviation of the sampling distribution of means, based on the data from one or more random samples. Numerically, it is equal to the square root of the quantity obtained when squared is divided by the size of the sample</td>
</tr>
<tr>
<td>The null hypothesis</td>
<td>Is a term that often used to indicate the statistical hypothesis tested, with a purpose of deciding if whether the obtained results</td>
</tr>
</tbody>
</table>
provide a reason to reject the hypothesis. For example, in an experiment in which two groups of randomly selected subjects have received different treatments and have yielded different means, it is always necessary to ask if the difference between the obtained means is among the differences that would be expected to occur by chance whenever two groups are randomly selected. In this example, the hypothesis tested is that the two samples are from populations with the same mean. Another way to say this is to assert that the investigator tests the null hypothesis that the difference between the means of the populations from which the samples were drawn, is zero. If the difference between the means of the samples is among those that would occur rarely by chance when the null hypothesis is true, the null hypothesis is rejected and the investigator describes the results as statistically significant.

<table>
<thead>
<tr>
<th>Regression</th>
<th>Given a pair of related measures (X and Y) on each of a set of items, the term &quot;regression&quot; is used to characterize the manner in which one of the measures (for example the Y measures) change as the other measure (in this case, the X measure) changes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi Square</td>
<td>A calculated value of Chi Square compares the frequencies of various kinds (or categories) of items in a random sample to the frequencies that are expected if the population frequencies are as hypothesised by the investigator.</td>
</tr>
<tr>
<td>Latent variable</td>
<td>An unobserved variable that may account for variation in the data and/or for apparent relations between observed variables.</td>
</tr>
<tr>
<td>Scale reliability</td>
<td>A measurement is reliable if it reflects mostly true score, relative to the error.</td>
</tr>
</tbody>
</table>
## Appendix 12: The Calculation of the Composite Reliability

<table>
<thead>
<tr>
<th>Composite reliability</th>
<th>CR = (sum of standardised loading) (2) / (sum of standardised loading (2) + sum of indicator measurement error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrity (IN)</td>
<td>(=(0.59+0.819+0.579+0.565)^2/((0.59+0.819+0.579+0.565)^2+(1-0.127+1-0.098+1-0.102)))</td>
</tr>
<tr>
<td>Benevolence (BN)</td>
<td>(=(0.563+0.78+0.637+0.704)^2/((0.563+0.78+0.637+0.704)^2+(1-0.131+1-0.111+1-0.131)))</td>
</tr>
<tr>
<td>Competence (CP)</td>
<td>(=(0.64+0.781+0.593+0.719)^2/((0.64+0.781+0.593+0.719)^2+(1-0.099+1-0.086+1-0.089)))</td>
</tr>
<tr>
<td>Value Alignment (VA)</td>
<td>(=(0.578+0.859+0.641+0.775)^2/((0.578+0.859+0.641+0.775)^2+(1-0.119+1-0.102+1-0.103)))</td>
</tr>
<tr>
<td>Consistency (CO)</td>
<td>(=(0.634+0.573+0.772+0.717)^2/((0.634+0.573+0.772+0.717)^2+(1-0.084+1-0.099+1-0.092)))</td>
</tr>
<tr>
<td>Communication (CM)</td>
<td>(=(0.654+0.758+0.618+0.749)^2/((0.654+0.758+0.618+0.749)^2+(1-0.089+1-0.076+1-0.091)))</td>
</tr>
<tr>
<td>Behavioural Loyalty (BL)</td>
<td>(=(0.677+0.839+0.617+0.823)^2/((0.677+0.839+0.617+0.823)^2+(1-0.078+1-0.068+1-0.075)))</td>
</tr>
<tr>
<td>Attitudinal Loyalty (AL)</td>
<td>(=(0.71+0.609+0.717+0.636)^2/((0.71+0.609+0.717+0.636)^2+(1-0.072+1-0.085+1-0.08)))</td>
</tr>
<tr>
<td>Trustworthiness (TW)</td>
<td>(=(0.576+0.677+0.815+0.572)^2/((0.576+0.677+0.815+0.572)^2+(1-0.108+1-0.132+1-0.098)))</td>
</tr>
</tbody>
</table>
Appendix 13: Construct Reliability Evaluation

1. Integrity

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.730</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show fairness in transactions</td>
<td>13.1909</td>
<td>2.556</td>
<td>.475</td>
<td>.697</td>
</tr>
<tr>
<td>Always achieves consistency in service delivery</td>
<td>13.1796</td>
<td>2.598</td>
<td>.489</td>
<td>.688</td>
</tr>
<tr>
<td>Always keeps its word</td>
<td>13.0870</td>
<td>2.352</td>
<td>.633</td>
<td>.603</td>
</tr>
<tr>
<td>The hotel employees treat me with respect</td>
<td>13.0851</td>
<td>2.582</td>
<td>.491</td>
<td>.687</td>
</tr>
</tbody>
</table>

2. Benevolence

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.765</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is receptive to my needs</td>
<td>12.8091</td>
<td>3.284</td>
<td>.593</td>
<td>.695</td>
</tr>
<tr>
<td>Acts in a caring manner</td>
<td>12.7051</td>
<td>3.333</td>
<td>.542</td>
<td>.721</td>
</tr>
<tr>
<td>Keeps its customers' best interest in mind during most transactions</td>
<td>12.8261</td>
<td>3.038</td>
<td>.638</td>
<td>.668</td>
</tr>
<tr>
<td>Is receptive to my needs</td>
<td>12.7505</td>
<td>3.475</td>
<td>.489</td>
<td>.749</td>
</tr>
</tbody>
</table>
## 3. Competence

### Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.776</td>
<td>4</td>
</tr>
</tbody>
</table>

### Item-Total Statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has adequate skills to deliver the right service</td>
<td>12.7543</td>
<td>3.261</td>
<td>.616</td>
<td>.702</td>
</tr>
<tr>
<td>Is efficient</td>
<td>12.6919</td>
<td>3.448</td>
<td>.508</td>
<td>.757</td>
</tr>
<tr>
<td>The hotel employees can competently handle most of my requests</td>
<td>12.7845</td>
<td>3.060</td>
<td>.654</td>
<td>.680</td>
</tr>
<tr>
<td>The hotel employees can be relied upon to know what they are doing</td>
<td>12.6957</td>
<td>3.379</td>
<td>.540</td>
<td>.741</td>
</tr>
</tbody>
</table>
### 4. Value Alignment

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>.801</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Statistics</th>
<th></th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares the same values as me</td>
<td>Scale Mean if Item Deleted</td>
<td>Scale Variance if Item Deleted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.4991</td>
<td>3.868</td>
<td>.673</td>
<td>.723</td>
<td></td>
</tr>
<tr>
<td>Is ethical while dealing with me</td>
<td>12.3384</td>
<td>4.001</td>
<td>.548</td>
<td>.783</td>
</tr>
<tr>
<td>Is interested in more than just making profit out of customers</td>
<td>12.5104</td>
<td>3.542</td>
<td>.729</td>
<td>.691</td>
</tr>
<tr>
<td>The hotel employees act as if they value the customer</td>
<td>12.4216</td>
<td>4.169</td>
<td>.515</td>
<td>.797</td>
</tr>
</tbody>
</table>

### 5. Consistency

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>.768</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Statistics</th>
<th></th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has stability in its operations</td>
<td>Scale Mean if Item Deleted</td>
<td>Scale Variance if Item Deleted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.4405</td>
<td>3.868</td>
<td>.546</td>
<td>.725</td>
<td></td>
</tr>
<tr>
<td>Is always reliable</td>
<td>12.3913</td>
<td>4.098</td>
<td>.498</td>
<td>.749</td>
</tr>
<tr>
<td>Always matches customers' expectations</td>
<td>12.4272</td>
<td>3.628</td>
<td>.638</td>
<td>.675</td>
</tr>
<tr>
<td>Always satisfies customers' needs</td>
<td>12.3403</td>
<td>3.782</td>
<td>.596</td>
<td>.699</td>
</tr>
</tbody>
</table>
### 6. Communication

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.789</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicates clearly</td>
<td>12.5879</td>
<td>3.262</td>
<td>.626</td>
<td>.722</td>
</tr>
<tr>
<td>Respond immediately</td>
<td>12.5236</td>
<td>3.686</td>
<td>.551</td>
<td>.760</td>
</tr>
<tr>
<td>when contacted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inform me immediately</td>
<td>12.6843</td>
<td>3.296</td>
<td>.635</td>
<td>.718</td>
</tr>
<tr>
<td>of any problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always communicates</td>
<td>12.6427</td>
<td>3.423</td>
<td>.580</td>
<td>.746</td>
</tr>
<tr>
<td>with me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 7. Behavioural Loyalty

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.827</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will transact with</td>
<td>12.7032</td>
<td>3.497</td>
<td>.714</td>
<td>.753</td>
</tr>
<tr>
<td>this hotel again for</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>future visits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will try new services</td>
<td>12.6163</td>
<td>3.923</td>
<td>.560</td>
<td>.821</td>
</tr>
<tr>
<td>that are provided by</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>this hotel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will recommend other</td>
<td>12.7618</td>
<td>3.386</td>
<td>.730</td>
<td>.745</td>
</tr>
<tr>
<td>people to visit to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>this hotel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will say positive</td>
<td>12.6919</td>
<td>3.623</td>
<td>.612</td>
<td>.801</td>
</tr>
<tr>
<td>things to other people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>about the services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provided at this hotel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 8. Attitudinal Loyalty

#### Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.763</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Item-Total Statistics

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will continue to visit this hotel even if the service charges are increased moderately</td>
<td>12.8450</td>
<td>2.828</td>
<td>.594</td>
<td>.689</td>
</tr>
<tr>
<td>I have strong preference to this hotel</td>
<td>12.8526</td>
<td>3.088</td>
<td>.519</td>
<td>.729</td>
</tr>
<tr>
<td>I will keep visiting this hotel regardless of everything being changed somewhat</td>
<td>12.9263</td>
<td>2.728</td>
<td>.596</td>
<td>.687</td>
</tr>
<tr>
<td>I am likely to pay a little bit more for using the services of this hotel</td>
<td>12.9319</td>
<td>2.851</td>
<td>.540</td>
<td>.719</td>
</tr>
</tbody>
</table>
### 9. Trustworthiness

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.756</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item-TOTAL Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>The hotel employees are professional and dedicated to customers</td>
<td>12.6881</td>
<td>3.514</td>
<td>.521</td>
<td>.715</td>
</tr>
<tr>
<td>The hotel respond caringly when I share my problems</td>
<td>12.6181</td>
<td>3.437</td>
<td>.550</td>
<td>.700</td>
</tr>
<tr>
<td>My hotel is always honest with me</td>
<td>12.6522</td>
<td>3.102</td>
<td>.646</td>
<td>.643</td>
</tr>
<tr>
<td>Overall I feel I can trust my hotel</td>
<td>12.5085</td>
<td>3.648</td>
<td>.494</td>
<td>.729</td>
</tr>
</tbody>
</table>