Exploring the Interrelationships among Operations Management Practices, Customer Perceptions of Service Quality, and Performance of Hotels

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Thesis Submitted to the University of Nottingham
for the Degree of Doctor of Philosophy

September 2012

Abstract

Hospitality and tourism are important sectors of any economy. In the service sector, achieving a level of service quality that satisfies customers usually results in a competitive advantage in the market. The concept of service quality in hotels has been the subject of many research studies and there are numerous published works in the field. However, only a few studies have focused on the determinants of service quality for hotels using a set of comprehensive criteria. Thus, conceptualizing a service quality model that identifies the dimensions of service quality that affect customers' satisfaction is needed for hotels. In addition, the role of operations management practices in managing service quality cannot be denied. The available literature on the hotel industry in terms of managerial practices is unfortunately poor and needs to be enriched. Logically, better operations management practices in managing hotels' service quality would have a direct positive impact on performance, but there could also be some indirect (mediating) impact on performance through customer satisfaction.

The purpose of this research is to build an effective model for measuring service quality in the hotel industry through critical evaluation of the available literature in service in general and hotels in particular. The built model has aspects of customer's perceptions of service quality, management's perceptions of operations management practices and of performance.

The existing literature has been used to conceptualize a service quality model that meets the purpose of this research. The conceptualized model has eleven dimensions; seven for customer perceptions on service quality and four for management perceptions of operations management practices in managing service and on performance. The dimensions of customer's perceptions are: employee behaviour/attitude, price fairness, non-technological tangibility, technological tangibility, in-consumption positive emotions, in-consumption negative emotions and overall customer satisfaction. The introductions of technology and in-consumption emotions are one of the main contributions of this research. Though previous researchers have supported the use of these two criteria in evaluating service quality of hotels, the researcher is not aware of any quantitative service quality study that used these two dimensions. Of particular note is that emotion is evaluated in terms of its frequency of occurrence during the service experience, unlike previous studies.

The dimensions of operations management practices are managing employees, managing process and customer feedback. Managers' perceptions on hotel performance were also included in the conceptualized model. Linking

\operations management practices to overall customer satisfaction is another contribution of this research. Many previous studies attempted to understand the direct link between service quality and performance; although there is an equally dominant view in the literature that the relationship between service quality and performance could be more complex. Hence, there could also be some indirect (mediating) impact on performance through customer satisfaction. This research tested whether there is a mediating effect by customer satisfaction between operations management practices and performance. This test also contributed to the existing literature on service as a whole and on hotels in particular. Moreover, a moderation test of customers' characteristics; gender, purpose of hotel stay, age and education, is also performed in this research, further strengthening the value of this research.

Responses from two independently administered surveys have been used in this research, one for hotel customers and a second for hotel managers. Data has been collected in two international airports and a number of hotels in Oman. A sample size of 689 observations was used to test the relationships developed in the conceptualized model. First, factor analysis was carried out on the data to validate the developed dimensions. Exploratory factor analysis (EFA) was performed to explore the dimensions and then confirmatory factor analysis (CFA) was performed to confirm the validity of the dimensions. The measurement model has been checked for its reliability and validity using criteria developed from the available literature. Then, the developed hypotheses were tested using a structural equation model (SEM) using partial least square approach (PLS-SEM).

The results have generally confirmed the original conceptualizations. All service quality dimensions, namely employee behaviour/attitude, non-technological tangibility, technological tangibility, positive in-consumption emotions and negative in-consumption emotions and operations management practices, namely managing employees, managing process and customer feedback, have been found to have a statistically significant influence on the overall satisfaction of guests. The hypotheses on the moderating effects of customers' characteristics were partially supported. The results proved that management practices have direct and significant effects on performance. In addition, customer satisfaction was found to be partially mediating the relationship between operations management practices and performance.

Knowledge about the dimensions of service quality and operations management practices in hotel industry is valuable for managers in the context of managing and assessing the quality of their service. This research has used the available literature to build a model that has interrelationships between operations management practices, customer perceptions of service quality and performance in the hotel industry. The model has introduced two new

dimensions, technology and emotions, which has enriched the literature of service quality evaluation. There is no doubt that managerial awareness of the dimensions influencing customer satisfaction will help in developing competitive advantages for their hotels. In addition, linking operational management practices to overall customer satisfaction and testing its direct and indirect effect on performance has also contributed to knowledge. Thus, in order for managers to increase the hotels' performance in terms of customer satisfaction, special considerations need to be carried through their practices. Moreover, managers' awareness of the moderating role of the customers' characteristics will help in better managing the quality of service provided. The findings of this study in particular will open new directions for future research in the hotel industry in particular and the service industries as a whole.

Acknowledgment

O God..

When I'm in pain, I remember Your saying: "Do not despair of the mercy of Allah." (Holy Quran, Surah Zumar, 39:53).

When I complain of difficulties to get through, I remember Your saying: "And whoever fears Allah, He will make for him a way out." (Holy Quran, Surah Talaq, 65:2).

When I need hope, I remember Your saying: "Indeed, with hardship [will come] ease." (Holy Quran, Surah Ash-Shrah, 94:6).

When I confided to you that I have many dreams that I want to come true, I remember Your saying: "Call upon me; I will respond to you." (Holy Quran, Surah Ghafir, 40:60).

First and above all, I praise God, the merciful and the passionate, for providing me with the opportunity to step into the excellent world of research and granting me the capability to proceed successfully in my PhD. thank you so much for giving me more than I could ask for and so God, let the knowledge that you have granted me, be useful for me and others. Let it be an argument for me and not on me.

Working on this PhD has been both a painful and an enjoyable experience. It is a dream of just climbing a high peak or swimming in rough seas and staying focused to reach the target. I'm indebted to many people who have helped me to reach the top and enjoy the beautiful scenery.

I am deeply grateful to my supervisor Professor Ramanathan Ramakrishnan who has accepted me as his PhD student. I appreciate all your support and assistance with my doctoral research. You challenged me to be a better student. Thank you for your guidance, constructive criticism and countless hours of revisions and advice which have been instrumental in achieving my academic goal of a PhD.

I would like to thank my beloved parents; Nasser and Yamina for giving me a lot of inspiration with love, support and encouragement. I cannot thank you enough for everything you did for me throughout my life. I owe my every achievement to you both and whatever I do I will not to be able to give back. I hope that I can always be a daughter to be proud of.

My deepest gratitude to my brothers and sisters; Ali, Mustafa, Zainab, Malika, Sara and Younis; for their infinite support, their goodwill and kindness. More thanks to my brother Younis who has taken a lot of my

responsibilities during my PhD, I really cannot thank you enough and wish you all success in your life. Thank you God for giving me such a lovely family that forms the backbone of my success and happiness. To be able to step strong and believe in myself, I have also been always supported by my grandfather Mohammed. I learned a lot from you about life.

I feel so very lucky to have my friend; Aseela Al-Harthi who has helped me to continue believing in myself. Your kind hearted personality has always encouraged me to pursue my PhD. You have always motivated me during the most painful periods of my studying and encouraged me to stand and never bend to difficulty. I cannot thank you enough; you are a gifted sister from God.

Special Thanks are also given to my friends; Amila, Aniza, Amal, Kate and Wei in Nottingham University Business School for their support and motivation. I have been very privileged to get to know you all. I am grateful to you Amila for your continuous motivation to work harder and do my best. I cannot thank you enough you are such a wonderful friend. I do appreciate you Aniza for being there and always listen to me. Amal you have been always there sharing with me your experience and listening to me when I needed to be listened to. I am lucky knowing you all during my PhD study.

There are also five friends I need to mention; Bushra Al-Harthi; Marwa Hassan, Nadhira Al-Habsi, Rahma Al-Yahmedi and Sabrina Al-Asmi for their friendship. You have always been as a member of my family in the UK. I cannot thank you enough for the lovely times I have spent with you. You were always there when I needed you.

I would like to convey my thanks to my home university, Sultan Qaboos University for granting me the scholarship for my study. I also express my appreciations to all my colleagues back home in the College of Commerce and Economics for their support. My sincere thanks also go to all the hotels in the Sultanate of Oman who participated in the data collection surveys. I also appreciate the Department of Statistics and the Department of Quality Control in the Ministry of Tourism in Oman for offering me time to meet people and collect the necessary data. Finally, I thank my students who helped me during the data collection.

Asma N M Al-Zaidi.

Nottinghm, UK, April 2012.

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Chapter 1 Introduction

1.1 Research Background

The number of tourists and travellers is increasing significantly all over the world. As a result, hospitality and tourism is becoming one of the most important industries in the world in terms of its effects on the social and economic development of a region or country (Holjevac, 2003). Researchers have started to conduct large numbers of studies in the field as tourism is booming all over the world. As the hotel industry plays an important role in tourism, the hotel industry has a bright future (Holjevac, 2003).

Despite the considerable number of studies on the hotel industry in terms of evaluating service quality, there is still a paucity of research studies on understanding the influence of customer perceptions of service quality on managerial attitudes. In fact, there is very little literature available on hotels to build a good tool for service quality evaluation (Tseng, 2009; Hsieh et al., 2007). Prior to defining service quality, it is important to define service. Many researchers have defined service as the opposite of goods as service is intangible. Gronroos has defined service comprehensively, saying that: 'A service is an activity or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between customers and services employees and/or physical recourses or goods and/or systems of the service provider, which are provided as solutions to customer problems' (Gronroos, 1990, p.27).

What matters to hotels is the customers' perception of service quality (Mohsin and Lockyer, 2010), as the delivery of service quality to customers is the main responsibility of hoteliers (Su, 2004). The available literature in measuring customers' satisfaction of service quality has not provided an agreed single model as different researchers have come up with different models in terms of the dimensions of the service quality (Mohsin, 2007; Ramsaran-Fowdar, 2007; Akbaba, 2006; Juwaheer, 2004; Ekinci et al., 2003; Mei et al., 1999; Akan, 1995; Getty and Thompson, 1993; Knutson et al., 1990). In fact,

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there are significant differences in the conceptualization of satisfaction (Martinez and Martinez; 2010; Giese and Cote, 2000). Therefore, despite the growing body of literature on the concept of customers' perceived value, calls remains for more sophisticated measures (Lloyd et. al, 2011).

In comparison to goods, service is said to be intangible. However, when measuring service quality and its influence on customer satisfaction, it is equally important to include both tangibles and intangibles elements (Pandey and Joshi, 2010). Service may involve the interaction between customers and employees; therefore it is important to include employees' attitude/behaviour as a dimension of service quality as it may affect the customers' perception of service quality (Llyod et al., 2011; Cheung et al., 2009; Kuo, 2009; Lenka et al., 2009; Hennig-Thurau, 2004; Tsaur and Lin, 2004; Chu and Choi, 2000; Dabholkar et al., 2000; Mei et al., 1999; Parasuraman et al., 1985). According to equity theory (Huppertz et al., 1978), customers will evaluate the output (e.g. satisfaction) according to their input (e.g. price), and the price fairness of a hotel. Hence, price fairness is another dimension that should be included in measuring service quality as it also affects customers' perceptions and satisfaction (Martín-Ruiz and Rondan-Cataluna, 2008; Chowdhary and Prakash, 2007; Martin-Consuegra et al., 2007; Kandampully and Suhartanto, 2000; Voss et al., 1998).

Tangibility in service refers to the physical attributes of the service which consists of physical facilities and the appearance of those facilities, (Parasuraman et al., 1985) their condition (eg. cleanliness), and the noise/quietness of the service (Fitzsimmons and Fitzsimmons, 2009, p. 109). When measuring service quality the dimension of tangibility should also be included. Many researchers have stated the importance of tangibility and its affect on the customers' perception of service quality (Liu and Yen, 2010; Akbaba, 2006; Santos, 2002; Choi and Chu, 2001; Parasuraman et al., 1985). Although hotel service is a sensory experience wherein the customer experiences feelings and emotions, the in-consumption emotional aspect that occurs during the service process has not been significantly studied yet in the

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literature of the hotel industry. As emotions affect the customers' perception of service quality and satisfaction, it needs to be considered as a dimension of service quality and should be included in the measurement model (Pandey and Joshi, 2010; Zins, 2002; Bosque and Martin, 2008; Briggs et al., 2007; Han and Back, 2007; Yu and Dean, 2001; Wirtz et al., 2000; Oliver, 1993).

From an operational point of view, service quality depends on the managers' practices in the organization. Therefore, including operations management practices and measuring their effect on satisfaction, is unavoidable service quality and performance. In fact, to maximize the relationship between managers and customers which results in customers' satisfaction and repurchase attention, managers should establish practices by integrating people and resources (Drohan et al., 2009). Managers' practices in operations, quality and human resources must be considered, as they are correlated with service quality and customer satisfaction and are important for the success of business such as hotels (Pandey and Joshi, 2010; Kandampully and Huo, 2007; Lagrosen and Lagrosen, 2003; Kandampully and Menguc, 2000). However, operations management practices need to be further explored and researched (Menor et al., 2001). According to Gunawardane (2006), the literature on operations management practices has highlighted dimensions such as managing employees, managing process and customer evaluation of service quality. Applications of management practices in managing their employees affect the hotels' performance and customer satisfaction (Wong et al., 2010; Sit et al., 2009; Merino-Diaz, 2003). Hence, management practices in managing employees are important in satisfying customers, as one of the dimensions affecting customer's satisfaction is employees' attitude/behaviour. In addition, it is important to consider management practices in managing processes, including process control and process standardization (Tari et al., 2007; Nair, 2006) as they affect the firms' performance and customers' satisfaction (Wong et al., 2010; Tari et al., 2007, Behara et al., 2001; Kandampully and Menguc, 2000). It was stated by Zehrer (2009) that little attention has been paid to understanding the role of customers in managing service. In fact, looking to the service, through and from the customer's perspective, will add to the future of

understanding the service approach. So, managers should establish practices of taking customer's feedback and suggestions on the service provided. In fact, taking into consideration management practices of customer's feedback may also affect satisfaction and performance (Wong et al., 2010; Tari et al., 2007; Sit et al., 2009).

Customers of hotels have different characteristics: gender, age, education etc., and they stay in hotels for different reasons: leisure and business. Accordingly, their perceptions and expectations of service quality may differ. Some researchers found that customers with different characteristics differ in terms of their perceptions, preferences and satisfaction of service quality (Liu and Yen, 2010; Kuo, 2009; Anderson et al., 2008; Mohsin, 2007; Floh and Treiblmaier, 2006; Chu and Choi, 2000), whereas, other researchers failed to prove the difference (Liu and Yen, 2010; Walsh, et al. 2008; Chu and Choi, 2000). So, further investigation is needed that helps in understanding different customers for marketing segmentation.

1.2 Research Aim and Objective

The aim of this research is to build an effective model for service quality measurement that can be used in the hotel industry. The objective of this research is to fill the following gaps:

Research gap 1: *In-consumption emotions and its effect on the overall customer satisfaction.*

Research gap 2*: Including technological tangibles as a dimension of service quality and studying their effects on the overall customer satisfaction.*

Research gap 3: *Linking operations management practices to the customers experience of service quality.*

Research gap 4: *Understanding the moderating role of customers' characteristics.*

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Research gap 5: *Understanding the mediating role of overall customer satisfaction.*

Research gap 6: *Applying the study to a specific location the Sultanate of.*

The main question of this research:

What are the interrelationships between customers' perceptions of service quality, operations management practices and hotel performance in the hotel industry?

To meet the aims of this research, fill the identified gaps and answer the research question, a model for service quality has been developed through critical evaluation of the available literature. The conceptualized service quality model has included three main aspects: service quality dimensions, operations management practices dimensions and hotel performance. Service quality customers' perception dimensions are: employees' attitude/behaviour, price fairness, technological tangibility, non-technological tangibility, in-consumption positive emotions and in-consumption negative emotions. All dimensions are linked to the overall customers' satisfaction of service quality. Operations management practices dimensions are managing employees, managing process and customer feedback and again, all are linked to the overall customers' satisfaction of service quality. Operations management practices are also linked to performance. Overall customers' satisfaction of service quality is also linked to performance. The moderating role of customer's characteristics is also presented in the conceptualized service quality model.

1.3 Research Methodology

Recalling the objective of the research, primary data was collected through surveys. Two surveys have been developed: One targeted to customers where their perceptions of experiencing the hotel's service quality is measured. The second survey was developed to measure the operations management practices and performance in the hotel through management's perceptions. For the

customers' survey, international airports and hotels in Oman were targeted to collect data. For managers, surveys were sent by e-mail, fax or by hand. For each hotel, the manager's response was linked to their customers' responses.

A multivariate statistical method Structural Equation Modelling (SEM) was selected to test the hypothesized relations, moderation and mediation. Partial Least Square (PLS) was the approach used for SEM (PLS-SEM). Accordingly, factor analyses were used and the measurements of the structural model were tested. Two software have been used for analyses; SPSS and SmartPLS.

1.4 Research Main Findings

The empirical analyses have proved that the service quality dimensions: employee attitude/behaviour, price fairness, technological tangibility, non-technological tangibility, in-consumption positive emotions and in-consumption negative emotions affect overall customers' satisfaction significantly. In addition, it was proved that operations management practices: managing employees, managing process and customer feedback also affect overall customer satisfaction significantly. It was also proved that management practices affects performance significantly. In addition, it was proved that the overall customer satisfaction mediates the relationship between quality dimensions and operations management practices and performance, where some are partially mediated and others fully mediated. However, the moderation role of customer's characteristics has been supported only partially.

1.5 Research Structure

Chapter 1 provides an introduction to this research starting with the background of service quality and specifically hotels. Then, the research aim, objective and key findings are discussed briefly. Finally, the research structure is provided.

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Chapter 2 shows the available literature in service quality which is then narrowed to focus on tourism, leisure and hospitality. The literature has been further narrowed to concentrate on the hotel industry. A critical evaluation of the literature is then used to conceptualize a service quality model that can be used by hotel managers to evaluate the quality of their organizations' services, and enables service evaluators to measure the service quality of the hotel industry as a whole. Finally, the gaps in the literature covered by this research are highlighted.

Chapter 3 discusses the Sultanate of Oman as it is the selected place for data collection. Oman and it's tourist industry is introduced and the importance of including Oman and how it's inclusion will add to practice is discussed.

Chapter 4 presents the purpose of this research and research questions are provided. The conceptual framework which is built through literature is presented. Accordingly, six hypotheses are developed.

Chapter 5 shows the research methodology and the research design plan. Justification of the research methodology is discussed. The development of surveys for both customers and management is then discussed in detail and the plan of the data collection is highlighted.

Chapter 6 presents the data analysis. The methods used for data analyses are discussed in detail and then applied to the data collected. The developed hypotheses are tested and results of analyses are provided.

Chapter 7 discusses the findings of this research. First, an overview of the findings are presented and linked to the objective of the research. Then, the hypotheses tested are interpreted and discussed using the empirical results from the data analysis chapter with supporting literature.

Chapter 8 demonstrates the contribution and the implications of this research. The role of management to stand in the competitive market in the hotel context is discussed in terms of its managerial implications. Then, the theoretical implications are highlighted and how this research will add to the existing knowledge. Then, the research findings are linked to the Omani

context and how it helped in enriching the practical context in the country. Limitations of the study and future research directions are also highlighted. Finally, the conclusions of this research are provided.

Chapter 2 Literature Review

2.1 Introduction

The previous chapter provided an introduction to the research, its purpose and main findings. This chapter reviews the literature of service quality and conceptualizes a measurement model. The chapter starts by highlighting in general the service concept and service quality. Later, the literature is narrowed to service quality in leisure, tourism and hospitality and specifically in the hotel industry. Then, a critical evaluation of the literature is discussed to conceptualize the measurement model of service quality. Interrelationships between customers' perceptions of service quality, managements' perception of practices and performance are developed. At the end of the chapter, the gaps in the literature to be filled by this research are discussed.

2.2 Service and Service Quality

2.2.1 *Defining Service*

At the beginning it is very important to define the word 'service' in order to help understand the nature of service and how to deal with it. Most people have defined service with reference to goods, saying that goods are tangible, whereas services are intangible products. Goods can be manufactured to meet customers' exact requests, whereas a service can sometimes be said to be provided within an immediate temporal context upon the customer's request. Moreover, services cannot be stored and used later on as goods and manufactured products can, thus managing the availability of services is critical, making the role of managers more important in service provision. It is obvious that unless there are requests by customers for a service, the available resources will not be utilized effectively and efficiently. Looking to the literature available under service, different definitions of service can be found,

depending either on the field where the service is provided or on how the researchers perceive service.

Gronroos has defined service quality comprehensively, saying that: 'A service is an activity or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between customers and services employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems' (Gronroos, 1990, p.27). Service is also further defined by many other researchers to develop a deeper understanding of the concept in order to conduct research to build models for service (Ghobadian et al., 1994, Seth, 2004). In addition, to understand how the concept of competition has increased in the service industry, there is a motivation to run research on service quality. To do so, there is a need to understand and highlight the literature on service quality, which is discussed in the following section.

2.2.2 Service Quality

As discussed earlier, early researchers focused on defining and measuring the quality of the manufacturing. Systematic quality efforts in modern manufacturing began in the 1920s, and fifty years later quality of services started to grow as the service industry expanded across the world (Gummesson, 1991). In order to survive in today's competitive environment, the interest in service quality is ever-increasing (Ghobadian et al., 1994). Research shows that service quality leads to customer loyalty and attracts new customers, due to customer satisfaction generating a positive reputation (such as by word-of-mouth or online reviews) about service (Zabkar et al., 2010; Stickdorn and Zehrer, 2009; Tseng, 2009; Ingram, 1996). The theoretical concepts of service quality and management percolated slowly into the service industry from manufacturing (Levitt, 1972).

A number of studies showed the importance of increasing the level of the perceived quality, as it affects organizational performance and profitability (Zabkar et al., 2010; Gupta and Zeithaml, 2006; Bernhardt et al., 2000;

Harrington and Akehurst, 1996). Thus, there is a need to know the meaning of service quality and how it can be achieved. Service quality is something that an organization needs to be aware of in order to please its customers, which leads to profitability and business success (Zeithaml, 2000; Ittner and Larcker, 1999; Anderson and Fornell, 1994, Koska, 1990). Service quality is said to be meeting customers' expectations (Garcia and Tugores, 2006). An organization needs to serve according to the customers' expectations, while simultaneously maintaining its standards and guiding principles, and compromising between the two. Wyckoff (1992) also defined service quality and stated that service quality is the degree of excellence in meeting the customer's satisfaction. However, that is a big challenge, as measuring service quality is difficult in comparison with measuring the quality of a product. A product's quality can be checked prior to being sent to market. Moreover, quality of products can be physically measured (by weight, height, length etc.), whereas service quality is mainly manifested in the usually internal feelings and emotions of customers. An assessment of quality is difficult to be obtained or to quantified as customer judgements are subjective (Norman, 1991; Anderson and Fornell, 1994).

Managing the service quality successfully and satisfying the customer leads to positive customer perceptions. As a result, the service organization provider will build a good reputation, which means profitability and survival in a competitive world (Peters, 1987). Developing the understanding of service quality, the concept of service management started to be defined and applied as the role of management became more critical. Service quality management was divided into two schools: Scandinavian and American. The main difference between the two schools was in terms of the data collected (Williams and Buswell, 2003). The American school requires numerical data to be generated.

Quality of service was defined as the difference between customer perceptions and their expectations according to the PZB theory or model (Zeithaml et al., 1990). They introduced the GAP theory, which highlighted the gaps in the service organizations. Their theory was, and is still considered to be, reliable enough to be used in service quality evaluation. Moreover, their

concept was the basis for building the SERVQUAL method, which has been adapted to different fields of service like banks and health service providers. In general, it can be said that for a successful service relationship there should be trust between the supplier and the client (Czepiei, 2002). In fact, it was proved by Gounaris (2005) that the higher the perceived quality of the service offered, the greater the degree of trust between the customer and its supplier. Building such relationships necessitates the consideration of lots of parameters, such as physical features, the safety of facilities provided, accessibility and client knowledge (Ban, 2008).

The research on service quality has focused on understanding the service dimensions, and attributes to build models that helped develop measures and tools to evaluate the service quality for the purpose of organizational success. However, it is not sufficient merely to measure service effects at the point of delivery; other factors and aspects need to be taken into consideration, such as management practices. Management practices are important in enhancing the excellence in service and for the success of organization (Lagrosen and Lagrosen, 2003; Haynes and Frayer, 2000; Kandampully and Menguc, 2000). Obviously the role of management is important in increasing the subjective and objective performance factors of an organization, and both need to be measured. It was stated by Nair (2006) that managing quality had started many years ago, yet rigorous attempts to measure management practices in managing quality and their effect on quality and performance only started in the late 1990's. In addition, factors that affect the service satisfaction evaluations also need to be highlighted and investigated. Moderating these factors will definitely add to the understanding of service quality perceptions and expectations. There is no doubt that lots of research has been conducted and has taken into consideration what was pointed out. However, there is a need to include factors such as management practices in a model that relates customers' perceptions of service quality, management practices and performance. That is the main objective of this research. The next section discusses the available literature on models and literature of service quality, to help in building the proposed model for the research.

2.2.3 *Service Quality Models*

Defining service quality has led many researchers to develop models, either original or based on existing ones. In fact, there have been many developments and changes in service quality models because of new and emerging factors. Researchers started to know and understand the factors affecting service quality, and how to evaluate those factors, which was followed by the improvements in the service quality models. Currently, models are changing according to the role of new technology, which is introduced continuously, with the proliferation of computers and the internet being key (Seith et al., 2005). Seith et al. (2005) published an interesting and valuable pioneering piece of work which reviews nineteen service quality models. The paper critically examined the differences in the service quality models and highlighted the future direction of research in the field. The paper was used as a key for understanding and knowing the models used in the area of service quality. In this section some models will be briefly described and discussed.

Gronroos (1984) developed the technical and functional quality model that pointed out the importance of understanding customer's perceptions of quality, and the way that service quality is influencing business performance and help the firm to compete successfully. Two dimensions of quality were introduced at that time: physical and technical. In 1985 the famous GAP model was developed by Parasuraman et al., built on the idea of differences between expectations and perceptions, with a conceptual service quality model that included five gaps see Figure 2.1.

Figure 2.1: Service Quality Model


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                    Word-of-mouth        Personal Needs        Past Experience

                                         Expected Service

                                            Gap 5
         CUSTOMER
                                         Perceived Service

    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                                                    Gap 4      External Communica-
                                          Service                tion to Customers
                                          Delivery

         PROVIDER                          Gap 3

                                        Service Quality
              Gap 1                      Specifications

                                            Gap 2

                                    Management Perceptions of
                                     Customer Expectations
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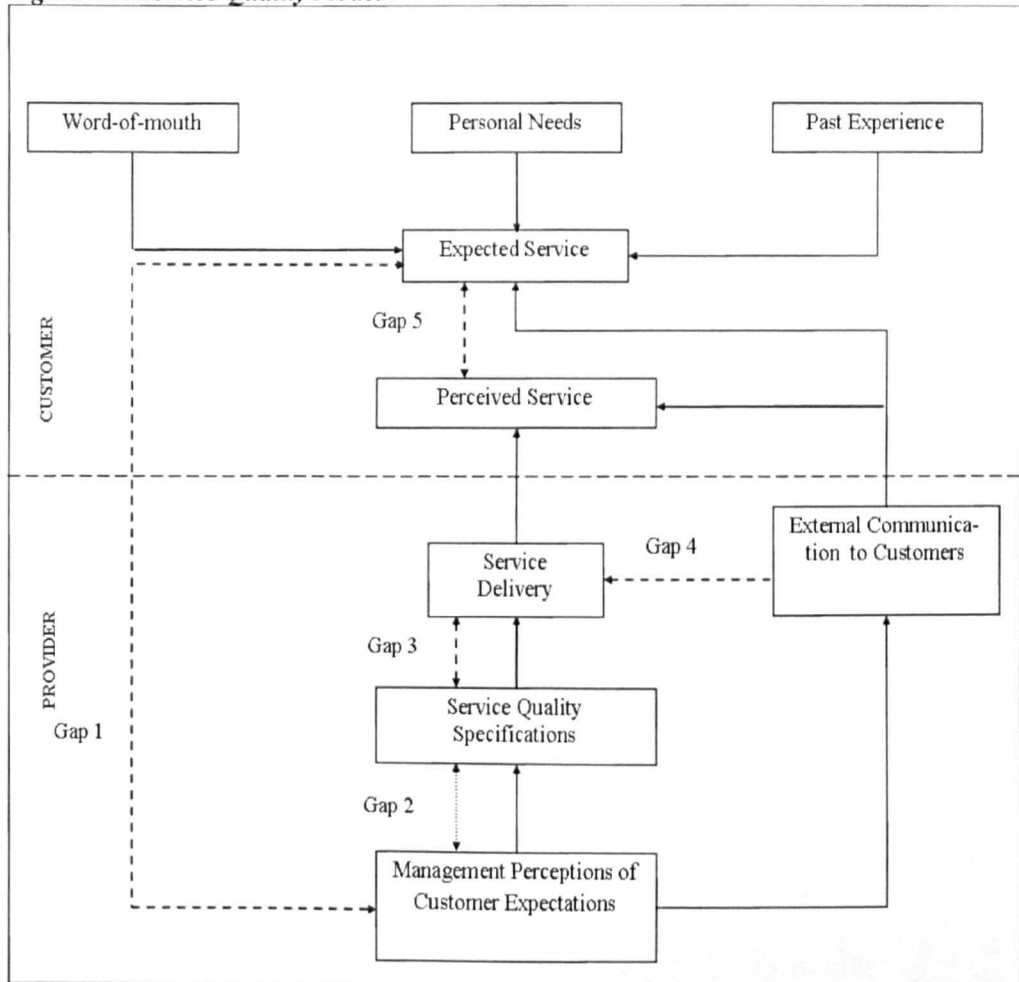
Source: Parasuraman et al., 1985)

Using the GAP model, a SERVQUAL measurement tool was developed to evaluate service quality. Later, using three components of service quality, Haywood-Farmer developed the attribute service quality model in 1988 (Seith et al., 2005). The GAP model was criticized by Taylor and Cronin (1992), who developed a performance only model, arguing that the perceptions of customers are the only valid predictor of service quality, as many customers do not think in terms of expectations and perceptions.

With the boom of technology in the business industry, in production and service, researchers started to take technology into consideration. Case study data was used to develop a model that maps the quality dimension in technology, which helps the managers to know the role of information

technology in improving service quality (Berkley and Gupta, 1994). Other quality service models were developed in accordance with the field in which they were to be applied, such as banking, transportation, healthcare and retailing.

Introducing models for service quality is necessary as it helps in pointing out attributes or dimensions of the service, which helps in measuring and evaluating the service quality, especially for practitioners. In addition, the managers' role will be clearer, building the practices that are needed to serve quality that leads to success and gain in the competitive environment of the market. Moreover, an understanding of types of service will also help in evaluating service quality. Therefore, an understanding of how service quality is evaluated through the literature is important, and is discussed in the following section.

2.2.4   Evaluating Service Quality

Developing service quality models helped researchers and practitioners to come up with tools to measure service quality satisfaction. The leading tool was SERVQUAL, which developed after the GAP model discussed previously. SERVQUAL was mainly developed to calculate Perceptions-Expectations using ten dimensions of service quality, later condensed to five: tangibility, responsiveness, reliability, assurance and empathy (Parasuraman et al., 1985, 1988, 1991, 1994). SERVQUAL literature was discussed in many research papers and publications (Badri et al., 2005). In fact there has been debate on the tool of the SERVQUAL and lots of criticism raised at the theoretical level and operational level (Grzinic, 2007). As per theoretical criticisms, the introduced tool was more directed to the process of the service quality and the introduced dimensions could not be universalised (O'Neill and Palmer, 2003; Soliman and AlZaid, 2002). Another theoretical criticism pertained to the fact that not all customers think in terms of expectations and perceptions (Qin and Prybutok, 2009). There are also many operational criticisms on the tool as well. At the operational level, the elements introduced under each dimension could

not encompass the variability inside each dimension (Grzinic, 2007). In addition, the moment of truth for a customer may vary from time to time for the same service, so looking just to SERVQUAL will give a limited evaluation of the service quality. It was stated by Qin and Prybutok (2009) that SERVQUAL has issues in the use of gap score, poor predictive, overlap among dimensions and unstable dimensionality. Researchers failed to confirm the five dimensions of SERVQUAL in different industries (Ladhari, 2009a; Quin and Prybutok, 2009; Hudson et al., 2004; Mei et al., 1999). SERVQUAL also has been criticized in terms of convergent, discriminant and predictive validity (Ladhari, 2009a). Thus, when adopting items of SERVQUAL, validation of the instrument in terms of reliability and validity should be performed after data collection (Ladhari, 2009a). So, the developed dimensions are not stable. Therefore, different context industries should replace SERVQUAL with measurements that overcome the criticisms raised by researchers (Ladhari, 2009a).

Nevertheless, the model should be highlighted when building an evaluation model by taking the basics and avoiding the criticisms.

Taking the criticism of SERVQUAL of the measurement of the differences between expectation and perceptions has resulted in introducing SERVPREF as a new tool. The tool uses performance only as a sufficient measurement for service quality (Cronin and Taylor, 1994). Other tools were also developed, introduced, and applied in many service industries. Some merely modified SERVQUAL according to the criticisms discussed earlier. DINSERV was a tool introduced to measure the service quality in restaurants developed by Stevens et al. in 1995, in response to the criticism that SERVQUAL was inadequate for the 'unique' restaurant environment (Knutson et al., 1995). Tribe and Snaith (1998) introduced the HOLSAT tool for the purpose of evaluating tourist satisfaction with destinations. Another model was also developed for libraries to evaluate their service quality, called LIBQUAL. Strossmayer (2008) applied SERVQUAL in the health sector.

Statistical techniques to control service quality and its delivery process may be used in several areas (Mason and Anotomy, 2000; Wood, 1994). Control charts, Pareto analysis, Histograms and Cause-and-effects diagram can be used in managing service (Murdick et al., 1990). Charts for average and range may be used to control time of service delivery or waiting time for service. P-chart may be used to control proportions. C-chart can be used for controlling the number of customers' complaints. Quality improvement may be carried out through Pareto analysis and Cause-and-effect diagram.

Advanced statistical tools were used to evaluate service quality alongside simple ones. For example, Exploratory Factor Analysis (EFA) was used by many researchers to evaluate the service quality in the shipping industry (Cronin and Taylor, 1992). Structural Equations Models (SEM) and multivariate statistical tools have also been used widely in measuring service quality (Cronin, 2000; Dabholkar, 2000). What was common in most of the developed tools for measuring service quality was that they relied on the customers' determination of satisfaction. There is a positive relation between service quality and customers satisfaction, often using the SERVQUAL model of service quality (Coulthard, 2004), that can be used by managers to improve and make sure that their organizations have service quality that satisfies their customers. In spite of all this, SERVQUAL is still one of the most recommended tools to be used in evaluating service quality (Akababa, 2006; Lam and Woo, 1997; Mittal and Lassar, 1996). However, the limitations of the model must be identified, and a model must be constructed. So, SERVQUAL items should be the base of building a service quality measurement model.

Recent studies have added dimensions that need to be considered in the evaluation of the process. An example is the addition of fee or price dimension by many researchers as it was stated by Chowdhary & Prakash (2007). Technology was also recommended by Ramsaran-Fowdar (2007), but has not been applied yet. Technology is usually considered as a part of tangibles. That will create an overlapping in the dimensions and which needs to be taken into consideration while building a measurement tool. Many studies in the literature

modified the SERVQUAL model to fit a certain industry, or to develop the concept, with the evaluation itself being accomplished with other tools such as multivariate statistical analysis.

To more focus the concept, the next section will discuss service quality in leisure, tourism and hospitality, with due consideration of the available literature, in order to conceptualize a model for the hotel industry.

2.3 Service Quality in Leisure, Tourism and Hospitality

2.3.1 Leisure, Tourism and Hospitality

Over recent decades the number of tourists and travellers has increased significantly all over the world, and is forecast to increase further over the next few years, from 565 million in 1995 to 1006 million in 2010 and 1561 in 2020 according to the World Tourism Organization WTO (Tourism 2020 Vision). The Middle East is expected to face the largest annual growth with 6.7% average annual growth rate (Tourism 2020 Vision). That has resulted in focussing the attention of many researchers onto this field.

The hospitality and tourism industries are among the most important in the world in terms of their effect on the social and economic development of a region or country (Holjevac, 2003). In fact, tourism has not only become one of the main sources of income for many countries, but also a valuable means to encourage global income development (Hwang and Chang, 2003) especially in developed countries, which creates gain for both investors and governments. That has lead many countries to give special attention to tourism, and some countries have increased the money invested in the sector. Lots of studies have proved that there is a positive relation between the GDP and increased numbers of tourists in the country (Arslanturk and Atan, 2012, Stainslav and Craig, 2007). Although uncontrolled tourism has affected some countries negatively, governments are encouraging it. Thus, politicians and tourism organizations should establish some boundaries and roles to control the effect of tourism on their own countries (Archer et al., 2004).

Tourism was defined by the WTO as 'the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes' (WTO Technical Manual, 1995). Tourism is a competitive and dynamic industry that requires the ability to constantly adapt to the changing needs and desires of customers. Tourism aims to satisfy customers and provide enjoyment as well as safety and the feeling of security (although not particularly noticeable in long-established Euro-American tourism, in some parts of the world concern over security is the prime consideration of tourists). Tourism consists of different elements and sectors: accommodation, food, beverage services, travel agencies, transportation and entertainment. The tourism process might be viewed as three elements: travel, accommodation and participation in activities and attractions (Williams and Buswell, 2003).

Looking to the tourism and hospitality industry, it can be said that the industry is becoming one of the largest industries in the world (Burkart and Medlik, 1974; Holjevac, 2003; Arslanturk and Atan, 2012). As a result, many businesses and organizations have been developed in the industry. That has led to the appearance of competition, and concern about quality has become a requirement to survive. Quality for tourists, as defined by Holjevac (2003), is everything a tourist requires and expects. He also added that human beings nowadays are not only looking for basic needs, they are also looking to fill their social and spiritual needs, including leisure and travel, and whatever the tourist desires (Holjevac, 2003). Moreover, caring about the emotions of tourists in the service processes is important as it leads to satisfaction (Oliver, 1993; Wirtz et al., 2000; Yu and Dean, 2001; Bosque and Martin, 2008). It is clear that quality is even more important and essential in the tourism and hospitality industry than is immediately obvious.

As the term 'service quality' is very important, it is necessary to highlight previous studies in the area. The next section discusses the service quality in leisure, tourism, and the hospitality industry as it has been dealt with in the available literature.

2.3.2 Service Quality in the Leisure, Tourism and Hospitality Industry

It is difficult to define the concept of service quality, especially in the tourism and leisure industry. As explained by Williams and Buswell (2003), the writers in the field of the service quality concentrate on two approaches: value-based and user-based approaches. The two approaches were discussed critically by Williams and Buswell (2003), and how the interpretations of the two approaches were developed historically by famous researchers in the field of service quality. Service quality is becoming one of the most important attributes for tourists to choose a particular destination, in terms of accommodation or activities and attractions (Weiermair and Fuchs, 1999). That was the reason which researchers intensified their studies on service quality in leisure and tourism. The studies were run to build the dimensions of service quality in the tourism industry and define the importance of each dimension. What is also challenging in the tourism industry is that the expectations of tourists have changed a lot in recent years. In addition, tourists travel from one place to another for many purposes, such as business, leisure and health. Depending on the purpose of the visit the tourists' expectations and interests differ. That obviously makes it more challenging in terms of satisfying customers/tourists with different expectations, and as discussed before, satisfaction means at least meeting customers' expectations.

At the early stages of research it was important to know and understand the service quality dimensions in the field of the leisure and tourism industry. That attention has resulted in a rich literature of deciding the service quality dimensions in the industry (Akbab, 2006; Tribe and Snaith, 1998; Akan, 1995; Knutson et al., 1990). The focus of concern in service quality was mainly customer satisfaction. It was stated that customer satisfaction was considered in many studies as it is one of the keys for business success in today's competitive environment and for gaining customer loyalty (Morgan and Rego, 2006). That is considered to be challenging, as the customer feedback of the service quality is considered to be subjective. It is also required to have knowledge of the

psychological aspects, as it deals with feelings and emotions. Customers for the tourism industry are people with different characteristics which may affect their perceptions of satisfaction. That must be considered as a moderator and needs to be researched regarding how it affects the perceptions of the service quality.

In considering the effectiveness of service quality it is important in addition to customer satisfaction to take into consideration the management and employees' role (Maxwell et al., 2004). So, looking just to customers gives a limited understanding of service quality in tourism. Managers of tourism organizations and their employees are also important elements to be taken into consideration while understanding the concept of service quality. Although service quality is primarily based on the face-to-face experience of employees, other determinants of service should also be taken into consideration (Kandampully, 2001). The organizational climate plays a big role in satisfying customers/tourists. The communication skills of employees and relations between employees and service managers are examples of the determinants of organizational culture. It was also proved that training and special programs for employees in the tourism industry are important as well (Maxwell et al., 2004). Pandey and Joshi (2010) have highlighted the importance of service quality and management practices in managing quality as it affects customer's satisfaction positively. This is where the role of management practices is important and cannot be denied.

Understanding the idea and the concept of service quality in leisure, tourism, and hospitality has helped in measuring service quality. The next section discusses how service quality was measured in this area.

2.3.3   *Measuring Service Quality in Leisure, Tourism and Hospitality Industry*

Various methods to monitor and control service performance are utilized in the tourism and hospitality industry. A number of studies were

conducted to gain a better understanding of the success or failure of service delivery generally, while on the other hand, it was stated by Ross (1994) that there were little attention from researchers to running and conducting studies on the tourism and hospitality industry. From the mid-1990s a rich literature emerged on developing tools and methods to measure service quality (Akababa, 2006; Tribe and Snaith, 1998; Lam and Woo, 1997; Mittal and Lassar, 1996; Stevens et al., 1995; Cornin and Taylor, 1994; Knutson et al., 1994). As discussed above, the role of managers and employees are important for what is known as organization culture. Customer satisfaction was the main index in the tools and methods applied. In fact, lots of studies were conducted by researchers to measure customer satisfaction in the tourism industry (Hasegawa, 2009). The studies proved the positive relation between service quality and customer satisfaction (Tribe and Snaith, 1998). However, that should not eliminate the role of including aspects from organization behaviour and management in forming and evaluating service quality.

SERVQUAL has been applied and used in research for evaluating and measuring the service quality of tourism sectors such as hotels, destinations and travel agencies. The criticisms of the tool have motivated lots of researchers to modify the tool or develop new ones. Lots of researchers have also used the structural equation model and included the factor analysis of customer satisfaction in the tourism industry (Silvester et al., 2008; Thompson and Schofield, 2007). Lately, the multivariate ordered point approach was also used in the field of tourism (Hasegawa, 2009). There was also an integration of different models to measure customer satisfaction in tourism, for example, integrating Kano-model and quality, Quality Function Deployment and SERVQUAL (Tan, 2003). He used the tool to evaluate the customer satisfaction and applied it in Singapore. A tool named INSQPLUS was also applied to evaluate internal service quality in the industry by Uran (Grizinic, 2007). The HOLSAT tool was also introduced for the purpose of evaluating tourist satisfaction with destinations by Tribe and Snaith (1998). The LODGSERV tool was build for the hotel industry, designed to measure the customer expectation of the service quality of hotels (Knutson et al., 1990).

Later on, the role of managers and employees in service quality was included by researchers and the concept of tourism service management was studied and defined. Measuring service quality in the tourism and hospitality industry should include managers and employees (Maxwell et al., 2004). Training and special programs for employees in a tourism industry are also important, and should be considered for organization success (Hope, 2004). Management practices and their effects on quality have been considered in manufacturing by many researchers (Wong et al., 2010; Sit et al., 2009; Tari et al., 2007; Nair, 2006; Kaynak, 2003). Recently researchers have been highlighting the importance of management practices in managing service (Chand, 2010; Pandey and Joshi, 2010; Tari et al., 2010; Zehrer, 2009; Ofir and Simonsons, 2001), but most of those studies were on human resource management only. So, other practices also need to be taken into consideration.

The purpose of this research is to conceptualize a model that can be used to evaluate service quality in the hotel industry. The model is designed to link customers' perception of service quality and management perceptions of operations management practices and performance. To do so, first the literature available on the hotel industry is presented and highlighted in the next section. Then, conceptualization of a measurement model literature is discussed in detail.

2.4 The Hotel Industry

At the beginning it is important to define 'hotel' and understand the nature of the service organization. Hotel is a tourism subsector establishment providing accommodation as well as food and beverages for tourists stay on a paying basis (Cooper et al., 2005). Another definition of hotel in Business Dictionary (2012) is 'a commercial establishment providing lodging, meals and other guest services'. Hotels are said to play an important role in most countries by providing facilities and services for entertainment and business for meetings and conferences (Medlik and Ingram, 2000). Thus, it can be said that

hotel is a mainly a service organization, which also provide tangibles to its customers.

Many studies have been conducted on the hotel industry as one of the most lucrative and fundamental aspects of the boom of tourism. However, most of the studies were just duplicates in terms of concept and methodology, though different in place of application. In order to improve the service quality of the hotel industry, hotel managers need to have a good knowledge of, and critically understand, the customers' expectations, alongside building good organizational behaviour through their management practices. The reason for highlighting management practices is because it is essential to measure their effect on the service quality perception of customers and the performance of organizations. Essentially, the managers should be able to define and identify the service quality and its' dimensions. In addition, managers need to know the service quality measurements and evaluations. It is also important to know the importance of these dimensions to customers (Fick and Ritchie, 1991).

The literature available provided plenty of service quality measurements, and many methods were introduced. The method which attracted most studies was the SERVQUAL (Parasuraman, Zeithaml and Berry, 1998). SERVQUAL is a multiple dimensions of service quality which is based on the idea of service quality gap. Other applications in the hotel industry were by modifying the PZB tools taking into consideration the criticisms of these tools (Akbaba, 2006; Getty and Thompson, 1994; Knutson, 1990). Understanding and building service quality in the hotel industry might be critical as the stakeholders are coming with different needs to be fulfilled.

Understanding the customers' expectations from the hotel service is critical and challenging as hotels have different customers coming with different cultures and backgrounds. It is recommended to employ repertory grid interviews with customers to indentify the key areas of hotels service operations from their point of view (Nightingale, 1983). Interviewing customers or asking them to fill in a survey will give a good understanding of

their needs and what exactly they are looking for from the hotel so that it may be considered as an excellent service provider. Visitors to hotels from different nations and countries differs in terms of their satisfaction, expectations, perceptions and dissatisfaction (Yuksel et al., 2006; Mattila, 1999; Mok and Armstrong, 1998). There was also another tool built for the hotel industry which is LODGSERV that was designed to measure the customer expectation of service quality from a hotel (Knutson et al., 1990). This instrument was also tested in other cultures and it was found that it worked quite well. LODGSERV included the five dimensions of SERVQUAL, and it is distinguished in terms of not calculating the difference of expectations and perceptions. They recommended their instrument to be used by hotels' managers to help them build a good service quality that satisfies their customers. However, the model does not evaluate the perceptions of customers, which is important to evaluate the quality of service.

Later, the use of 'a critical incident technique' was recommended to understand service delivery (Lockwood, 1994). Critical incident technique is a social science qualitative method used to classify observations of human behavior by relying on a set of procedures and content analyze (Germler, 2004, Ekinci, 2002). In service, customers are asked to tell a story about their experience to understand their incident and act using content analysis (Germler, 2004). In 1995, Martin employed importance/performance analysis. Then, in order to assess the differences between managers and employees, he employed 'service gap methodology'. Later on, the importance of the service quality measurement in the hotel industry and validating the measurement motivated lots of researchers to conduct work and case studies. A study conducted by Oberoi and Hales (1990) developed a scale to measure service quality in conference hotels. A study undertaken by Ekinic and Riley (2000) showed that the most critical issue in service quality research is the validity of the measurement scale.

Other statistical quality tools that are used in the manufacturing sector can be modified and used for services (Johannsen et al., 2011; Murdick et al.,

1990). Statistical techniques to control service quality and its delivery process may be used in several areas(Murdick et al., 1990) . For example, charts for average and range may be used to control time of service delivery or waiting time for service. P-chart may be used to control the proportion of rooms' occupancy in a hotel. C-chart can be used for controlling the number of customers' complaints. Quality improvement may be carried out through Pareto analysis and cause-and-effect diagrams. Those tools are used in continuous evaluation of the service quality of hotels, which helps the managers to make sure that their service quality is under control. Moreover, those tools are easily used and applied with the development of computer software and user-friendly programs. Alongside the basic tools of quality, managers should use a good model of service quality. Accordingly, the quality of service will be measured, controlled and improved.

Studies were conducted on the management of the service quality and their role in providing good service quality (Kandumpully and Huo, 2007; Lagrosen and Lagrosen, 2003; Kandumpully and Menguc, 2000) . There should be a comprehensive understanding of the service quality by managers in order to build a good quality policy for the hotel service. The policy should include the role of customers as well as that of employees (Drohan et al., 2009; Edvardsson et al., 2005; Brotherton, 2004; Geller, 1985). In order to provide a high quality service in a hotel there should be an effective internal communication system for understanding the quality policy of the organization (Harrington and Akehurst, 1996). It is known that most hotels have similar features, especially international chain hotels, and this increases the importance of managers' and employees' role, as service quality has to be part of the hotel culture if the service is to stand out from the crowd. It was stated that service quality should be part of organization culture (Pallet et al., 2003; Davidson, 2003). Thus, the culture of the organization and the role of managers are extremely important and critical in ensuring the quality of intangible services as customers will experience perceptions of intangible service.

In terms of customers, the managers of hotels need to measure customer satisfaction as well to make sure that what is provided results in a satisfactory customer perception. It was also recommended to consider guest questionnaires as the prime key or tool for hotel managers to evaluate the service quality of their organizations (Harrington and Akehurst, 1996). In fact, what matters for a hotel in producing service quality is the customer perceptions' of service quality and that is why it needs to be studied (Mohsin and Lockyer, 2010). The reason is that a satisfied guest is not only more likely to return but they are also more likely to recommend the place to others (Stickdorn and Zehrer, 2009).

There is also a need to know the importance of each criterion and dimension of service quality. A study was recently conducted by a researcher just to ask the customers what they considered to be the most important criteria in the hotels' service quality and to rank them (Ban, 2008). Accordingly, the importance of each criterion can be decided. So, service quality dimensions and criteria should all be given equal attention because each tool has an effect on the overall customer satisfaction. Also, in recent years researchers have started to encourage the application of total service quality in hotels (Wilkins et al., 2007).

Service quality in the hotel industry is a requirement for hotels to survive in the world of competition. Competition in the lodging industry has increased significantly (Mohsin, 2007). It was proved using the structural equation model that service quality in the hotel industry has an effect on the competitiveness of hotels both externally and internally (Campos-Soria et al., 2005). In their study, it was found that in addition to the direct positive relation and effect of service quality on competitiveness, service quality in hotels also has an indirect relationship and effect on other variables such as average direct cost and occupancy level. So service quality is the key to achieve competitiveness and profitability for a hotel. Recently, it was suggested that the hotel industry should also think of high quality in segmenting their service quality (Garcia and Tugores, 2006). Customer satisfaction on a particular quality service dimension will affect the overall customer satisfaction which

will later affect the results of customers' repurchase intensions (Jones and Suh, 2000).

Research has entered a new phase since the introduction of technology, computers and the internet. Technology is mainly considered to be the role of the internet and the use of e-mails. E-mail is the leading internet application among global hotels (Anuar, 2011; Ramsey, 2001). Hotels need to adopt technology either in building a website for their hotels, or at least having smoothly running e-mail facilities for the hotel that can be used for reservations and handling customers' feedback. E-mails are technology that should be used to expand, survive, and personalise in the hotel industry (Frey et al., 2003). Moreover, technology in hotels should be provided to customers as part of conventional services, for example, internet, on-demand PC, e-mail, wake-up systems etc (Ramsaran-Fowdar, 2007). E-mails are also now used to evaluate the service quality and to respond to customers' e-mail enquiries (Murphy et al., 2007). From a customers' points of view it was found that hotels' responses to customer e-mails have two critical factors: the effect on the buying decision; and customer satisfaction (Matzelrs et al., 2005). So, just as hotels are expected to respond professionally to customer's calls and faxes, they should be treating e-mails professionally as well (Murphy et al., 2007). In addition, other technological facilities like T.V and electrical plugs should be conveniently available for customers staying in hotels (Ramsaran-Fowdar, 2007).

Looking to the available literature and as the main purpose of this research is to evaluate the service quality of hotels; there is a need to develop a comprehensive tool to measure that service quality. A critical literature investigation is needed to conceptualize an effective model to measure service quality to increase the value, and help add to the theoretical knowledge of service quality in the service industry, and specifically in the hotel industry. The build model is to link operations management practices, customers' perceptions of service quality and performance. The next section discusses the literature to conceptualize the model.

2.5   Conceptualizing the Service Quality Model

2.5.1   Customer Satisfaction and Service Quality

Customer satisfaction is essential for the success of service firms because it leads to increase profit (Zabkar, 2010; Claver-Cortes et al., 2007; Morgan and Rego, 2006). Customer satisfaction was considered in many studies as one of the keys for business success in today's competitive environment and in gaining customer loyalty (Morgan and Rego, 2006). There is a need to define customer satisfaction and understand its meaning. Lots of researchers' approaches view customer satisfaction as a cognitive process (Bloemer and Poiesz, 1989); however it has also been defined as the accumulated experience of a customer during purchase and consumption (Andreasen, 1995).

Customer satisfaction is a subjective evaluation of the experience of consumption by customers. Moreover, it is the relationship between the attributes of the product or service and customers' perceptions. Another definition is that it is a customer's overall evaluation of the performance of an offering to date and considered as an effective component that is created in the usage of a service (Elliott and Meng, 2009).

Customer satisfaction has been considered as one of the main measurements of service quality by researchers in the service industry. The service operations literature either views satisfaction as the antecedent of perceived quality (Anderson and Sullivan, 1993), or perceived quality as an antecedent of customer satisfaction (Parasuraman et al., 1988).

Going back to quality philosophies and quality management tools, customer satisfaction is considered as the prime principle of quality. For example, Deming's definition of quality was considering the current and future need of customers (1986). The 14 points of Deming were later applied to the service industry in a book by Rosander (1991), which entrenched customer satisfaction as a tool or yardstick for measuring service quality. In fact most researchers evaluated service quality in terms of customer satisfaction in a

number of different service industries (Strossmayer, 2008; Akbaba, 2006; Choi and Chu, 2000).

Customers should be considered and given attention, according to stakeholder theory. The stakeholder theory is a theory of organizational management and business ethics that addresses morals and values in managing an organization (Freeman, 1984). Stakeholder theory holds that an organization should act in terms of satisfying its stakeholders, including customers. Here the importance of using customer satisfaction as an evaluation of the service quality in service industry is recognized. In fact, competitive success for any service provider depends ultimately on customer satisfaction which is determined by customer experience with service (Zehrer, 2009). So, customers' perceptions of service quality must be studied in order for hotels to produce service quality (Mohsin and Lockyer, 2010). The reason for that is, a satisfied guest is not only more probable to return but they are also likely to recommend the place to others (Stickdorn and Zehrer, 2009).

It can be pointed out that hotel managers should take into consideration customer satisfaction because it directly affects profits and performance. Recently, it was stated by Kuo (2009), that the correlation between customer satisfaction and profitability has been confirmed empirically in numerous studies. So, service quality causes an increase in business performance as it attracts new customers (Tseng, 2009). The customer's satisfaction is considered to be a measurement for a service's quality, measured through surveys. Customer satisfaction with service quality is considered by the perception of single attributes that are the building dimensions later accumulated for the measurement of overall customer satisfaction which is the overall perception of service quality.

To evaluate customer satisfaction there is a need to build a quality model with dimensions that represent the quality of service. A discussion of how service quality dimensions were developed is provided in the next section.

2.5.2 Dimensions of Service Quality

Logically, to measure the service quality satisfaction for hotels there is a need to conceptualize the model of measurement and evaluation. It was stated that service quality has received more attention in recent years, however only a few studies help in building a good sound service quality evaluation criterion for hotels (Tseng, 2009; Hsieh et al., 2007). Here, where the literature on service quality in general to conceptualize the service quality model needs to be considered and not only the literature available on hotels.

There are significant differences in the conceptualization of satisfaction (Martinez and Martinez, 2010; Giese and Cote, 2000). The literature of service quality evaluation was viewed and analysed to decide the attributes and dimensions of service quality to build into the model. Looking at the available literature of service quality measurement, plenty of methods were proposed and identified, and those measurements were divided into two groups, incident-based and attribute-based (Akbaba, 2006). Incident-based measures consider the incidents the customer faces during the service experience. Attribute-based measures exist in a wide range of attributes and dimensions.

Introducing different methods in the literature by researchers has helped in understanding the different dimensions of service quality in the hotel industry. Although lots of researchers agreed that SERVQUAL is a leading measure of service quality and is suitable for the measurement of service quality (Akababa, 2006; Lam and Woo, 1997; Mittal and Lassar, 1996), there is a need to modify and change some dimensions to suit the hotel industry. In addition, the method or aspects of it were criticized by lots of researchers. Initially the SERVQUAL model was based on ten determinants of quality, which were seen to characterise the perceived quality of the customer experience (Grönroos, 2000): *Reliability* involves consistency of performance and dependability. *Responsiveness* concerns the willingness or readiness of employees to provide service. *Competence* means possession of the required skills and knowledge. *Access* involves approachability and ease of contact.

Courtesy involves politeness, respect consideration and friendliness of personal contact. *Communication* means keeping customers informed in language they can understand and *Credibility* involves trustworthiness, believability, honesty and having the customers' best interests at heart. *Security* is the freedom from danger, risk or doubt. *Understanding/Knowing* the customer involves making the effort to understand the customers' needs. *Tangibles* include physical evidence of the service. Later, the ten dimensions were abbreviated to the known five RATER dimensions: *Tangibles, Reliability, Responsiveness, Assurance* and *Empathy.* When measuring service quality, many studies failed to confirm the dimensions of service quality suggested by SERVQUAL which lead to few suggestions for generalizing SERVQUAL. Different service industries should have different dimensions of service quality based on the nature of the service provided (Hudson et al., 2004; Solaiman and Alzaid, 2002). Yet many researchers used SERVQUAL as a base to conceptualize service quality measurement models.

Models for measuring service quality in hotels: Based on the SERVQUAL model, Knutson et al. (1990) developed an instrument called LODGSERV and found the same dimensions as SERVQUAL but differences in their order of importance. *Reliability* was the first followed by *Assurance, Responsiveness, Tangibles* and *Empathy.* Patton et al. (1994) translated the LODGSERV into Japanese and Chinese and implanted the model into many countries to find out if the tool or the model retained its reliability. They found that the reliability was maintained when the instrument was transferred to different cultures. Juwaheer in 2004 has explored the international perceptions of hotel operations by using a modified SERVQUAL model in Mauritius using a three-part questionnaire (like Akbaba, 2006). The study in Mauritius defined 39 variables that were later using factor analysis categorized into smaller sets of newly correlated dimensions. These dimensions were reliability, assurance, extra room benefits, staff communication, room attractiveness and décor, empathy, staff outlook and accuracy, food and service and hotel surroundings and environment. Further analysis has found that service quality perception by international tourists is derived from reliability, staff outlook and accuracy,

room attractiveness and décor and hotel surroundings and environment (Akbaba, 2006; Juwaheer, 2004). Clearly there is some overlap between these conceptual factors. In 1992 Saleh and Ryan developed five dimensions: conviviality, tangibles, reassurance, avoiding sarcasm, and empathy, which are different from the SERVQUAL dimensions. Their conclusion was that conviviality has higher variance. In 1993, Getty and Thompson adapted SERVQUAL to develop the LODGQUAL instrument with three dimensions: tangibles, reliability, and contact.

In 1995 Akan conducted a study in Turkey and concluded that users of hotels may expect to receive friendly, courteous, hygienic and expert service but without special personalized attention. The model resulted in introducing seven dimensions of service quality: courtesy and competence of hotel personnel; communication and transaction, tangibles; knowing and understanding customers; accuracy and speed of service; solution to problems; and accuracy of hotel reservations. It was found that the most important was the first dimension, but the study was only applied in four- and five-star hotels. Looking more into the available literature in the hotel industry, Mei et al. (1999) developed the HOLSERV tool and found three dimensions for the service quality: employees, tangibles and reliability. The best predictor of the overall customer satisfaction of service quality was employees.

In 1999, another study by Delgado et al. used HOTELQUAL with three dimensions: evaluation of service personnel, evaluation of hotel facilities and service organization. Ekinci et al. (2003) evaluated the service quality in terms of only two dimensions: tangibles and intangibles. In 2006, Akbaba used five dimensions: adequacy in service quality, understanding and caring, assurance, and convenience. Recently, two dimensions were added to the five dimensions of SERVQUAL and applied in the hotel industry: technology and hotel core benefits (Ramsaran-Fowdar, 2007). The technology dimension might overlap with tangibility, since technologies are considered to be tangibles. In a study by Mohsin (2007) on hotels in New Zealand five factors converged: quality and importance, reception services and courtesy, flexibility, value-for-money and

overall impression and convenience. So, there is no one specific model that can be used to measure service quality in the service industry in general or in hotels in particular. It was stated by Martinez and Martinez (2010) that there is a debate in the last three decades in management and marketing literature of how service quality can be measured. As was discussed earlier, different conceptualized models have been developed by a number of researchers. However, all these models have a common feature which is they propose a multidimensional service quality model that is measured in terms of customers' perception (Martinez and Martinez, 2010).

Criticisms/gaps of quality models developed for hotels: As discussed in section 2.2.4, SERVQUAL criticisms have encouraged researchers to either modify the model or even build a new model to measure service quality in hotels. As a result, LODGSERV (Knutson et al., 1990), LODGQUAL (Thompson and Getty, 1994) and HOLSERV (Mei et al., 1999) were built by researchers to measure the service quality of hotel.

Recalling the criticism of SERVQUAL on dimensionality and their discriminant and convergent validity (Ladhari, 2009a; Quin and Prybutok, 2009; Hudson et al., 2004; Mei et al., 1999), the criticism has not been overcome by LODGSERV and LODGQUAL as they have similar dimensions as SERVQUAL. Thus, SERVQUAL criticism on generalizing service quality dimensions is not overcome by the introduced models. Moreover, It was also questioned whether the scales of LODGQUAL provide a superior analysis for assessing service quality (Crick and Spencer, 2011). It was also stated by Ekinci et al. (2003) that exploratory and confirmatory analysis failed to confirm the dimensions of LODGSERV.

HOLSERV model by Mei et al. (1999) has modified some of SERVQUAL items and unlike SERVQUAL the customers' evaluations of items were in terms of perceptions to expectations but in one column. It was found that perceptions score 'one column' is superior than the gap 'two columns' score of expectations-perceptions used in SERVQUAL (Mei et al.,

1999). Asking customers for expectations and perceptions leads him/her to compare mentally perceptions and expectations, which mean perceptions might already include the difference between expectations and perceptions (Huson et al., 2004). So, customers may not assess service quality in terms of perceptions minus expectations. Thus, the best measurement is perception only (Hudson et al., 2004).

Mei et al. (1999) study have overcome the opretionalising of SERVQUAL by using one column evaluation, reliability and robust in hospitality industry and the scale was shorter and user friendly. Moreover, it was stated by Mei et al. (1999) that HOLSERV should be treated as a starting point for hotel service evaluation but the model should be enhanced by qualitative research.

Adding the dimension of technology by Ramsaran-Fowdar (2007) has also created another gap of the developed models for hotels as none of the previous models has included the dimension of technology provided by hotels. It is also important when developing a model to measure service quality of the hotel to take into consideration emotions as they play an important role in the measurement of customer satisfaction (Bosque and Martin, 2008; Briggs et al., 2007; Han and Back, 2007; Zins, 2002; Yu and Dean, 2001; Wirtz et al., 2000; Oliver, 1993). Moreover, the dimension of price should also be included when measuring the overall customer satisfaction of service quality (Chowdhary and Prakash, 2007; Kandampully and Suhartanto, 2000; Voss et al, 1998). Although Getty and Thompson (1994) stated the importance of price in building customer satisfaction, their LODGQUAL model has not included the dimension of price. In relation to the discussed criticisms/gaps of the service quality models, there is a need to develop an effective model for hotels to measure service quality.

Building an effective model to measure hotel's service quality: Although there are several studies in the hotel industry, as discussed, there is a need to look into the attributes that were introduced to build a comprehensive model

that can be used to evaluate the service quality of the hotel which is the aim of this research. It was stated by Lloyd et al. (2011) that despite the growing body of literature on the concept of customers' perceived value, calls remains for more sophisticated measures. The delivery of service quality to customers is the main responsibility of hoteliers (Su, 2004), so what matters to hotels is the customers' perception of service quality (Mohsin and Lockyer, 2010). Customer satisfaction, which is determined by customers experiencing the service, affects the competitive success of the service organization. The reason for that is a satisfied hotel guest is not only more probable to return but they are also likely to recommend the place to others. All of that increases the importance of conceptualizing a service quality measurement model.

Understanding and critically evaluating the discussed literature has resulted in considering the following dimensions of service quality, which are discussed:

Employees' attitude/behaviour: Unlike products and goods, the service delivered to customers is generally intangible. Understanding the nature of service is more about the interaction of customers with the service employees, which emphasizes the importance of including the employees' attitude as a dimension of service quality. It is known that the nature of the service is intangible, relating to the interaction of employees and customers, and some studies have analysed the role of employees as a dimension (Dabholkar et al., 2000). The employee attitude here is how the employees interact with customers, usually measured through customer survey. Despite the importance of the role of employees, few studies have considered employees' attitude as a dimension in itself (rather than as part of other dimensions of service quality satisfaction in the service industry), particularly in hotels. However, employees' attitudes were tested under several quality dimensions, or were introduced in the service attributes. In addition, the role of employees was introduced in some studies indirectly in the dimension of the service quality (Paursuraman et al., 1998; Dabholkar et al., 2000), hence employees are now generally tested indirectly in the service industry in general.

Employees' behaviour and attitude should be given high attention in evaluating the service quality. In fact, many researchers underlined the importance of the employees' behaviour, and contact with customers is important in creating and providing good service quality as it affects the perception of service quality (LIyod et al., 2011; Cheung et al., 2009; Lenka et al., 2009; Tsaur and Lin, 2004; Chu and Choi, 2000; Parasuraman et al., 1985). For example, it was shown by Chandon et al. (1997) that customers evaluated the service quality on the dimension of employees listening and understanding of customers. It was stated by Liu and Yen (2010) using importance-performance analysis that the service item related to employee-customer interaction in helping customers even if they are busy should be prioritized and improved by service providers.

Looking to the available literature on hotels, it was found that numerous studies on evaluating service quality included many attributes that measure the employees' attitude directly or indirectly (LIyod et al., 2011; Cheung et al., 2009; Lenka et al., 2009; Tsaur and Lin, 2004; Chu and Choi, 2000; Dabholkar et al., 2000; Paursuraman et al., 1998). In addition, performing factor analysis resulted in naming factors that relate to employee attitude and their interaction with the customers. For example, the personnel factor was one of the seven factors identifying service qualities in hotels (Akan, 1995). Moreover, the other factors identified in his study related to the attitude of the employees to hotel customers, yet his study has the limitation of being implemented only on four-star hotels. Mei et al. (1999) also used the HOLSERV tool for employees, declaring it the best predictor of the service quality of hotel. So, employees' attitude/behaviour is one of the most important factors for hotels customers (Chu and Choi, 2000). Looking to the available literature, the employee dimension, which includes attributes of employees' behaviour and their interaction with a hotels customer, should be included in the dimension of service quality. Such introduction of the dimension will even help the managers of hotels evaluating the attitude of their employees from the customer's point of view, and that will result in better performance through managing employees.

Numerous studies indicate that customer satisfaction is closely related to employees' service attitude (Kuo, 2009). Looking to the literature, researchers have agreed that friendly service attitude includes on-time and effective customer service (Gronroos, 1990; Heskett and Schlessinger, 1994). Friendly attitude includes employees being kind, polite, keen, and neat in appearance, emphasizing the role of employees in satisfying the customers (Kuo, 2009). As a result, it is important for the service providers (including hotels) to provide employees with attitudes that satisfy customers in their communication and interaction. In 2000, Dabholkar et al. indicated that employees with positive quality service attitudes enable the employees to solve problems patiently, quickly and in an ordered manner. Achieving quality service attributes will definitely lead to customer satisfaction. Considering the employee attitude, there is a need to know how the attribute will contribute to the overall customer satisfaction.

Looking to what is discussed in the literature and looking to the items of the dimensions of the service quality it can be said that employees' attitude/behaviour will include the assurance, empathy, responsiveness and reliability items. Reliability is the ability to perform the promised service dependably and accurately (Parasuraman et al., 1990). In terms of the hotel service quality is the ability of staff performing the service accurately the first time, and at the time it was promised for delivery. It is also the accuracy of orders and queries made by customers such as food orders, billing, and information. It also includes the communication skills, knowledge and experience of employees. Responsiveness is the willingness to help customers and to provide prompt service (Parasuraman et al., 1990). Responsiveness in the hotel industry is how quickly a customer gets a response from the employees in addition to the time of doing the check-in and check out. Moreover, how quickly do hotel employees respond to problems faced by customers. Assurance is the knowledge and courtesy of employees and their ability to convey trust and confidence (Parasuraman et al., 1990). The assurance here is the feeling of customers that the employees are friendly and

courteous; in addition, it is the ability of staff to inspire confidence. Empathy is the provision of caring, individualized attention to customers (Parasuraman et al., 1990). Empathy in a hotel is the attention by hotel staff to the customer and the customer's feeling of getting attention and care. It is also giving customers the chance to express their feelings and listening to their queries, comments and questions carefully. In addition, it is about dealing with complaints raised by customers and the ability to solve any problems. Empathy is also achieved through calling the customer by his/her name.

To evaluate the service quality through customers' perceptions it is important to introduce employee attitude as one of the dimension of service quality. Customers often rely on the behaviour of the service employees when judging the quality of a service (Hennig-Thurau, 2004). In addition, it was also demonstrated in the context of the service research that the employees' behaviour affects the perception of the service (Cheung et al., 2009; Lenka et al., 2009; Bitner et al., 1990). The aim of this research is also to investigate the contribution and the relationship of the customers' perception of the employee attitude, to overall customer satisfaction.

Price/Price Fairness: It is important to include the price and price fairness in conceptualizing the service quality model to measure overall customer satisfaction. Recently researchers have included the price or fees as some researchers refer it to as a dimension of service quality (Chowdhary and Prakash, 2007) and the reason for that is that price perceptions also directly influence satisfaction judgments (Voss et al., 1998). Moreover, it was proven that the price significantly influences the customer satisfaction with the service in hotels (Kandampully and Suhartanto, 2000). Yet there is a need to study how the price fairness dimension will affect the overall satisfaction of the customer in the service quality of the hotel.

Researchers have shown an interest in considering the price and its' effect on customer satisfaction, as it is the aim of the business to succeed in a competitive environment. Moreover, according to the concept of equity theory (Scherer, 1999; Huppertz et al., 1978), customers will evaluate the output (e.g.

satisfaction) according to their input (e.g. price), and thus the perceived price fairness of a hotel and the service affects the satisfaction of the customer.

Getty and Thompson (1993) stated that price is an important factor that assists and influences the development of customer satisfaction. However, there is still little published research on including the influence of price fairness on customer service satisfaction, despite its importance (Herrmann et al., 2007). Researchers also agreed that perceived price fairness could be another factor that influences customer satisfaction and behavioural intentions (Martín-Ruiz and Rondan-Cataluna, 2008; Andaleeb and Conway, 2006; Xia et al., 2004). The perceived price fairness here is whether the price the customers pay for the service of the hotel is considered to be reasonable for the service quality they receive. Including the price fairness as a dimension of service quality is also important for the managers to know if their customers are satisfied with the price (as a measure of) what they provide through their service (Martín-Ruiz and Rondan-Cataluna, 2008). There is a need to know if there is in fact a relationship between price fairness and customer satisfaction with the service quality and if the relationship is significant. In 2007 a study conducted by Martin-Consuegra et al. supported the significant positive relationship between price fairness and customer satisfaction, but their study concerned only the airline industry. Similar conclusions were reached by the hotel study of Kandampully and Suhartanto (2000); however, the price was included only indirectly under another dimension of service quality, not as a dimension by itself.

Although several studies investigated price and price fairness and its relationship to customer satisfaction, there is a gap to be filled in including it as a dimension of service quality. Moreover, the relationship of price fairness with the overall customer satisfaction of service quality of the hotel needs to be researched.

Tangibility: Although services, unlike goods, are generally intangible, the tangibles that help to provide the services are important and an unavoidable in testing service quality satisfaction. It is equally important to include both

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tangibles and intangibles when measuring service quality and its influence on customer satisfaction (Pandey and Joshi, 2010). So, the service can be said to consist of two parts: what is seen and what is not. Tangibility refers to the physical evidence of the service and consists of physical facilities and the appearance of those facilities (Parasuraman et al., 1985). It is important to include the tangibles in the service quality, because they have a significant effect on the perceived service quality (Liu and Yen, 2010; Santos, 2002). Researchers have given several names with different interpretations to the physical elements of service quality measure; for example, Dabholkar et al. (1996) used the term "physical aspects". Williams and Buswell (2003, p. 89) also pointed out the importance of including tangibility in service quality evaluations of the tourist industry.

According to the literature, in relation to hotels tangibles include the furniture, facilities, appearance and cleanliness. Tangibility's role or introducing tangibility as a dimension of service quality is important to build a comprehensive method or model to evaluate the service quality. Lots of researchers observed that hotel customers' first impression when entering the hotel is based mainly on decoration and physical appearance (Hsieh et al., 2007; Akbaba, 2006; Tsaur, 2001). Moreover, the other facilities in the hotel, such as swimming pool, food, beverages, and room furniture are also examples of tangibles that affect the service quality perception of customers (Akbaba, 2006; Choi and Chu, 2001; Meler et al., 1996). In addition to physical facilities, tangibility is also the condition of the physical (e.g. cleanliness), noise/quietness in the service is also considered within the dimension of tangibility (Fitzsimmons and Fitzsimmons, 2009, p. 109). It was stated by Liu and Yen (2010) that tangibility has a significant effect on service quality where it has significant relation to total tourists' satisfaction.

Understanding the concept of tangibility and its definition it can be said that one of the tangibles that has became important and unavoidable is technology. In fact, technology has been introduced lately as a (separate) dimension of service quality in the hotel industry (Ramsaran-Fowdar, 2007).

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The context and satisfaction in tourism is influenced by the technological items or facilities in the organization (Williams and Buswell, 2003). In fact, providing technology facilities to customers is effective for hoteliers (Chu and Choi, 2000). In the hotels' context, technology for customers is the emails and enquiry facilities used for reservations, including websites that are viewed by customers. Technology is also manifested as fax, T.V., internet, and Wi-Fi availability in the hotel and rooms. However, technology as a dimension by itself overlaps with tangibility dimensions. To avoid such criticism, the tangibility dimension is divided into two dimensions: *technological tangibility and non-technological tangibility.*

Consumption Experience Emotions: In order to measure customer satisfaction, it is important to take into account factors concerning the psychological environment, such as subjective personal reactions or feelings experienced by customers. In many situations, it may be difficult to separate emotions from the evaluation of service quality. Emotions can be experienced from the start of consuming a service to the termination of the service experience (Liljander and Strandvik, 1997). When applying a service quality to a customer that creates an emotional experience will hopefully results in satisfying the customer's service needs (Pandey and Joshi, 2010). As a result, there is a need to include psychology in the satisfaction of the service by including the emotion of the customer. The emotion is important in explaining the customer's behaviour and reaction. So the need to include emotions in the model of customer behaviour has increased significantly during the last few years (Loken, 2006).

Looking to the available literature, it was pointed out that emotions play an important role in satisfaction (Bosque and Martin, 2008; Briggs et al., 2007; Han and Back, 2007; Zins, 2002; Yu and Dean, 2001; Wirtz et al., 2000; Oliver, 1993). So, when forming or conceptualizing satisfaction the emotion should be included in the formation. However, there is little research investigating the relationship between emotion and satisfaction of a service (Gountas and Gountas, 2007). Including emotion as a dimension in the service

quality has not yet been significantly attempted, especially in the hotel industry. Accordingly, it is important to introduce such a dimension in the service quality model to fill the discussed gap.

In fact, emotions have been the subject of increasing interest recently due to their effect on the customers' judgment of the quality of the service. Dolen et al. (2001) concluded that emotions relate to customer satisfaction with the service. Emotion was also related to the passengers' overall satisfaction rating for the services received in airline services (Gountas and Gountas, 2003). However, it is still unclear how emotion contributes to the overall customer satisfaction of the service quality of a hotel. In a recent study by Brunner-Sperdin and Peters (2009) it was proved empirically in high-quality hotels that emotions are a result of process and employee interaction with customers with higher influence given to employee interaction. However, there is still a gap that needs to be filled in the research of the hotel industry. Emotion as a base of satisfaction has not been documented in the literature in spite of its importance in affecting the satisfaction of the customer (Briggs et al., 2007).

The available literature outlined that an understanding of emotions is necessary to understand customer psychology, and emotions here are expressed in terms of the feeling and the satisfaction of a service in the tourism industry experienced by tourists (Bosque and Martin, 2008). So the emotions derived and experienced in the tourism process affect the satisfaction of the tourist (Bigne et al., 2005). Another study was also conducted by Zins (2002) in tourism and concluded that in consumption emotional experience affects the overall service satisfaction of tourists. Hotel stays are one of tourism processes, so including emotion in the evaluation of the overall customer satisfaction of service cannot be denied, and needs further research.

In-consumption emotions or emotions during the process of the service have been studied in the literature, but there is little empirical investigation in previous studies (Mudie et al., 2003). The role of consumption emotion needs to be deeply explored as customer satisfaction is a cognitive process (Philips

and Baumgrartner, 2002). The consumption emotion here results either in customer-employee interaction, which results from employees' behaviour/attitude; or the usage of the tangibles available in hotel. Emotions are not just a result of customer interaction with employees; they are also a result of non-human elements (Dolen et al., 2001). That has been proven empirically in their study for negative emotions but not for positive emotions. It can be said that, emotions are a result of process and employee interaction with customers with the higher influence by employee interaction (Brunner-Sperdin and Peters, 2009). In order to fill the gap here, emotions are included in terms of their occurrence during the service and not at the end or as a consequence of an experienced service quality.

In relation to the theory of appraisal, emotions here will be divided into positive and negative emotions. Appraisal theory is defined as the idea that emotions are extracted from our evaluations (appraisals) of events that cause specific reactions in different people (Zeelenberg and Pieters, 2004; Scherer, 1999). So, consumption emotions are a set of positive and negative emotions that are found to effect satisfaction (Dube and Morgan, 1998, Han and Back, 2007; Zins, 2002). Looking to the literature, it is more cited that: positive emotions are: happiness, pleasure, excitement, positively surprised, and enjoyment; whereas the negative emotions are: anger, frustration, disgust, embarrassment and sadness (Bosque and Martin, 2008; Ladhari et al., 2008). For the hotel service a selection of emotion lists should be included in terms of easing it in evaluation and to be understandable to customers. The experiential consumption emotions of hotel customers will be divided into two dimensions, negative and positive (Zin, 2002). The way that emotion will be included is in terms of the frequency of occurrence of emotions during the service consumption (Dube and Morgan, 1998), which are a result of facility or tangibility usage during employee-customer interaction (Brunner-Sperdin, and Peters, 2009; Dolen et al., 2001).

Emotion here is included to fill the gap of including it in the hotel service experience. Emotions was included (as discussed previously) in the

literature on the tourism industry as a whole, but not on hotels specifically; this research will fill this gap. Moreover, emotions were included and evaluated at the end of the consumption but not during the service experience.

All the dimensions mentioned need to be measured and linked to the overall satisfaction of the customer with service quality. Moreover, an understanding of the type of the relationship and if in fact it exists needs to be tested. However, the relationship might be affected by many factors and those are called moderators. Moderators also need to be taken into consideration to have a deeper understanding and evaluation of service quality. Moderators of the model will be discussed later in the report. The next section will provide the literature on the importance of management practices in affecting customers' satisfaction and performance.

2.5.3   The Role of Management Practices

When discussing management practices, the concept of Organizational Behaviour (OB) is a key concept: "Organizational behaviour is the systematic study of actions and attitudes that people exhibit within organizations" (Robbins, 2005, p. 2). Understanding the definition of OB shows that there are many disciplines involved, such as communication, training, appraisal, performance, job design, and organizational culture, so managers need to be aware of that and make sure they implement it in their practices in their organization. There are many theories in the field of the organization behaviour that can be used in performing management practices which help in surviving in the world of competitive business. One of these theories is the Resource-Based View (RBV) of organizational competitive advantage.

RBV sees the firm as a collection of unique resource and capability pools that, if utilised in a distinctive way, can be employed to create and preserve competitive advantage (Drohan et al., 2009). However, whilst recognising RBV's potential as a strategic management theory, firms must understand it before implementation efforts are considered (Fahy and Smithee,

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1999). The available resources in the firm by itself is not the key to the success of the firm and achieving competitive advantage, as the capabilities of managing and utilizing those resources through management practices is much more important.

RBV proposes managers' practices of utilizing and processes resources for the firms' competitive advantage, which leads to better performance. Many empirical studies using the theory have strongly supported the resource-based view as having a key role in competitive advantage. However, it is not the available resource that creates the competitive advantage; the resources and their combination are valuable, rare, imperfectly imitable and imperfectly substitutable (Gouthier and Stefan, 2003).

RBV is also connected to the management of customer relations, which focuses on improving the management efforts considering the engagement with customers. That means the managers should establish the practices that help in increasing customers' satisfaction and better performance (Drohan et al., 2009), by integrating the resources of people, processes and technology in their practices for better performance and to provide service quality (Drohan et al., 2009).

The RBV will be pooled by its concept to be evaluated in hotel service and how it is going to affect service quality, customer satisfaction and performance. The evaluation will be through management practices, as they are the key to utilizing and integrating the available resource valuably. The resources that are taken into consideration here are: employees, hotels' tangibles and customers. As customers are considered to be a resource from the perspective of RBV (Gouthier and Stefan, 2003), the managers' practices of taking customers' feedback will be considered as well as part of this dimension.

According to Kandumpully and Menguc (2000) the managerial practices are important, since the customer generally evaluates everything they experience in the whole delivery system. It may be difficult to separate the service concept from the components of the management system. Including the

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managerial aspects strengthens the model of service quality and increases its comprehensiveness. Moreover, it adds to knowledge of management practices in Oman and this will be discussed and highlighted later.

It is important for management to understand and know what their service offers, and to emphasize the importance of their role in providing service quality. How an organization views itself will determine how it presents and positions itself, along with the service delivery, to customers and stakeholders. Edvardsson et al. (2005) rightly argued that looking at service as a perspective on value creation through the lens of the customer may add to future understanding of the service approach. Thus it is important for managers to take customers into consideration in decision making and in providing their service, and that also may be considered as a managerial practice. In addition, managers should build through their practices a good or excellent organizational environment that develops a satisfactory behaviour and communication environment for its customers.

Managerial factors are important for the hotel industry, and those factors are training, information and technologies communication, and environmental management (Geller, 1985; Brotherton, 2004). Moreover, training is considered as a key practice to enhance excellence in service (Haynes and Frayer, 2000). In addition, it helps to develop a strategic value for hotels (Boudreau et al., 2001). The practices of managers in operations and managing processes are also important to consider. The management of processes includes checking the working condition of the physical facilities that are available in the hotel.

Philip (1999) reviewed the performance literature and proposed a hotel performance measurement framework. Several studies attempted to examine the link between quality and performance (Philip, 1999). In 1987, Buzzell and Gale showed a positive relationship between perceived quality and performance using mostly data from manufacturing industry. So, there is a need to know if this relationship hold true in the service industry, and particularly in hotels.

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A paper published by Kandampully and Huo (2007) represented the prime and best practice of customer service in an international hotel chain. They enhanced the opportunities to develop satisfaction and create loyalty. Here the management practices towards employees became important to achieve satisfaction and increase performance.

Managers' practices in operations and human resources must be considered, as they correlate with service quality and customer satisfaction (Kandampully and Huo, 2007). Quality practices of managers in a service are also important for the success of a firm (Kandampully and Menguc, 2000; Lagrosen and Lagrosen, 2003). One quality management practice is the use of practical quality tools, such as quality circle, quality function deployment and Tuguchi methods. It was stated that the frequency of using quality tools is important in creating a positive affect (Lagrosen and Lagrosen, 2003).

It has been presented in the literature that Human Resource Management (HRM) practices have an impact on improving organizations' performance (Philip, 1999). Despite the lack of literature in showing the relationship of HRM to service quality in hotels, the link has been attempted and researched in other service industries (Philip, 1999). Moreover, talking about customers' perceptions of satisfaction, they are more influenced by the behaviour of the service providers like employees, and that is influenced by the role of HRM. However, other managerial practices are also important for serving quality, and increasing financial performance, as discussed earlier.

Management strategy and practices are important in increasing the performance of hotels (Claver-Cortes et al., 2007). In addition, management practices in employee selection, training, empowerment, team working, appraisal, and rewards are important. Moreover, the management of processes, including standard operating procedures, planned maintenance, and equipment working condition are also important and need to be considered in an evaluation of managerial practices (Hope, 2004). As discussed earlier, the adoption of technology in management practices is also essential, and needs to

be evaluated. Using the available literature, the managerial practices list needs to be developed.

According to what is discussed in the literature on management practices in general, the discussion will be focused on operations management practices to conceptualize its dimensions.

2.5.3.1 Dimensions of Operations Management Practices

To measure operations management practices, dimensions need to be conceptualized. Managers should be aware of how to manage customers' experience of their service (Zehrer, 2009). By integrating the resources of people, process and technology, managers should establish practices that help them to increase customer satisfaction to maximise profit (Drohan et al., 2009). In spite of the available literature on management practices, it was argued by Menor et al. (2001) that operations management practices need to be further explored and researched.

Managing Quality started many years ago, yet rigorous attempts to measure quality practices in manufacturing and their affect on quality and performance only started in the late 1990s (Nair, 2006). It has been known that customers do experience service (Gronroos, 2001). Yet little attention has been paid to understand the role of customers in service management (Zehrer, 2009) and to test its effect on service quality and performance. Using meta-analysis in manufacturing it was found that management practices in managing employees and process do affect performance and quality outcomes (Nair, 2006). The relationship has also been proven empirically by a study on firms in Spain by Tari et al. (2007) where managing people and process was found to have a significant effect on quality outcomes, including attributes of performance and customer satisfaction. Process management practices also do significantly affect a firm's quality performance (Wong et al., 2010; Kaynak, 2003).

Managing quality practices in firms includes managing people which covers work attitude, training and employee relation and managing process which covers process control and standardization of process instructions (Tari et al., 2007; Nair, 2006). In comparison to service, management practices in manufacturing and linking it to organization performance have been more considered as a subject of study by many researchers (Gustafsson et al., 2003). In service there are many studies on HRM practices in service in general and in hotels in particular (Chand, 2010), yet studies of other management practices in services have only lately started. Recently, it was stated by Tri et al. (2010) that effective implementation of quality management practices in the hotel industry improves performance. In another study by Chand (2010), a model linking HR management practices, customer satisfaction and performance was build and tested. The results proved the significance of the relationships, yet the study did not include other dimensions of management practice.

Hotel managers should develop lists of practices that help them in serving quality that leads to better performance. So, there is a need to enrich the service literature in general and that for hotels in particular, which demonstrates the effect of operations management practices on the overall customer satisfaction. That is one of the aims of this research.

Researchers found both direct and indirect effects of managing quality practices on firms' performance (Tari et al., 2007; Nair, 2006). It was proved empirically that human resource management and management process practices do affect quality outcomes directly and indirectly (Tari et al., 2007). In a study on hotels in India by Chand (2010), it was stated that HRM practices do affect customers' satisfaction significantly which (in turn significantly affects) the performance of hotels. His study was limited by including only HRM practices, developing a direct relationship between HRM and performance which have already been proved by many researchers and testing the mediation rule of customer satisfaction if it exists. Yet, his study contributed to hotels in terms of revealing the importance of hotel service effectiveness as a consequence of guest satisfaction and an antecedent of hotel

performance (Chand, 2010). The argument that is raised is whether or not the relationship between HRM practices is mediated by overall customer satisfaction. Here, where it needs to be researched if service quality, which is measured through customer satisfaction, mediates the relationship between operations management practices dimensions and performance. Thus, the relationships between operations management practices and overall customer satisfaction needs to be tested as well. It was stated by Sharma and Gadenne (2010) that some cases have provided a positive relationship between quality management practices and performance and other have very little evidence regarding this relationship. So, further investigation and research needs to be conducted to test the relationship. Previous literature has proved the direct relationship, yet customers' satisfaction was measured by managements' perception.

Nair (2006) and Kaynak (2003) stated that, while linking quality management practices to performance, researchers considered performance in different dimensions such as customer satisfaction, profitability and product quality. An analytical study on the available literature on operation management of service have discussed the areas of operations service management and highlighted dimensions such as managing employees, customers' evaluation of service quality and process management (Gunawardane, 2006). Three dimensions of operations management practices are conceptualized for this research:

Managing Employees: in order to enhance customers' perception of service quality, management should manage their employees (Mei et al. 1999). In a study by Nair (2006) and using meta-analysis, it was found that managing employees has a positive relationship with the performance of firms. Researchers considered performance in different dimensions such as customer satisfaction and profitability (Nair, 2006; Kaynak, 2003). So, managing employees' practices are essential to provide service quality as that affects the performance of quality.

Managing employees is important and considered to be the prime and best practice to enhance opportunity to develop customer satisfaction and create loyalty (Kandampully and Huo, 2007). Recalling the dimensions of service quality, it is said that employees' attitude/behaviour significantly effects customers' satisfaction, which supports the importance of management practices in managing their employees. It was highlighted earlier that employees attitude have been proved to have a significant relationship to customer satisfaction by many researchers. That increases the importance of managing employees' practices in any organization to achieve competitive advantage in the market.

Applications of management practices in managing employees do affect quality performance (Chand, 2010; Wong et al., 2010; Tari et al., 2007; Merino-Diaz, 2003). Managing employees includes practices on employee selection, training, team work, rewards and appraisal (Hope, 2004; Pfeffer, 1996; Cho et al., 2006; Haynes and Frayer, 2000). Therefore, managing employees is an important dimension that should be considered in conceptualizing the service quality model of hotels.

Managing Process: managerial practices in managing process in any organization play an important role in affecting customer satisfaction and performance. It was stated by Hope (2004) that it is important to consider the management of processes while evaluating managerial practices. Thus, Process management practices have a positive relationship with financial performance and customers' service measures (Nair, 2006). In order to provide service quality to gain customer satisfaction managers should manage the process of the service provided. Continuous quality improvement and firms' performance is affected by process management practices (Wong et al., 2010; Tari et al., 2007).

From previous studies, it can be said that process management practices in service affects customer satisfaction (Sit et al., 2009). A study in manufacturing, managing process practices of tracking and improvement of

manufacturing process do affect positively the quality of finished products from a customers' point of view (Ahire and Dreyfus, 2000). In their study, the relationship has been empirically proved with a high significance. So, the relationship needs to be tested in the service industry. In other words, there is a need to test if the effect of management practices on managing processes affects the customers' satisfaction as well.

Managing service process includes practices such as taking corrective action against failure, using tools to assist quality, standard operating procedures and planned maintenance (Hope 2004; Kandampully and Menguc, 2000; Lagrosen and Lagrosen, 2003). Those practices need to be considered by management in order to satisfy its customers, leading to high performance and being able to stand in a competitive market environment. Including such dimension, will enhance the conceptualized model and enrich the available literature on service in general and the hotel industry in particular.

Customers' Feedback: Service organizations such as hotels asking customers to evaluate the service provided and considering their feedback will increase the satisfaction of the customer with the Service provided (Ofir and Simonson, 2001). Edvardsson et al. (2005) argued that looking at service as a perspective on value creation through the lens of the customer may add to future understandings of service approach. Here is where managerial practices in relation to customers become important and indeed essential for the success of the business.

Service organizations should invest in the management of customers and the customer relationship (Gouthier and Stefan, 2003). Therefore, it is important for management to listen to their customers and be aware of their expectations in order to sustain profitability (Mohsin and Lockyer, 2010). In manufacturing, it was stated by Tari et al. (2007) that many empirical studies of firms found that customers' feedback does affect the improvement of products. This relationship needs to be investigated and tested in hotels as well. In a recent paper by Wong et al. (2010), it was stated that many researchers and

scholars suggest that customer surveys, feedback and evaluation do affect quality performance.

When managers ask their customers to evaluate the service quality provided, such practices will help them to better manage their service and to call for improvements when needed. In addition, asking customers for suggestions for better service quality will also affect the service quality and performance. Taking into consideration customers ideas in service does affect customer satisfaction (Sit et al., 2009).

Managing customers includes listening to the voice of the customer in evaluating the quality of the service when giving suggestions and recommendations, facilitating customers and building loyalty programs (Hynes and Fryer, 2000; Kandampully and Minguc, 2000, Claver-Cortes et al., 2007; Behara et al., 2001 and Lagorsen and Lagorsen, 2003).

All the three dimensions of operations management practices are to be linked to overall customer satisfaction and performance. This will enhance the conceptualized model of service quality and help in meeting the target of this research. Both direct and indirect effects of practices will be investigated. That will contribute to currently available literature on service in general and hotels in particular. Moreover, this research will help in testing the mediating role of overall customer satisfaction and will open a new direction for future studies. The next section discusses performance as it is important to be introduced in order to include it in the model to help in evaluating the service quality of the hotel industry.

2.5.4   *Performance of Hotels*

To evaluate the success of an organization, performance must be taken into consideration, both financial and non-financial. There is a need for managers to know what increases the performance of their organization. Quality is a function of performance (Oliver, 1994). The quality of the service

here was introduced as customer satisfaction, and there is a need to know the relationship between customer satisfaction and performance, which should then be tested. It has been argued that the financial performance of service organizations is generated from a high level of customer satisfaction (Rucci et al., 1998). In fact, numerous empirical studies also confirm the positive correlation between customer satisfaction and profitability (Anderson and Fornell, 1994; Zeithaml, 2000). Service quality profitability and the economic worth of customers needs to be ascertained, studied, and investigated more in the hotel industry. Profitability is said to be one of the key performance indicators (Brignall and Ballantine, 1996). Enhancing customer satisfaction is therefore a critical issue for hotel managers seeking to maintain stability between guest accommodation and corporate ethicality in today's competitive global marketplace (Kuo, 2009).

There are many objective performance indicators of hotels that can be used to evaluate performance. Occupancy rate per room, gross operative profit, gross operative per available room per day, sales growth, and market ratio can be used as objective performance indicators (Sainaghi, 2010; Claver-Cortes et al., 2007; Reichel and Haber, 2005, Atkinson and Brown, 2001). Subjective performance is also important in hotels whether it is from the customers or the managers' point of view. In fact, subjective performance criteria such as customer satisfaction contribute to service quality (Reichel and Haber, 2005). The challenge for hotels is to use the appropriate performance measurement systems (Sainaghi, 2010). Performance of hotels can be related to different measures such as financial measures, or stakeholders 'customers and employees' related measures (Sainaghi, 2010; Reichel, 2005). Although hotels' financial performance is more considered, non-financial performance measurement such as quality service and customer satisfaction must be considered as well as a measurement of evaluation to better evaluate the hotel's overall performance (Atkinson and Brown, 2001).

Recalling the aim of the study, subjective performance by managements' perception is taken into consideration in conceptualizing the service quality model. The model is built to test the interrelationships between

quality dimensions, operations management practice dimensions and performance.

2.5.5 Moderating Customers' Characteristics

It is important while building a service quality model that links the dimensions to the overall customer satisfaction of service quality and to know what affects the relationships. Here the importance of including moderators in the model is highlighted. Moderators are related to customer characteristics 'gender, purpose of visit: business vs. leisure, age and education' will introduce in the conceptualized model.

Recently in a study by Liu and Yen (2010) it was stated that some demographic variables may lead to significant difference in perception of service quality and total satisfaction. Customers with different educational levels have different service quality perceptions (Liu and Yen, 2010; Aksoy et al., 2003). In terms of satisfaction, males have higher satisfaction than females and in terms of expectations highly educated customers have higher expectations than those with lower levels of education (Liu and Yen, 2010).

A study by Dirmitriades and Maroudas (2007) found that males and older individuals tend to evaluate differently and to rate higher the service quality compared with female and younger customers. So, age and gender may also be considered as moderators. It was concluded by Kuo (2009) in his empirical study on employee attitude/behaviour in hotels that, after nationality, age and gender have the greatest impact on customers' opinions. In addition, Floh and Treiblmaier (2006) supported the moderation by age, where they found that service quality has stronger impact on satisfaction in younger people than elderly. However, age was not found to have a significant difference in service quality perceptions by Liu and Yen (2010) in their empirical study. In addition, Walsh et al. (2008) has proved empirically that age and gender had no moderating effect between satisfaction with employees and satisfaction with

tangibles. Whereas, it was found that there is a significant difference by gender in the importance analysis of hotel attributes, where females ascribe higher importance to perceptions of quality of service (Mohsin, 2007). In addition, a study by Anderson et al. (2008) in the US airlines industry, shows there is empirical evidence that age moderates the relationship between service attributes and overall satisfaction, whereas considering gender has a different compositional satisfaction model.

Tourists visit countries and stay in hotels for many reasons, such as leisure or business, and their reason for travel is used in their classification into customer types. As the type of customer differs, the needs that are to be filled by service providers are different, and here the importance of understanding those needs arises. Business and leisure travellers view the quality of hotels differently (Cullen and Rogers, 1988). In fact, it was proved that there is a significant difference in service satisfaction in terms of the purpose of visit and stay (Avci and Sayilir, 2007), as service satisfaction is met by the satisfaction of each dimension. Thus, it is important to know the importance of those dimensions to different customers (Fick and Ritchie, 1991). A study was conducted by Chu and Choi, (2000) on the hotel industry in Hong Kong has supported the significant differences between leisure and business hotel customers as to their perception of service quality dimensions in terms of employee attitude\behaviour, service quality and value. On the other hand, they found preferences for both leisure and business on service dimension do not much differ.

Looking to the available literature, the moderating role of customers' characteristics needs to be further analysed. Researchers have reached different conclusions regarding this. So, adding customers' characteristics as a moderator to the conceptualized model will add to the available literature, especially for hotels. Customers' characteristics: gender, purpose of stay, education and age will be taken into consideration. As the literature of conceptualizing a measurement model of service quality for hotels that interrelates service quality, operations management practices and performance

is discussed in detail, there is a need to discuss the need for developing such model. Accordingly, the gaps in the literature to be covered by this research need to be highlighted. That will be discussed in the next section.

2.6 Critical Gaps in the Literature

The purpose of the conceptualized model as a tool for service quality measurement is to fill the gaps that were discussed in the literature:

Research GAP 1: *The in-consumption emotion and the study of its effect on service quality perception:* As it was mentioned previously it is difficult to separate emotions from the evaluation of service quality. It was stated by Liljander and Strandvik (1997) that emotions can be experienced from the start of consuming a service till the end of the experience. So, emotions play an important role in satisfaction (Oliver, 1993; Wirtz et al., 2000; Bosque and Martin, 2008). Yet there is little research that has investigated the relationship between emotion and satisfaction in service provision (Gountas and Gountas, 2007). Moreover, researchers have evaluated the emotion at the end of the process but there is a gap in evaluating the emotions that occur during the service itself. Emotions here are evaluated in terms of their occurrence, either from tangibles or facilities consumption in the hotel or through employee-customer interaction. Previous evaluation tools from literature will be used to evaluate the in-consumption emotion. Adding such a dimension will contribute to knowledge and will give a new direction to future research on service quality in the hotel industry.

Research GAP 2: *Including technological tangibles as a dimension of service quality and study their effect on overall customer satisfaction:* It was stated that satisfaction in the tourist industry is influenced by technological items or facilities in the organization (Williams and Buswell, 2003). In fact, technology has been introduced lately as a dimension in studies of the hotel

industry by Ramsaran-Fowdar (2007). However, there is still a gap in testing its effects on the overall customer satisfaction of service quality. Technology here will be included in terms of using it in the reservation process by customers. In addition, technology facilities that are provided during the customer's stay in the hotel such as: internet, Wi-Fi, fax, Wake-up system etc. will be included. Including this dimension will contribute to knowledge as well.

Research GAP 3: *Linking operations management practices to customers' experienced service quality:* It was stated by Kandumpully and Menguc (2000) that managerial practices are important. For example, management practices in quality and human resource must be considered as they are correlated with service quality. It has also been proved that managerial factors (training, information technologies, communication and environmental management) are important for the hotel industry (Geller, 1985; Brotherton, 2004). As was discussed earlier in the literature, that managerial practices have also been linked to the financial performance of the hotel. For instance, it was proved that quality practices of managers are important for the firms' success (Kandumpully and Menguc, 2000; Lagrosen and Lagrosen, 2003). However, there is a gap in linking these practices to customers' perception of experienced service quality. Although a recent paper has shown a correlation between managers practices and service quality and perception (Kandumpully and Huo, 2007), there is a limit to the testing other management practices. In addition, it was stated by Sharma and Gadenne (2010) that some cases have provided a positive relation between quality management practices and performance and others have very little evidence regarding the relationship. So, further investigation and research need to be conducted to test this relationship. Therefore, linking management practices to customers' perception of experienced service quality will contribute to our knowledge and enrich the literature on hotel's service quality.

Research GAP 4: *Moderating the role of customers' characteristics*: In spite of the rich research in service quality, researchers have ignored customer characteristics and treated all customers as identical (Anderson et al., 2008). Recalling the available literature, there is a debate about the moderating role of customer characteristics of the relationship between quality dimensions and customer satisfaction. Some researchers found that customers with different characteristics'; gender, purpose of visit, age and education differed in terms their perception, preferences and satisfaction of service quality (Liu and Yen, 2010; Kuo, 2009; Anderson et al., 2008; Mohsin, 2007; Floh and Treiblmaier, 2006; Chu and Choi, 200), Whereas, other researchers failed to prove the difference (Liu and Yen, 2010; Walsh, et al. 2008; Chu and Choi, 2000). So, adding testing of moderation will give further empirical evidence especially that the conceptualized model has introduced different dimensions of service quality and linked them to the customers' overall satisfaction.

Research GAP 5: *The mediating role of overall customer satisfaction:* In relation to filling gap 3 in this research of linking operations management practices to overall customer satisfaction, it is essential to test the mediating role of overall customer satisfaction between the relationship of operations management practices and performance. It was stated by Tari et al. (2007) and Nair (2006) that researchers found both direct and indirect effects of managing quality practices on firms' performance. In fact, it was proved in manufacturing empirically that human resource management and management process practices do effect quality outcomes both directly and indirectly (Tari et al., 2007). So, the relation needs also to be tested for service industry. In a very recent study of hotels in India by Chand (2010), HRM practices were linked to customer satisfaction and customer satisfaction was linked to performance and all the relationships were found to be significant. Yet, his study has not provided the mediation test. So, this study will fill this gap in addition to including other dimensions of management practices. Moreover, mediation of the relationship between quality dimensions and performance also will be tested. The previous literature has provided evidence for the mediating role of overall customer satisfaction of the relationships between the

satisfactions of transaction specific satisfactions and repurchases intentions (Jones and Suh, 2000). However, further tests need to be performed as the link is to performance in this research and the model includes other dimensions of service quality for example in-consumption emotions and technological tangibility.

Research GAP 6: _**The Omani Context**_: As was pointed out earlier in the introduction, the conceptualized model will be applied in Oman. There is a need to know why Oman is selected as a place for application. The next section will give some information on Oman and how a study conducted there will contribute to knowledge, which is another purpose of this research.

2.7 Conclusion

This chapter has critically evaluated the available literature on service quality. First, the chapter started with defining service quality and measurement models. Then, it narrowed to focus on service quality in tourism and hospitality and particularly in hotels. To meet the aim of this research the literature in conceptualizing service quality model has been discussed in detail and critically evaluated. At the end of the chapter, the critical gaps in the literature are provided. The next chapter will be about the Sultanate of Oman where the practical gap to be filled will be highlighted.

Chapter 3 Sultanate of Oman

3.1 Introduction

This chapter is about the Sultanate of Oman where the research's conceptualized model is to be applied. The chapter starts with general information about Oman and tourism followed by information on the Ministry of Tourism. Then, the hotel industry in the country is discussed. Finally, management practices in Oman are presented and the practical GAP is highlighted.

3.2 Oman and Tourism

The Sultanate of Oman is the second largest country in the Gulf Cooperation Council (GCC). As shown in Figure 3.1, the country shares borders with the Saudi Arabia, Yemen and the United Arab Emirates (UAE). Oman has a long coastline of more than 2,000 kilometres bordering the Arabian Sea, Gulf of Oman and the Arabian Gulf. Oman has famously beautiful landscapes, which is the primary theme of tourism in the region. Before 1970, Oman was isolated from the outside world (Winckler, 2007). It was stated by Mershen (2007) that until 1970, only little is known about Oman and its people as Oman was basically closed towards the outside world. Since then, Oman has started to open its doors to outsiders, and since then the country has been developing steadily. Oman's capital is Muscat.

Figure 3.1: Map of the Middle East

Source: Lonely planet maps http://www.lonelyplanet.com/maps/middle-east/

The nature and landscape of Oman has encouraged potential tourists to visit the place in large numbers. It was stated: "with its ancient forts, castles and archaeological sites, the country holds considerable appeal for culture seekers and historians" (Hospitality Vision, Middle East Performance Review, 2008, p. 12). In addition, there is a variety of wildlife and flora and Oman has a rich marine environment (Mershen, 2007). Accordingly, the Omani government has encouraged the tourism sector. Thus, the key alternative to petroleum based economy for generating income in Oman is Tourism (Subramoniam et al., 2010).

It can be said that the tourist industry in Oman contributes positively to the economy as there is a high level of integration between the two. Moreover, development and investment in the tourism industry will lead to the development of other sectors like transportation and handicrafts through multiplier effects. The Omani government is attempting to diversify the economy, and began considering tourism as a key sector in 2003. In fact, Oman

aims to increase the contribution of the industry by 5% of GDP. Therefore, in 2004 Ministry of Tourism was established to take care of the tourism sector.

Omani tourism started to merge with the other Middle East countries in the late 1990s. In fact, Oman became a tourist destination for Europeans only in the mid-1990s (Mershen, 2007). Since then, the tourism sector in the country has grown rapidly as the number of tourists increased every year. Recently, the capital city of Muscat has been named as the second best city in the world to visit in 2012 by the London-based travel guide series Lonely Planet (Khaleej Times, 2011). In addition, Muscat has been selected as the Capital of Arab Tourism 2012, (Oman Observer, 2011). The event was launched in January 2012. In the year 2012, Oman will host and hold various activities and programs including conferences and workshops in tourism (Al-Mahrazi, 2011).

3.3 Ministry of Tourism

In 2004 the Ministry of Tourism was established to take care of the sector's development and control. The mission statement for the ministry is "Tourism will facilitate economic diversification, preservation of cultural integrity and protection of the environment of the Sultanate of Oman" and its vision is "Tourism will be developed as an important and sustainable socio-economic sector of the Sultanate of Oman in a manner that reflects the Sultanate's historic, cultural and natural heritage and ethos of traditional hospitality" (Ministry of Tourism, 2011).

To achieve the target of encouraging tourism, the government has several projects in the tourist sector currently being pursued. One of the objectives of the ministry is "to increase Oman's share of visitors to the GCC and increase its recognition as a high quality tourist destination in its own right" (Ministry of Tourism, 2011). Another objective of the ministry was to achieve an average annual growth rate for tourist generated income by about 7% for the period 2005-2010. Quality control of the tourism sector is one of the main objectives of the ministry. Therefore, the ministry established a department of Inspectors and Quality Control. As hotels play an important role

in tourism industry, measuring and assessing quality issues in hotels are essential (Hsieh and Lin, 2010). The aim of this research is to conceptualise a model for evaluating service quality that is useful to hotels. So, it is important to understand the hotel industry in Oman and that is discussed in the following section.

3.4 The Hotel Industry in Oman

The hotel industry is considered to be one of the main constituent elements for the development and encouragement of tourism. A look into the facts and figures of the hotel industry in Oman shows that the industry has developed significantly, according to the data published by the Ministry of National Economy 'Table 3.1'. The number of hotels and motels has increased significantly from 37 hotels in 1999 to 226 in 2010. The number of beds and rooms increased accordingly, reaching 11,183 rooms in 2010. The number of hotel occupants also increased, with fluctuations in the occupancy rates of rooms. The total revenue of hotels increased threefold in the period from 1994 to 2010, reaching Rial Omani (R.O.) 106,600,000.

As was highlighted earlier, the Ministry of Tourism in Oman has developed classification criteria and standards for hotels. The ministry has also made special consideration of the quality standards in terms of services provided to customers. In fact, a department was established to check, control, and develop the quality of services and tangibles provided to tourists. One of the sectors checked continuously is the hotel industry. Quality of hotels is one of the most important issues in tourism industry (Hsieh and Lin, 2010).

Table 3.1: Key Statistics of the Hotel Industry in Oman

Year	No. of Hotels and Motels	No. of Rooms	Room Occupancy Rate %	Number of Occupants	Total Revenue (millions R.O)
1994	37	2,431	50	358	33.8
1995	39	2,500	52	352	35.1
1996	49	3,017	49	436	40
1997	64	3,476	51	463	42
1998	89	4,657	47	529	43.2
1999	102	5,138	41	627	40.4
2000	100	5,312	42	710	45.7
2001	115	5,729	42	749	46
2002	124	6,078	41	811	43.9
2003	133	6,462	39	887	48.4
2004	147	6,980	43	1,202	59.3
2005	153	7,248	47	1,309	78.3
2006	172	8,504	58	1,585	110.5
2007	185	9,149	58	1,547	132.9
2008	194	9,306	58	1,686	172.2
2009	219	10,550	49	1,814	169
2010	226	11,183	51	1,616	161.6

Source: Ministry of National Economy Statistical Year Books, 1999 to 2011

The ministry routinely sends people to experience the service of hotels without notifying the proprietors, the 'Mystery guest approach'. The responsibility of the person is to experience the authentic service of the hotel, check its quality, and write a report. Hotels that are found not to meet the required standards are given a notice from the ministry. Accordingly, a follow-up visit is carried out and if the quality is still not meeting the standard, the hotel will face penalties. This system may be open to criticism because the ministry checks the quality based on the arbitrary criteria of the inspector, with no special model or method to evaluate the service quality of hotels. Moreover, the report relies on only two parties, the hotel and the professional inspector, without considering the judgment of tourists/customers. The research presented in this thesis can help improve the efficiency of evaluating service quality of hotels in Oman. Doing this research in Oman is important for two reasons: firstly, there is no published work on the service quality of hotels in Oman; and secondly, it is necessary to build a model that can be used to evaluate the

service quality of the hotel industry that takes customers into consideration, as they are the main evaluators of the service quality.

3.5 Management Practices and Practical Research GAP

Furthermore, applying this study to Oman will add to the knowledge of the managers' practices in the hotel industry in the country, and this will add to the literature of Arab countries management practices. Oman is also considered to be a developing country, targeted for foreign investment, and as was pointed out earlier, the tourism sector is potentially one of the most lucrative sectors of the economy.

Research GAP 6: *The Omani Context*: Chapter 2 has introduced this significant gap in the research literature. In addition, the Omani context is a new major gap discussed here.

Looking to the available research on the tourist industry in Oman and particularly the hotel industry and its service quality, there is no published work yet. So far, there has been research on Oman's tourism industry as a whole (Khanfar, 2010; Winckler, 2007; Choufany and Younes, 2005). These studies have discussed the facts and figures of the tourist industry in Oman and the governments' role in developing the industry for economic diversification. In the service industry as a whole, the published work on Oman has been so far taken more interest in the health industry (Al-Hatmi, 2010; Al-Mandhari, 2004), transportation (Belwal and Belwal, 2010), banking (Al-Hajri and Tatnall, 2007; Khalfan et al., 2006) and education (Mahdi, 2008).

The purpose of applying this tool in the Sultanate of Oman is to know about managers practices in the context of the hotel industry in the country.

There has been no published work that studies the role of management practices in the hotel industry in the Sultanate of Oman. In fact, few studies in the area of management practices have been conducted in other areas. For

example, human resource management has been considered in research by few researches (Al-Hamadi et al, 2007, Al-Lamki, 2000; Aycan et al. 2007; Budhawer et al. 2002). However, still there is a gap that is going to be filled by this research. Al-Lamki (2000), has studied the training and human resource strategies in terms of Omanization. Omanization here refers to employing Omanis in an organization. Another study by Aycan et al. (2007), investigated the human resource management practices in Oman, yet their study had the limitation of not considering the other management practices and the application was applied on different service organizations, not including the hotel industry. Another study has also been conducted to study the effect of the social environment of Oman on human resource development practices (Al-Hamadi et al. 2007). However, the relationship between HRM practices and organization performance has not been studied in the Arabian Gulf Countries including Oman (Moideenkutty et al., 2011).

A study has considered other management practices in Oman and tested the effects of different management views in using performance models in accounting practices (Mohamed and Hussain, 2005). Recently, a study by Moideenkutty et al. (2011) has proved empirically that a high-involvement of HRM practices is positively related to the subjective and objective performance of an organization. Their study was not run specifically for the service industry and has the limitation of including other management practices.

Looking to the previous studies in Oman there is a limitation of taking the human resource and accounting management practices only into consideration. In addition, the studies are limited by not considering management practices in the context of the hotel industry. Moreover, service quality has been taken more into consideration in other service sectors in Oman. So the purpose of this study is to fill this gap.

3.6 Conclusion

The literature has been discussed in the previous chapter and the place of application in this chapter. This chapter has discussed tourism in Oman and the importance of the hotel industry. Finally, the practical gap of this research has been highlighted and discussed in detail. The next chapter will provide the research's questions, framework and hypotheses.

Chapter 4 Conceptual Framework and Hypotheses

4.1 Introduction

In the previous chapter, the literature was discussed and critically reviewed. Accordingly, gaps in the literature were highlighted. In order to fill the gaps, the research question is developed and will be presented in this chapter. Then the conceptual framework of the research will be provided. Based on the framework shown the hypotheses to be tested in this research are provided.

4.2 Purpose and Research Questions

The purpose of this research is to fill the gap of building a good quality model that can be used to evaluate the service quality of hotels. The aim of building the model is to help managers and service evaluators to evaluate the service satisfaction of customers in hotels. The dimensions introduced in this study will add to theory in many aspects, including the price/price fairness as a dimension in service quality and the role of technology in addition to taking into consideration the positive/negative in-consumption emotions of customers' dimensions affecting the perception of service quality, which will also add to the knowledge gained. Especially that, emotion is not evaluated as the overall feeling about the service; it will be evaluated as the frequency of its occurrence during the service experience. Moreover, including aspects of the role of operations managers in terms of their practices will add value, not to the service itself but in terms of evaluating the service quality by stakeholders such as shareholders and the government. Extending this will help in evaluating the performance of the hotel industry of as a whole.

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Selecting Oman as the country to conduct the research and apply the built model to will add to the value of the research. As it is known Oman is a developing country and there is no published work on service quality of hotels

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in this country. Hotels are important part of the tourism industry and hence maintaining good service quality in hotels is important. As mentioned before, Oman is investing a lot in developing the tourism sector to diversify its economy. So learning about management practices in hotels in Oman will add to knowledge as it has not been studied yet. Additionally, Muscat, the capital of Oman, has been selected as the Capital of Arab Tourism 2012. Moreover, according to the travel guide by Lonely Planet, Muscat is the world's second best tourist destination to visit in 2012.

The main question of the research: *What are the interrelationships between customers' perceptions of service quality, operations management practices and performance in the hotel industry?*

Sub-questions:

> *Do, and how do, quality dimensions (employees' attitude/behaviour, price fairness, technological tangibility, non-technological tangibility, in-consumption positive emotions and in-consumption negative emotions) affect customers' overall satisfaction?*

> *Do, and how do, operations management practices (managing employees, managing processes and customer feedback) affect overall customer satisfaction of service quality and performance of hotels?*

> *Do customers' characteristics (gender, purpose of visit, age and education) moderate the relation between quality dimensions and operations management practices and performance?*

> *Does overall customer satisfaction mediate the relationships between quality dimensions, operations management practices and performance?*

A conceptual framework has been developed to answer the above questions. The framework is discussed and presented in the next section.

4.3 Developing Research Conceptual Framework

This research's' conceptual framework was built according to the understanding of the literature available on service quality, particularly in the hotel industry. Service quality will be evaluated with customer satisfaction as the key factor (Elliott and Meng, 2009). Figure 4.1 shows the conceptual framework, and is followed by a discussion of its development.

Figure 4.1: research Conceptual Framework

Performance

Overall Customer satisfaction

Operations Management Practices

Customers' Feedback

Managing Process

Managing Employees

Customers' Characteristics

Age

Education

Purpose of Visit

Gender

Service Quality Dimensions

Employee attitude/behaviour

Price and Price fairness

Technological Tangibility

Non-technological Tangibility

In consumption positive Emotions

In consumption negative Emotions

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4.3.1 Customers' perceptions of service quality

Although it was stated that the dimensions of service quality differed from one school of thought to another (Ekinci et al., 2008), the dimensions introduced by Parasuraman, Zeithaml and Berry (PZB) are generally accepted in the literature. Individual studies have made some additional modifications depending on their application. In fact it was stated by O'Neill and Palmer (2003) and Mei et al. (1999) that many studies failed to replicate the SERVQUAL dimensions, so that lead to few suggestions for generalizability of the SERVQUAL's dimensions (O'Neill and Palmer, 2003; Soliman and AlZaid, 2002). In service quality, customers see that intangibles are more important than tangibles, such as security, location and reputation (Ekinci et al., 2003). However, that might not be true in many cultures, such as Americans, especially after the September 11 attacks in New York (Shanahan and Hayman, 2006). A critical evaluation of the literature of the attributes related to the hotel industry was performed to come up with a list of attributes to be evaluated (Ramsaran-Fowdar, 2007; Juwaheer, 2004; Akbaba, 2006; Akan, 1995; Parasuraman et al., 1985). Therefore, studies using named dimensions were also viewed to develop the list of the dimensions to be included in the conceptual framework.

It was stated that services are different from goods because of their intangibility; however, tangibility is important in performing or delivering service. The importance of the tangibility cannot be denied and should be included as a dimension. In fact, tangibility has a significant effect on customers' perception of service quality (Liu and Yen, 2010; Santos, 2002). Tangibility here is not only the physical facilities themselves; it is also their condition (e.g. cleanliness) and the noise related to the service (Fitzsimmons and Fitzsimmons, 2009, p. 109). Tangibility also includes technological items and services, but as technology by itself plays an important role a separate dimension is needed to measure technology, as recommended by Ramsaran-Fowdar (2007) as a result of the deep interviews they conducted with customers of the hotel industry. Thus, providing

technology facilities to customers is effective for hoteliers (Chu and Choi, 2000). However, the introduction of such a dimension might result in an overlap between tangibility and technology. To avoid such criticism, the two dimensions *technological tangibility* and *non-technological tangibility* were introduced.

Many studies indicate that customer satisfaction is closely related to employees' service attitude or behaviour (Kuo, 2009). In fact, it is important that service providers, for instance hotels, provide employees with attitudes that satisfy customers in their communication and interaction. So, the evaluation of employees' attitude/behaviour by customers should not be eliminated. Usually customers consider the behaviour/attitude of employees while judging and evaluating service quality (Hennig-Thurau, 2004). In fact, employees' attitude in their interaction affects the customers' satisfaction (LIyod et al., 2011; Liu and Yen, 2010). Including employees' attitude/behaviour results in achieving other service quality dimensions of reliability, assurance, empathy, and responsiveness, as discussed previously. So the dimension *Employees' attitude/ behaviour* was introduced into the conceptual framework.

Researchers have shown an interest in considering the price and its effect in terms of its fairness to customers in comparison to the consumed service. In fact, the fees or price have been included by researchers as a dimension of service quality (Chowdhary and Prakash, 2007). The reason for introducing such a dimension is that the perception of price significantly affects satisfaction judgements (Voss et al., 1998). The need to include such a dimension is to help managers understand if the price is fair for customers in terms of the provided service. For reasons stated in the literature previously, a dimension of *price/price fairness* is included in the conceptual framework.

In order to measure customer satisfaction, it is important to take into account factors concerning the psychological environment such as subjective personal reactions or feelings experienced by customers. In-consumption emotions that occur during the service consumption experienced by employees' interaction

or using facilities are important and need to be included in the service quality evaluation. In high-quality hotels, it was proved by Brunner-Sperdin (2009) that emotions are a result of process and employee interaction with customers. The need for including emotions in the model of customer behaviour has increased significantly during the last few years (Loken, 2006). The available literature outlines that emotions are necessary to understand customer psychology, and emotions here are expressed in terms of the feeling and the satisfaction of a service in the tourist industry experienced by customers (Bosque and Martin, 2008); the emotions that are derived and experienced in the tourism process affect the satisfaction of the tourist (Bigne et al., 2005). With regard to the theory of appraisal, emotions here will be divided into positive and negative. Two dimensions are added to the conceptual framework, namely *in-consumption positive emotions* and *in-consumption negative emotions*. Emotions in this context refers to the sensory perceptions during (but not after) the time in which the service is rendered and measured in terms of the frequency of their occurrence.

In the conceptualized model of this research, customer satisfaction is divided into two parts: overall satisfaction and single item satisfaction (Ekinci et al., 2008). This study endeavours to measure the satisfaction of each service quality dimension and its affect on the overall customer satisfaction. Most literature research studies suggest that service quality is the customer's subjective and individual assessment of service performance (Cronin and Taylor, 1992; Dabholkar et al., 2000), and that satisfaction ascertained in terms of customer perception is considered to be an evaluator of the service quality. Subjectivity might affect the results of evaluating the quality, but such a thing is difficult to avoid. When hotels provide service quality, the customers' perception of service quality is what is needed (Mohsin and Lockyer, 2010). Moreover, the competitive success of any service provider depends ultimately on the customers' satisfaction, which is determined by the customers' experience of the service.

4.3.2. Managers' perceptions of operations practices

The role of management is also important as managers' practices in the organization affect the performance. According to Kandampully and Menguc (2000), managerial practices are important and should be taken into consideration. Looking to the available literature, there is a debate on what is the best list of practices to be included and implemented in the service industry and in particular for hotels. Generally speaking, in order to maximize the satisfcation of customers, managers should establish practices that by integrating the available resources of people, processes and technology in their practices for better performance and provide service quality (Drohan et al., 2009). Management practices in managing quality in hotels are important to achieve customer satisfaction and improve performance (Pandey and Joshi, 2010; Tari et al. 2010).

Managing employees is important and considered to be the prime and best practice to enhance opportunity to develop customer satisfaction and create loyalty (Kandampully and Huo, 2007). Thus, applications of management practices in managing employees do affect quality performance (Wong et al., 2010; Merino-Diaz, 2003). It has been discussed earlier that customer satisfaction is affected by the employees' behaviour/attitude, which also supports the importance of management practices in managing employees. Further, it was stated by Philip (1999) that managing employees will have an impact on improving the performance of an organization. Managing employees includes practices around employee selection, training, team working, rewards and appraisal (Hope, 2004; Cho et al., 2006; Haynes and Frayer, 2000). Therefore, the dimension *managing employees* has been introduced to the conceptualized model.

Managerial practices in managing process in any organization play an important role in affecting customer satisfaction and performance. It was stated by Hope (2004) that it is important to consider management of processes while

evaluating managerial practices. Managing service processes includes practices such as taking corrective action about failure, using tools to assist quality, standard operating procedures and planned maintenance (Hope 2004; Kandampully and Menguc, 2000; Lagrosen and Lagrosen, 2003). These practices need to be considered by management in order to satisfy their customers that will lead for high performance and be able to stand in the competitive market environment. Management practices in managing processes do affect performance and customer satisfaction (Wong et al., 2010; Sit et al., 2009; Nair, 2006; Tari et al. 2006). The dimension of *managing process* has been added to the conceptual framework.

Looking at the service from the perspective of value through the customer's eyes may add to the future understanding of the service approach (Edvardsson et al., 2005). Here is where managerial practices in relation to customers become important for the success of the business. In fact, service organizations should invest in the management of customers and the customer relationship (Gouthier and Stefan, 2003). Managing customers includes listening to the voice of the customer in evaluating the quality of the service and giving suggestions and recommendations, facilitating customers and building loyalty programs (Hynes and Frayer, 2000; Kandampully and Minguc, 2000, Claver-Cortes et al., 2007; Behara et al., 2001 and Lagorsen and Lagorsen, 2003). It was suggested by many researchers and scholars that customer surveys, feedback and evaluation do affect quality performance (Wong et al., 2010). Taking into consideration customers' ideas on service does affect customer's satisfaction (Sit et al., 2009), so the *customer feedback* dimension is introduced to the conceptualized model.

4.3.3. Moderators

The other aspect included in the conceptual framework is the customer's characteristics. The aim of including customer's characteristics is to test if they

could be considered as moderators that affect the interrelationships between quality dimensions, operations management practices and overall customer satisfaction. To achieve this customers' age (Walsh et al., 2008; Avci & Sayilir, 2007; Floh and Treiblmaier, 2006), purpose of visit (Avci & Sayilir, 2007; Chu and Choi, 2000), gender (Mohsin, 2007) and education (Lui and Yen, 2010; Aksoy et al., 2003) will be taken into consideration. It was proved through many studies that these factors affect the satisfaction of customers. These understandings of customers' characteristics' resulted in a need to run a test to check if they act as moderators. That is introduced as an additional element to the conceptual framework.

4.4 Hypotheses Development

4.4.1 Service Quality Dimensions and Overall Customer's Satisfaction

A Service Quality (SQ) tool or model needs to be built carefully in terms of deciding its dimensions and how they measure and affect the overall service quality of an organization. According to Jones and Suh (2000), customer satisfaction on a particular service quality dimensions will affect the overall customer satisfaction which will later lead to customers' repurchase intentions. Understanding the nature of service is more about the interaction of customers with the service employees, and that emphasizes the importance of including the employees' attitudes as a dimension of service quality. This has encouraged researchers to study the role of employees as a dimension that is affecting service quality (Dabholkar et al., 2000). In fact, the role of the employee and their effect on service quality has been studied directly as an attribute under other dimensions (Dabholkar et al., 2000; Parasuraman et al., 1998). In addition, performing analysis on hotel attributes resulted in naming factors that relate to employee attitudes and their interaction with the customers. For example, the personnel factor was one of the seven factors identifying service qualities in a hotel (Akan, 1995). Numerous studies indicate that customer satisfaction is closely related to employees' service attitude (Kuo, 2009), so there is no doubt that employees'

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behaviour/attitude affect service quality (LIyod et al., 2011; Cheung et al., 2009; Lenka et al., 2009).

Recently, researchers have included the price or fee as a dimension of service quality (Chowdhary and Prakash, 2007; Kandampully and Suhartanto, 2000). Many researchers agreed that another factor that could influence customer satisfaction and behavioural intentions is the perceived price fairness (Martín-Ruiz and Rondan-Cataluna, 2008; Andaleeb and Conway, 2006; Xia et al., 2004). So it can be said that there is a relation between the price fairness and service quality, yet further empirical evidence needs to be provided. It was stated by Herrmann et al. (2007) that despite the importance of the price, there is still little published research on including price fairness in customer service satisfaction.

Tangibility refers to the physical evidence of the service, which consists of physical facilities and the appearance of those facilities (Parasuraman et al., 1985). When building a quality tool to evaluate the service quality of a service organization or discussing service quality dimensions, tangibility is mentioned by almost all researchers as a service quality dimension (Liu and Yen, 2010; Pandey and Joshi, 2010; Gronroos, 2000; Parasuraman et al., 1985). In addition, other studies that evaluated the service quality in terms of attributes and later ran a factor analysis, the dimension of tangibility was a result of the test (Mei et al., 1999; Saleh and Ryan, 1991; Akan, 1995; Knutson et al., 1990). It is important to include tangibility in the measurement of service quality, because it has a significant effect on the perceived service quality and therefore customer satisfaction (Lui and Yen, 2010; Pandey and Joshi, 2010; Santos, 2002). Williams and Buswell (2003, p. 89) also pointed out the importance of including tangibility in service quality evaluation in the tourist industry. In addition to physical facilities, tangibility is also the condition of the physical facilities e.g. cleanliness, noise/quietness in the service is also considered within the dimension of tangibility (Fitzsimmons and Fitzsimmons, 2009, p. 109).

Technology has become important and affects service quality, represented by such things as T.V, telephone, internet availability and other elements. Technologies are considered as tangibles but must be considered a dimension by themselves (Ramsaran-Fowdar, 2007). In fact, it is effective for hoteliers to provide technology facilities to their customers (Chu and Choi, 2000). It was discussed earlier that to avoid the overlap in the service quality dimensions, two dimensions are introduced: technological tangibility and non-technological tangibility. The context and satisfaction in tourism is influenced by the technological items or facilities in the organization (Williams and Buswell, 2003). In fact, technology in hotels play an important role in satisfying customers (Chatoth, 2007), and customer satisfaction here is viewed in terms of service quality.

In-consumption emotions of customers during service affect the service quality perception. In many situations, it may be difficult to separate emotions from the evaluation of service quality. Emotions can be experienced from the start of consuming a service to the termination of the service experience (Liljander and Strandvik, 1997). The literature highlighted that emotions play an important role in defining customer satisfaction (Bosque and Martin, 2008; Joseph et al., 2005; Yu and Dean, 2001; Wirtz et al., 2000; Oliver, 1993). The emotions here occur when customers communicate with employees, and in the use of tangibles available in the hotel (e.g. room service and hotel facilities). It was proved by Brunner-Sperdin and Peters (2009) that emotions are a result of process and employee customer interaction. It was also proved that emotions relate to satisfaction with the service quality (Gountas and Gountas, 2003), necessitating an understanding of appraisal theory, which is the idea that emotions are extracted from our evaluations (appraisals) of events that causes specific reactions in different people. The experiential consumption emotions of hotel customers will be divided into two dimensions, negative and positive (Zin, 2002). Looking to the literature, it is commonly cited that positive emotions are happiness, pleasure, excitement,

positively surprised, and enjoyment; whereas the negative emotions are anger, frustration, disgust, embarrassment and sadness (Bosque and Martin, 2008; Ladhari et al., 2008). Positive emotion positively relates to service quality satisfaction and negative emotion relates negatively to service quality satisfaction (Han and Back, 2007; Han and Back, 2006).

The above discussion leads to the following hypothesis to be tested:

H1: There is a relationship between the quality dimensions (employee attitude/behaviour, price fairness, technological tangibility, non-technological tangibility, in-consumption positive emotion, and in-consumption negative emotion) and the overall customer satisfaction.

H1a: There is a relationship between customers' perception of employee attitude/behaviour and the overall customer satisfaction.

H1b: There is a relationship between customers' perceptions of price fairness and the overall customer satisfaction.

H1c: There is a relationship between customers' perceptions of technological tangibility and the overall customer satisfaction.

H1d: There is a relationship between customers' perceptions of non-technological tangibility and the overall customer satisfaction.

H1e: There is a positive relationship between customers in consumption positive emotions and the overall customer satisfaction.

H1f: There is a negative relationship between customers in consumption negative emotions and the overall customer satisfaction.

4.4.2 Relationship between Operations Management Practices, Overall Customer Satisfaction and Performance

When evaluating the success of an organization, performance must be taken into consideration; whether the performance is financial or non-financial. In other words, in terms of customers' overall satisfaction, or management self-evaluation, or objective performance like market share and revenue, management strategy in an organization plays an important role in affecting the organisations performance (Claver-Cortes et al., 2007). Therefore, managers should be aware of those practices that significantly affect customers' satisfaction and performance (Tari et al., 2010; Zehrer, 2009; Nair, 2006). The hypotheses in the effect of the relation between operations management practices and overall customer satisfaction and performance have been built through considering mostly manufacturing publications and few from service as there is a gap in literature in providing such relations. So, critical evaluation of the available literature resulted in building these hypotheses

Managers' relationship with employees is an important key in building the organization's climate and culture and that affects the quality of service provided to customers. For instance, communication between managers and employees affects the service quality, as it affects the behaviour/attitude of employees. It was also proved that training and special programs for employees in the tourist industry is important as well (Maxwell et al., 2004). Practices of employee selection, job design, training, and appraisal are human resource managers' practices that clearly affect performance. The literature emphasizes that human resource management practices have an impact on improving the organizations' performance (Philip, 1999). All of that will help in providing an excellent service in terms of quality. Thus, management practices in managing their employees will affect the overall customer satisfaction and the performance (Wong et al.; 2010, Sit et al., 2009; Merino-Diaz, 2003).

As it is known that most hotels have similar features in terms of buildings and the facilities provided, this increases the role and importance of management practices. Managing quality by managers using statistical tools is important in order to achieve high customer satisfaction (Kandampully and Menguc, 2000). Management processes include standard operating procedures, TQM, planned maintenance and equipment working condition (Hope, 2004). Managing processes can effect continuous improvements in quality (Wong et al., 2010; Tari et al., 2007).

When building management practices, it is important to consider practices that relate to customers' evaluation of the services provided by hotels. The reason is that taking into consideration the customer's idea of service does affect customer satisfaction (Sit et al., 2009). In fact, many scholars and researchers suggest that customer surveys, feedback and evaluation do affect quality performance (Wong et al., 2010).

Understanding the literature available on management practices in general and operations management in particular and to fill gap 3 highlighted in Chapter 2, the following hypotheses are to be tested.

H2: Management practices of managing employees, managing processes and customer feedback' influences the overall customers' satisfaction of service quality.

H2a: There is a relationship between managements' practices of managing employees and the overall customers' satisfaction of service quality.

H2b: There is a relationship between managements' practices of managing processes and the overall customers' satisfaction of service quality.

H2c: There is a relationship between managements' practices of taking customers' feedback and the overall customers' satisfaction of service quality.

H3: Management practices (managing employees, managing processes, customer feedback) influence hotel performance.

H3a: There is a relationship between managements' practices of managing employees and hotel performance.

H3b: There is a relationship between managements' practices of managing processes and hotel performance.

H3c: There is a relationship between managements' practices of taking customers' feedback and hotel performance.

4.4.3 Relationship between Overall Customer Satisfaction and Performance

It was stated by Oliver (1994) that quality is a function of performance. In this research the quality of service here was introduced as customers' satisfaction. There is a need to know what relationship (if any) exists between overall customer satisfaction and performance. When producing service quality, customer perception of service quality needs to be studied (Mohsin and Lockyer, 2010). It has been argued that the financial performance of service organizations is generated from higher levels of customer satisfaction (Rucci et al., 1998). In fact, numerous empirical studies also confirm the positive correlation between customer satisfaction and profitability.

Customers' satisfaction with service changes affects changes in the financial performance of the service provider firms. In fact, a significant positive relationship between changes in customer satisfaction and changes in performance

was proved using analysis of time-series data (Bernhardt et al., 2000). It was generally observed using collective results of studies that improvement in customer satisfaction has a significant and positive impact on firms' financial performance (Gupta and Zeithaml, 2006).

It was also stated in the literature that there is a relationship between quality and performance (Ittner and Larcker, 1999). Although many researchers have shown no relation between the two, others have proved that quality results in profitability. In the first decade of service research, service quality improvement was not clearly linked to profit because of the cost (Zeithaml, 2000). However, later it was investigated and shown that profit is a consequence of service quality yet there is a need to validate this relationship (Zeithaml, 2000).

Many studies in service organizations showed a relationship between service quality and profit. For example, a study in American hospitals by Koska (1990) presented a positive relationship between the perceived quality of patient care and hospital profitability. A study also showed that quality improvements relate to overall performance (Easton and Jarrell, 1998). It is generally believed in tourism that high service quality and achieving satisfaction lead to a positive word-of-mouth endorsement, referrals and repeat visits which will ultimately affect performance (Zabkar et al., 2010). The hypothesis that is going to be tested in this research and presented in the conceptual framework is:

H4: There is a relationship between overall customer satisfaction and hotel performance.

4.4.4 Model Moderators

As discussed in the literature previously, tourists are with different national, cultural, socio-economic and demographic characteristics which makes achieving satisfaction much more challenging for service providers as culture might affect service quality expectations and perceptions. Many researchers have called for a study to relate culture to service quality (Furrer et al., 2000). The

reason is that customers from different cultures have different service quality perceptions, as it has an important role in building customers' expectations and perception (Avci and Sayilir, 2007).

Service providers, for instance hotels, need to understand and know how gender affects the expectations or the perception of the service quality to satisfy the customer. It was stated by (Liu and Yen, 2010) that there is significant difference in perception of service quality and total satisfaction in terms of gender. They stated that males have higher expectations than females. Consistently and by using t-test, Kuo (2009) found customer's opinion about employees' attitude/behaviour differs between genders. Moreover, there is significant difference by gender in the importance analysis of hotels' attributes (Mohsin, 2007). In comparison to females and younger customers, it was proved that males and older individuals tend to evaluate service quality differently (Dimitriades and Maroudas, 2007).

Tourists visit countries and stay in hotels for different purposes such as leisure and business, and that is what is referred to as customers' purpose of visit. Different customers with type of visit come with different expectations that need to be at least met by the service provider. As a result, business and leisure travellers view the quality of hotels differently (Cullen and Rogers, 1998). So, the customers' purpose of visit might affect the relationship between the service quality dimensions and the overall customer satisfaction of service quality. In fact, it was proved that there is a significant difference in service satisfaction and the purpose of visit (Avci & Sayilir, 2007). A study of hotels in Hong Kong by Chu and Choi (2000) shows significant differences between leisure and business hotel customers in their perception of service quality in terms of employee attitude\behaviour and value have been supported.

Education also plays an important role and might affect the customers' perception of service quality. A study was conducted by Aksoy et al. (2003) and found that age, education and gender have an effect on service quality perception in the hotel industry. In addition, a study by Dimitriades and Maroudas (2007)

proved that male and older individuals tend to evaluate service quality differently in comparison to female and younger customers. Highly educated customers have higher expectations of service quality (Chu and Choi, 2000). An empirical evidence of age moderation on the relationship of service attributes and overall satisfaction was provided in a study on US airlines by Anderson et al. (2008).

The available literature brought up the idea of testing if customer characteristics can be considered as moderators of the relationship between the satisfaction of each dimension and the overall customer satisfaction on service quality. The customers' characteristics here refer to: gender, purpose of visit in hotel, age and education.

H5: Customers' characteristics (gender, purpose of visit - business or leisure, age and education level) moderate the relation between quality dimensions, operations management practices and overall customer satisfaction.

H5a: Gender moderates the relationship between quality dimensions, operations management practices and overall customer satisfaction.

H5b: Purpose of stay moderates the relationship between quality dimensions, operations management practices and overall customer satisfaction.

H5c: Age moderates the relationship between quality dimensions, operations management practices and overall customer satisfaction.

H5d: Education level moderates the relationship between quality dimensions, operations management practices and overall customer satisfaction.

4.4.5 Mediating Role of Overall Customer Satisfaction

Recalling the literature discussed in Chapter 2, it was found that there is gap in testing if the relationship between operations management practices and performance is mediated by overall customers' satisfaction. In manufacturing, it was proved empirically that both human resource and process management

practices do affect quality outcomes directly and indirectly (Tari et al., 2007). When managing service quality, managers should be aware how to manage the customer experience of their service (Zahrer, 2009). Management practices in managing service quality do affect customers' satisfaction significantly (Pandey and Joshi, 2010), so the customers' satisfaction determined by customers' service experience leads to the competitive success of any service.

Looking to the available literature, many researchers have stated that management practices do help to provide better service quality (Chand, 2010; Kuo, 2009; Claver-Cortes et al., 2007; Haynes and Frayer, 2000). In addition, customers' perceptions of service quality and satisfaction are affected by its dimensions: employees' attitude/behaviour (LIyod et al., 2011; Cheung et al., 2009, Lenka et al., 2009), price fairness (Martín-Ruiz and Rondan-Cataluna, 2008; Andaleeb and Conway, 2006; Xia et al., 2004), technological and non-technological tangibility (Lui and Yen, 2010; Pandey and Joshi, 2010; Chatoth, 2007; Ramsaran-Fowdar, 2007; Santos, 2002) and in-consumption emotions (Bosque and Martin, 2008; Joseph et al., 2005; Yu and Dean, 2001; Wirtz et al., 2000; Oliver, 1993). Having a good service quality will in turn affect performance (Zeithaml, 2000; Ittner and Larcker, 1999; Anderson and Fornell, 1994, Koska, 1990). So, customer satisfaction is affected by the management system that in turn helps to serve quality to its customers, which in turn will affect sales and profits positively.

In a recent study by Chand (2010), it was proved empirically that the relationship between human resource management practices and customer satisfaction is significant and that between customer satisfaction and performance is also significant. Thus, it can be said that the customer's overall satisfaction mediates the relationship between management practices and performance.

Considering quality dimensions, the previous literature has provided evidence for both full and partial mediation of the overall customer satisfaction of the relationship between the satisfaction of a specific transaction satisfaction and repurchase intentions (Jones and Suh, 2000). In other words, customer satisfaction

of a dimension of service quality will affect the overall customers' satisfaction of service quality. Accordingly, it can be said that relationship between quality dimensions and operations management practices and performance is mediated by the overall customer satisfaction. The following developed hypothesis will be tested empirically.

H6: Overall customer satisfaction mediates the relationship between quality dimensions, operations management practices and performance.

H6a: Overall customer satisfaction mediates the relation between employees' attitude/behaviour and performance.

H6b: Overall customer satisfaction mediates the relationship between price fairness and performance.

H6c: Overall customer satisfaction mediates the relationship between technological tangibility and performance.

H6d: Overall customer satisfaction mediates the relationship between non-technological and performance.

H6e: Overall customer satisfaction mediates the relationship between in-consumption positive emotion and performance.

H6f: Overall customer satisfaction mediates the relationship between in-consumption negative emotion and performance.

H6g: Overall customer satisfaction mediates the relationship between managing employees and performance.

H6h: Overall customer satisfaction mediates the relationship between managing process and performance.

H6i: Overall customer satisfaction mediates the relationship between customer feedback and performance.

4.5 Conclusion

This chapter has presented the research framework followed by research questions. Then, the hypotheses to be tested in this research have been developed. The next chapter will present the methodology of this research. The research paradigm and design will be provided and the survey development, data collection plan and process will be highlighted.

Chapter 5 Methodology and Research Plan

5.1 Introduction

In Chapter 2 the literature of conceptualizing service quality and linking it to operations management practices has been discussed in detail and the critical gaps to be filled by this research have been highlighted. Chapter 3 discussed the context of the Sultanate of Oman where the practical gap has been highlighted. In Chapter 4, there was a discussion about the conceptual framework of the PhD, its research questions and the hypotheses to be tested. In this chapter the research design and methodology are described highlighting how they are used to fulfil the aims and objectives of the research. This chapter starts with a brief discussion of philosophy in research and the Social Sciences. Then, the paradigm of this research is highlighted and discussed.

5.2 Research Philosophy and Paradigm

There is no doubt that the research framework needs to be well planned and critically analyzed to meet the aims of the researcher and answer their research questions. Knowledge claims, strategies and method are the three elements required to form a framework for research design (Creswell, 2002). Starting a research or knowledge claim means building assumptions about how to learn and what to learn. The claims or assumptions built for this research are called: paradigms, philosophical assumptions, epistemologies and ontologies or broadly conceived research methodologies (Creswell, 2002). The paradigm is central and needed for any research regardless of its field or aim. Gummesson (2000) in his book "Qualitative *Methods in Management Research, p. 18*" notes that the idea of paradigm concept is brought in the early 1960s by Thomas Khun, which means how people govern their thinking and actions through their standards, judgments, norms, value judgments... etc. Accordingly, a researcher need to go through the three elements stated by Creswell (2002) to decide the appropriate method to use for the research: quantitative, qualitative or a mix of the two.

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When thinking about research philosophy, there are three major ways to do so: epistemology, ontology and axiology. According to Gill and Johnson (1997), the word epistemology is broke into two parts: episteme "science or knowledge" and logos "knowledge, information theory or accounts". Epistemology is "what can be accepted as knowledge in a certain field or discipline" (Baker and Foy, 1993). Simply, epistemology is what we know about a certain field or topic. This knowledge is gained either through reading books, previous studies or even experience of a situation. Epistemology is what we know and how we link it to reality and judge a statement is true, where as ontology is what is it to be and what is reality. Ontology is concerned with the nature of reality, which means the assumptions researchers have about how the world operates (Saunders et al., 2007). The value of a researcher about making judgments of research conducted and how to do it is known as axiology. So, axiology is simply what values go into research (Creswell, 2002).

Research philosophy is the way the researcher understands the world and performs research strategy, which later helps in adopting the most suitable methods to be used. Creswell (2002) has developed a research design framework which has been discussed earlier. To implement the framework a researcher should first develop the knowledge claims which are the assumptions of the research. Then, a researcher selects the most suitable methodology to perform the research and test the developed assumptions. That requires the researcher to decide the procedure/method of the research, if it's going to be qualitative, quantitative or a mix of the two, "triangulation". It was stated by Hathaway (1995) that 'the decision to use quantitative or qualitative methods is replete with assumptions concerning the nature of knowledge and reality, how one understands that knowledge and reality, and the process of acquiring knowledge and knowledge about reality'. To give a broad picture of research design and how the strategy and framework is performed the research onion by Saunders et al. (2007) has been adopted from their book "Research Methods for Business Students". The adopted

framework of research steps and philosophies is provided in Figure 5.1. When conducting research, the researcher needs to know clearly their research aim in order to decide the appropriate philosophical paradigm, detailing the approach adopted for the research, its strategy, method choice, time needed and finally the techniques of data collection and analysis to be used.

Figure 5.1: The Research Onion
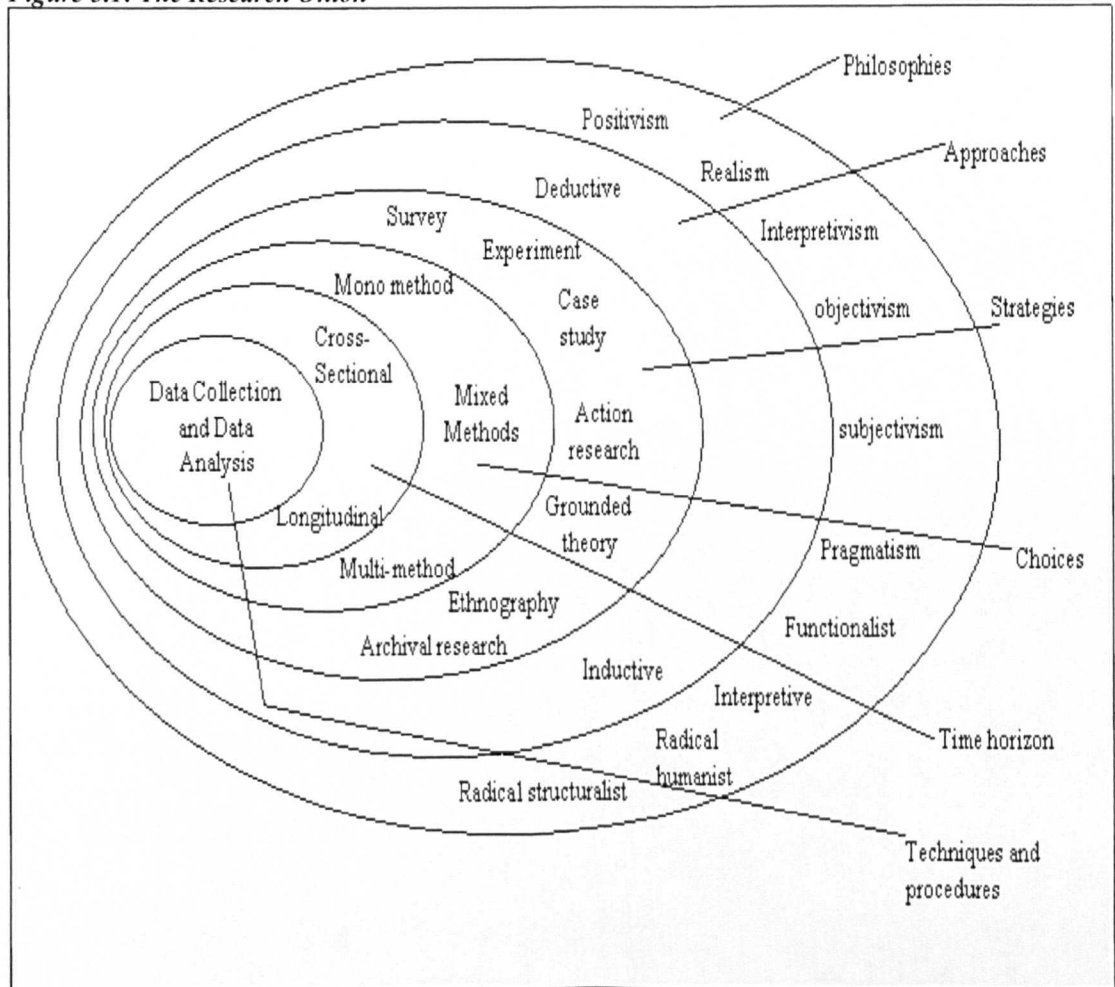
Source: Saunders et al. (2007).

To frame the research design and select appropriate scientific approaches is challenging as there are enormous variations in approaches and perspectives. Considering a knowledge claim asks questions of which are suitable techniques and procedures for investigating that claim, what guarantees are there that a certain procedure/method is suitable (Hughes and Sharrok, 1990). The reason for this is the unavailability of a general procedure that can be used regardless of the field of

research. In fact, there is no single 'scientific method' which is in general use among all scientists and researchers (Khun, 1996). Hence, the importance of critically analyzing the research methodology of a particular research method for its suitability is essential. As this research is classified under business and social science, it is important to narrow the concept of research design approaches.

5.2.1 Possible Research Approaches for Social Science

The available literature has discussed different types of research approaches under social science. There is no common classification of research approaches as researchers divided the assumption of main paradigms into different numbers of assumptions. Further, it is suggested that paradigms are used at three different levels: the philosophical level, the social level and the technical level (Collis and Hussey, 2009). Looking to the available paradigms of research, paradigms have been mainly divided into three philosophies: positivism, interpretivsm and social constructivism. Paradigms are classified as ranging from being objective 'positivism' to subjective 'social constructivism'. To better explain the different paradigms Table 5.1 has been developed using multiple resources.

Table 5.1: Paradigms of Research in Social Sciences

Paradigm	Positivism	Interpretivism (Relativism)	Social Constructivism
Ontology assumption *Answers: what is reality and what is what we know?*	Reality is objective and it is seen as singular and separate from the researcher "Reality is real" Its knowable "true nature" so what is known is unchangeable as it is known by natural laws	Reality is subjective and seen as multiple, it is not separated from the researcher "Reality is real but probabilistic and imperfectly" Knowable through probabilities so what we know is through multiple resources and need to try it	Reality is relative, multiple and depends on who establishes it " Reality is relative 'multiple subjective'" It is in peoples' minds, what we know is specifically constructed according to what people believe it to be
Epistemology assumptions *answers: what constitute knowledge*	Researcher is independent of that being researched findings are true and objective	Researcher is interactive with what has been researched findings are probably true	Researcher enters into the social world of the research subject and understand from their point of view findings are created
Elements of Methodology *Aim* *Starting point* *Designs* *Techniques* *Analysis/interpretation* *outcomes*	 Discovery Hypothesis Experiment Measurement Survey Causality	 Exposure Propositions Triangulation Survey Probability Correlation	 Invention Meanings Reflexivity Conversation Sense-Making Understanding
Designs for methods	Action research, Case method, Experimental methods, Grounded theory, Quasi-experimental research, survey feedback, Survey research	Case method, Experimental methods, Grounded theory, Quasi-experimental research, survey feedback, Survey research	Action research, Case method, Experimental methods, Collaborative research, Cooperative inquiry, Ethnography, Grounded theory, Narrative method, survey feedback, Survey research
Strengths	Can Provide wide coverage, Potentially fast and economical, Easier to provide justification	Accepts value of multiple data sources, Enables generalization beyond used sample, Greater efficiency including outsourcing potential.	Good for processes, and meanings. Flexible and good for theory generation, Data collection is less artificial.
Weaknesses	Inflexible and artificial, Not good for processes, meanings or theory generation. Implications for actions not obvious.	Requires large samples, cannot accommodate institutional and cultural differences. Problems reconciling discrepant information.	Can be very time consuming, Analysis and interpretations are difficult, May not have credibility with policy makers.

<u>*Sources:*</u> *Based on Creswell (2002), Saunders et al. (2007), Easterby-Smith et al. (2008) and Collis and Hussey (2009).*

5.2.2 PhD Research Design

Understanding the underlying philosophical assumptions helps in framing the design of this research. In the previous section the research paradigm was discussed in detail from the high objectivity approach of 'positivism' to the high subjectivity approach of 'social constructivism'. The field of operations management faces new, multiple research challenges in its areas of production, service, quality and many other areas (Meredith et al., 1989). Looking to the available research under operations management, it can be seen that before 1980 most of the research in the field had been developed through modelling-base research using either simulation or optimization (Bertrand and Fransoo, 2002; Rungtusanathm et al., 2003). Operations management research for a long time has been employing limited paradigms. That had resulted in research with high internal reliability and lacking in external validity (Meredith et al., 1989). Understanding the nature of operations management research, the researcher should tend to develop research that is linked to the real world. It was stated by Meredith et al. (1989) that research should make a true contribution to both research and practice. So, recalling Chapters 2 and 3, theoretical and practical gaps have been highlighted earlier.

Understanding the objectives and aims of the research from its research questions and hypotheses, 'the appropriate paradigm has been decided upon Chapter 4. The philosophical paradigm for the current research is Positivism. That means the research looks to reality as objective and seen separately from the researcher. So, reality is assumed to be real and the findings of the research are assumed to be true and objective. Looking to the literature discussed in chapter 2 and the conceptualizing the research framework in Chapter 4, theories and previous studies have been used to develop it and later it is tested empirically. So, the literature is used to build a conceptual framework and previous methods are used to create the most suitable approach and procedure to test the conceptual

framework using real data where people are participants. The conceptual framework is tested through developed hypotheses. A survey have been developed to collect the required data. Mainly the surveys had close ended questions with a few open ended questions. This paradigm/research approach is also known as pragmatic, which requires mixed methods and data can be collected through close-ended measures and open-ended observation (Creswell, 2002). Using mixed methods may provide a basis for triangulation (Gill and Johnson, 1997; Easterby-Smith et al., 2008). The collected data through the developed surveys has been analyzed and interpreted to make meaning and develop a conclusion about the hypotheses. As a result, the research questions can be answered to meet the research objectives. Generally speaking, this research is objective as the approach of the data analyses is quantitative.

In order to conduct the research and to answer the researchers' question, to fill the critical gap and to add to knowledge a critical research design process and procedure has been developed. Figure 5.2 represents the research process which has been developed based on Gill and Johnson (1997), Collis and Hussey (2009), Easterby-Smith et al. (2008) and Saunders et al. (2007).

Figure 5.2: Research Process and Design

PhD Process and Structure

Decide Research Area
"Service Quality Ch2 Sec.1"

View Available Literature and Narrow the Research
"Service Quality in Leisure, Tourism and Hospitality
Ch2 Sec.2"

Selecting Context
"Hotel Industry
Ch2 Sec. 3"

Further Narrowing with Critical Literature Review
"Conceptualizing Service Quality Model Ch2 Sec.4"

Customer Satisfaction:
Employees' attitude/behavior, Price, Tangibility 'Technological and Non-technological' and In-consumption emotions

Operations Management Practices:
Managing Employees, Managing Process and Customer Feedback

Performance:
Subjective

Model Moderators

Selecting Place of Application
'practical Context'
Sultanate of Oman Ch3

Critical Gaps:
Theoretical gap Ch2 Sec.5
Practical gap Ch3 Sec.3

Meet people form government and industry:
Current situation Research usefulness and value

Primary Data collection:
*Possibility
Procedure 'formalities'*

Useful Data Availability:
*Secondary data
Possibility access
Procedure 'formalities'*

Research Conceptual Framework
Research Questions Ch4 Sec1
Hypothesis Ch4 Sec3

Plan Data Collection
Ch4 Sec4

Secondary Data

Survey development Ch5:
Managers and Customers

Interviews
Opinion about the Survey

Data Collection Phase 1 'Random Sampling'
Preliminary Test

Data Collection Phase 2 'Judgmental'

Review Methods and Software for Analysis

Select Appropriate Method for Analysis
Ch5 and Ch6
Structural Equation Modeling
'Testing Hypotheses'

Forward Planning

Reflection and Revision

Discussion
Ch 7
Discussion of the Research Findings

Recommendations and Conclusion
Ch 8
Research Implication
Research Limitations
Conclusion

Writing the Thesis

5.3 Justification of Research Methodology

As has been discussed earlier, this research overall philosophy and research paradigm positivism. Accordingly, a researcher is said to be a positivist and is separate from reality and independent of that being researched (Eastrby-Smith et al., 2008, Saunders et al., 2007, Creswell, 2002). In other words, what is known is unchangeable as it is known by natural laws . Recalling the purpose of this research, the aim is to test the interrelationship between operations management practices in hotels and linking it to customers' perception of service quality in the hotel. To do so, research is conducted using both management and customers, where quantitative data has been collected.

When developing the conceptual framework of this research, previous literature is used to build it 'Chapters 2-4'. Previous literature has also been used to decide the appropriate methods and approach to collect suitable data to test the framework empirically. Accordingly, it was decided to collect data using different methods and procedures, 'triangulation'. Recalling the data collection plan in Chapter 4, data is collected by using existing databases, 'secondary data', and through surveys, 'primary data'. Implementing the concept, a visit to a government institution is performed in order to investigate the situation and figure out the available data and possibility of access. Secondary data availability and access possibility will be discussed later in this chapter.

In order to get primary data for the research to enable testing of the conceptual model, two surveys have been developed: one is targeted to customers experiencing service in hotels where perceptions of service quality are measured. The second survey is developed to measure the operations management practices in the hotel industry. Surveys have become an important method in operations research and use has increased through the years (Rungtusanatham et al., 2003). Further details on survey development will be discussed later in the following sections.

The paradigm of this research requires using primarily quantitative methods (Tashakkori and Teddlie, 1998 and Creswell, 2002). Most of the data collected for this research is quantitative data and is primarily used to test the conceptualized model of the research. Where hypothesis were tested and findings are true and objective. In addition, more data is collected to understand the current situation of tourism, hospitality and the hotel industry in Oman. That has required collecting some documentation and meeting people in charge of quality control of hotels in Oman. That was through multiple visits to the Ministry of Tourism in Oman. However, to meet the objective of the research and test the conceptual framework, a quantitative approach is also adopted.

5.3.1 Survey Development

This section explains the development of the surveys used to collect the needed data for the research. A first step, the definition of a survey needs to be highlighted. In fact, there are variety of definitions for surveys where some researchers use either general or exclusive definitions (Saunders et al., 2007). Collis and Hussey (2009) have defined a survey in their book as a method for collecting primary data in which a sample of respondents are asked a list of carefully structured questions chosen after considerable testing, with a view to eliciting reliable responses. Survey may be purely quantitative where closed-ended questions are used and have a certain scale of measurement, for example category scale or continuous scale (Easterby-Smith et al., 2008). Alternatively, surveys may include both open-ended and close-ended questions, which are known as mixed surveys (Tashakkori and Teddlie, 1998).

Various researchers have identified lists of principles, steps and guidelines that need to be followed by a researcher to design a survey that helps to meet the objective of the research and answer its questions. The researcher needs to be aware that a survey is a critical tool and need to be used with full understanding to successfully meet the research aim. It was stated that to large extent reliability,

validity and response rate depends on the design of the questions (Saunders et al., 2007). To successfully develop a suitable survey for this research, several points have been taken into consideration, as listed in Table 5.2.

Table 5.2: Steps of survey Development

1. Decide data needed to test hypothesis and answer research questions. Done through critical analysis of previous work 'literature' taking into consideration reliability of the study and context.

2. Prepare a summary table for the available literature.

3. Decide whether to include open-ended questions or close-ended questions or a mix of the two. Accordingly select the appropriate scale of measurement.

4. Use multiple items when testing a construct

5. Decide type of participant to select a suitable language and wording for questions 'easy and understandable'.

6. Carefully develop the layout of the survey 'font, design...etc' and include paragraph or cover letter explaining purpose of research for participants.

7. Circulate survey to friends, relatives or colleagues asking for comments and if the survey is understandable.

8. Work on the comments raised about the survey.

9. Repeat steps 6-7 and develop the final draft.

10. Conduct pilot study to test survey.

Sources: Based on Collis and Hussey (2009), Easterby-Smith et al. (2008) and Saunders et al. (2007).

The need to develop two surveys; one for customers and the other for management, is to meet the aim of the research in contributing to knowledge (GAP 3), which is the main aim of the research. Customer surveys are used to collect information about the customer's perceptions of service quality. The management survey is used to measure the practices of operations management in managing the service quality and information about the performance of the hotel. The

management survey collects management perceptions about the practices they have in managing employees, service process and customer feedback. Each survey is developed to measure different information using different participants. That will contribute to knowledge as it looks to the service from two different angles.

All the steps recommended by researchers 'table 5.2' has been followed while developing the surveys for this research. In the next two sections the development of customer and management surveys will be discussed.

5.3.1.1 Customer Survey

There is a rich literature available on measuring customer satisfaction with the quality of a hotel's service. However, only a few studies help in building a good, sound service quality criterion for hotels (Tseng, 2009; Hsieh et al., 2007). In Chapters 2 and 4 the literature has been analysed critically to conceptualize the model to measure service quality through customer satisfaction. A summary of attributes and elements used to measure customer satisfaction with hotel service quality has been developed. There were no fixed or common factors to construct a model of service quality for the hotel industry. Further, constructs of service quality in several studies have been different and were renamed after the empirical work as a result of factor analysis. A summary of attributes discussed in the literature has been developed and presented in Table 5.3.

Emotions also were used as part of service quality perception measurement as it affects the customers' judgment of service quality. It was stated by Liljander and Strandvik (1997) that emotions can be experienced by customer from the beginning to the end of service consumption. The previous research on measuring emotions is summarized and presented in Table 5.4, which is used to construct emotions for this research. The surveys of both customers and managers which were used to collect data for this research are provided in the appendix.

Table 5.3: Service Attributes

Attributes	Lewis, 1983	Soliman and Alzaid, 2002	Nightingale, 1983	Mohsin, 2007	Akan, 1995	Briggs et al. 2007	Hsieh et al., 2007	Tseng, 2009	Wilkins et al. 2007	Akbaba, 2006	Kuo, 2009	Juwaheer, 2004	Ramsaran-Fowdar, 2007
Price/value	*	*	*	*	*	*	*						*
Location	*	*					*						
Clean	*	*	*	*				*		*		*	*
Size of rooms	*	*	*										
Quality of TV/Radio	*	*								*			*
Décor/furnishing	*	*		*	*				*	*		*	*
Promptness of service	*	*		*	*	*				*		*	*
check in / out	*	*		*									
Staff friendliness	*	*			*			*	*	*		*	*
Professionalism of staff	*	*	*					*	*	*	*	*	*
Physical conditions	*	*		*					*	*		*	*
Quietness	*	*	*									*	*
Security	*	*					*	*		*		*	*
additional facilities ex. exercise equipment	*	*					*	*	*	*		*	*
Reservation Systems	*	*	*	*	*								*
Walk-up system		*											*
well timed service				*				*		*	*	*	*
Staff knowledge/skills				*	*		*	*	*	*	*	*	*
staff manners and presentation				*	*	*	*	*	*	*	*	*	
staff understanding of customers					*	*	*	*	*	*	*	*	*
quick response to customers					*			*	*	*	*	*	*
solving problems					*	*	*		*	*	*	*	*
calling customer by name					*					*	*		
speed of transaction					*			*	*	*	*		*
willingness to help						*		*	*	*	*		*

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Table 5.4: Emotions Discussed in Literature

	Han and Back (2007)	Kathy (2007)	Zins, 2002	Dolen et al. 2001	Richins, 1997	Mudie et al. 2003	Bosque and Martin, 2008	others
Negative emotion								
Frustrated	*							
Angry	*		*		*		*	Grace, 2009
Irritated	*			*	*			
Unfulfilled	*							
Discontented	*				*	*		
Negatively Surprised					*			
Unhappy			*					
others				Disappointment			Disappoint-ted; Displeased; bored	
Positive emotion								
Happy	*		*		*	*		Philips and Baumgrartner, 2002
Pleased/pleasure	*	*	*	*	*	*	*	Grace, 2009
Optimistic	*				*			
Joyful	*				*	*		Grace, 2009
Positively surprised/amazed				*	*	*	*	
others		Fun, enjoyment, wow		Contentment fulfilled	excite-ment, relief	Fulfilled	impressed	

As mentioned previously, a full discussion of constructing the factors of service quality has been included earlier in section 2.5. Accordingly and for the purpose of this research, seven constructs have been developed: Employee attitude/behaviour, Price fairness, Non-technological tangibility, Technological tangibility, In-consumption positive emotions, In-consumption negative emotions and Customer satisfaction. Each construct will be defined and the items of measurement will be introduced. The selection of items under each construct has been developed through the available literature taking into consideration the context and reliability of the study. In this section a brief definition of each construct is provided with the items used for measurement and the reference from the literature.

To get the required data to test the research framework, the customer survey has been divided into four sections: personal information, visit information, service quality perceptions, and, feelings and emotions during service experience. The survey also included, at the beginning, a section describing the purpose of the study and its value and purpose. In the following paragraphs, the four sections will be discussed in detail.

Section 1 – Personal information: the first section of the survey concerns the demographic characteristics of respondents. The participant is asked about their nationality, gender, age and education. The purpose of these questions is to know about the people who participated in the study, which can be used as some moderating variables in this research. Participants' education level, gender and age affect satisfaction of service quality (Aksoy et al., 2003; Dimitriades and Maroudas, 2007). The role of moderators in the literature has been discussed in Chapter 2 and in research conceptual framework development and hypotheses in Chapter 4.

Section 2: Visit information: The second section of the survey asks participants about visit information by asking them to write the name of the hotel they stayed in, its location, the duration of stay, period, purpose of visit, if the visit was individual or with a group of people and if they stayed in more than one hotel. It is important to know the name of hotel being evaluated by participant and its location helps in linking customers' perception of service to operations management practices for the same hotel. That information is important to test the conceptual model of the research.

Section 3 – Customers' perception of service quality: This section is divided into two parts. Part 1 is intended to measure customer perception of service quality using a 5 point Likert scale (1 – strongly disagree to 5 – strongly agree). Customer experience in tourism has been traditionally evaluated using the Likert scale (Bosque and Martin, 2008; Hudson et al., 2004). Part 2 is intended to measure the frequency of emotions and feelings occurring for customers during service consumption.

Service quality is captured in this research in the form of several constructs. Each of these constructs, in turn, is measured using several questions in the questionnaire. These questions will also be called items hereafter in this thesis in line with the convention used in previous research. These items collectively measure constructs. Constructs are also called factors or latent variables in the literature, but the term construct is consistently used in this thesis. The constructs in the survey have been measured as follows:

Construct 1 – Employee attitude/behaviour: This construct measures the customers' perception of the employees' attitude/behaviour in the service where it measures employees' responsiveness, reliability and communication. Kuo (2009) has stated that many studies have indicated that customer satisfaction is closely related to the employees' service attitude or behaviour. So, usually customers

consider the attitude/behaviour of employees when judging and evaluating service quality (Hennig-Thurau, 2004). The literature has been used to develop a list of items used to measure customers' perception of employees' attitude/behaviour. They are listed in Table 5.5 below.

Table 5.5: Items of Employees' Attitude/Behavior Construct

When employees at the hotel promised to do something by a certain time, they did.
When employees at the hotel promised to do something in a certain way, they did.
Employees were able to provide the service right the first time.
Employees introduced available hotel services and equipment to me.
Employees informed me of promotional programs of the hotel.
Employees paid attention to my requirements as much as possible.
Employees' behaviour was satisfactory during my stay.
Employees acted friendly and treated me nicely.
Employees were willing to solve my problems.
Employees solved problems adequately and quickly.
Employees provided a personalized service.
Employees remembered my name.
Employees always made me their first priority.
Employees were concerned about my safety and privacy.
Employees were trustworthy.
Employees took adequate care of me.
Employees were available all time.
Employees had good communication skills.
Employees were able to tell me when a service was going to be provided.
Employees answered my questions and queries.

Sources: Based on: Erto and Vanacore (2002), Akbaba (2006), Ramsaran-Fowdar (2007), Qin and Prybutok (2009) and Kuo (2009).

Construct 2 - Price Fairness: Customers' perception of service quality is significantly affected by price perception (Voss et al., 1998). It was stated by Chowdhary and Prakash (2007) that price has been introduced by researchers as a dimension of service quality. Several more researchers (Qin and Prybutok, 2009; Akan, 1995) have included price in testing customers' perception of service quality. Customers' judgment of service quality is affected by the price fairness of facilities and services provided within the hotel. To measure the price fairness construct, items have been taken from previous studies, as shown in Table 5.6.

Table 5.6: Items of Price Fairness Construct

In general, the price I paid for my stay in hotel was fair.
Price of hotel facilities (gym, laundry, ironing, shoe-shinning, child care etc.) was fair.
Price of food and beverages was fair.
The price satisfactorily reflected the value of service provided in hotel.
In comparison to the quality of room furniture, the price was satisfactory.
Technology (internet, telephone calls etc.) prices were satisfactory.

<u>Sources:</u> *Based on: Akan (1995) and Qin and Prybutok (2009)*

Construct 3 – Tangibility – technological and non-technological: Although service is said to be different from goods as it is intangible, tangible things do play a part while performing services. Santos (2002) stated that tangibility has a significant impact on customer satisfaction. Tangibility here is not only the physical facilities themselves; it is also their condition and noise in the service (Fitzsimmons and Fitzsimmons, 2009, p. 109). Further, tangibility also includes technology such as the internet, telephones and the wakeup system. As technology by itself plays an important role in the customers' perception of service quality it should be included as a separate dimension (Ramsaran-Fowdar, 2007). Accordingly, two constructs need to be measured: non-technological tangibility

and technological tangibility. Items used to test and measure each constructs are listed in Tables 5.7 and 5.8

Table 5.7: items of Non-Technological Tangibility Construct

Hotel furniture was modern.
Hotel furniture was comfortable.
Furniture was in good condition.
The hotel had an appealing décor.
The room was spacious.
Bathroom/toilets were hygienic.
The room was clean.
The hotel was clean.
The hotel's location was convenient.
Hotel facilities (swimming pool, gym etc.) were functioning well.
Food and beverages were good.
Adequate business facilities (fax, meeting rooms etc.) were available in the hotel.
The hotel was secured and safe.
The hotel was quiet.
The hotel employees had a smart appearance.

Sources: Based on: Erto and Vanacore (2002), Juwaheer (2004) Akbaba (2006), Ramsaran-Fowdar (2007) and Qin and Prybutok (2009).

Table 5.8: Items of Technological Tangibility Construct

Internet facilities in the hotel were convenient.
Telephone facilities were satisfactory.
Television facilities were satisfactory.
Plug availability was satisfactory.
The hotel wake-up system was satisfactory and reliable.
International calling facilities were satisfactory.
The available facilities and devices were in good condition and working properly.
The hotel had adequate facilities for processing transactions, including credit/debit cards.
The hotel responded to my e-mail/fax reservations quickly.
The hotel responded to my e-mail/fax satisfactorily.

Sources: Based on: Ramsaran-Fowdar (2007).

Construct 4 – Overall Customer Satisfaction: It is the construct that measures the overall customer satisfaction of service quality. Customer satisfaction means the customer's overall evaluation of the performance of offerings to date and considered as an effective component that is created in the usage of service (Elliot and Meng, 2009). Many researchers have used measured and evaluated service quality in terms of customer satisfaction in service (Lui and Jang, 2009; Qin and Prybutok, 2009; Strossmayer, 2008; Olorunniwo et al., 2006). Table 5.9 represents the items used to measure overall customer satisfaction.

Table 5.9: Items of Overall Customer Satisfactions Construct

In general, I was satisfied with the service of the hotel.
I am willing to stay in the same hotel in future.
I will recommend this hotel to my friends.
I will say positive things about the hotel to other people.
Choosing this hotel was the right decision.
The choice to stay in this hotel was a wise one.

<u>Sources:</u> Based on: Olorunniwo et al. (2006), Qin and Prybutok (2009) and Liu and Jang, (2009).

Construct 5 – In-consumption emotions: This construct measures the emotions or feelings customers have in the consumption process of service as a result of customer-employee interaction or the use of tangibles available in the hotel. The construct of in-consumption emotion is included to fill gap 1 'Section 2.6' of the research. As it was discussed earlier, emotions play an important role in satisfaction (Bosque and Martin, 2008; Wirtz et al., 2000 and Oliver, 1993). In-consumption emotions are divided into two: positive and negative (Bosque and Martin, 2008; Han and Back, 2007; Mudie et al., 2003; Zins, 2002; Dolen et al., 2001; Richins, 1997). See Table 5.10 for the items for in-consumption emotions.

Table 5.10: Items for In-consumption Emotions Constructs

In-consumption Positive Emotions	*In-consumption Negative Emotions*
Happy	Angry
Pleased/Pleasure	Displeased
Excited	Annoyed
Positively surprised	Unhappy
Enjoyable	**Negatively** Surprised

<u>Sources</u> : Based on Bosque and Martin (2008), Han and Back (2007), Mudie et al. (2003), Zins (2002) and Richins (1997).

5.3.1.2 Management Survey

When it comes to management practices to sustain service quality, there is a big debate in selecting the best list of practice. The literature has been critically reviewed to decide the list of practices to be used by this researcher 'Chapter 2'. Accordingly, the available literature and practices have been summarized in Table 5.11.

Table 5.11: Management Practices

Management Practice	Kandampully and Minguc, 2000	Hope, 2004	Pfeffer, 1996	Cho et al, 2006	Paul and Anantharaman, 2003	Behara et al. 2001	Haynes and Frayer, 2000	Tsuar and Lin, 2004	others
Taking corrective action at failure	*								
Doing it right the first time	*								
Customer/employee feedback	*					*			
Complaints	*					*			
Statistical tools to assist quality	*								Lagrosen and Lagrosen, 2003
Operating standards	*								
Service Guarantee	*								
Tangibles planned maintenance		*							
Training		*	*	*	*	*	*	*	
Employee Selection		*	*	*	*	*		*	
Empowerment		*	*	*		*	*		
Team working		*	*	*		*			
Appraisal		*	*	*	*	*	*	*	
Rewards		*		*					
Communication		*	*	*		*	*		
Employee assessments				*					
Job descriptions			*		*				

Based on table 5.11, three constructs of operations Management practices have been developed: management of employees (Wong et al., 2010; Tari et al., 2007; Nair, 2006; Hope, 2004; Lashley, 1998, Chand and Katou; 2007; Claver-Cortes et al. 2007), management of service processes (Tari et al., 2007; Nair, 2006; Hope, 2004, Kandampully and Menguc, 2000; Behara et al. 2001; Claver-Cortes et al. 2007) and customer feedback (Wong et al., 2010; Tari et al. 2007; Lagrosen and Lagrosen, 2003; Claver-Cortes et al. 2007). Items under each construct have been selected from previous studies taking into consideration the context and reliability of the study. Further, items have been selected if they were proved in previous studies to have an effect on either performance, customer satisfaction or both. Moreover, the management survey also has been developed to be consistent with the customer survey.

The developed survey has five sections: managers' personal information (Garrigos-Simon et al. 2007), hotel information, subjective evaluation for hotel performance (Chatoth, 2007; Blake et al., 2006; Vlachos, 2008; Chand and Katou, 2007; Claver-Cortes et al. 2007), operations management practices and a section with open-ended questions. The survey also included at the beginning a section describing for respondents the purpose of the study and its purpose. Further, a covering letter was attached to explain the details of the research and to declare confidentiality of data.

Section 1 – Personal Information: Demographic information about the manager is requested in the first section. This type of information helps us to know more about the respondents.

Section 2 – Hotel Information: This section asks information about the hotel: the name of the hotel, its location, star rating, type of management (chain/independent), age and size (in terms of number of rooms and employees). That information is used to double check with the secondary data from the Ministry of Tourism for bias testing. In addition, it helps in linking management responses with the customers' responses of the same hotel.

Section 3 - Subjective performance measures: To measure the subjective performance of the hotel, 8 items have been selected as shown in Table 5.12. The measurement of performance is the Likert scale from 1 (very bad) to 5 (very good).

Table 5.12: Items to Measure Performance of Hotel

Sales growth
Productivity
Profitability
Achieving targets
Services provided
Employee satisfaction
Customer satisfaction
Satisfaction of other stakeholders (government, shareholders, suppliers etc.)

Sources: Based on Vlachos (2008), Chand and Katou (2007), Chatoth (2007), Claver-Cortes et al. (2007) and Blake et al. (2006).

Section 4 - Operations management practices: As discussed earlier, three constructs were developed to measure operations management practices using the Likert scale (1 strongly disagree to 5 strongly agree). These constructs and the items on which these constructs are based on are discussed below.

Construct 1: Managing employees is achieved through management practices on training and development, recruitment and selection, compensation and benefit, performance appraisal and reward, employee empowerment and participation. The developed construct measures the practices of managing employees of the hotel. The items that measure this construct are listed in Table 5.13 below along with the previous research sources on which these items are based.

Table 5.13: Operations Management Practices of Managing Employees

Employees in hotel normally go through training programs every few years.

There are formal training courses to teach new employees the skills they need to perform their jobs (e.g. service methods, and fire emergency procedures, etc.).

Hotel conducts systematic analysis to determine the needs for training programs.

Hotel assesses the effectiveness of training programs in terms of the degree to which customer satisfaction has improved.

Hotel evaluates training programs to determine whether the training objectives are met.

In the selection of new employees, hotel often uses tests (e.g. knowledge test, personality test, language tests etc.).

During the hiring process in hotel, potential employees are often provided with a realistic picture of the job and the hotel, including negative aspects.

Hotel conducts structured and standardized interviews (as opposed to unstructured interviews) for selection of jobs.

Promotion in hotel is based primarily on seniority.

In hotel, employees with good performance are rewarded.

Hotel constantly reviews and updates the range of benefits to meet the needs of employees.

Employees in hotel could know the result of their performance appraisal result by a formal feedback system.

In hotel, performance appraisal includes the supervisor setting objectives and goals of employees for the period ahead in consultation with them.

In hotel, promotions go to people who really deserve them.

Hotel uses incentives to boost employees' performance.

Hotel rewards employees who care about hotel objectives.

Hotel emphasizes job-relevant criteria in its appraisal systems.

Hotel holds meetings with employees when problems occur.

In hotel, employees participate in quality meetings.

Majority of employees in hotel are involved in quality circles or quality improvement teams.

In hotel, employees do participate in suggestions process.

Hotel has a good communications system with employees.

Sources: Based on Vlachos (2008), Claver-Cortes (2007), Alleyne et al. (2006), Hope (2004), Tsuar and Lin (2004), Tornow et al. (1991) and Behara et al. (2001).

Construct 2 – Managing Processes: These are the practices by managers to maintain quality, control it and the use of statistical tools in managing the quality of the service (Table 5.14).

Table 5.14: Operations Management Practices of Managing Process

Hotel has quality circle teams.

Hotel uses statistical quality tools to maintain and manage quality.

Hotel had ISO 9001 certificate.

Hotel uses appropriate software and equipment to manage service quality.

Hotel has standard operating procedures.

Hotel has planned maintenance policies (e.g. frequent check for lifts, paintings, etc.).

Hotel checks working conditions of equipment and devices regularly.

In hotel, Failed equipment are repaired immediately when reported.

Hotel usually keeps records of errors.

Sources: Based on Hope (2004), Lagrosen and Lagrosen (2003), Behara et al. (2001) and Kandampully and Minguc (2000).

Construct 3 – Managing the customers' feedback: This is the practice that enables the customers' voice to be a part of the service quality and builds customer relationship, making this survey consistent with the customer survey (Table 5.15).

Table 5.15: Operations Management Practices of Considering Customer Feedback

Hotel usually asks customers to evaluate our service quality.

In hotel, customers' suggestions are always taken into consideration.

Hotel has a box or e-mail for customers' suggestions and recommendations.

Hotel has customer loyalty programs.

Hotel provides option to customers to make payments on-line.

Hotel accepts debit and credit cards for payments from customers.

Hotel provides phone facility for customers.

Hotel usually asks customers to evaluate our service quality.

Sources: *Based on Claver-Cortes (2007), Lagrosen and Lagrosen (2003), Behara et al. (2001), Hynes and Frayer (2000) and Kandampully and Minguc (2000).*

Section 5 – Open ended questions: This part has been added to the survey to gain more knowledge about management practices in hotels that are not explicitly included in other parts of the questionnaire.

Surveys translation: The developed survey was written in English and has been translated into Arabic by a senior student majoring in translation. Later, the translated survey was checked by a translation academic from the College of Art and Social Sciences, Sultan Qaboos University, Muscat, Oman. Further, the researcher has double checked the translation using a specialized dictionary.

5.3.2 Data Collection

As was discussed earlier in section 5.3, two types of data have been collected for the research. Primary data has been collected through surveys from customers and managers. Secondary data has been collected from the Ministry of Tourism and the yearly statistical book. Special permissions had to be requested to get access to the data. After several attempts, the data has been collected in two phases, each phase lasting approximately three months. The first phase of data collection was from December 2009 to February 2010 and the second phase was from August 2010 to October 2010.

5.2.2.1 Primary data collection

In order to proceed with data collection, the sampling procedure needs to be discussed and highlighted. Sampling is an important procedure to help later in generalizing results to the larger population. Generally speaking, a researcher selects a sample of the population in question to participate in the study, to help in making a statement about the population the sample is drawn from (Easterby-Smith et al., 2008). It is important for the researcher to select the right sample and think about the way to do so as that will help in getting reliable results that are genuinely relevant to wider population. For the purpose of this research the sampling method used is random (Creswell, 2002, Easterby-Smith et al., 2008). It is said to be random as all respondent have similar likely possibility to be selected.

Pilot study: As recommended by researchers, both surveys included corresponding pilot studies to test the survey questionnaires. Both surveys were pilot tested with the main respondent of the research in both languages: English and Arabic. For the pilot study, 5 hotel managers were selected to fill the mangers survey. For the customer survey, 30 customers have been targeted in Muscat International Airport. After filling the survey, each selected respondent were asked about the survey. As no negative comments by participating managers or customers on the surveys language or any difficulty in understanding the concepts involved were expressed during the pilot tests, it was decided to start the main data collection using the developed surveys.

Survey of customers' perceptions: As the research is taking into consideration the evaluation of service quality, the target for participants was tourists either domestic or international. Initially, the researcher visited each hotel and randomly selected customers who had just completed their checkout. However this strategy was soon found to be difficult or impossible as hotels are located in different parts of the country and there are about 190 hotels in the country. Selecting only a few hotels is not the right decision either as a large

sample of data is needed. Moreover, many hotels need to be targeted as the management survey needs to be linked to the corresponding customers to be able to test the conceptualized model.

Hence, an alternative strategy was adopted that involved contacting tourists at Oman's' two international airports, Muscat and Salalah. This proved to be a better strategy as different customers from different hotels could be approached with relative ease. To do so, a letter from the sponsor has been sent to the director of the airports security to get access to the security point in order to collect data. It was decided by the researcher to collect the data after the security for a better response rate. As it is common, usually after check in and security, travellers are waiting for the gate to be opened for departure, so, the waiting time is utilised to target respondents to fill the survey. However this strategy has mostly targeted international tourists. To get domestic tourists participating in the study, while distributing the management survey to each hotel, customers checking out were asked to participate in the study. In addition, when a hotel was used for a conference or for workshops, customers staying in the hotel were targeted after their checkout. Another alternative was to give the survey to the hotel and request the receptionist to ask customers to complete it after the checkout, but this strategy was not used. The reason is that, this strategy might create bias in the data collected.

Getting access to an airport was not easy. It required several formalities and had some restrictions. Survey distribution in airports happened in two places: Muscat International Airport and Salalah International Airport. Participants were asked to complete the survey explaining to them the purpose of the research.

Survey of managers' perceptions: To be able to answer the research questions and test the hypothesis, a management survey is used to collect data about operations management practices. To distribute the management survey, the researcher went through a series of planned steps and procedures. Each hotel in Oman was contacted by phone; talking to the manager or secretary. The

researcher introduced the idea of the research and asked for the possibility of hotel management to participate in the survey. Further, the fax number of the hotel was taken to send a copy of the researcher's covering letter and a letter from the sponsor of the author. The Government of Oman is the sponsor, providing a scholarship for the PhD study. The letter from the sponsor was needed as an official requirement in order to be able to distribute the survey to hotels and receive responses.

In the letter and during the call it was pointed out that all gathered information would be confidential and be used only for the purpose of the study. Surveys were sent either by fax or email when requested by the management of some hotels. For other hotels the survey was taken to them by hand and a date for it to be collected back from the hotel was agreed.

Survey administration: It is important to discuss the survey administration to clarify the procedure of data collection. The period available for data collection was almost six months for the two phases. Two participants needed to be targeted: hotel managers and customers. About one month of each phase has been taken to finish all the procedural formalities. Hotels are located all around Oman and much travelling was needed to reach all the hotels in the study.

Collecting data in the airports needed to be done through shifts as flights were on different timings and multiple flights operated at the same time. For all these reasons, it was decided by the researcher to get help with distributing the survey. Five students were selected from the College of Commerce and Economics, Sultan Qaboos University to perform the work in addition to the researcher. Selection of students was in terms of their specialization 'business senior students', and how active they were in the students' university activities. Further, the students' place of residence was taken into consideration as each selected student was from a different region of the country. That made it easier when distributing the survey to hotel managers.

Right at the beginning, there was a workshop organized by the researcher to make the students aware of the research aims and objectives. Instructions were

given for data collection and timetables were handed to them. For airports, a scheduled shift timetable was developed to target different flights with different timings. The researcher was controlling and following the work as well as participating in the data collection. Some students worked for four weeks and others worked for more than 3 months.

Copies of the customer survey were put in envelopes with instructions for data collection as a reminder and the phone number of the researcher to be contacted at any time. For managers, a closed envelope was sent including the official letter, fax confirmation report for any faxes sent earlier, a copy of the survey and the contact details of the researcher.

So, for customers data has been mainly collected in the airports. The procedure was to get the timetable for flights departures. Then flights have been selected randomly. Random sampling is a procedure where a numbered list of all possible selections is generated and all have equal probability to be selected, where the numbers to be selected are generated randomly (Nolan and Heinzen, 2011; Barrow, 2009; Cannon, 1994). Once the flights were selected, the travellers were targeted after the security point in the airport and while waiting for the gate to open. Each traveller was asked if they were visiting Oman and if they stayed in a hotel. If the two conditions were satisfied the traveller was given a brief idea about the research and asked to fill the survey. The respondent was also told to choose only one hotel for evaluation in case he/she stayed in more than one hotel. Roughly, half an hour to 40 minutes was given to the respondent to fill the survey. As soon as the survey was collected back, the general information of hotel stay was checked to make sure the name of the hotel was not missing as that would lead to discarding the survey. The reason is that the surveys of customers need to be linked with the management survey for the corresponding hotel.

As the number of hotels in Oman is not a large number, each hotel has been targeted. Where each has been contacted by phone and surveys were sent either by fax, e-mail or in hand. Managers were given about a week to fill the survey. The managers who have not respondent within a week, a reminder was sent either by fax, e-mail or by phone. For hotels, it was easy to track the name of the hotel if

it was written in the survey by the respondent as the returned survey was by fax, e-mail or by hand.

5.3.2.2. Secondary Data from the Ministry of Tourism

The Ministry of Tourism has been visited several times by the researcher since the start of the research. The first visit was to introduce the researcher and the research aims and objectives. For the purpose of the research the visit has taken place at two departments within the ministry: The Statistics Department and The Investor and Quality Control Department.

The Statistics Department was visited by the researcher to get access to the available secondary data on the hotel industry. In Oman, part of the data needed was published in the yearly statistical book and the other data was considered to be confidential. After several visits and completing several formalities, a set of selected data was given to the researcher. Regardless of the restrictions, the researcher acknowledges the cooperation of the Statistics Department is above expectation. However, not all the required information was provided.

The Quality Control Department was visited to understand the procedure used to control and check the service quality of hotels in Oman. Relevant documentation was collected from the department and three people were met to get the required information. The researcher also requested to read the reports of service quality evaluation for several hotels, but for confidentially reasons the department refused to allow this. However, one report was provided where the name of the hotel was covered and the researcher was allowed to read it only and no copy was provided. The purpose of the visit was to learn about the star rating classification procedure of the ministry. In addition, to be aware of procedures and tools used by the ministry to control and measure the quality of hotels and particularly the service quality. A copy of the surveys for both managers and customers was provided to the quality department to check if the elements considered by the researcher are consistent with their quality evaluation.

5.3.3 Method of Data Analysis

Multivariate statistical analysis is used in this research to test the hypotheses and be able to answer the research question. Multivariate statistical analysis influences the researchers' analytical aspects and helps in designing the approach to data collection in order to make decisions (Hair et al. 2006). Further, it helps in analyzing complicated data where there are many independent and dependent variables having multiple measurements and on individuals and objects (Tabachnick and Fidell, 2001; Hair et al., 2006).

The service quality model consists of several latent constructs that represents latent variables and each construct has several items. According to Hair et al., (2006), a latent construct is a concept that can be defined in conceptual terms but cannot be measured directly. To measure a latent construct several items are needed. An item is a variable or an indicator that is used in conjunction with one or more to form and measure the latent construct (Hair et al., 2006). Recalling the survey development, constructs were defined with items used to measure each construct. So, the construct cannot be measured directly and perfectly, but using items it can be approximately measured.

Although constructs has been developed with items to be measured, factor analysis is used in this research in analyzing the collected data to know the set of items that are relatively independent of each other. The validity of factor analysis is later tested using the appropriate method (Sharma, 1996; Tabachnick and Fidell, 2001; Hair et al., 2006). Factor analysis is defined as a technique used to examine the interrelationship of items and used to test if items may be condensed or summarized in a smaller set of factors (Hair et al., 2006). In this research, collected data has been analyzed using Exploratory Factor Analysis (EFA) where items are formed into factors. EFA is discussed in detail in the next chapter with the data analysis.

As constructs are developed, the relationships between constructs need to be tested. To do so, multiple regression analysis is needed. Multiple regression analysis is a technique used to analyze the interrelationship between a single

dependent variable and several independent variables (Hair et al., 2006). However, the conceptual model of the research has more complexity than this and multiple regression analysis might not be appropriate to meet the aims of the research.

To meet the objective of the research, a combination of regression and factor analysis is needed. Accordingly, a suitable statistical method namely Structural Equation modelling (SEM) has been selected as the appropriate data analysis method for this thesis. SEM is a collection of statistical techniques that allows multi-relationships between one or more independent variables and dependent variables, either those variables are factors or measured variables (Tabachnick and Fidell, 2001). Further, SEM is a technique that uses both factor analysis and regression analysis.

There are two approaches for SEM: Covariance-Based SEM (CB-SEM) and Partial Least Squares SEM (PLS-SEM) (Hair et al., 2011; Gefen et al., 2000). PLS-SEM is selected for use in this research. One of the objectives of this research is to test moderation where a multi-group approach is used which is explained further in the next chapter. PLS-SEM is becoming more common in multi-group analysis approaches to test moderation (Qureshi and Compeau, 2009). To apply the multi-group approach the data needs to be split into groups where SEM is run for each group. That results in a small number of data sets which makes it more appropriate to use PLS-SEM. It was stated by Gefen et al. (2000) that when there is a smaller sample size PLS-SEM is preferable (Ringle et al., 2012; Alexander et al., 2011; Hutchinson et al., 2009). Though CB-SEM has received more applications in the past, the applications of PLS-SEM have increased over the last few years, and there is an increased preference towards PLS-SEM among researchers (Hair et al., 2011). In operations management, many recent researchers are using PLS-SEM (Cheung et al., 2010; Braunscheidel and Suresh 2009; Rosenzweig, 2009; Klein, 2007; Johnston et al., 2004).

In order to build the SEM and analyze it through PLS, factor analysis was first performed in SPSS, a statistical software package used for the Social Sciences. As the constructs were checked in terms of their reliability and

adequacy for measurement, SmartPLS is used to confirm the factors through assessment of the measurement model. The measurement model was checked in terms of its' reliability and validity; then the structural model was assessed where hypothesized relations were tested (Chin, 2010; Henseler et al., 2009; Rosenzweig, 2009; Braunscheidel and Suresh 2009; Klein, 2007; Hair et al., 2006; Johnston et al., 2004; Chin, 1998). Detailed discussions of the methods of analysis with their applications are presented in the next chapter.

5.4 Conclusion

This chapter has discussed the research philosophy of this research followed by a discussion of the detailed design of the research process. Methodology of research has been considered with detailed justifications. Then, the measurement development of the two surveys has been discussed. After that, the data collection process and sampling procedure has been examined. Finally, the selected method for data analysis has been briefly discussed. In the next chapter, the statistical methods are discussed in detail along with their application to the data. The results of the analysis are also provided in Chapter 6.

Chapter 6 Data Analyses and Results

6.1 Introduction

In the previous chapter the methodology and research design were discussed and a discussion of the surveys developed for both customers and management was provided. Then, sampling procedures for data collection were highlighted. A brief explanation of the method selection of data analysis was also pointed out. In this chapter, details of data analysis are presented in detail. Results of the analysis are also presented in this chapter.

6.2 Data Analysis

Recalling the conceptual framework of the research, a variety of multivariate statistical analyses (factor analysis, multiple regressions and structural equation modelling) can be used to test the hypotheses developed in Chapter 4. Factor analysis is a technique used to study the relations between items and to determine if those items can be summarized in a smaller set of constructs (Hair et al., 2006). Structural Equation Modelling (SEM) is a multivariate data analysis used to test relations between constructs (Sharma, 1996 and Hair et al., 2006). Structural equation modelling enables the researcher to test the structure of interrelationships expressed in a series of equations (Hair et al., 2006). There are many constructs in this research that need to be tested for interrelationship, so, SEM is applied. Usually, a SEM study is preceded by preliminary analysis using other multivariate statistical techniques such as factor analysis.

As it was discussed earlier in Chapter 5, there are different methods used to test SEM; Covariance-based SEM (CB-SEM) and Partial Least Square SEM (PLS-

SEM). In this research the PLS-SEM method is used for analysis; a method many recent researchers in operations have used (Cheung et al., 2010; Braunscheidel and Suresh 2009; Rosenzweig, 2009; Klein, 2007; Johnston et al., 2004).

Data examination and factor analysis are essential to build a SEM model that can be used to test the developed hypotheses in order to answer the research question and meet the research objective. In this section a brief discussion of the steps followed by the researcher will be highlighted. Then, a discussion of each step is provided, applied to the data collected and results are provided.

Step 1 – Preliminary examination of the data

First, the data is coded and entered onto the computer for analysis. Next, the data is examined in terms of missing data, outliers and unusual cases (Hair et al., 2006; Tabachnick and Fidell, 2001). The data needs to be examined in order to have a reliable analysis that can be used to make decisions and reach conclusions.

Other relevant characteristics of the data, such as the profiles of respondents in terms of gender, purpose of visit, education, etc., are also discussed briefly.

Step 2 – Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis (EFA) has then been performed on the collected data. The purpose of EFA is to explore the interrelationships between items, reduce their number and form them into constructs (Hair et al., 2006; Sharma, 1996). This step is needed to explore the constructs of service quality dimensions and operations management practices dimensions as the available literature has not agreed on the dimensions to be used when evaluating service quality 'Chapter 2'. EFA was performed in SPSS. The constructs identified using EFA have been further confirmed by another factor analysis using SPSS. This time factor analysis has been performed for each construct individually and checked if they converge into one construct 'step 3'.

Step 3 – Confirmatory Factor Analysis (CFA)

Once EFA has been performed, CFA is used to test the hypothesized constructs of the research where the theory used in the research can be tested empirically (Sharma, 1996). Factors resulting from the EFA have been first confirmed in SPSS. The resulting constructs and variables from SPSS after confirmation have been used to test the measurement model in SmartPLS, where PLS-SEM is used. The data file has been exported to SmartPLS and the analyses run.

Step 4 – Testing the Conceptual Framework and its Hypotheses

After carrying out EFA and CFA analyses, developed relations in the conceptualized model of the research 'Chapter 4' has been tested through Structural Equation Model using PLS-SEM.

Step 5 – Testing Moderation and Mediation

As the hypothesis of relationships between customer's perceptions, operations management practices and performance have been tested; moderation and mediation of the model have also been tested.

Each of the five steps highlighted will be discussed in detail in following sections with its application on the collected data and results are presented accordingly.

6.3 Preliminary Examination of Data

The process of survey distribution to both customers and managers has been discussed in detail in Chapter 5. 769 out of 1200 copies of the customers' survey were returned making a 64.08% response rate. Not all returned surveys

were useful and 80 were discarded for different reasons: a large number of questions were not answered, the name or the location of the hotel was missing, the survey was answered all as one from beginning to end, or the manager of that hotel had not responded to the managers' survey.

For the managers' survey, 190 hotels were contacted and 87 responded making a response rate of 45.79%. However, only 85 effective surveys were considered as two have been discarded.

Each hotel had one manager survey and many customers' surveys. For each hotel, the surveys of customers perceptions of service quality were matched with the corresponding hotel's management perception on operations management practices and performance. In other words, the matching was many 'customers' to one 'management'. In Excel each row represents the respondent response and the columns represents the answers of the questions of the surveys. So the columns first present the questions of customer survey followed by questions of the managers' survey.

An example explains how the data has been matched: if hotel 'A' has 10 customers surveys each customer responses has been entered in a row in excel where it results in 10 rows. Beside each customer the response of the manager on managers' survey from the correspondence hotel has been entered and the response manager has been repeated beside each of the 10 customers of the same hotel. This is the way to enable testing of the relationships that link both management practices to overall customer satisfaction and to run the SEM.

For the nature of SEM analysis, any hotel with a missing survey from either customer or manger has been discarded from the data set. As a result, the effective size of the data sample used for analysis was 689

6.3.1 Data Coding

Once the data had been collected, coding of the data began. Most of the data had been pre-coded as the questions are close ended, yet some questions' data needed to be coded. For instance nationality, hotel name and location were non-standard data that need to be coded. Tables were developed for each nominal data set with all possible answers and a code is given for each answer in order to make it easy for analysis and to facilitate their use in the data analysis software. The data was then input into an Excel spreadsheet where each case 'survey' was double checked twice. After inputting all the data, a set of surveys were selected randomly and the inputted data for each selected case was double checked for errors.

6.3.2 Data Examination

Once the data had been coded and checked, it was transferred to SPSS for preliminary analysis where cases were checked for missing values, outliers and unusual cases. Prior to analysis, the data had been discussed in terms of biasness.

First, *non-response and response bias* have been assessed. Non-response bias exists when respondents to a survey are different from those who did not respond (Sax et al. 2003). Response bias exists when respondents bias the response from the correct, honest and accurate response (Furnham, 1986). In this research, as the data collection had taken place in two phases, as was highlighted in Chapter 5, significance testing of mean differences has been run between the data collected from the first and second phases. In addition, a survey that was returned with one answer for all questions was discarded from the analysis. To reduce bias from the management survey general questions on hotel information such as star rate and size of hotel completed by managers has been checked with the secondary data available from the Ministry of Tourism. For the customer survey, the time of collecting the survey back from customers and their personal information were checked for some of them. Another way of testing a non-response bias is the percentage of response rate; yet, this is debatable as some researchers limit it to

20% and others to more than 50% (Forza, 2002). Recalling the response rate of respondents to this research, for customers it was 62.75% and managers to 45.79%. To control the response bias in customers, different people were targeted in terms of age, gender and purpose of stay in hotels. When collecting data in the airports, different flights were targeted with different timings and destinations to ensure targeting of different types of customers. For hotels, different hotels in terms of location, star rate and size were targeted during the data collection period.

Missing data caused a reduction in the sample size for some analyses. Discarding cases with missing data might result in inadequate sample (Hair et al., 2006). For this research two types of data are considered as a missing value: inapplicable situations or just leaving a question without an answer. Deleting all cases with a missing value regardless of its type resulted in an inadequate sample size for confirmatory factor analysis and structural equation modelling. Accordingly, missing values as a result of leaving a blank answer have been treated later in PLS for SEM analysis.

Outliers' testing has also been performed for the data collected as structural equation models are sensitive to outliers (Hair et al., 2006). A case (i.e., a completed questionnaire) is considered an outlier if any of the items (i.e., questions) have unusually high or low values or unusual response for different reasons. Entering data incorrectly in the computer might result in outliers, so, the entered data has been checked twice as it was discussed earlier. Further, SPSS has been used to detect outliers where the test result detected a few outliers. Upon subsequent analysis, it was decided to leave the outliers in the data set because the decision of deleting outliers for improving analysis might limit model generalization (Hair et al., 2006).

Normality distribution testing for data has not been performed as it is not required when using PLS-SEM unlike CB-SEM (Alexander et al., 2011;

Hutchinson et al., 2009). In fact, researchers use PLS as an alternative approach of CB to SEM when data is not normally distributed (Ringle et al., 2012).

6.3.3 Respondent profile

Customers' Survey: the demographic characteristics for the respondents of the customers' survey were measured in terms of nationality, age, gender and education level. The participants were domestic and international tourists as it was pointed out earlier. Participants presented in the study were from 70 different nationalities. In addition, respondents have been asked for their visit information. Respondents reported staying at 85 different hotels during their visits, where most of the hotels are in the two main cities, Muscat and Salalah. Looking at hotels in Oman, most hotels are located in Muscat and Salalah. Further, tourists stay in the city where most of the attractions are based. Moreover, if tourists are interested in attractions outside the two big cities they travel to the attraction and come back to the same hotel as Oman is not a big country and travelling from one place to another is easy except for limited places or when the visitors are camping. While collecting data respondents were asked to evaluate the service quality of the hotels they stayed at one at a time they preferred to measure the hotels in Muscat even if they had stayed in other hotels outside Muscat.

This section provides the results summary of respondents' profiles for the customer survey in Table 6.1.

Table 6.1: Customers' Survey Respondent Profile

Variable	Frequency	Valid Percent
Gender		
Female	270	39.2%
Male	417	60.5%
No Response	2	0.3%
Total	*689*	100.0%
Age (years)		
25 or less	74	10.7%
26 – 35	179	26.0%
36 – 45	151	21.9%
46 – 55	123	17.9%
56 or more	161	23.4%
No response	1	0.1%
Total	*689*	100.0%
Education		
School	71	10.3%
Diploma	125	18.1%
Bachelor's	223	32.4%
Master's and above	240	34.8%
No response	30	4.4%
Total	*689*	100.0%
Purpose of Visit		
Business	198	28.7%
Leisure	376	54.6%
Business and Leisure	66	9.6%
Other	39	5.7%
No response	10	1.5%
Total	*689*	100.0%
Visit		
Individual	258	37.4%
With Family	307	44.6%
In group	97	14.1%
No response	27	3.9%
Total	*689*	100.0%
Stayed in more than one hotel		
Yes	298	43.3%
No	366	53.1%
No response	25	3.6%
Total	*689*	100.0%

The respondents were 39.2% female and male 60.5%. The reason for more males than females reporting are that females are usually accompanied by a male and the males are more likely to respond to a survey in addition most travellers are males by themselves. This had been noticed during the data collection stage of the research. The age group of participants reported 10.7% of age 25 years or less, 26% aged between 26 and 35 years, 21.9% aged between 36 to 45 years, 17.9% aged between 46 and 55 years and 23.4% aged 56 or above. The results shows that majority of respondents are aged between 26 and 55 years.

Education level of respondents showed that only 10.3% of respondents hold a school certificate, 18.1% have reached diploma level, 32.4% have a college certificate and 34.8% have completed postgraduate programs 'masters and above'. That might be as a result of the collection period for two main reasons: many conferences were functioning at that time and in Salalah as it was the diving season. Most people dive for study and research reasons, and is thus primarily done by people holding higher education certificates.

Approximately 30% of respondents reported the purpose of their visit to be for business reasons, 54.6% for leisure, 9.6% for both business and leisure and 6.3% for other reasons. More than half of respondents were accompanied by a family member 44.6% or were with a group of people 14.1% during their visit whereas 37.4% said their visit was individual. Most of the respondents stayed in one hotel making it 53.1% of the total. These results are summarized in Table 6.1.

· *Managers' survey:* The demographic characteristics for the management surveys' respondents were measured in terms of gender, age, education, nationality, job title and experience in the current position. Managers were asked about their experience in the hotel industry if they had worked in another hotel in Oman or in another country. This section provides the results summary in Table 6.2 of the managers who responded to the survey.

The respondents were 90.59% male and only 8.24% female. The reason for more males is that high managerial positions are usually occupied by males. The majority of respondents are aged 35 years or less 41.18% followed by a 30.59% of respondents that are aged between 36 and 45 years and only 2.35% of respondents aged more than 56 years. Education level of respondents reported that only 7.06% hold school certificate, 29.41% have reached a diploma level, 41.18% have a college certificate making the highest percent and 20% hold a postgraduate certificate 'masters and above'. More than half 52.94% of respondents hold a qualification in hotel management.

Most of respondents 64.71% have 9 or less years of experience in current job, where 12% have an experience of 10 to 19 years in the current job and only 8.24% have more than 20 years of experience. The reason for that is the hotel industry in Oman is still young as modern civilization in the country started only in 1970 when Oman ceased to be isolated from other countries. The results shows that 24.71% of respondents have experience in the hotel industry of 9 years or less, 36.47% have an experience of 10 to 19 years, 17.65% their experience is between 20 and 29 years and only 2.35% and 1.18% experience is 30 to 39 years and more than 40 years respectively. As most of the hotel managers were foreigners, 56.8% of respondents reported that they have worked previously in hotels outside Oman.

Table 6.2: Managers' Survey Respondent Profile

Variable	Frequency	Valid Percent
Gender		
Male	77	90.59%
Female	7	8.24%
No response	1	1.18%
Total	85	100.00%
Age (years)		
35 or less	35	41.18%
36 – 45	26	30.59%
46 – 55	19	22.35%
56 or more	2	2.35%
No response	3	3.53%
Total	85	100.00%
Higher Educational Degree		
School	6	7.06%
Diploma	25	29.41%
Bachelor's Degree	35	41.18%
Masters and Above	17	20.00%
No response	2	2.35%
Total	85	100.00%
Respondent Hold a Qualification in Hotel Management		
Yes	45	52.94%
No	24	28.24%
No response	16	18.82%
Total	85	100.00%
Experience In Current Job (Years)		
9 or less	55	64.71%
10 – 19	11	12.94%
20 or more	7	8.24%
No response	12	14.12%
Total	85	100.00%
Experience In Hotel Industry (Years)		
9 or less	21	24.71%
10 – 19	31	36.47%
20 – 29	15	17.65%
30 – 39	2	2.35%
40 or more	1	1.18%
No Response	15	17.65%
Total	85	100.00%
Worked Previously in Hotel Outside Oman		
Yes	56	65.88%
No	28	32.94%
No response	1	1.18%
Total	85	100.00%

Managers also were asked to complete some information about their hotel such as the name of the hotel, its star rating, management type 'Chain/Independent' and number of rooms and employees. The missing information was completed using the secondary data provided from the Ministry of Tourism, although some information was still missing. The summary of this information is provided in Table 6.3.

Table 6.3: Hotel Information

Variable	Frequency	Valid Percent
Star Rating		
1	14	16.47%
2	18	21.18%
3	27	31.76%
4	14	16.47%
5	12	14.12%
Total	85	100.00%
Type of Management		
Part of Hotel Chain	33	38.82%
Independent	46	54.12%
No response	6	7.06%
Total	85	100.00%
Number of Rooms		
Less than 25	11	12.94%
25 – 49	23	27.06%
50 – 64	11	12.94%
65 – 99	9	10.59%
100 – 199	22	25.88%
200 or more	5	5.88%
No Response	4	4.71%
Total	85	100.00%
Number of Employees		
Less than 25	23	27.06%
25 – 49	15	17.65%
50 – 64	6	7.06%
65 – 99	7	8.24%
100 – 199	19	22.35%
200 or more	9	10.59%
No Response	6	7.06%
Total	85	100.00%

Most of the hotels were rated as 2 and 3 stars with percentages of 21.18% and 31.76% respectively. The results reported 14.12% of hotels in this study are 5 star hotels whereas 16.47% each of hotels are 4 and 1 star. Most hotels in Oman are part of hotel chains, reporting a percentage in the sample of 54.12% while 38.82% are independent hotels. Size of hotel is measured here in terms of number of employees and rooms. 12.94% of hotels have less than 25 rooms, 27.06% have between 25 and 49 rooms, 12.94% have 50 to 64 rooms, 10.59% have 100 to 199 rooms and only 5.88% of hotels have more than 200 rooms. More than a quarter of hotels 27.06% have less than 25 employees making that the highest percentage followed by 22.35% and 17.65% hotels have 25 to 49 and 100 to 199 employees respectively. 10.59% of hotels have more than 200 employees, 8.24% of hotels have from 65 to 99 employees and 7.06% have 50 to 64 employees.

This section has discussed the step of data preparation for analyses. Then, the respondent profile of both customers and managers has been presented. The next section will discuss the statistical methods of data analyses and the results will be presented.

6.4 Methods of Data Analysis

As it was highlighted earlier sections 5.3.3 and 6.2, multivariate statistical analysis is the appropriate method to be used in this research as it helps in analyzing model where there are many independent and dependent variables having multiple measurements on individuals and objects (Hair et al., 2006; Tabachnick and Fidell, 2001). Particularly, Structural Equation Modelling (SEM) will be used to test the researches' conceptualized model. SEM is a technique that uses both factor analysis and regression analysis and allows multi-relationships between one or more independent variables and dependent variables (Hair et al., 2006; Tabachnick and Fidell, 2001).

To do so, first factor analyses; exploratory and confirmatory was performed in SPSS. Although constructs with their items has been developed through literature, factor analysis is performed to know that set of items that are relatively independent of each other and examine their interrelationships to condense them in smaller set of factors or constructs. Accordingly, the collected data has been analyzed using EFA to form them into factors. Then, the factors or constructs has been confirmed where reliability is checked for each construct. So, first all the items of customer perceptions on service quality and management perception on operations management practices and performance has been grouped into factors through EFA using SPSS. Accordingly, number of items has been reduced and the remaining items has been confirmed in SPSS. Confirming factors in SPSS provides only the reliability and sampling adequacy whereas to carry SEM, the measurement model need to be tested through CFA. Thus, the only remaining items from analysis carried in SPSS has been transferred to SmartPLS to test the developed hypothesis.

As factor analysis has been performed the conceptualized model has been tested using SEM partial least square approach (PLS-SEM) with SmartPLS software. PLS-SEM is tested in two stages; measurement model and structural model. Measurement model is a CFA using PLS-SEM where constructs are confirmed and tested in term of their reliability and validity. Whereas, structural model tests the hypothesized relations developed in the conceptualized model.

As relations of the conceptualized are tested, moderation of customer characteristics and mediation of overall customer satisfaction are tested where SmartPLS is used too. Multi-group comparison suggested by Chin's PLS-SEM approach (1998) is used to test moderation. Accordingly, data are split into groups where PLS-SEM is performed for each group and the path differences are calculated between groups and tested in terms of its significance. Finally, mediation test has been performed using suggested approach by Zhao et al. (2010) and Iacobucci et al. (2007). Each method; EFA, CFA, PLS-SEM, moderation and

mediation will be discussed in detail with its application on the collected data and results will be presented.

6.4.1 Exploratory Factor Analysis (EFA)

The measurement items for the eleven constructs have been examined through a series process of Exploratory Factor Analysis. Factor analyses are used by the researcher to reduce information to a reasonable number to be used later for multivariate analysis. It was stated by Hair et al. (2006) that factor analysis is utilized to examine the pattern and relationship among variables to determine whether information can be condensed and reduced to a smaller number of components. Factor analyses are in fact used in many statistical analyses prior to more targeted multivariate analysis.

EFA is run to seek, describe and summarize data by grouping variables that are correlated together (Tabachink and Fidell, 2001). There is a need to run EFA for this research as previous literature does not provide a model that is suitable to measure the service quality of a hotel (Tseng, 2009; Hsieh et al., 2007). In Chapters 2 and 4, a detailed discussion of conceptualizing service quality for hotels took place describing how each construct has been built. Further, an explanation of measurement items for each construct has also been discussed in Chapter 5 providing the relevant literature used.

To perform EFA, the principal component analysis is used with varimax rotation and a loading factor of 0.4. Although there is no specific rule for researchers to select a rotation method, varimax rotation is selected as it gives a clearer separation of the items (Hair et al., 2006). In fact, varimax rotation is the method of rotation most commonly used by researchers in EFA (Tabachnick and Fidell, 2001). Loading factor selection is generally down to the preference of the researcher. It was stated by Hair et al. (2006) that although factor loading 0.3 and

0.4 are minimally acceptable, a loading factor value greater than 0.5 is considered necessary for practical significance.

Steps for factor analysis recommended by Hair et al. (2006) were followed and the optimal structural is performed when all variables have a high loading to only one single factor. So, factor analyses were run and each time factors that were loaded in more than one factor, or had not got a load, or where communalities were less than 0.5, that variable was deleted. SPSS software package has been used for this analysis.

EFA has resulted in eleven components where items have been recalled, labelled with the construct conceptualized from literature Chapters 2, 4 and 5 and each component has been given a name: '(1) Customer Feedback', '(2) Employees' Attitude/behaviour', '(3) Non-Technological Tangibility', '(4) In-Consumption negative emotion', '(5) Performance ', '(6) Managing Process', ' (7) Technological Tangibility', '(8) In-Consumption Positive Emotion', '(9) Price Fairness', '(10) Overall Customer Satisfaction' and '(11) Managing Employees' . Each item has also been given a label which will be used in the rest of the report. Table 6.4 summarizes the results of EFA.

Table 6.4: Results of Exploratory Factor Analysis

	Item	Label	Communality	1	2	3	4	5	6	7	8	9	10	11
									Component					
1	When employees at the hotel promised to do something by a certain time, they did.	EMP1	.632		0.7668									
2	When employees at the hotel promised to do something in a certain way, they did.	EMP2	.615		0.7465									
3	Employees were able to provide the service right the first time.	EMP3	.691		0.8064									
4	Employees paid attention to my requirements as much as possible.	EMP4	.611		0.6801									
5	Employees' behaviour was satisfactory during my stay.	EMP5	.730		0.8122									
6	Employees acted friendly and treated me nicely.	EMP6	.733		0.8107									
7	Employees were willing to solve my problems.	EMP7	.635		0.7606									
8	Employees solved problems adequately and quickly.	EMP8	.651		0.7770									
9	Employees provided a personalized service.	EMP9	.503		0.5233									
10	Employees always made me their first priority.	EMP10	.647		0.7510									
11	Employees were concerned about my safety and privacy.	EMP11	.667		0.7273									
12	Employees were available all time.	EMP12	.642		0.6824									
13	Employees had good communication skills.	EMP13	.567		0.6776									
14	Employees answered my questions and queries.	EMP14	.672		0.7259									
15	In general, the price I paid for my stay in hotel was fair.	PRICE1	.736									0.6232		
16	Price of hotel facilities (gym, laundry, ironing, shoe-shinning, child care etc.) was fair.	PRICE2	.679									0.6170		
17	Price of food and beverages was fair.	PRICE3	.751									0.7073		
18	The price satisfactorily reflected the value of service provided in hotel.	PRICE4	.810									0.6860		
19	In comparison to the quality of room furniture, the price was satisfactory.	PRICE5	.724									0.5817		
20	Internet facilities in the hotel were convenient.	TECH1	.748							0.7155				
21	Telephone facilities were satisfactory.	TECH2	.792							0.6761				
22	Television facilities were satisfactory.	TECH3	.847							0.7065				
23	Plug availability was satisfactory.	TECH4	.737							0.6181				
24	The hotel wake-up system was satisfactory and reliable.	TECH5	.682							0.5735				
25	The available facilities and devices were in good condition and working properly.	TECH6	.727							0.5545				

Table 6.4 (continued) Results of Exploratory Factor Analysis

	Item	Label	Communality	Component										
				1	2	3	4	5	6	7	8	9	10	11
26	Hotel furniture was comfortable.	NONTECH1	.605			0.6062								
27	The hotel had an appealing décor.	NONTECH2	.651			0.6321								
28	The room was spacious.	NONTECH3	.656			0.6454								
29	Bathroom/toilets were hygienic.	NONTECH4	.610			0.6365								
30	The room was clean.	NONTECH5	.624			0.6994								
31	The hotel was clean.	NONTECH6	.725			0.7407								
32	The hotel's location was convenient.	NONTECH7	.724			0.7177								
33	Happy	POS1	.720								0.7491			
34	Pleased/Pleasure	POS2	.710								0.7191			
35	Excited	POS3	.672								0.7693			
36	Positively surprised	POS4	.600								0.7324			
37	Enjoyable	POS5	.563								0.6640			
38	Angry	NEG1	.789				0.8484							
39	Displeased	NEG2	.758				0.8255							
40	Annoyed	NEG3	.813				0.8617							
41	Unhappy	NEG4	.836				0.8761							
42	Negatively Surprised	NEG5	.740				0.8036							
43	In general I was satisfied with the service of the hotel.	SAT1	.836					0.8485						
44	I am willing to stay in the same hotel in future.	SAT2	.862					0.8658						
45	I will say positive things about the hotel to other people.	SAT3	.840					0.8353						
46	Choosing this hotel was a right decision.	SAT4	.859					0.6934						
47	The choice to stay in this hotel was a wise one.	SAT5	.833					0.6019						
48	Sales growth	PERF1	.905										0.5482	
49	Profitability	PERF2	.883										0.5464	
50	Achieving targets	PERF3	.877										0.5227	
51	Services provided	PERF4	.878										0.5457	
52	Satisfaction of stakeholders (government, shareholders ...etc.)	PERF8	.821										0.5291	

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Table 6.4 (continued) Results of Exploratory Factor Analysis

	Item	Label	Communality	Component											
				1	2	3	4	5	6	7	8	9	10	11
53	Employees in my hotel normally go through training programs every few years.	MNGEMP1	.756											0.5923
54	There are formal training courses to teach new employees the skills they need to perform their jobs (e.g. service methods, and fire emergency procedures, etc.).	MNGEMP2	.821											0.4990
55	My hotel conducts systematic analysis to determine the needs for training programs.	MNGEMP3	.802											0.7469
56	My hotel assesses the effectiveness of training programs in terms of the degree to which customer satisfaction has improved.	MNGEMP4	.888											0.8918
57	My hotel evaluates training programs to determine whether the training objectives are met.	MNGEMP5	.744											0.7246
58	In the selection of new employees, my hotel often uses tests (e.g. knowledge test, personality test, language tests etc.).	MNGEMP6	.828											0.7629
59	My hotel conducts structured and standardized interviews (as opposed to unstructured interviews) for selection of jobs.	MNGEMP7	.839											0.8035
60	In my hotel, employees with good performance are rewarded.	MNGEMP8	.794											0.7150
61	Employees in my hotel could know the result of their performance appraisal result by a formal feedback system.	MNGEMP9	.810											0.6335
62	In my hotel, promotions go to people who really deserve them.	MNGEMP10	.716											0.6905
63	My hotel uses incentives to boost employees' performance.	MNGEMP11	.872											0.7679
64	My hotel rewards employees who care about hotel objectives.	MNGEMP12	.921											0.8533
65	My hotel emphasizes job-relevant criteria in its appraisal systems.	MNGEMP13	.884											0.8982
66	My hotel holds meetings when problems occur.	MNGEMP14	.816											0.8515
67	In my hotel, managers and employees meet frequently.	MNGEMP15	.711											0.6846

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Table 6.4 (continued) Results of Exploratory Factor Analysis

	Item	Label	Communality	Component										
				1	2	3	4	5	6	7	8	9	10	11
68	My hotel usually asks customers to evaluate our service quality.	CUSTFED1	.855	0.4072										
69	In my hotel, customers' suggestions are always taken into consideration.	CUSTFED2	.842	0.6907										
70	My hotel has a box or e-mail for customers' suggestions and recommendations.	CUSTFED3	.861	0.4578										
71	My hotel has standard operating procedures.	MNGPROC1	.910						0.7477					
72	My hotel has planned maintenance policies (e.g. frequent check for lifts, paintings, etc.).	MNGPROC2	.867						0.8556					
73	My hotel checks working conditions of equipment and devices regularly.	MNGPROC3	.876						0.8086					
74	In my hotel, Failed equipment are repaired immediately when reported.	MNGPROC4	.928						0.8304					

Overall Measure of Sampling Adequacy: 0.844
Cronbach's Alpha: 0.969

The number of measurement items used was reduced from 124 items to74 and the resultant constructs are consistent with the constructs developed for the research in Chapters 2, 4 and 5. All items have exceeded the recommended value of 0.5 for communality and factor loading under each component. The factor loadings ranged from 0.5227 to 0.8982 except items CUSTFED1, CUSTFED3 and MNGEMP2, yet they exceeded the minimal accepted value of 0.3 and 0.4 according to Hair et al. (2006). Communalities of the items ranged from 0.503 to 0.928.

The appropriateness of EFA performed has also been assessed to ensure that the selected variables 'items' are sufficiently inter-correlated to produce a factor or a construct. To do so, a measure of sampling adequacy for all variables is calculated. According to Hair et al. (2006), the value must exceed values of 0.5 or above to be considered as miserable; 0.6 or above as mediocre; 0.7 or above as middling and 0.8 or above, as meritorious where a value of less than 0.5 is unacceptable. The overall sampling adequacy for the performed analysis is said to be meritorious as the value is 0.844.

The reliability of EFA has been assessed by calculating Cronbach's alpha. Cronbach's alpha is a reliability coefficient measure that ranges from 0 to 1 where it measures how an item or a set of items are consistent in what it is intended to measure (Hair et al. 2006; Tabachnick and Fidell, 2001). Cronbach's alpha is calculated using the formula:

$$\alpha = \frac{N.\bar{r}}{(1+(N-1)*\bar{r})}$$

$$where \quad N = \quad number \quad of \quad items$$
$$\bar{r} = \quad average \quad correlation$$

To say that the variables are reliable Cronbach's alpha should exceed 0.7 (Hair et al., 2006; Tabachnick and Fidell, 2001; Sharma, 1996). The EFA performed is said to be reliable as Cronbach's alpha is 0.969.

The next step for the EFA is the confirmatory factor analysis (CFA) as it is required to build the structural equation model. The model proposed using literature and EFA will be further tested in order to validate the measurement model of customer perception of service quality. To do so, CFA is performed in SPSS which is presented in the next section.

6.4.2 Confirmatory Factor Analysis using SPSS

In the previous section, EFA has been performed and resulted in 11 constructs. To confirm the components resulting from EFA and to check reliability and sufficient inter-correlation, CFA has been performed in SPSS. Factor analysis has been run for each construct. Items of each construct are checked if they are loaded to only one single factor. Further, communalities of 'at least 0.5', a loading factor 'greater than 0.5, for practical significance', a measure of sampling adequacy 'greater than 0.5' and Cronbach's alpha of 'more than 0.7' were checked (Hair et al., 2006; Tabachnick and Fidell, 2001; Sharma, 1996). Table 6.5 summarizes the results of the analysis.

Table 6.5: Factor Analysis for each Construct

	Construct	Item	Communality	Factor Loading	Sampling Adequacy	Cronbach's Alpha
1	Employees' Attitude/Behaviour	EMP1	0.573	0.7570	0.943	0.947
2		EMP2	0.543	0.7368		
3		EMP3	0.631	0.7942		
4		EMP4	0.553	0.7436		
5		EMP5	0.707	0.8408		
6		EMP6	0.690	0.8306		
7		EMP7	0.564	0.7512		
8		EMP8	0.621	0.7880		
9		EMP9	0.598	0.6307		
10		EMP10	0.640	0.7999		
11		EMP11	0.636	0.7976		
12		EMP12	0.607	0.7792		
13		EMP13	0.500	0.7074		
14		EMP14	0.651	0.8068		
15	Price	PRICE1	0.720	0.8488	0.841	0.887
16		PRICE2	0.626	0.7911		
17		PRICE3	0.648	0.8049		
18		PRICE4	0.816	0.9031		
19		PRICE5	0.652	0.8075		
20	Technological Tangibility	TECH1	0.683	0.8266	0.902	0.930
21		TECH2	0.811	0.9008		
22		TECH3	0.855	0.9244		
23		TECH4	0.737	0.8582		
24		TECH5	0.650	0.8063		
25		TECH6	0.716	0.8461		

Table 6.5 (Continued): Factor Analysis for each Construct

	Construct	Item	Communality	Factor Loading	Sampling Adequacy	Cronbach's Alpha
26	Non-Technological Tangibility	NONTECH1	0.585	0.7646	0.842	0.884
27		NONTECH2	0.528	0.7268		
28		NONTECH3	0.593	0.7702		
29		NONTECH4	0.569	0.7541		
30		NONTECH5	0.606	0.7783		
31		NONTECH6	0.654	0.8087		
32		NONTECH7	0.640	0.8002		
33	In-Consumption Positive Emotion	POS1	0.732	0.8557	0.805	0.846
34		POS2	0.702	0.8380		
35		POS3	0.593	0.7700		
36		POS4	0.552	0.7427		
37		POS5	0.564	0.7508		
38	In-Consumption Negative Emotions	NEG1	0.779	0.8825	0.887	0.930
39		NEG2	0.755	0.8690		
40		NEG3	0.813	0.9016		
41		NEG4	0.838	0.9152		
42		NEG5	0.731	0.8547		
43	Overall Customer Satisfaction	SAT1	0.867	0.9314	0.893	0.965
44		SAT2	0.894	0.9453		
45		SAT3	0.869	0.9322		
46		SAT4	0.893	0.9451		
47		SAT5	0.864	0.9296		

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Table 6.5 (Continued): Factor Analysis for each Construct

	Construct	Item	Communality	Factor Loading	Sampling Adequacy	Cronbach's Alpha
48	Performance	PERF1	0.835	0.9135	0.788	0.938
49		PERF2	0.761	0.8725		
50		PERF3	0.835	0.9138		
51		PERF4	0.864	0.9293		
52		PERF8	0.718	0.8476		
53	Managing Employees	MNGEMP1	0.778	0.8349	0.846	0.966
54		MNGEMP2	0.530	0.6574		
55		MNGEMP3	0.720	0.6578		
56		MNGEMP4	0.849	0.5457		
57		MNGEMP5	0.633	0.5721		
58		MNGEMP6	0.730	0.7314		
59		MNGEMP7	0.765	0.7209		
60		MNGEMP8	0.738	0.7887		
61		MNGEMP9	0.740	0.7894		
62		MNGEMP10	0.592	0.6715		
63		MNGEMP11	0.750	0.7549		
64		MNGEMP12	0.873	0.8755		
65		MNGEMP13	0.871	0.8777		
66		MNGEMP14	0.791	0.7477		
67		MNGEMP15	0.602	0.6033		
68	Customer Feedback	CUSTFED1	0.742	0.8612	0.612	0.777
69		CUSTFED2	0.509	0.7134		
70		CUSTFED3	0.826	0.9090		
71	Managing Process	MNGPROC1	0.655	0.8093	0.775	0.904
72		MNGPROC2	0.794	0.8910		
73		MNGPROC3	0.840	0.9167		
74		MNGPROC4	0.892	0.9444		

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Communalities of all items under each construct have met the rule of a value of at least 0.5, as values ranged from 0.5004 to 0.8937. Loading factors ranged from 0.5457 to 9453, so all items have exceeded the minimum value. That means that all items under each construct are said to be practically significant.

As the measure of sampling adequacy of all constructs has exceeded the minimum acceptable value of 0.5 it can be said that variables under each construct are sufficiently inter-correlated. In fact, most of them are said to be 'meritorious' as the value is above 0.8 except for Customer Feedback which is 'mediocre' and Managing Process and Performance which is 'middling.

All constructs are to be considered reliable as the Cronbach's alpha values ranged from 0.777 to 0.966. The minimum accepted value is 0.7, yet 0.6 can be considered in an exploratory study (Hair et al., 2006; Tabachnick and Fidell, 2001; Sharma, 1996).

In addition to the above confirmatory process, CFA has also been performed using Partial Least Square (PLS-SEM) method as it is usually the first step of testing the conceptual framework

When Structural Equation Modelling is used to test the conceptual framework, the literature normally recommends a two-step process (Hair et al., 2006). First, a measurement model is validated, which involves repeating a confirmatory factor analysis using SEM. Then, the conceptual model is tested, which is usually called testing the structural model. As discussed earlier, this research uses Partial Least Squares (PLS-SEM) for implementing SEM.

PLS-SEM is a confirmatory second generation multivariate statistical analysis technique and tests the strength of individual components of structural equation models (Johnston et al., 2004). Measurement model is the relation between variables 'constructs' and its items 'indicators' and structural model is the

relation between independent and dependent variables (Arteaga et al., 2010; Barroso et al., 2010; Chin, 2010; Braunscheidel and Suresh, 2009). The next section will first introduce the concept of SEM and following sections will explain the evaluation of the measurement and structural model.

6.4.3 Structural Equation Modelling (SEM)

Recalling the aim of the research, the conceptual framework is built and tested for people's perception of service quality and links it to management practices where both are linked to performance. Accordingly, it is important to assess the quality of the behavioural model in order to reach t a valid conclusion. In SEM, as mentioned above, the analysis is usually conducted in two stages – measurement model and structural model. Measurement model precedes the structural model and is usually called CFA. Structural model is the one that tests the hypothesized relationships among variables.

Structural Equation Modelling is a multivariate statistical technique that combines aspects of factor analysis and multiple regressions and enables the researcher to simultaneously examine series relations between measured and unmeasured variable constructs, and between unmeasured variables (Hair et al., 2006). A construct or latent factor is conceptualized and defined, but cannot be measured directly. Accordingly, multiple indicators are needed for each construct to be measured. Constructs are said to be either *exogenous*; which is a multi-item equivalent of an independent variable, or *endogenous*; which is a multi-item equivalent of a dependent variable.

The relationships in SEM is either between two constructs or between the construct and the variables. The relation between a variable 'item indicator' and a construct is known as a dependence relationship and it is a type of regression relationship represented by an arrow pointing to the dependent variable. So items are connected to a construct as they are indicators for that construct and one

indicator by itself does not explain the construct fully. Indicators are usually proofed to measure construct using theory. Dependence relationship also occurs between an exogenous construct and an endogenous construct but does not occur between two exogenous constructs. This is represented by arrows pointing to the relevant endogenous constructs.

The relationship that connects two exogenous constructs is known as a co-relational or covariance relationship and is represented by a two point arrow. In research a co-relational relationship is allowed between two exogenous constructs while being aware that this relationship is different than the dependence relationship. In a co-relational relationship the researcher believes that there is a relationship between two exogenous constructs but one is not dependent on the other (Hair et al., 2006). All these types of relationships and constructs are represented graphically using a path diagram. In path diagrams, constructs are represented with ovals or circles, measured variables by squares and relations by arrows. A simple SEM path diagram is represented in Figure 6.1

Figure 6.1: Simple SEM Path diagram
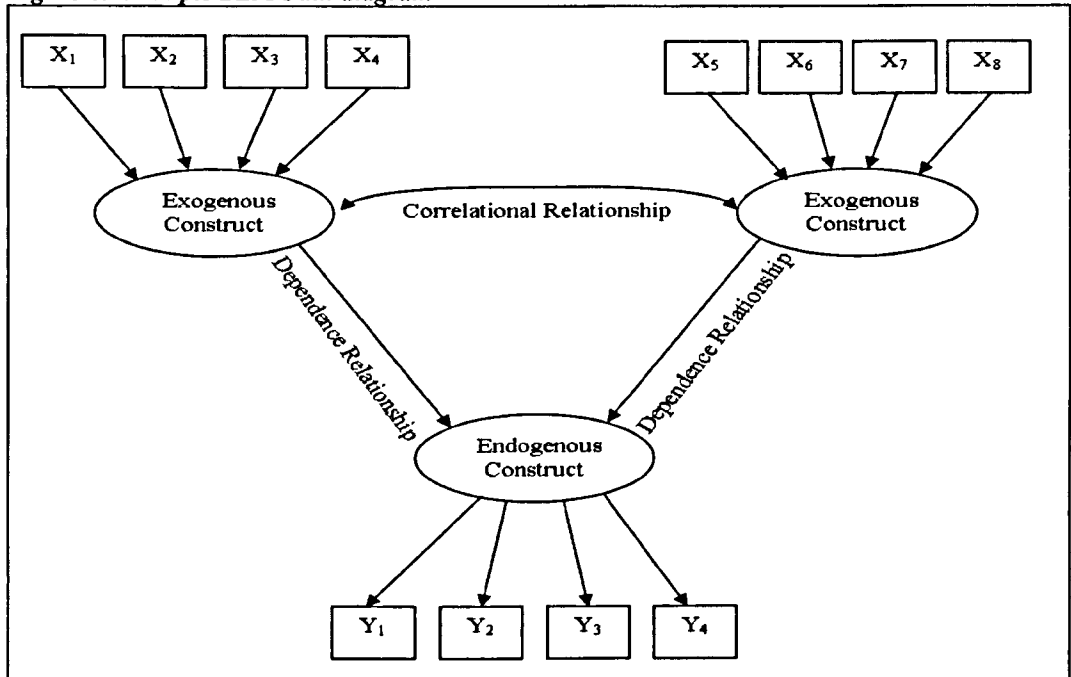
As it was highlighted earlier, there are two approaches of SEM; CB-SEM and PLS-SEM. In this research, the Partial Least Square PLS-SEM approach is used to test the conceptualized model. PLS-SEM and CB-SEM are superior to traditional statistical methods such as factor analysis, regression and path analysis (Wang et al., 2007; Hair et al., 2006) as it is used when there are more than one dependent variable. Johnston et al. (2004) defined PLS-SEM as a confirmatory second generation multivariate statistical analysis technique that tests the strength of individual components of a structural equation model. Unlike other methods, PLS-SEM does not assume normality in the data so it relaxes the model more (Alexander et al., 2011; Hair et al., 2011; Hutchinson et al., 2009; Johnston et al., 2004). PLS-SEM is also defined as a second generation regression model that combines both factor analysis with regression analysis and makes minimal distribution assumptions (Gefen et al., 2000). In addition, PLS-SEM does not require a large sample of data (Ringle et al., 2012; Alexander et al., 2011; Hutchinson et al., 2009). Yet, when using PLS-SEM the minimum sample size should be equal to the larger of the following: (1) ten times the largest number of

formative indicators used to measure one construct. (2) Ten times the largest number of structural paths directed at a particular latent construct in the structure model (Hair et al., 2011; Braunscheidel and Suresh, 2009; Gefen et al., 2000).

Unlike the covariance approach of testing SEM, PLS-SEM estimates structural and measurement integrity together yet the results are interpreted in two stages. In other words, when using CB-SEM first CFA is tested where constructs with their items are presented. Then, relations between constructs are introduced and structural model is examined. In PLS-SEM, constructs with their items are presented and relation between constructs all at one step. However, results of measurement model is interpreted first then results of the structural model. So, the reliability and validity of the measurement model is assessed, then the structural model. According to Henseler et al. (2009) a two step process should be followed for PLS-SEM assessment: outer model assessment and inner model assessment. The measurement model is the relationship between variables, 'constructs', and its items, 'indicators', and the structural model is the relationship between independent and dependent variables (Arteaga et al., 2010; Barroso et al., 2010; Chin, 2010; Braunscheidel and Suresh 2009).

This research also follows a similar approach. First, the measurement model is verified using confirmatory factor analysis with the help of PLS-SEM. Once the measurement model has been verified as acceptable, the structural model is tested using PLS-SEM. The SmartPLS software has been used to implement PLS-SEM. Details of the measurement model and structural model are provided next, followed by discussion of results.

6.4.3.1 Assessing Measurement Model (Confirmatory Factor Analysis (CFA) using PLS-SEM)

Testing the measurement model involves using CFA. CFA is similar to EFA in some respects; however, philosophically they are quite different (Hair et al., 2006). CFA helps the researcher to test a hypothesized model built through literature and used to test unidimensionality (Qin and Praybutok, 2009). Thus, CFA can be viewed as a multivariate statistical analysis that helps in testing theory (Sharma, 1996). The key advantage of using CFA is to test analytically a conceptually grounded theory explaining how different measured items represent important business, sociological and physiological measures (Hair et al., 2006).

CFA is used to assess the measurement model which specifies the relationship between items and constructs. In SEM, evaluation of the measurement model depends on the conceptualization of the construct in terms of the direction of relations between the construct and its items or indicators. A construct is said either to be formative or reflective. Recalling the concept of the construct, a latent construct is a concept that can be defined but cannot be measured directly. Accordingly, one or more of the items are used to be approximately measured (Hair et al., 2006). The relationship between the items can be either from construct to items, 'reflective', or in the opposite direction items to constructs, 'formative', where the relationship is decided based on theoretical information (Gotz et al., 2010; Henseler et al., 2009; Hair et al., 2006). A measurement model can either be exclusively formative or reflective or both. All constructs of the conceptualized model of this research are reflective. Accordingly, the assessment of the reflective measurement model is followed.

The assessment of reflective measurement model criteria has been developed after Gotz et al., 2010; Henseler et al., 2009; Rosenzweig, 2009; Braunscheidel and Suresh 2009; Klein, 2007; Hair et al., 2006; Johnston et al., 2004 and Chin, 1998. Five criteria have been developed:

- Item Reliability: indicates that 50% of variance of items are explained by its underlying construct (Gotz et al., 2010; Henseler et al., 2009) which is assessed through the standardized loading of each item under its' construct of a value above 0.7 (Rosenzweig, 2009; Klein, 2007; Braunscheidel and Suresh 2009). However, the item loading of 0.7 should be noted as a rule of thumb and a value of 0.5 or 0.6 maybe acceptable (Chin, 2010; Gotz et al., 2009) although if the loading is below 0.4 that item should be deleted (Gotz et al., 2009).

- Items significance: items under each construct must be significant. T-statistics are used which are calculated in SEM-PLS by bootstrapping (Henseler et al., 2009). Samples are selected randomly and the model is run for each sample then the value is calculated (Henseler et al., 2009; Chin, 1998).

- Consistency Reliability or Construct Reliability: measures internal consistency which means how an item or a set of items are consistent in what they are intended to measure and shows that the items of each construct share a high variance in common (Hair et al. 2006; Tabachnick and Fidell, 2001), where the value should be at least 0.7 (Hair et al., 2006). However a value above 0.6 is acceptable (Henseler et al., 2009). CR is calculated through the formula:

$$CR = \frac{\left(\sum_i \lambda_i\right)^2}{\left(\sum_i \lambda_i\right)^2 + \left(\sum_i v[\delta_i]\right)}$$

Where λ_i = Standardized factor loading for item i.

$v[\delta_i]$ = Standardized error variance for item i.

The alternate evaluation of construct reliability is cronbach's alpha (Gotz et al., 2010; Henseler et al., 2009) which has been explained and used previously in EFA analysis.

- Convergence Validity: is measured by average variance extracted (AVE). AVE is a measure of variance in a construct explained by its indicators (Braunscheidel and Suresh 2009). The value of AVE should be 0.5 or higher and is calculated using the formula:

$$AVE = \frac{\left(\sum_i \lambda_i^2\right)}{\left(\sum_i \lambda_i^2\right) + \left(\sum_i v[\delta_i]\right)}$$

Where λ_i = Standardized factor loading for item i.

$v[\delta_i]$ = Standardized error variance for item i.

- Discriminant Validity: Discriminant validity is used to prove sufficient distinction between two constructs, so the construct should be closer to its measured items than to any other constructs items (Johnston et al., 2004). In other words, two constructs should not highly overlap and present a different concept. Discriminant validity is proved through Fornell-Larcker criterion or through cross-loadings (Gotz et al., 2010; Henseler et al., 2009, Chin, 1998; Fornell and Larcker, 1981). Fornell-Larcker criterion statistics are when the average variance extracted of a construct is greater than the correlation of that construct to other constructs and this criterion has been used by many researchers (Rosenzweig, 2009; Braunscheidel and Suresh 2009; Klein, 2007).

When all the above criteria are achieved by the measurement model, it can be concluded that the conceptualized model is reliable as it has 'internal consistency reliability and indicator reliability' and valid 'convergence validity and discriminant validity'. If not, the researcher needs to drop items and recheck the model (Henseler et al., 2009). When a reliable and valid measurement model is achieved, the structural model is assessed. An explanation of assessing structural model is presented in the next section.

6.4.3.2 Assessing Structural Model using PLS-SEM

To test the hypothesis developed for this research, the quality of the developed SEM needs to be assessed. As was highlighted earlier, unlike the other approaches PLS-SEM has different criterion in assessing the quality of SEM developed. The following criterion is developed after Hair et al., 2011; Gotz et al., 2010; Henseler et al., 2009; Rosenzweig, 2009; Braunscheidel and Suresh 2009; Klein, 2007; Johnston et al., 2004 and Chin, 1998:

- The Coefficient of determination (R^2): a value calculated for an endogenous construct which reflects the level of the variance explained by the exogenous construct (Gotz et al., 2010). R^2 results of 0.67, 0.33 and 0.19 are described as 'substantial', 'moderate' and 'weak' respectively (Henseler et al., 2009; Chin, 1998).

- Estimates for Path Coefficients: the estimates of the path coefficients of relationships between exogenous and endogenous constructs are assessed in terms of their value, sign and significance (Henseler et al., 2009; Gotz et al., 2010).

- The size effect: besides the R^2 which calculates the variance explained by the exogenous construct, the effect size is used to calculate the effect of each endogenous construct on the exogenous construct (Henseler et al., 2009; Gotz et al., 2010). For each endogenous construct the model is run twice; with ($R^2_{included}$) and without ($R^2_{excluded}$) the corresponding endogenous construct and the effect size are calculated using the formula:

$$f^2 = \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{inluded}}$$

Effect size values of 0.02, 0.15 or 0.35 indicate weak, moderate or substantial influence of the latent exogenous variable on the endogenous variable (Chin, 1998).

- Some researchers also report the Goodness Of Fit (GOF) index calculation as an assessment of the structural model (Chin, 2010). The higher the GOF the better the model is (Henseler et al., 2009). The geometric average of communalities and average R^2 and the formula used to calculate is

$$GOF = \sqrt{(average(communalities)) * ((average(R^2))}$$

In practice, the goodness-of-fit has been reported only in a few publications (Henseler et al., 2009).

- Other researchers also report predictive relevancy Q^2, which is a measure for endogenous variables which have reflective measurements only, and it represents a synthesis of cross-validation and function fitting (Chin, 2010; Henseler et al., 2009). Predictive relevance is calculated through blindfolding procedure that omits part of the data of a particular block of data, and then estimates are calculated for the omitted data using the estimated parameters (Chin, 2010). In other

words, it measures how well the data collected can be reconstructed with the help of the parameter of PLS-SEM (Gotz et al., 2010). Q^2 is calculated for cross-validity communality and cross-validity redundancy. Predictive value above 0 implies the model has predictive relevance and that value is preferably above 0.5; while a value of less than 0 means there is a lack of relevance predicative (Chin, 2010; Henseler et al., 2009). Similarly, to effect the size of each exogenous variable, q^2 for the cross-validity redundancy is also calculated where each time predictive relevancy is calculated an exogenous variable is included $Q^2_{included}$ and then excluded $Q^2_{excluded}$ and the impact of each exogenous construct is calculated through the formula

$$q^2 = \frac{Q^2_{included} - Q^2_{excluded}}{1 - Q^2_{inluded}}$$

Predictive relevance values of 0.02, 0.15 or 0.35 indicate a weak, moderate or substantial impact of the prediction of the latent exogenous variable on the endogenous variable (Henseler et al., 2009).

As the concept of the structural model is explained and the assessing criteria are developed, the conceptualized model of the research is tested in SmartPLS and the results are presented in the following section.

6.4.3.3 Results of Assessing the Measurement and Structural Model

This section presents the results of the analysis of the research using the conceptualized model. The constructs 'variables': Employees' Attitude/Behaviour, Price Fairness, Non-Technological Tangibility, Technological Tangibility, In-Consumption Positive Emotion, In-Consumption Negative Emotion, Managing Employees, Managing Process and Customer Feedback are all exogenous

variables, whereas, Performance is endogenous and overall customer satisfaction is both endogenous and exogenous.

Figure 6.2: SEM Path Diagram of the Research Conceptualized Model

Structural Path Model
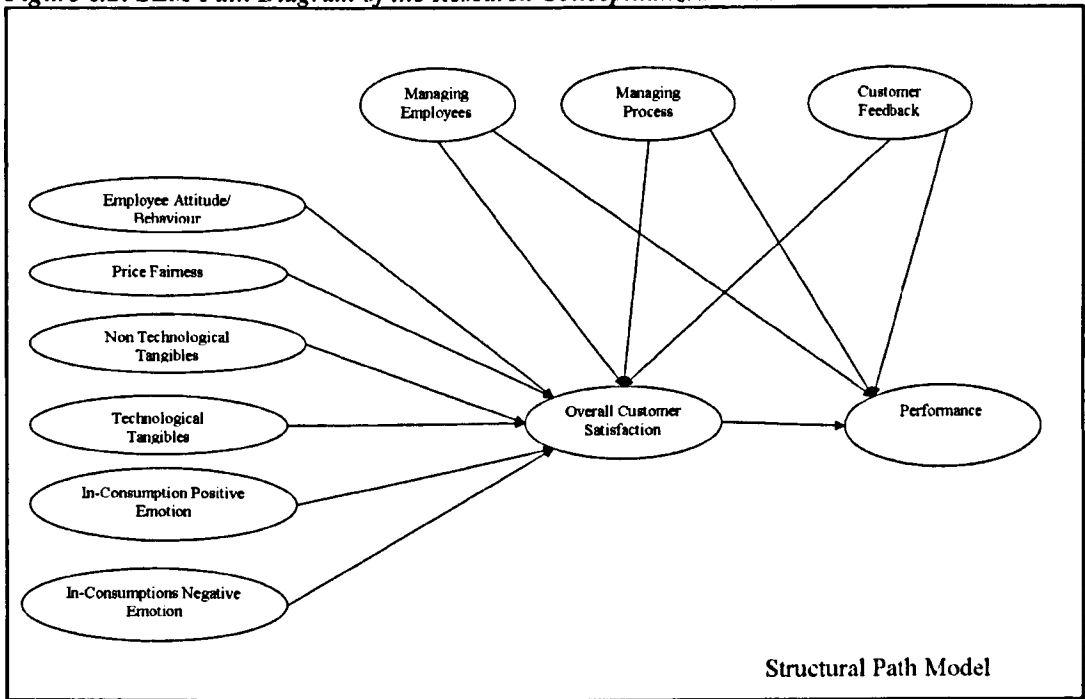
All collected data has been exported to SmartPLS and the analysis was run according to the '74' items converged from EFA. Both measurement and structural models were assessed and some items have been deleted for different reasons, such as high cross-loading with other constructs or unacceptable loading, such that the final model has 69 items.

For each item factor loadings and t-test is calculated and for each construct Cronbach's alpha, composite reliability CR and average variance are extracted. AVE are calculated as well. These results are presented in Table 6.6

Table 6.6: SmartPLS outputs of Items Factor Loadings and T-test is and Construct cronbach's alpha, CR and AVE

	Construct	Item	Factor Loading	T-Value*	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
1	Employees' Attitude/Behaviour	EMP1	0.739	26.3122	0.944	0.951	0.619
2		EMP2	0.744	30.2869			
3		EMP3	0.791	34.4393			
4		EMP4	0.751	28.6759			
5		EMP5	0.843	47.4030			
6		EMP6	0.840	44.7487			
7		EMP7	0.747	29.0513			
8		EMP8	0.785	34.5414			
9		EMP10	0.793	30.3435			
10		EMP11	0.807	39.9123			
11		EMP12	0.785	36.7659			
12		EMP14	0.805	38.0978			
13	Price Fairness	PRICE1	0.861	71.0824	0.889	0.919	0.694
14		PRICE2	0.799	41.8464			
15		PRICE3	0.780	35.8526			
16		PRICE4	0.900	92.9853			
17		PRICE5	0.820	48.4206			
18	Technological Tangibility	TECH1	0.815	42.3004	0.929	0.944	0.739
19		TECH2	0.900	87.8509			
20		TECH3	0.922	115.0848			
21		TECH4	0.855	54.6444			
22		TECH5	0.811	34.2957			
23		TECH6	0.851	48.4266			

Table 6.6 (Continued): SmartPLS outputs of Items Factor Loadings and T-test is and Construct cronbach's alpha, CR and AVE

	Construct	item	Factor Loading	T-Value*	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
24	Non-Technological Tangibility	NONTECH1	0.757	36.6882			
25		NONTECH3	0.775	40.8800			
26		NONTECH4	0.779	34.1607			
27		NONTECH5	0.795	39.5833	0.875	0.905	0.614
28		NONTECH6	0.802	35.4863			
29		NONTECH7	0.794	32.9786			
30	In-Consumption Positive Emotion	POS1	0.872	84.3886			
31		POS2	0.858	78.3482			
32		POS3	0.742	33.1750	0.853	0.894	0.629
33		POS4	0.713	26.7269			
34		POS5	0.767	29.3318			
35	In-Consumption Negative Emotions	NEG1	0.865	44.0863			
36		NEG2	0.876	53.9434			
37		NEG3	0.894	69.1817	0.923	0.942	0.765
38		NEG4	0.903	66.1965			
39		NEG5	0.833	35.1441			
40	Overall Customer Satisfaction	SAT1	0.930	105.8789			
41		SAT2	0.946	125.4083			
42		SAT3	0.932	77.0018	0.964	0.972	0.876
43		SAT4	0.945	89.4503			
44		SAT5	0.926	83.7558			

Table 6.6 (Continued): SmartPLS outputs of Items Factor Loadings and T-test is and Construct cronbach's alpha, CR and AVE

	Construct	item	Factor Loading	T-Value*	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
45	Performance	PERF1	0.952	233.5826	0.802	0.941	0.914
46		PERF2	0.746	35.0807			
47		PERF3	0.952	233.5826			
48		PERF4	0.915	112.7891			
49	Managing Employees	MNGEMP1	0.790	37.7586	0.964	0.968	0.683
50		MNGEMP3	0.853	46.6627			
51		MNGEMP4	0.909	81.8179			
52		MNGEMP5	0.811	40.0818			
53		MNGEMP6	0.835	53.4616			
54		MNGEMP7	0.875	85.1635			
55		MNGEMP8	0.809	54.2625			
56		MNGEMP9	0.802	58.0962			
57		MNGEMP10	0.753	33.5147			
58		MNGEMP11	0.830	42.5748			
59		MNGEMP12	0.836	46.4583			
60		MNGEMP13	0.827	45.9539			
61		MNGEMP14	0.860	65.2604			
62		MNGEMP15	0.768	36.5653			
63	Managing Process	MNGPROC1	0.849	56.6153	0.914	0.938	0.790
64		MNGPROC2	0.863	54.1067			
65		MNGPROC3	0.877	57.8918			
66		MNGPROC4	0.962	256.7461			
67	Customer Feedback	CUSTFED1	0.890	103.2653	0.690	0.868	0.773
68		CUSTFED2	0.675	19.2503			
69		CUSTFED3	0.907	138.7381			

* All Significance at 0.01

The results have proved that all the items are reliable and their variance is well explained by the construct as all loadings exceeded 0.7, except for item CUSTFED2 which was 0.675, yet 0.6 can be considered an acceptable value (Chin, 2010; Gotz et al., 2010). Internal consistency reliability has been assessed through composite reliability and Cronbach's alpha. Consistency reliability shows if the items of each construct share high variance in common and are consistent in what is intended to measure. According to Hair et al (2006) the value of composite reliability and Cronbach's alpha should be at least 0.7 (Hair et al., 2006), yet according to Henseler et al. (2009), a value above 0.6 is acceptable. The values of Cronbach's alpha of the test ranged from 0.6903 to 0.9645. Composite reliability values are all above 0.85.

Convergent validity is the extent to which items of each specific construct share a high proportion of variance in common. In other words, the items converge to a specific construct (Hair et al., 2006). Convergent validity is assessed through average variance extracted (AVE), where values should be at least 0.5. Looking to table 6.6 AVE values ranged from 0.614 to 0.9138.

Discriminant validity is the extent on which a specific construct is truly distinct from another construct, which means that the construct should be closer to its measure items than to the measure items of any other construct (Hair et al. 2006; Johnston et al. 2004). Discriminant validity requires that the measures of the square of correlations between constructs are not higher that the AVE of the construct, the 'Fornell-Larcker approach' and is shown in Table 6.7.

Table 6.7: Square of Correlations between Constructs and Average Variance Extracted of each Construct

	Employee Attitude/ Behaviour	Price Fairness	Technological Tangibility	Non-Technological Tangibility	In-Consumption Positive Emotion	In-Consumption Negative Emotions	Overall Customer Satisfaction	Performance	Managing Employees	Managing Process	Customer Feedback
Employee Attitude/Behaviour	**0.6187**[1]										
Price Fairness	0.332[2]	**0.694**									
Technological Tangibility	0.414	0.377	**0.739**								
Non-Technological Tangibility	0.229	0.414	0.379	**0.614**							
In-Consumption Positive Emotion	0.126	0.202	0.167	0.159	**0.629**						
In-Consumption Negative Emotions	0.065	0.115	0.153	0.162	0.159	**0.765**					
Overall Customer Satisfaction	0.485	0.441	0.510	0.395	0.205	0.205	**0.876**				
Performance	0.094	0.047	0.124	0.045	0.050	0.018	0.164	**0.802**			
Managing Employees	0.096	0.050	0.170	0.062	0.053	0.041	0.181	0.609	**0.638**		
Managing Process	0.022	0.013	0.014	0.033	0.004	0.009	0.023	0.039	0.204	**0.790**	
Customer Feedback	0.078	0.043	0.159	0.050	0.020	0.037	0.137	0.312	0.455	0.229	**0.690**

(1): Average Variance Extracted, (2): Square of Correlations between Constructs

It can be concluded that the conceptualized model is valid and reliable as it met all the assessment criterions. The next step is the assessment of the structural model. Figure 6.3 represents the SmartPLS outputs of the structural model.

Figure 6.3: SmartPLS Output of Structural Model
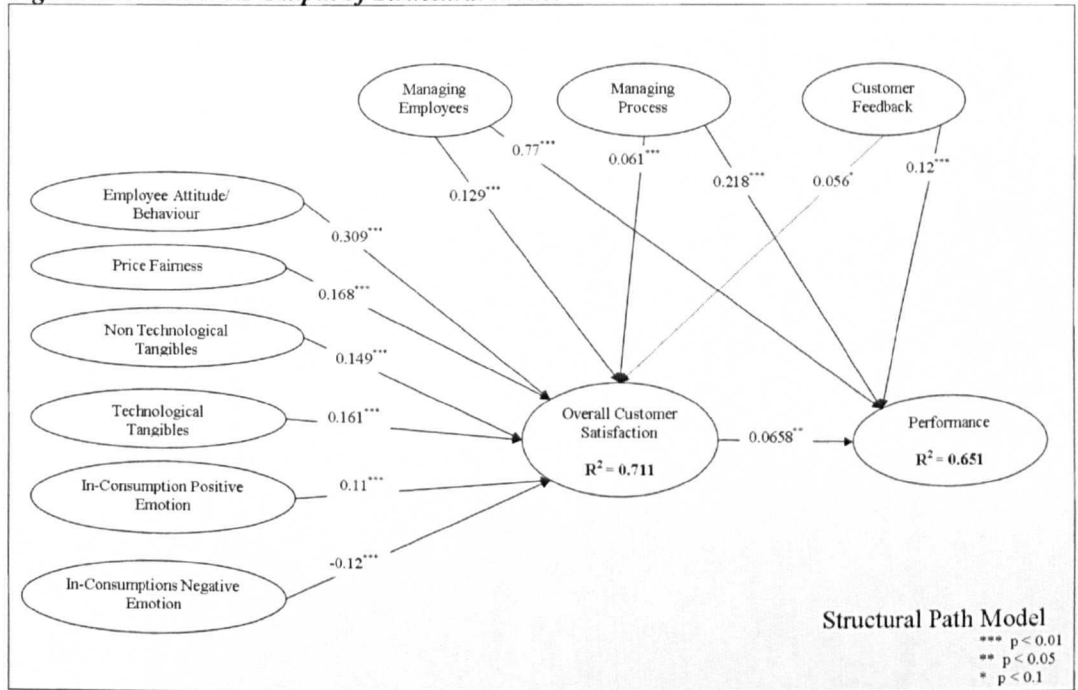
The model exhibits adequate predictive validity as it explains 71.1% of variance on overall customer satisfaction which is substantial and 65.1% of performance which is moderate. All path coefficients are positive except the relationship between in-consumption negative emotion and overall customer satisfaction. All path relationships are significant.

The size effect of each exogenous variable on the endogenous variables has been calculated. Each time an exogenous variable has been selected and the model is run with and without the selected variable, the R^2 is taken every time and the effect size calculated with the formula presented in the previous section. Table 6.8 represents the effect size of each exogenous variable

Table 6.8: Effect Size of Exogenous Variables on Endogenous Variables

	Overall Customer Satisfaction		Performance	
	R^2 when Variable Excluded	Effect Size	R^2 when Variable Excluded	Effect Size
Employee Attitude/Behaviour	0.66	0.17		
Price Fairness	0.70	0.04		
Technological Tangibility	0.70	0.03		
Non-Technological Tangibility	0.70	0.04		
In-Consumption Positive Emotion	0.70	0.03		
In-Consumption Negative Emotions	0.70	0.04		
Overall Customer Satisfaction			0.65	0.004
Managing Employees	0.70	0.03	0.39	0.74
Managing Process	0.71	0.01	0.62	0.08
Customer Feedback	0.71	0.01	0.64	0.02

Overall customer satisfaction is more affected by employees' attitude/behaviour where it has a medium effect. Management practices on managing employees have a high effect on performance. The overall goodness-of-fit of the structural model is 0.6982.

Predictive relevancy Q^2 has been calculated for both overall customer satisfaction and performance. The cross-validity communality for overall customer satisfaction and performance are 0.8756 and 0.8015 respectively and cross-validity redundancy is 0.6183 and 0.5145. The relative impact of predictive relevancy 'q²' of cross-validity redundancy for each exogenous variable on each endogenous variable is calculated and results are summarized in Table 6.9. The highest impact

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on the overall customer satisfaction is from the employees' attitude/behaviour. Performance is highly affected by managing employees.

Table 6.9: Relative Impact of Predictive Relevancy

	Overall Satisfaction		Performance	
	Q^2 when Variable Excluded	Relative Impact	Q^2 when Variable Excluded	Relative Impact
Employee Attitude/Behaviour	0.58	0.113		
Price Fairness	0.61	0.029		
Technological Tangibility	0.61	0.022		
Non-Technological Tangibility	0.61	0.022		
In-Consumption Positive Emotion	0.61	0.018		
In-Consumption Negative Emotions	0.61	0.024		
Overall Customer Satisfaction			0.51	0.000
Managing Employees	0.61	0.019	0.29	0.470
Managing Process	0.62	0.004	0.49	0.060
Customer Feedback	0.62	0.002	0.51	0.009

The results have proved all the relationships proposed in the hypotheses that were built in Chapter 4. There are positive, significant relationships between overall customer satisfaction and employee attitude/behaviour, non-technological tangibility, technological tangibility, in-consumption positive emotion management practices on managing employees, managing process and customer feedback and negative relationship between customer satisfaction and in-consumption negative emotions. There is also a positive significant relationship between performance and management practices on managing employees, managing processes and managing customer feedback. Finally, there is a positive significant relationship between overall customer satisfaction and performance.

The model is said to be a good fit model as it met the assessment criterion developed. A good fit model in PLS-SEM is assessed by significant path coefficients, acceptably high R-square, the reliability of each construct being

above 0.7 and an AVE above 0.5 (Braunscheidel and Suresh 2009; Gefen et al., 2000). The predictive relevancy is also above the accepted value.

This section has presented the analysis of the measurement and structural model. The next two sections will present the analysis of moderations of the customers' characteristics and mediations of the overall customer satisfaction.

6.4.4 Testing Moderation

A moderator is a variable that affects the relationship between an independent and a dependent variable by strengthening the relationship or changing its direction (Baron and Kenny, 1986; Sauer and Dick, 1993), as shown in figure 6.4.

Figure 6.4: A Moderator Model
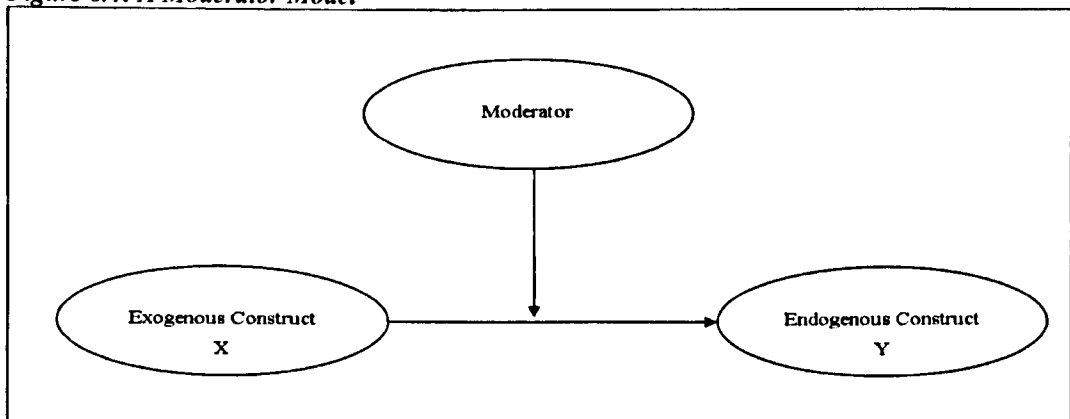
For the relationships developed for the conceptualized model between the exogenous and endogenous variables, the customer's characteristics are tested to see if they can be considered as a moderator to the model. The customer's characteristics in this research are categorical variable gender: 'female and male', purpose of visit 'business and leisure', age 'old and young' and education, 'high and low'. If the moderator is not a continuous variable then group comparison can be used to test the moderation effect (Henseler and Fassott, 2010). Accordingly,

under each customer characteristics two groups have been compare for significance difference. The generated groups under each characteristics are as follows: gender: female and male, age: young '35 years old or less' and old 'above 36 years old', education: low 'diploma or less' and high 'bachelors' or above'. For purpose of the visit only business and leisure have been considered for analysis. 9.6% of data of customers visiting for both purposes have been excluded from analyses. The reason is that the number of observations available under the group does not meet the minimum requirement for the number of data points required for PLS-SEM analysis.

In PLS-SEM groups cannot be compared but the significance impact of the moderator can be tested (Eberl, 2010). Yet all groups should have an acceptable fit, where it is checked by R^2, reliability and validity (Cheung et al., 2010; Eberl, 2010; Keil et al., 2000).

A recent paper by Cheung et al. (2010) used multi-group comparison suggested by Chin's PLS-SEM approach (1998) to test moderation. There was also another study by Keil et al. (2000) where the same approach has been applied. This research is also following this same approach. For each group the model was checked in terms of its measurement and structure following the developed criterions in sections 6.4.1 and 6.4.2. Then the path differences are calculated and checked for any significance using the formula:

$$t = \frac{Path_{group1} - Path_{group2}}{\sqrt{\left(\frac{(m-1)^2}{(m+n-2)} * S.E^2_{group1} + \frac{(n-1)^2}{(m+n-2)} * S.E^2_{group2}\right) * \left(\sqrt{\frac{1}{m} + \frac{1}{n}}\right)}}$$

Where, m and n are the sample size of groups 1 and 2 respectively

S.E is the Standard error

As was highlighted earlier, prior to multi-group analysis the structural model under each group 'gender: female and male; purpose of stay: business and leisure; age: young and old and education: low and high' is assessed. Both, measurement model and structural model are checked in terms of the developed criterions assessment. Tables 6.10 to 6.11 represent the summary of the models' outputs of the different groups. Table 6.10 presents the item loadings and t-values for each group. Table 6.11 presents Cronbach's alpha, composite reliability and average variance extracted for constructs under each group of customers. Tables 6.12 to 6.19, presents the Fornell-Larker test for each group; 'gender: female and male; purpose of stay: business and leisure; age: young and old and education: low and high respectively.

Table 6.10: Item's Factor Loadings and T-values of Customers' Characteristics Groups

Constructs	ITEMS	Gender				Purpose of Visit				Age				Education			
		Female		Male		Business		Leisure		Young		Old		Low		High	
		Factor Loading	T-Value	Factor Loading	T-Value	Factor Loading	T-Value	Factor Loading	T-Value	Factor Loading	T-Value	Factor Loading	T-Value	Factor Loading	T-Value	Factor Loading	T-Value
Employees' Attitude/Behaviour	EMP1	0.731	15.60	0.741	19.18	0.825	23.00	0.657	12.84	0.622	10.57	0.805	28.63	0.652	9.28	0.754	21.48
	EMP2	0.757	21.43	0.742	22.88	0.843	29.96	0.661	14.90	0.710	16.83	0.765	23.37	0.690	13.53	0.766	24.95
	EMP3	0.789	20.02	0.792	30.39	0.847	29.32	0.774	24.18	0.766	20.30	0.802	28.95	0.736	13.20	0.826	37.70
	EMP4	0.745	17.97	0.755	21.89	0.814	33.32	0.747	19.77	0.711	13.92	0.782	29.26	0.678	10.24	0.785	29.29
	EMP5	0.871	30.64	0.825	34.46	0.864	28.50	0.844	38.70	0.796	23.31	0.872	49.94	0.780	15.00	0.857	45.34
	EMP6	0.840	23.89	0.840	34.67	0.849	28.05	0.823	24.94	0.842	32.86	0.838	30.06	0.827	18.60	0.842	36.83
	EMP7	0.675	12.51	0.786	29.52	0.758	17.07	0.739	18.34	0.774	19.80	0.724	19.27	0.664	9.06	0.786	28.98
	EMP8	0.757	15.37	0.800	33.60	0.778	17.13	0.777	24.42	0.771	22.02	0.788	24.37	0.744	13.40	0.797	29.34
	EMP10	0.748	14.49	0.820	32.05	0.741	12.85	0.819	34.40	0.693	11.78	0.856	47.38	0.780	17.20	0.793	24.88
	EMP11	0.863	52.54	0.768	23.35	0.867	44.13	0.812	34.71	0.762	17.58	0.836	43.82	0.742	11.92	0.837	44.67
	EMP12	0.799	28.56	0.776	24.46	0.843	29.33	0.725	20.18	0.808	28.78	0.773	26.07	0.797	22.82	0.796	29.51
	EMP14	0.804	21.32	0.808	30.80	0.858	37.94	0.765	19.54	0.788	25.66	0.820	28.02	0.795	18.98	0.827	31.95
Price Fairness	PRICE1	0.901	75.41	0.833	42.29	0.877	47.96	0.846	48.19	0.884	52.56	0.837	47.87	0.886	40.55	0.843	55.05
	PRICE2	0.819	29.72	0.785	28.94	0.876	47.00	0.659	14.11	0.836	37.71	0.753	27.28	0.812	22.06	0.795	36.05
	PRICE3	0.706	15.27	0.820	36.91	0.854	31.77	0.671	17.03	0.815	26.73	0.752	26.11	0.815	28.80	0.758	23.74
	PRICE4	0.878	36.47	0.909	110.04	0.914	60.89	0.878	67.86	0.909	55.91	0.897	91.89	0.915	69.00	0.889	61.38
	PRICE5	0.780	20.20	0.841	51.81	0.780	21.66	0.823	35.70	0.782	21.44	0.852	59.18	0.815	22.46	0.833	47.10
Technological Tangibility	TECH1	0.811	24.23	0.818	35.23	0.745	17.41	0.855	48.45	0.752	19.97	0.857	49.12	0.771	17.51	0.852	64.82
	TECH2	0.917	60.51	0.886	71.38	0.923	79.47	0.859	42.23	0.889	58.19	0.905	61.07	0.904	51.20	0.896	67.69
	TECH3	0.949	125.61	0.905	79.82	0.936	108.20	0.898	57.36	0.917	83.96	0.923	82.26	0.926	58.22	0.921	111.52
	TECH4	0.859	35.87	0.853	46.92	0.914	53.64	0.802	32.79	0.845	32.84	0.858	44.37	0.875	31.16	0.855	53.07
	TECH5	0.803	20.21	0.814	32.60	0.769	16.15	0.768	22.60	0.815	25.08	0.801	29.10	0.832	20.24	0.803	31.29
	TECH6	0.885	45.02	0.823	31.31	0.839	25.38	0.813	26.28	0.869	46.92	0.829	31.67	0.885	42.51	0.833	33.72

Table 6.10 (continued): Item's Factor Loadings and T-values of Customers' Characteristics Groups

Constructs	ITEMS	Gender Female Factor Loading	Gender Female T-Value	Gender Male Factor Loading	Gender Male T-Value	Purpose of Visit Business Factor Loading	Purpose of Visit Business T-Value	Purpose of Visit Leisure Factor Loading	Purpose of Visit Leisure T-Value	Age Young Factor Loading	Age Young T-Value	Age Old Factor Loading	Age Old T-Value	Education Low Factor Loading	Education Low T-Value	Education High Factor Loading	Education High T-Value
Non-Technological Tangibility	NONTECH1	0.820	32.48	0.701	21.43	0.816	28.71	0.762	21.40	0.777	25.62	0.720	21.96	0.850	30.01	0.703	21.93
	NONTECH3	0.804	28.18	0.754	28.58	0.807	23.98	0.751	22.79	0.812	31.54	0.726	26.10	0.844	31.59	0.762	32.05
	NONTECH4	0.838	36.82	0.724	16.76	0.839	34.19	0.793	26.41	0.744	15.79	0.810	44.23	0.838	27.31	0.726	18.25
	NONTECH5	0.831	27.98	0.766	23.29	0.812	22.61	0.792	20.61	0.776	21.21	0.798	27.87	0.852	29.05	0.754	22.27
	NONTECH6	0.815	20.26	0.799	27.45	0.811	20.18	0.739	16.15	0.771	20.56	0.822	29.61	0.883	40.88	0.711	16.41
	NONTECH7	0.817	19.22	0.784	24.26	0.834	23.57	0.689	13.55	0.794	21.18	0.786	24.10	0.886	40.41	0.704	15.17
In-Consumption Positive Emotion	POS1	0.874	48.72	0.871	60.29	0.873	39.18	0.863	48.51	0.876	52.76	0.865	56.03	0.899	57.17	0.858	56.71
	POS2	0.852	40.74	0.863	52.76	0.827	26.26	0.847	44.67	0.864	48.52	0.848	51.51	0.886	54.17	0.836	46.51
	POS3	0.760	23.51	0.732	22.88	0.725	15.26	0.759	26.59	0.826	36.82	0.708	19.28	0.718	15.63	0.758	24.55
	POS4	0.767	25.03	0.667	14.19	0.673	10.22	0.760	25.36	0.701	13.45	0.747	26.29	0.669	9.84	0.748	24.59
	POS5	0.799	25.47	0.738	18.18	0.815	22.91	0.702	16.41	0.831	31.11	0.703	16.53	0.877	47.21	0.683	16.68
In-Consumption Negative Emotions	NEG1	0.890	26.46	0.850	32.15	0.912	31.89	0.768	16.73	0.911	42.77	0.786	19.21	0.950	65.64	0.788	20.54
	NEG2	0.930	60.62	0.834	32.07	0.923	51.14	0.830	21.02	0.892	35.46	0.874	38.08	0.917	32.23	0.847	34.64
	NEG3	0.924	43.00	0.871	45.89	0.937	63.38	0.845	29.53	0.910	44.21	0.878	47.82	0.933	56.50	0.856	32.03
	NEG4	0.925	42.45	0.890	54.41	0.949	75.41	0.836	23.97	0.931	59.86	0.855	31.83	0.940	48.43	0.866	34.42
	NEG5	0.882	33.06	0.797	21.70	0.885	32.11	0.829	21.48	0.911	49.26	0.705	13.17	0.909	29.03	0.789	24.40
Overall Customer Satisfaction	SAT1	0.942	79.17	0.921	72.35	0.952	86.99	0.919	62.31	0.937	82.81	0.920	63.76	0.940	66.53	0.932	88.09
	SAT2	0.970	170.45	0.928	73.92	0.943	59.63	0.948	104.76	0.941	67.19	0.949	120.18	0.939	55.14	0.952	142.75
	SAT3	0.963	137.82	0.910	45.02	0.947	51.35	0.944	92.03	0.922	40.08	0.940	99.34	0.911	26.89	0.942	120.89
	SAT4	0.970	131.06	0.926	53.90	0.970	138.63	0.924	40.41	0.967	141.56	0.916	42.71	0.970	115.94	0.930	61.02
	SAT5	0.950	79.11	0.909	54.13	0.957	83.75	0.896	37.83	0.956	115.99	0.888	41.62	0.962	126.47	0.904	50.92
Performance	PERF1	0.961	197.94	0.945	155.26	0.938	87.95	0.968	249.79	0.941	115.64	0.963	229.89	0.956	132.43	0.951	173.03
	PERF2	0.722	18.20	0.764	27.81	0.823	29.16	0.652	14.22	0.800	28.22	0.686	20.05	0.790	21.83	0.741	28.18
	PERF3	0.961	197.94	0.945	155.26	0.938	87.95	0.968	249.79	0.941	115.64	0.963	229.89	0.956	132.43	0.951	173.03
	PERF4	0.919	69.78	0.911	82.93	0.963	140.84	0.886	70.48	0.937	95.99	0.895	73.51	0.930	73.28	0.915	92.82

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Table 6.10: (continued): Item's Factor Loadings and T-values of Customers' Characteristics Groups

Constructs	ITEMS	Gender — Female Factor Loading	Female T-Value	Male Factor Loading	Male T-Value	Purpose of Visit — Business Factor Loading	Business T-Value	Leisure Factor Loading	Leisure T-Value	Age — Young Factor Loading	Young T-Value	Old Factor Loading	Old T-Value	Education — Low Factor Loading	Low T-Value	High Factor Loading	High T-Value
Managing Employees	MNGEMP1	0.884	38.80	0.737	24.39	0.744	15.78	0.814	32.93	0.818	26.96	0.761	24.75	0.856	29.85	0.768	29.24
	MNGEMP3	0.884	33.01	0.837	35.13	0.847	27.04	0.860	33.83	0.887	42.09	0.817	28.77	0.889	35.55	0.838	37.51
	MNGEMP4	0.945	87.86	0.893	53.29	0.951	80.08	0.897	48.09	0.925	57.90	0.885	49.57	0.926	54.14	0.902	59.23
	MNGEMP5	0.861	32.14	0.781	24.61	0.798	24.40	0.834	28.72	0.852	30.95	0.758	26.00	0.871	31.42	0.781	27.11
	MNGEMP6	0.864	37.17	0.819	37.66	0.849	32.10	0.849	39.12	0.861	41.03	0.804	35.48	0.889	43.59	0.812	37.42
	MNGEMP7	0.875	55.98	0.876	59.73	0.902	47.82	0.881	64.72	0.885	51.43	0.863	76.66	0.894	48.66	0.868	68.94
	MNGEMP8	0.833	43.76	0.795	33.46	0.779	24.05	0.831	43.11	0.840	36.52	0.776	49.07	0.841	33.05	0.796	41.13
	MNGEMP9	0.839	47.19	0.779	41.41	0.840	31.18	0.811	61.11	0.810	31.27	0.798	51.69	0.819	29.80	0.800	52.86
	MNGEMP10	0.799	22.88	0.726	23.96	0.758	19.00	0.742	23.31	0.813	26.55	0.696	21.22	0.849	34.55	0.722	23.99
	MNGEMP11	0.872	36.37	0.811	26.83	0.877	37.99	0.823	23.81	0.860	32.18	0.790	24.10	0.898	41.82	0.801	27.36
	MNGEMP12	0.865	34.22	0.821	29.14	0.891	45.89	0.805	21.77	0.868	35.85	0.790	24.67	0.887	37.17	0.817	31.75
	MNGEMP13	0.876	35.54	0.805	28.57	0.880	39.28	0.773	19.77	0.856	34.08	0.788	26.45	0.825	25.92	0.845	39.19
	MNGEMP14	0.886	41.89	0.850	45.38	0.929	63.83	0.806	24.07	0.880	42.74	0.829	36.47	0.905	50.63	0.841	43.05
	MNGEMP15	0.826	25.71	0.740	25.68	0.811	24.79	0.759	18.17	0.810	24.98	0.710	21.43	0.842	22.60	0.739	26.70
Managing Process	MNGPROC1	0.868	53.81	0.847	24.05	0.765	10.54	0.870	23.79	0.833	34.97	0.857	28.24	0.875	44.83	0.845	39.88
	MNGPROC2	0.910	57.55	0.823	15.36	0.726	9.05	0.934	29.19	0.899	49.96	0.843	20.38	0.888	43.41	0.853	34.68
	MNGPROC3	0.908	46.14	0.848	16.00	0.785	11.10	0.925	23.12	0.899	50.48	0.868	24.54	0.891	46.38	0.875	39.66
	MNGPROC4	0.966	209.70	0.959	54.32	0.964	29.70	0.967	40.83	0.954	145.61	0.967	94.97	0.971	318.09	0.957	145.38
Customer Feedback	CUSTFED1	0.904	69.84	0.877	69.27	0.887	62.85	0.888	61.31	0.886	72.38	0.902	70.91	0.875	50.53	0.901	84.39
	CUSTFED2	0.583	9.53	0.735	18.08	0.774	18.93	0.585	8.67	0.807	26.20	0.522	7.66	0.658	9.94	0.682	16.39
	CUSTFED3	0.905	86.54	0.907	108.37	0.885	56.83	0.921	104.58	0.913	87.76	0.904	92.45	0.914	80.81	0.909	108.69

*All T-Values are significance at 0.01

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Table 6.11: Cronbach's Alpha, Composite Reliability and AVE of the Groups

Constructs	Cronbach's Alpha								Composite Reliability								Average Variance Extracted							
	Gender		Purpose		Age		Education		Gender		Purpose		Age		Education		Gender		Purpose		Age		Education	
	Female	Male	Business	Leisure	Young	Old	Low	High	Female	Male	Business	Leisure	Young	Old	Low	High	Female	Male	Business	Leisure	Young	Old	Low	High
Employee Attitude/Behaviour	0.94	0.94	0.96	0.93	0.93	0.95	0.93	0.95	0.95	0.95	0.96	0.94	0.94	0.96	0.94	0.96	0.61	0.62	0.68	0.58	0.57	0.65	0.55	0.65
Price Fairness	0.88	0.89	0.91	0.84	0.90	0.88	0.90	0.88	0.91	0.92	0.93	0.89	0.93	0.91	0.93	0.91	0.67	0.70	0.74	0.61	0.72	0.67	0.72	0.68
Non-Technological Tangibility	0.90	0.85	0.90	0.86	0.87	0.87	0.93	0.83	0.93	0.89	0.92	0.89	0.90	0.90	0.94	0.87	0.67	0.57	0.67	0.57	0.61	0.61	0.74	0.53
Technological Tangibility	0.94	0.92	0.93	0.91	0.92	0.93	0.93	0.93	0.95	0.94	0.94	0.93	0.94	0.95	0.95	0.94	0.76	0.72	0.74	0.69	0.72	0.74	0.75	0.74
In-Consumption Positive Emotion	0.87	0.84	0.85	0.85	0.88	0.83	0.87	0.84	0.91	0.88	0.89	0.89	0.91	0.88	0.91	0.88	0.66	0.61	0.62	0.62	0.68	0.60	0.66	0.61
In-Consumption Negative Emotions	0.95	0.90	0.96	0.88	0.95	0.88	0.96	0.89	0.96	0.93	0.97	0.91	0.96	0.91	0.97	0.92	0.83	0.72	0.85	0.68	0.83	0.68	0.86	0.69
Overall Customer Satisfaction	0.98	0.95	0.98	0.96	0.97	0.96	0.97	0.96	0.98	0.96	0.98	0.97	0.98	0.97	0.98	0.97	0.92	0.84	0.91	0.86	0.89	0.85	0.89	0.87
Performance	0.91	0.91	0.94	0.89	0.93	0.90	0.93	0.91	0.94	0.94	0.95	0.93	0.95	0.93	0.95	0.94	0.80	0.80	0.84	0.77	0.82	0.78	0.83	0.80
Managing Employees	0.97	0.96	0.97	0.96	0.97	0.95	0.98	0.96	0.98	0.96	0.97	0.97	0.97	0.96	0.98	0.96	0.75	0.65	0.72	0.67	0.73	0.63	0.76	0.66
Managing Process	0.93	0.90	0.84	0.94	0.92	0.91	0.93	0.91	0.95	0.93	0.89	0.96	0.94	0.94	0.95	0.93	0.83	0.76	0.66	0.86	0.81	0.78	0.82	0.78
Customer Feedback	0.73	0.79	0.81	0.73	0.84	0.70	0.76	0.79	0.85	0.88	0.89	0.85	0.90	0.83	0.86	0.87	0.66	0.71	0.72	0.66	0.76	0.63	0.68	0.70

Table 6.12: Square of Correlations between Constructs and Average Variance Extracted of each Construct for Females

	Employee Attitude/ Behaviour	Price Fairness	Technological Tangibility	Non-Technological Tangibility	In-Consumption Positive Emotion	In-Consumption Negative Emotions	Overall Customer Satisfaction	Performance	Managing Employees	Managing Process	Customer Feedback
Employee Attitude/Behaviour	0.614[1]										
Price Fairness	0.335[2]	0.672									
Technological Tangibility	0.462	0.454	0.761								
Non-Technological Tangibility	0.249	0.484	0.429	0.674							
In-Consumption Positive Emotion	0.120	0.172	0.219	0.196	0.658						
In-Consumption Negative Emotions	0.052	0.139	0.250	0.243	0.129	0.829					
Overall Customer Satisfaction	0.454	0.476	0.658	0.460	0.286	0.253	0.920				
Performance	0.179	0.112	0.212	0.095	0.143	0.066	0.327	0.803			
Managing Employees	0.158	0.099	0.272	0.097	0.136	0.102	0.357	0.671	0.749		
Managing Process	0.019	0.015	0.017	0.031	0.007	0.028	0.041	0.045	0.177	0.834	
Customer Feedback	0.113	0.102	0.259	0.077	0.078	0.103	0.262	0.306	0.444	0.168	0.658

(1): Average Variance Extracted, (2): Square of Correlations between Constructs

Table 6.13: Square of Correlations between Constructs and Average Variance Extracted of each Construct for Males

	Employee Attitude/ Behaviour	Price Fairness	Technological Tangibility	Non-Technological Tangibility	In-Consumption Positive Emotion	In-Consumption Negative Emotions	Overall Customer Satisfaction	Performance	Managing Employees	Managing Process	Customer Feedback
Employee Attitude/Behaviour	0.622[1]										
Price Fairness	0.332[2]	0.703									
Technological Tangibility	0.227	0.391	0.724								
Non-Technological Tangibility	0.380	0.336	0.351	0.570							
In-Consumption Positive Emotion	0.129	0.215	0.140	0.130	0.606						
In-Consumption Negative Emotions	0.075	0.100	0.106	0.094	0.183	0.721					
Overall Customer Satisfaction	0.514	0.427	0.356	0.411	0.223	0.170	0.845				
Performance	0.052	0.019	0.022	0.075	0.011	0.002	0.081	0.800			
Managing Employees	0.066	0.028	0.045	0.116	0.017	0.015	0.098	0.571	0.650		
Managing Process	0.026	0.013	0.035	0.014	0.003	0.001	0.014	0.039	0.232	0.758	
Customer Feedback	0.057	0.018	0.038	0.106	0.002	0.011	0.076	0.311	0.457	0.293	0.711

(1): Average Variance Extracted, (2): Square of Correlations between Constructs

Table 6.14: Square of Correlations between Constructs and Average Variance Extracted of each Construct for Customers Staying for Business

	Employee Attitude/ Behaviour	Price Fairness	Technological Tangibility	Non-Technological Tangibility	In-Consumption Positive Emotion	In-Consumption Negative Emotions	Overall Customer Satisfaction	Perfor-mance	Managing Employees	Managing Process	Customer Feedback
Employee Attitude/Behaviour	**0.680**[1]										
Price Fairness	0.318[2]	**0.742**									
Technological Tangibility	0.446	0.348	**0.735**								
Non-Technological Tangibility	0.200	0.465	0.490	**0.672**							
In-Consumption Positive Emotion	0.065	0.210	0.124	0.205	**0.617**						
In-Consumption Negative Emotions	0.038	0.156	0.151	0.236	0.222	**0.849**					
Overall Customer Satisfaction	0.443	0.517	0.549	0.609	0.209	0.235	**0.910**				
Performance	0.141	0.091	0.234	0.194	0.035	0.059	0.290	**0.841**			
Managing Employees	0.166	0.133	0.322	0.278	0.043	0.118	0.343	0.583	**0.721**		
Managing Process	0.085	0.054	0.083	0.081	0.000	0.055	0.074	0.063	0.283	**0.665**	
Customer Feedback	0.150	0.075	0.224	0.178	0.003	0.076	0.216	0.330	0.416	0.471	**0.723**

(1): Average Variance Extracted, (2): Square of Correlations between Constructs

Table 6.15: *Square of Correlations between Constructs and Average Variance Extracted of each Construct for Customers Staying for Leisure*

	Employee Attitude/ Behaviour r	Price Fairness	Technological Tangibility	Non-Technological Tangibility	In-Consumption Positive Emotion	In-Consumption Negative Emotions	Overall Customer Satisfaction	Perfor-mance	Managing Employees	Managing Process	Customer Feedback
Employee Attitude/Behaviou r	**0.584**(1)										
Price Fairness	0.303(2)	**0.610**									
Technological Tangibility	0.355	0.386	**0.695**								
Non-Technological Tangibility	0.216	0.346	0.234	**0.571**							
In-Consumption Positive Emotion	0.179	0.183	0.175	0.135	**0.622**						
In-Consumption Negative Emotions	0.069	0.088	0.125	0.096	0.077	**0.676**					
Overall Customer Satisfaction	0.509	0.315	0.469	0.203	0.265	0.139	**0.858**				
Performance	0.054	0.005	0.061	0.000	0.055	0.002	0.077	**0.771**			
Managing Employees	0.063	0.007	0.102	0.000	0.054	0.000	0.104	0.649	**0.675**		
Managing Process	0.020	0.010	0.010	0.028	0.010	0.004	0.014	0.032	0.165	**0.855**	
Customer Feedback	0.052	0.025	0.157	0.007	0.031	0.008	0.126	0.279	0.451	0.130	**0.660**

(1): Average Variance Extracted, (2): Square of Correlations between Constructs

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Table 6.16: Square of Correlations between Constructs and Average Variance Extracted of each Construct for Young Customers

	Employee Attitude/ Behaviour	Price Fairness	Technological Tangibility	Non-Technological Tangibility	In-Consumption Positive Emotion	In-Consumption Negative Emotions	Overall Customer Satisfaction	Performance	Managing Employees	Managing Process	Customer Feedback
Employee Attitude/Behaviour	0.571[1]										
Price Fairness	0.314[2]	0.717									
Technological Tangibility	0.397	0.540	0.722								
Non-Technological Tangibility	0.214	0.496	0.544	0.608							
In-Consumption Positive Emotion	0.104	0.289	0.258	0.331	0.676						
In-Consumption Negative Emotions	0.062	0.188	0.236	0.265	0.229	0.830					
Overall Customer Satisfaction	0.444	0.525	0.598	0.562	0.338	0.279	0.893				
Performance	0.089	0.129	0.173	0.186	0.080	0.059	0.249	0.823			
Managing Employees	0.075	0.106	0.158	0.173	0.066	0.077	0.221	0.676	0.731		
Managing Process	0.038	0.017	0.020	0.045	0.004	0.011	0.034	0.086	0.295	0.805	
Customer Feedback	0.047	0.058	0.126	0.089	0.021	0.065	0.135	0.367	0.496	0.326	0.756

(1): Average Variance Extracted, (2): Square of Correlations between Constructs

Table 6.17: Square of Correlations between Constructs and Average Variance Extracted of each Construct for Old Customers

	Employee Attitude/ Behaviour	Price Fairness	Technological Tangibility	Non-Technological Tangibility	In-Consumption Positive Emotion	In-Consumption Negative Emotions	Overall Customer Satisfaction	Performance	Managing Employees	Managing Process	Customer Feedback
Employee Attitude/Behaviour	0.650(1)										
Price Fairness	0.368(2)	0.673									
Technological Tangibility	0.433	0.267	0.745								
Non-Technological Tangibility	0.256	0.346	0.241	0.605							
In-Consumption Positive Emotion	0.150	0.144	0.109	0.055	0.604						
In-Consumption Negative Emotions	0.069	0.057	0.070	0.054	0.097	0.676					
Overall Customer Satisfaction	0.554	0.383	0.423	0.237	0.183	0.104	0.852				
Performance	0.093	0.009	0.076	0.000	0.029	0.001	0.085	0.782			
Managing Employees	0.118	0.014	0.163	0.000	0.039	0.003	0.119	0.546	0.627		
Managing Process	0.015	0.009	0.010	0.021	0.003	0.006	0.015	0.016	0.147	0.783	
Customer Feedback	0.106	0.026	0.179	0.008	0.018	0.007	0.120	0.259	0.411	0.148	0.634

(1): Average Variance Extracted, (2): Square of Correlations between Constructs

Table 6.18: Square of Correlations between Constructs and Average Variance Extracted of each Construct for Customers with Low Education Certificate

	Employee Attitude/ Behaviour	Price Fairness	Technological Tangibility	Non-Technological Tangibility	In-Consumption Positive Emotion	In-Consumption Negative Emotions	Overall Customer Satisfaction	Perfor-mance	Managing Employees	Managing Process	Customer Feedback
Employee Attitude/Behaviour	**0.551**[1]										
Price Fairness	0.374[2]	**0.722**									
Technological Tangibility	0.387	0.579	**0.751**								
Non-Technological Tangibility	0.224	0.653	0.543	**0.738**							
In-Consumption Positive Emotion	0.127	0.339	0.288	0.344	**0.665**						
In-Consumption Negative Emotions	0.109	0.256	0.398	0.392	0.351	**0.865**					
Overall Customer Satisfaction	0.373	0.632	0.661	0.617	0.446	0.497	**0.892**				
Performance	0.077	0.183	0.200	0.171	0.160	0.200	0.318	**0.830**			
Managing Employees	0.054	0.159	0.197	0.198	0.162	0.217	0.295	0.695	**0.759**		
Managing Process	0.036	0.063	0.037	0.119	0.042	0.033	0.062	0.073	0.228	**0.823**	
Customer Feedback	0.094	0.149	0.175	0.171	0.080	0.208	0.232	0.478	0.575	0.240	**0.678**

(1): Average Variance Extracted, (2): Square of Correlations between Constructs

Table 6.19: *Square of Correlations between Constructs and Average Variance Extracted of each Construct for Customers with High Education Certificate*

	Employee Attitude/ Behaviour	Price Fairness	Technological Tangibility	Non-Technological Tangibility	In-Consumption Positive Emotion	In-Consumption Negative Emotions	Overall Satisfaction	Performance	Managing Employees	Managing Process	Customer Feedback
Employee Attitude/Behaviour	0.650[1]										
Price Fairness	0.333[2]	0.680									
Technological Tangibility	0.439	0.283	0.741								
Non-Technological Tangibility	0.282	0.292	0.298	0.529							
In-Consumption Positive Emotion	0.152	0.161	0.131	0.101	0.607						
In-Consumption Negative Emotions	0.062	0.054	0.052	0.039	0.087	0.689					
Overall Customer Satisfaction	0.565	0.357	0.433	0.302	0.193	0.089	0.869				
Performance	0.117	0.014	0.099	0.011	0.022	0.003	0.113	0.799			
Managing Employees	0.140	0.018	0.165	0.015	0.023	0.000	0.139	0.574	0.657		
Managing Process	0.022	0.002	0.010	0.007	0.000	0.002	0.014	0.033	0.204	0.781	
Customer Feedback	0.080	0.016	0.166	0.018	0.008	0.003	0.107	0.265	0.418	0.227	0.701

(1): Average Variance Extracted, (2): Square of Correlations between Constructs

The results have proved that the measurement model under each group is reliable and valid. Items' factor loadings 'Table 6.9' for females ranged from 0.583 to 0.970 while for males it was from 0.667 to 0.583; for customers who stayed for business reasons it ranged from 0.673 to 0.970; for leisure from 0.585 to 0.968; for young customers from 0.622 to 0.967 while for old customers the range was 0.522 to 0.967; for customers with a low education certificate range was from 0.971 to 0.652 and those with a higher certificate ranged from 0.682 to 0.957. All items' loadings have exceeded the minimum accepted loading value of 0.5 (Chin, 2010; Gotz et al., 2009; Hair et al., 2006). That proves the items' reliability under each construct. The items under all groups are significant at p<0.01 'Table 6.10'.

Composite reliability and Cronbach's alpha values have been calculated and checked for internal consistency and reliability, the results are shown in 'table 6.10'. Consistent reliability checks: if the items under each construct are consistent in what they are intended to measure and if they share in common high variances, where the minimum accepted value should be at least 0.6 (Henseler et al., 2009). Cronbach's alpha for females ranged from 0.728 to 0.978, for males from 0.795 to 0.958, for customers staying for business reasons from 0.815 to 0.975, for leisure from 0.730 to 959, for young customers from 0.838 to 0.972, for old customers from 0.703 to 0.959, for customers with a lower education certificate from 0.756 to 0.976 and for higher education customers from 0.785 to 0.96. The lowest composite reliability values for females, males, customers staying for business purposes, leisure purposes, the young, the old, those with lower education certificates and higher educational level customers are: 0.848, 0.880, 0.886, 0.849, 0.903, 0.832, 0.861 and 0.871 respectively, where the highest values are: 0.983; 0.964, 0.980, 0.968, 0.977, 0.966, 0.978, 0.971.

Constructs under all groups have exceeded the minimum value of 0.5 of the average variance extracted 'Table 6.10'. The values have ranged from 0.614 to 0.920 for females, from 0.570 to 0.845 for males, from 0.617 to 0.920 for business, 0.571 to 0.858 for leisure, from 0.571 to 0.893 for the young, from 0.604 to 0.852

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for the old, from 0.551 to 0.892 for those with low education and from 0.529 for those with a higher education. Accordingly, the measurement model of all groups has convergent validity.

Finally, discriminant validity for all groups has been assessed using 'Fornell-Larcker'. Discriminant validity is the extent to which a specific construct is truly distinct from another constructs which means that construct should be closer in its measure items than to any other constructs measure items (Hair et al., 2006; Johnston et al., 2004). The squares of correlations between constructs are not to be higher than the AVE of the corresponding construct. Results are in tables 6.12, 6.13, 6.14, 6.15, 6.16, 6.17 6.18 and 6.19 for females, males, business, leisure, old, young, low education and high education respectively.

The structural model under all groups' exhibited adequate predictive validity as the values of R^2 exceeded the minimum value of 0.19 as shown in figures 6.5 to 6.11. The variability of overall customer satisfaction has been explained by 78.4%, 68%, 79.4%, 66.4%, 72.9%, 65.2%, 74.5% and 66.6% for groups females, males, business, leisure, young, old, low education and high education respectively. Whereas, performance has been explained by 70.1%, 62.6%, and 67.8%, 67.6%, 77.4%, 58.2%, 83.2% and 61.4% respectively. The overall goodness-of-fit of all groups ranged from 0.652 to 0.770, which indicates that they are all a good fit.

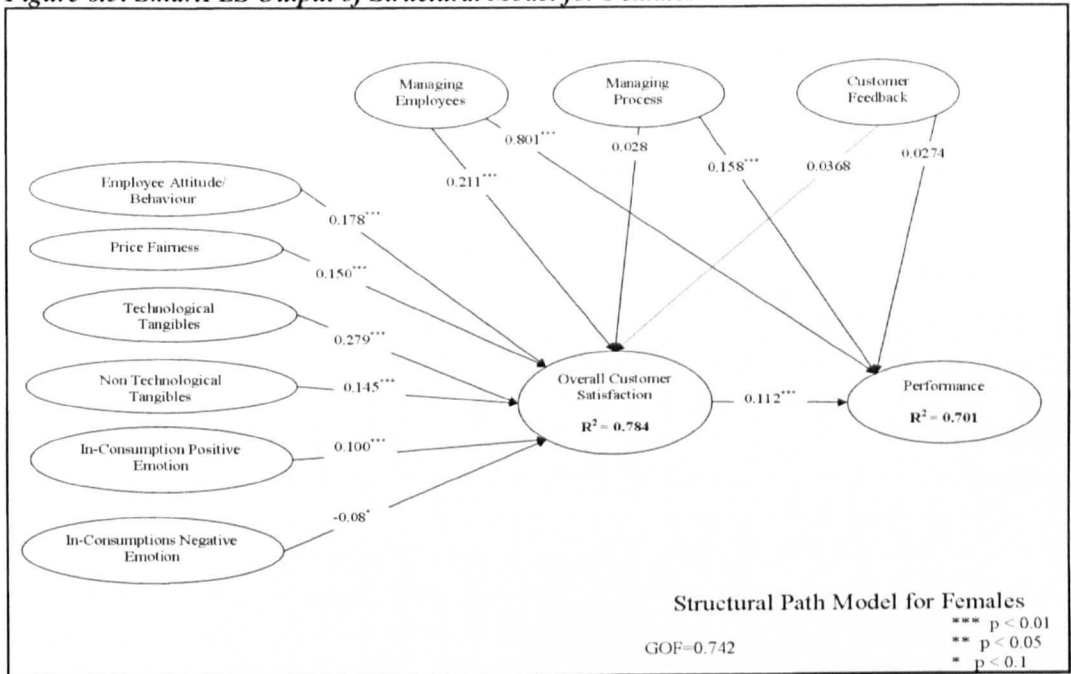*Figure 6.5: SmartPLS Output of Structural Model for Females*
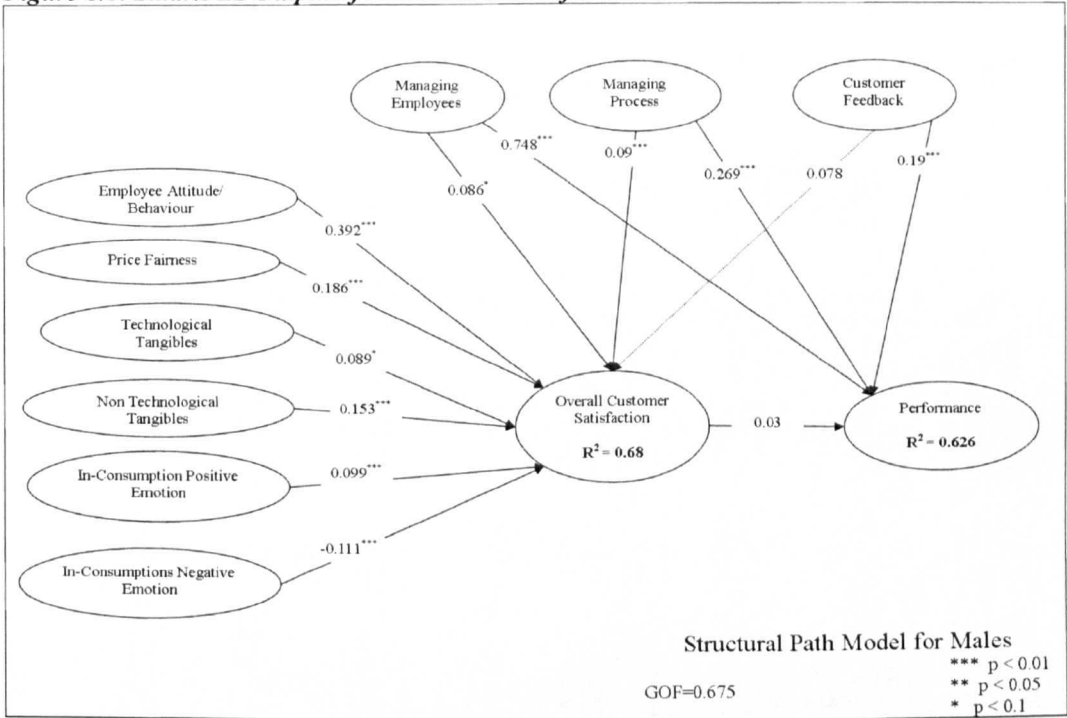

Structural Path Model for Females

GOF=0.742

*** p < 0.01
** p < 0.05
* p < 0.1

Figure 6.6: SmartPLS Output of Structural Model for Males

Structural Path Model for Males

GOF=0.675

*** p < 0.01
** p < 0.05
* p < 0.1

Figure 6.7: SmartPLS Output of Structural Model for Business

Structural Path Model for Business

GOF=0.739

*** p < 0.01
** p < 0.05
* p < 0.1
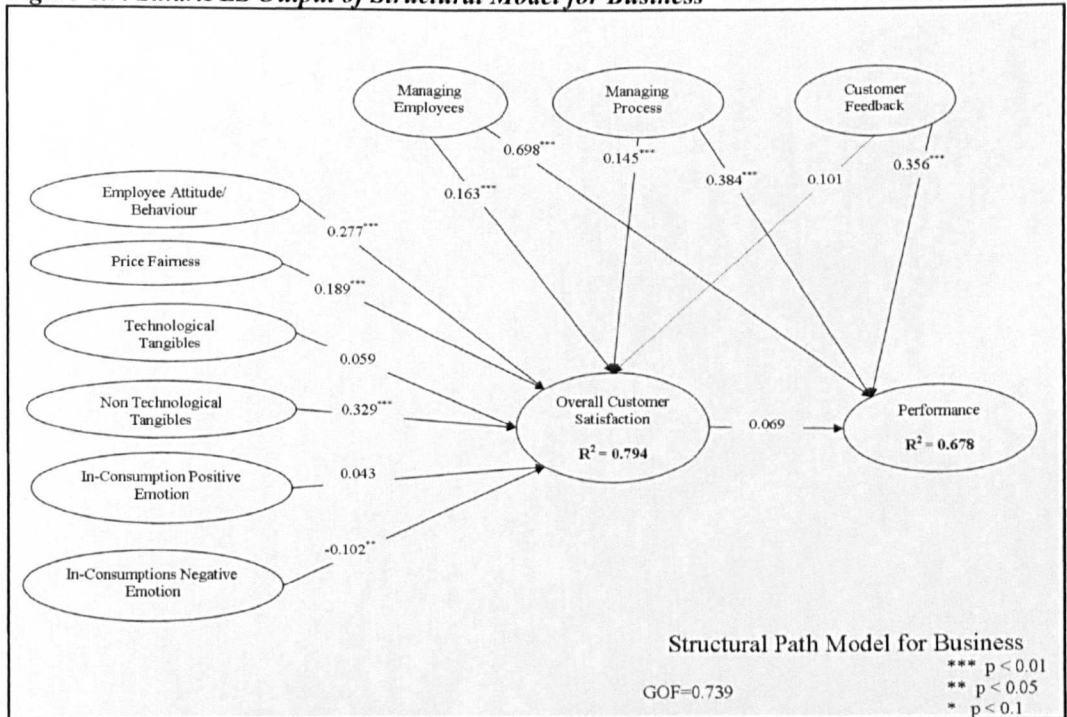
Figure 6.8: SmartPLS Output of Structural Model for Leisure

Structural Path Model for Stay For Leisure

GOF=0.679

*** p < 0.01
** p < 0.05
* p < 0.1
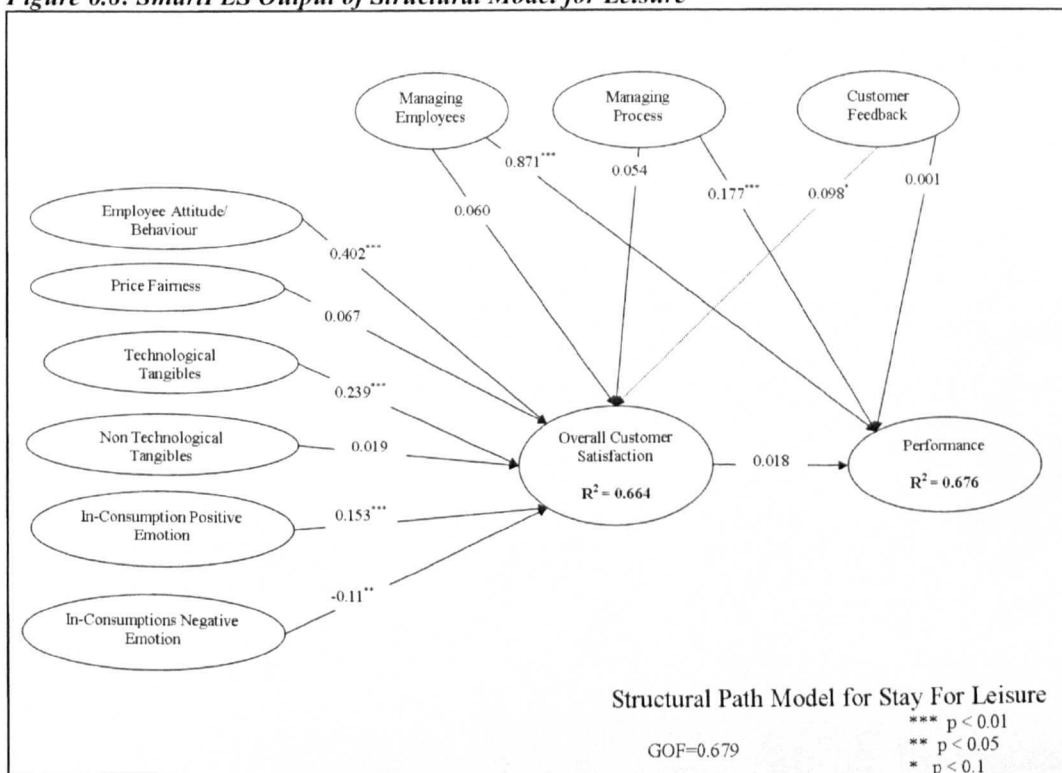
Figure 6.9: SmartPLS Output of Structural Model for Young

Structural Path Model for Young

GOF=0.746

*** p < 0.01
** p < 0.05
* p < 0.1
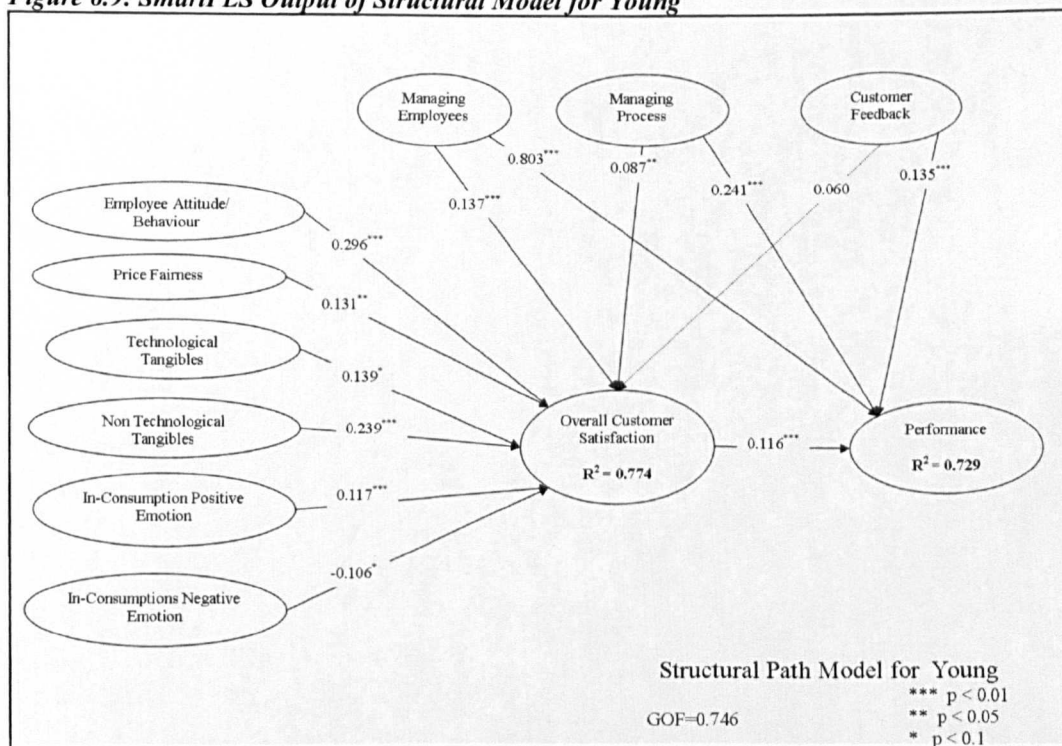
Figure 6.10: SmartPLS Output of Structural Model for Old

Structural Path Model for Old

GOF=0.652

*** p < 0.01
** p < 0.05
* p < 0.1
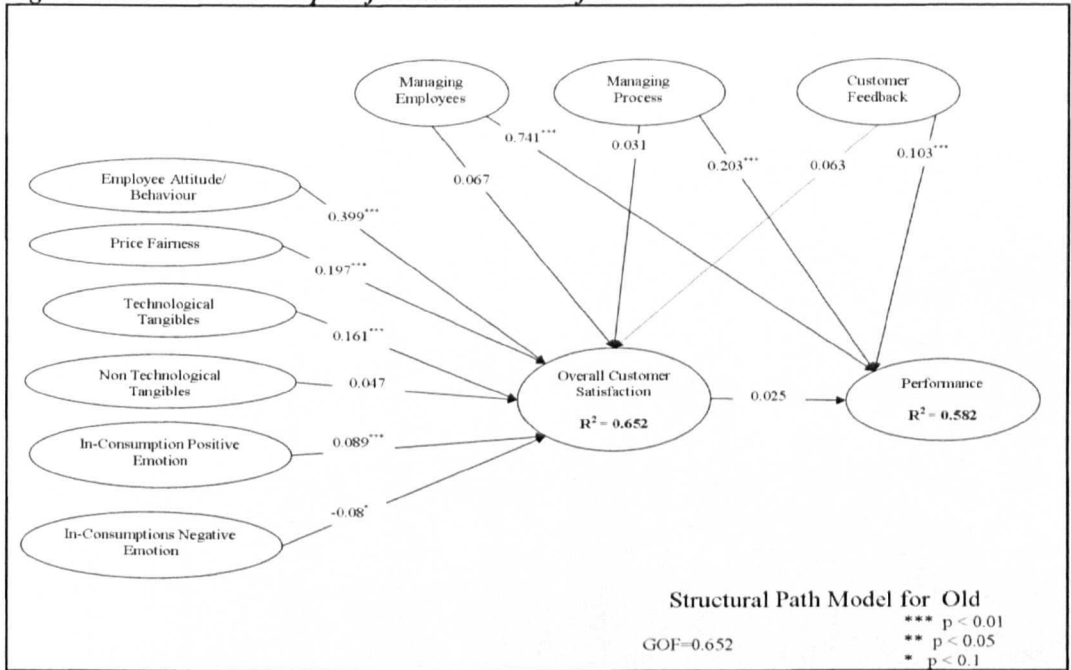
Figure 6.11: SmartPLS Output of Structural Model for Low Education

Structural Path Model for Low Education

GOF=0.770

*** p < 0.01
** p < 0.05
* p < 0.1
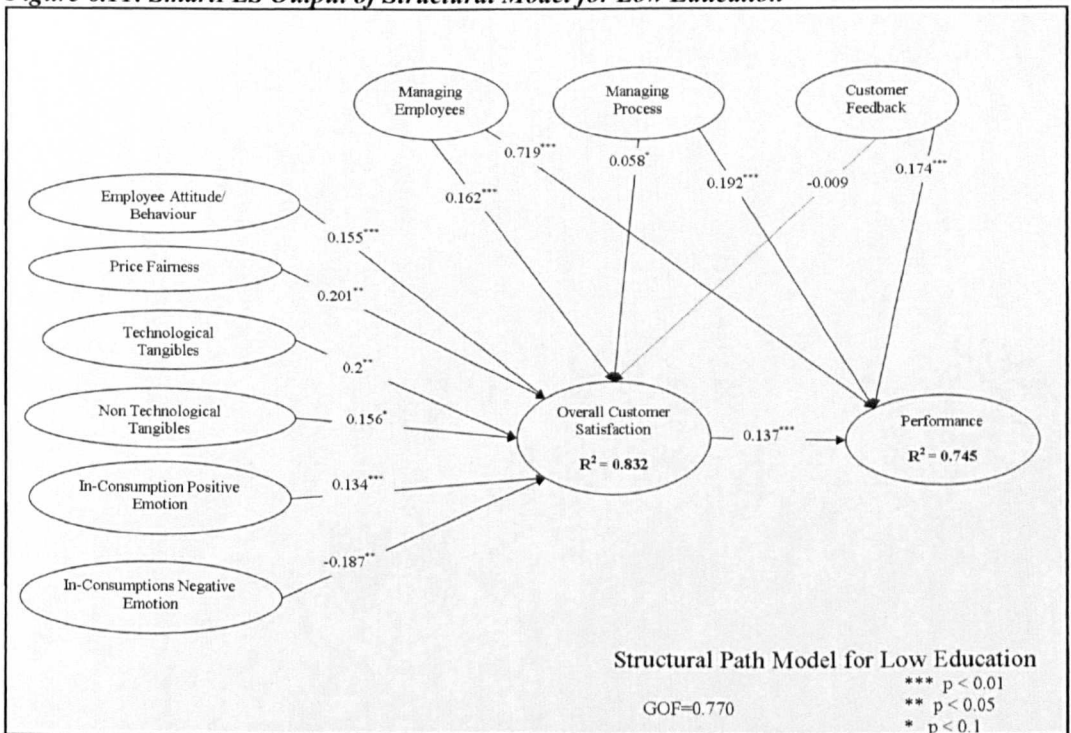
Figure 6.12: SmartPLS Output of Structural Model for High Education
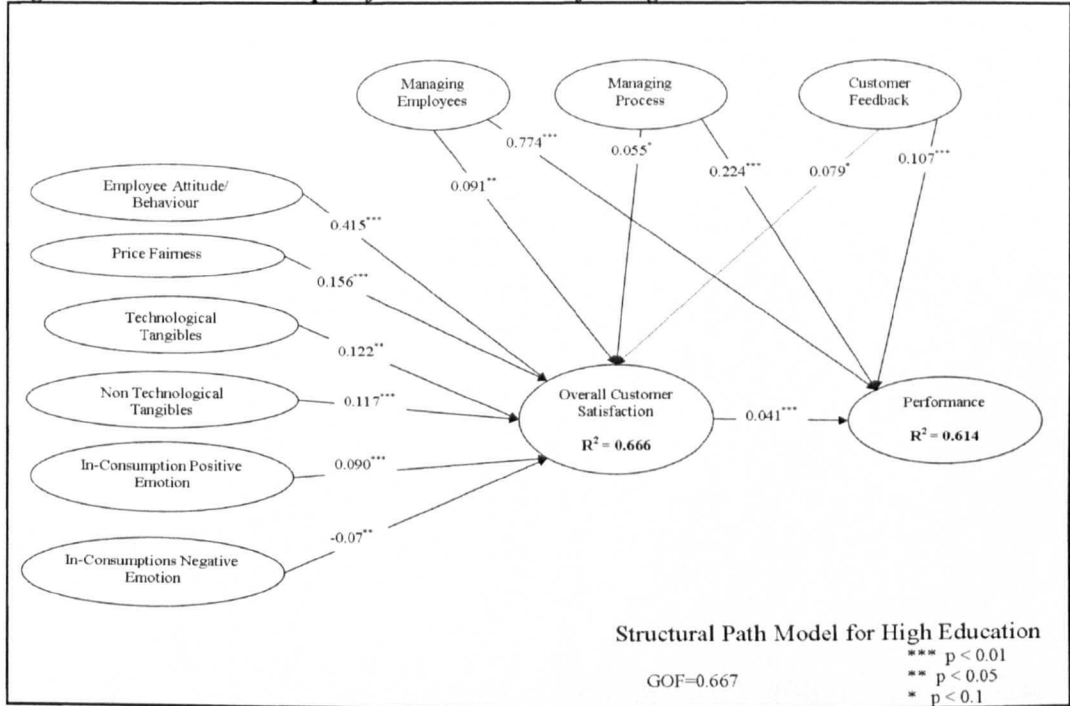
As the model under all groups is reliable, valid and with good fit the effect of moderation is assessed. First, the difference of a path between two groups is calculated and tested for significance. The results of this are summarized in Table 6.20.

Table 6.20: Multiple-Group Results

	Gender					Purpose of Stay				
	Female (n=270)		Male (n=417)		absolute value of path difference	Business (n=189)		Leisure (n=376)		absolute value of path difference
	Path	SE	Path	SE		Path	SE	Path	SE	
Employee attitude/Behaviour → Overall Customer Satisfaction	0.18***	0.05	0.39***	0.05	0.21***	0.28***	0.06	0.40***	0.06	0.13
Price Fairness → Overall Customer Satisfaction	0.15***	0.05	0.19***	0.05	0.04	0.19***	0.06	0.07	0.05	0.12
Technological Tangibles → Overall Customer Satisfaction	0.28***	0.07	0.09*	0.05	0.19*	0.06	0.07	0.24***	0.06	0.18*
Non technological Tangibles → Overall Customer Satisfaction	0.14***	0.05	0.15***	0.05	0.01	0.33***	0.07	0.02	0.04	0.31***
In-Consumption Positive Emotions → Overall Customer Satisfaction	0.10**	0.04	0.1***	0.03	0.00	0.04	0.04	0.15***	0.05	0.11
In-Consumption Negative Emotions → Overall Customer Satisfaction	-0.08*	0.04	-0.11**	0.05	0.03	-0.10***	0.04	-0.11**	0.05	0.01
Managing Employees → Overall Customer Satisfaction	0.21***	0.05	0.09*	0.05	0.13*	0.16***	0.06	0.06	0.05	0.10
Managing Process → Overall Customer Satisfaction	0.16***	0.04	0.27***	0.04	0.11*	0.38***	0.08	0.18***	0.04	0.21***
Customer Feedback → Overall Customer Satisfaction	0.04	0.05	0.08	0.05	0.04	0.10*	0.06	0.1*	0.05	0.00

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table 6.20 (continued): Multiple-Group Results

	Age					Education					
	Young (n=253)		Old (n=435)		Absolute value of path difference	Low (196)		High (463)		Absolute value of path difference
	Path	SE	Path	SE		Path	SE	Path	SE	
Employee attitude/Behaviour → Overall Customer Satisfaction	0.3***	0.06	0.4***	0.06	**0.10**	0.15***	0.04	0.42***	0.05	**0.26*****
Price Fairness → Overall Customer Satisfaction	0.13**	0.06	0.2***	0.05	**0.07**	0.20**	0.09	0.16***	0.04	**0.05**
Technological Tangibles → Overall Customer Satisfaction	0.14*	0.08	0.16***	0.05	**0.02**	0.20**	0.08	0.12**	0.05	**0.08**
Non technological Tangibles → Overall Customer Satisfaction	0.24***	0.06	0.05	0.04	**0.19*****	0.16*	0.09	0.12***	0.04	**0.04**
In-Consumption Positive Emotions → Overall Customer Satisfaction	0.12***	0.04	0.09***	0.03	**0.03**	0.13***	0.04	0.09***	0.03	**0.04**
In-Consumption Negative Emotions → Overall Customer Satisfaction	-0.11*	0.05	-0.08*	0.04	**0.02**	-0.19**	0.07	-0.08*	0.04	**0.11**
Managing Employees → Overall Customer Satisfaction	0.14***	0.05	0.07	0.05	**0.07**	0.16***	0.06	0.09**	0.04	**0.07**
Managing Process → Overall Customer Satisfaction	0.24***	0.04	0.20***	0.04	**0.04**	0.19***	0.05	0.22***	0.04	**0.03**
Customer Feedback → Overall Customer Satisfaction	0.06	0.05	0.06	0.05	**0.00**	-0.01	0.05	0.08*	0.04	**0.09**

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

There are differences between the path coefficients of different groups under customer characteristics, yet the difference is not significant for all path coefficients. Gender has significantly moderated the relationship between employees' attitude/behaviour, technological tangibility, managing employees and managing process and overall customer satisfaction.

The difference of path coefficients between business and leisure customers is significant between technological tangibility, non-technological tangibility and managing process and overall customer satisfaction. The path differences are also significant between managing processes and overall customer satisfaction for business and leisure customers.

The age of customers and their educational levels have not moderated any relation except for the relation between non-technological tangibility and overall customer satisfaction which has been moderated by age. In conclusion, the developed hypothesis of moderation in Chapter 4 is partially supported.

6.4.5 Testing Mediation

This section will present the mediation test for overall customer satisfaction. A variable is said to be a mediator if it mediates the relationship between an exogenous and an endogenous variable. Figure 6.13 is provided to clarify the concept. Looking to the available literature, most researchers test mediation using Baron and Kenny's approach (1986) through regression (Zhao et al., 2010; Keil and Park, 2010; Luthans et al., 2008). According to Baron and Kenny (1986), the following conditions should be met to verify the mediating effect of a mediator, variable M, on the relationship between two variables X and Y: (i) the relationship 'c' between X and Y should be significant, (ii) the relationship 'a' between X and M should be significant , (iii) the relationship 'b' between M and Y should be significant, and, (iv) when both a and b are controlled, the previously significant relationship 'c' between X and Y should no longer be

significant (leading to complete mediation), or should reduce in significance (leading to partial mediation).

Figure 6.13: Mediator Model
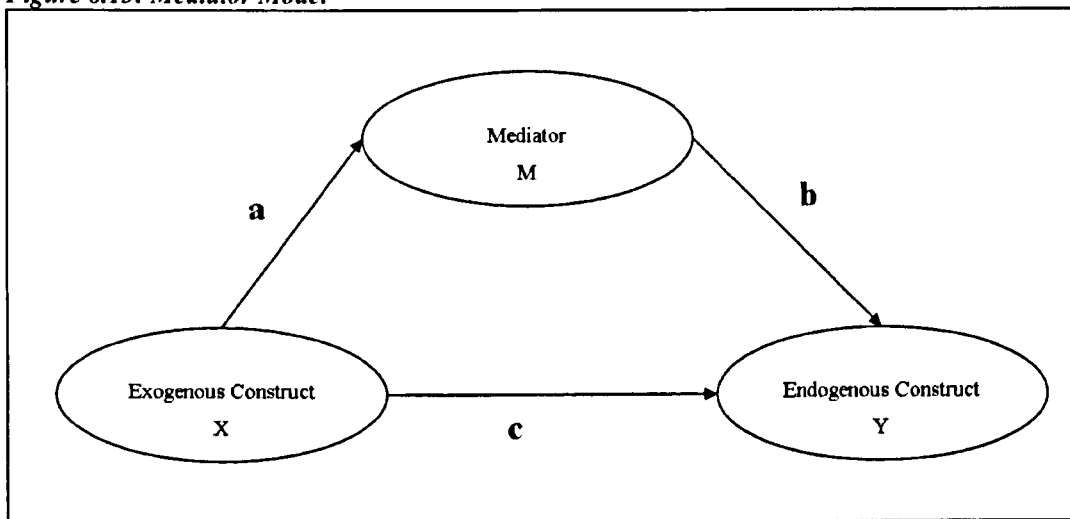
To test mediation using Baron and Kenny's approach, three steps should be followed (Zhao et al., 2010; Ekinci et al., 2008). First, the model is run between X and Y without the mediator 'M' and tested to see if 'c' is significant. Then, the model is run between X and M and path 'a' is tested for significance. Finally, the model is run just for M and Y and path 'b' is tested for significance. All relationships 'a, b and c' should be significant, then a Sobel z-test is run. A Sobel z-test calculates the significance of the indirect relation 'a * b', where it should be significant to say there is mediation. When running the full model X, Y and M and c loses its significance then there is full mediation, whereas if it remains significant then there is partial mediation.

Many researchers recently tested mediation in SEM using PLS-SEM (Ekinci et al., 2008; Wang et al., 2007; Preacher and Hayes, 2004; Sundaram et al., 2007; Kim et al., 2008; Akter et al., 2011; Dong et al., 2008). When applying Baron and Kenny's approach is should be reconsidered as many researchers have misapplied it (Zhao et al., 2010). Their test was mainly for regression, so a different approach needs to be applied when testing mediation in SEM.

Accordingly, only one test is recommended by Zhao et al. (2010) where only the indirect effect 'a*b' is tested for significance using the bootstrapping test introduced by Preacher and Hayes (2004). If 'a *b' is significant but 'c' is not then there is indirect only mediation. If 'a*b' is not significant but 'c' is significant, there is direct-only non-mediation. If both 'a*b' and 'c' are not significant then there is no-effect of mediation. If both 'a*b' and 'c' are significant, then the coefficients 'a', 'b' and 'c' should be multiplied. If the sign of the multiplication 'a*b*c' is positive then it is a complementary mediation, whereas if the sign is negative then it is competitive mediation.

The regression procedure of Baron and Kenny has also been discussed by Iacobucci et al. (2007) and it was recommended to use SEM to test mediation as a supplement of regression, especially if there are more than one exogenous variable. In this research PLS is used to test mediation as it allows testing of all paths simultaneously. The mediation testing steps have been developed after (Zhao et al., 2010; Iacobucci et al., 2007):

- The model is run in SmartPLS where all exogenous variables, 'employees' attitude/behaviour, price fairness, technological tangibility, non-technological tangibility, in-consumption positive emotion, in-consumption negative emotion, managing employees, managing process and customer feedback', are linked to the moderator 'customer overall satisfaction' and the endogenous variable 'performance' and both paths 'a' and 'b' are checked for their significance using bootstrapping. Both paths must be significant if one or both of them are not significant a mediation test is not run for that particular variable.

- Then the indirect effect 'a*b' is tested for significance: if the indirect effect is significant and path 'c' is not significant then there is full

mediation. If both the indirect effect and 'c' are significant then there is partial mediation. If the indirect effect is not significant but 'c' is significant then there is partial mediation as well. If both indirect effect and 'c' are not significant then there is partial mediation. The test of 'a*b' significance is calculated by bootstrapping using the formula $t = \dfrac{a*b}{sd(a_i*b_i)}$ where 'sd' is the standard deviation of paths 'a' and 'b' for all samples run through the bootstrapping.

- If there is partial mediation the proportion of mediation is calculated by: $\dfrac{a*b}{(a*b)+c}$ the closer the value is to 1 the greater is the proportion of mediation.

- As a rule of this test, each construct 'exogenous, mediator and endogenous' should have at least three items (Iacobucci et al., 2007).

The developed steps of mediation has been followed and the results are summarized in Table 6.21

Table 6.21: Results of Mediation for Overall Customer Satisfaction

Exogenous Variables (x)	Path 'a'	Path 'b'	Path 'a*b'	Path 'c'	Mediation	Proportion of Mediation
Employee Attitude/Behaviour	0.308***	0.083**	0.026*	0.057	complete	Not Applicable
Price Fairness	0.17***	0.083**	0.014*	0.006	complete	Not Applicable
Technological Tangibility	0.161***	0.083**	0.013*	-0.093**	partial	-0.168
Non-Technological Tangibility	0.149***	0.083**	0.012*	0.017	complete	Not Applicable
In-Consumption Positive Emotion	0.109***	0.083**	0.009*	0.042	complete	Not Applicable
In-Consumption Negative Emotions	-0.121***	0.083**	-0.01*	0.065**	partial	-0.183
Managing Employees	0.127***	0.083**	0.011*	0.776***	partial	0.013
Managing Process	0.060***	0.083**	0.005*	0.231***	partial	0.021
Customer Feedback	0.056*	0.083**	0.005*	0.138***	partial	0.032

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Overall customer satisfaction is considered as a mediator of the relationship between customers' perception of service quality, operations management practices and performance. Overall customer satisfaction mediated fully the relationship between employees' attitude/behaviour, price fairness, non-technological tangibility and in-consumption positive emotions and performance. While in the remaining relationships there is a partial mediation. So the developed hypothesis of mediation is supported. The highest indirect effect of mediation is on the relationship of in-consumption negative emotion as the effect is 18.3% of the total effect of in-consumption negative emotion on performance. In general, the relations between service quality dimensions and performance are fully mediated by overall customer satisfaction. Logically, when customer is satisfied with a specific quality dimension that will significantly lead to overall satisfaction of

service quality provided. Later, the overall customer satisfaction will lead for better business performance. Whereas, operations management practices can have both direct and indirect affect on performance and that is why the mediation appears to be partial and not full. A detail discussion will be provided in the next chapter.

6.5 Conclusion

This chapter has discussed the empirical analysis of the researches conceptualized framework. All developed hypotheses have been tested and the results have been presented. The next chapter will provide a discussion of the results and link this discussion to the available literature.

Chapter 7 Discussion

7.1 Introduction

This chapter presents an overview of the objective and core findings of the research, the built hypotheses and research problems. The chapter starts with an overview of the research and its objective. Then the built hypotheses are discussed and linked with the results of the data analysis from the previous chapter and supported by the available literature.

7.2 Discussion of Research Findings

This section discusses the research background, objectives, hypotheses and core findings. Then, explanations and interpretations of the research hypotheses are presented.

7.2.1 Research Overview, Objective and Core Findings

Service quality has received more attention in recent years, yet only a few studies have helped in building good, sound service quality evaluation criteria for hotels (Tseng, 2009; Hsieh et al., 2007). In addition, a review of the literature suggests that quality continues to be an issue for research and debate and hotels should give importance to their service quality as it reflects their standards and creates a positive image of their service (Mohsin and Lockyer, 2010). The objective of this research was build a model of service quality for hotels. To do so, a critical literature investigation has been performed to conceptualize the model in Chapter 2. The built model 'Chapter 4' has taken into consideration three aspects: customer perceptions of service quality, operations management practices for service quality provided and performance.

Recalling the literature on measuring service quality for hotels, researchers have not agreed on a single model that can be used to measure the customers' perception of service quality provided by hotels. Although many researchers have

used similar items for measurements taking SERVQUAL as a base, analysis has resulted in different dimensions and constructs for the service quality in hotels. Recently, it was stated by Lloyd et al. (2011) that despite the growing body of literature on the concept of the customers' perceived value, calls remain for a more sophisticated measure of service quality to be constructed.

Unlike goods, service quality is intangible, yet tangibility is important, and is unavoidable in measuring customers' satisfaction. So, it is important to include tangibility as it has significant effect on perceived service quality (Liu and Yen, 2010; Akbaba, 2006; Santos, 2002; Soliman and AlZaid, 2002). Research has entered a new phase since the introduction of technology, computers and internet. Providing technology facilities to customers is effective for hoteliers (Chu and Choi, 2000). In a qualitative study, Ramsaran-Fowdar (2007) has introduced the technological tangibility as a service quality dimension. In addition, many researchers highlighted the importance of including emotions in service quality evaluation as they play an important role in satisfaction (Oliver, 1993; Wirtz et al., 2000; Yu and Dean, 2001; Bosque and Martin, 2008). Following critical analysis of the literature from the aspect of customers' perceptions, six dimensions or 'constructs' of a service quality model have been proposed:

- Employees' attitude/behaviour (Kuo, 2009; Qin and Prybutok, 2009; Ramsaran-Fowdar, 2007; Akbaba, 2006; Hennig-Thurau, 2004; Erto and Vanacore, 2002; Dabholkar et al. 2000): this construct is built to measure customers' perception of employee/attitude behaviour in the service experience in the hotel.

- Price Fairness (Qin and Prybutok, 2009; Akan, 1995): this construct is built to measure customers' perception of the price fairness of their stay in the hotel.

- Technological tangibility (Ramsaran-Fowdar, 2007; Chu and Choi, 2000): this construct is built to measure the customers' perception of the technologies provided in hotels such as internet access and wakeup systems.

- Non-technological tangibility (Qin and Prybutok, 2009; Ramsaran-Fowdar, 2007; Akbaba, 2006; Juwaheer 2004; Erto and Vanacore, 2002): this construct measures the customers' perception on tangibility available in the hotel.

- In-consumption emotions: where two constructs has been built; positive and negative. In consumption positive emotions: (Bosque and Martin, 2008; Han and Back, 2007; Mudie et al., 2003; Zins, 2002, Dolen et al., 2001; Richin, 1997): measures the frequency of positive emotions and feelings by customers that result from employee-customer interaction or the use of facilities in the hotel. In-consumption negative emotions: (Bosque and Martin, 2008; Han and Back, 2007; Mudie et al., 2003; Zins, 2002, Dolen et al., 2001; Rich in, 1997): measures the frequency of negative emotions and feelings by customers that result from employee-customer interaction or the use of facilities in the hotel.

All the six constructs have been linked to a construct labelled 'overall customer satisfaction' (Olorunniwo et al., 2006; Qin and Prybutok, 2009; Lui and Jang, 2009) in order to test if there are any significant effects of service quality dimensions on the overall customer satisfaction

The role of management practices cannot be denied as being important in providing a satisfactory service quality to customers. That means managers should establish the practices which help them to maximize the satisfaction of the hotel's customers by integrating the available resources of people and processes (Drohan et al., 2009). Edvardsson et al. (2005) argues that looking at service through the lens of the customers' perception may add to future understandings of service approaches. That would help managers to offer better customer satisfaction and increase the performance of the hotel. The available literature on

operations management practices has been critically evaluated and three proposed constructs have been developed:

- Managing Employees (Vlachos, 2008; Claver-Cortes et al., 2007; Alleyne et al., 2006; Hope, 2004; Tsaur and Lin, 2004; Tarnow et al. 1991; Behara et al., 2001: this construct is developed to measure the management perceptions on practices in managing their employees in the hotel.

- Managing Processes (Hope, 2004; Lagrosen and Lagrosen, 2003; Behara et al., 2001; Kandampully and Menguc, 2000): this construct measures management perceptions on practices by managers to maintain and control the quality of the services provided by the hotel.

- Customer Feedback (Claver-Cortes et al., 2007; Lagrosen and Lagrosen, 2003; Behara et al., 2001; Kandampully and Menguc, 2000; Hynes and Frayer, 2000): to measure the management practices considering the customer voice when evaluating the services provided.

Operations Management practices have been linked to overall customer satisfaction to test if there are any significant relationships. In addition, practices have been linked to subjective performance where subjective performance (Chatouth, 2007; Blake and Sinclair, 2006; Vlachos, 2008; Chand and Katuo, 2007; Claver-Cortes et al., 2007) has been represented by a construct as well. A mediation test is also performed to find if overall customer satisfaction mediates the relationship between operations management practices and performance. Overall customer satisfaction has been also linked to performance and the hypothesized relationship is tested.

To test the built model of service quality and to be able to answer the research question and meet the research objective, structural equation modelling (SEM) 'Chapter 6' was performed using the Partial Least Square (PLS-SEM) approach. Accordingly, a rigorous analysis of the data has been performed. Prior to PLS-SEM, Exploratory Factor Analysis (EFA) was performed and then confirmed. EFA is run to condense the measurement scales. The EFA analysis

resulted in factors that were consistent with the proposed constructs built through the available literature. As was discussed earlier, the conceptual model of the research has been built through using the available literature where constructs have been named and built. EFA was assessed in terms of each item's communality and loadings, where all values have exceeded the minimum accepted value. In addition, the selected items are sufficiently inter-correlated to produce a component which is later named as a construct. To do so, a measure of sampling adequacy has been calculated and it was found to be meritorious (Hair et al., 2006) as it exceeded 0.8.

All factors have been confirmed with SPSS, where each construct has been checked in terms of its sampling adequacy, reliability and the loadings of its indicators 'items'. All constructs have exceeded the minimum levels recommended for measures of sampling adequacy and reliability by Hair et al. (2006) as Cronbach's alpha ranged from 0.777 to 0.966 and sampling adequacy from 0.612 to 0.943. Communalities and loadings of indicators under each construct have also exceeded the minimum accepted value.

Then all data has been imported into SmartPLS where both have been assessed; measurement and structural model. The measurement model has been performed through many analyses to provide a model that is reliable and valid. Indicators of constructs which have unacceptable loading values or high cross-loadings with other constructs have been discarded from the model (Gotz et al., 2010; Henseler et al., 2009; Rosenzweing, 2009). The measurement model was proved for consistency reliability, convergent validity and discriminant validity. That shows the selected indicators under each construct share high variance and consistency and that constructs are not highly overlapped.

Recalling the factor analyses, results have provided a breakthrough in understanding of service quality research in relation to the hotel industry. The converged items of 'in-consumption emotions' has added to the available literature 'Gap 1'. The literature has highlighted the importance of including emotions, but has not provided emotions appearing during the service consumption - emotions were considered as a consequence of the service

consumption. In addition, it was proved that tangibility should be divided into technological and non-technological tangibility, which has not been shown previously in literature ('Gap 2'). Technology was just provided but not tested through factor analysis. This finding enriches the literature in service quality as a whole and for understanding hotel quality in particular. Moreover, the factor results of the dimensions of operations management practices also add to knowledge. Recalling the literature on operations management practices in Chapter 2, to the knowledge of the researcher no study has studied operations management practices for hotels. So, the factor analysis has resulted in three dimensions that were all proved with high reliability and validity.

Then SEM has been used to test the built hypothesis and relationships using PLS-SEM approach. Path coefficients of the relations have been tested in terms of their significance and sign. Later, the model has been tested in terms of moderation, where hypothesized relations between constructs are tested to see if they were moderated by customers' characteristics. Finally, the mediation rule of customers' overall satisfaction between customers' perceptions of service quality and operations management practices and performance was tested. The results have mostly supported the hypotheses built through the literature. The following sections will discuss the findings of the hypotheses and provide interpretations of the results.

7.2.2 Hypotheses Results and Interpretations

Structural Equation Modelling (SEM) was used to test the hypotheses built for this research to find relations between exogenous and endogenous constructs. Most of the hypotheses discussed in 'Chapter 4' of the conceptual model of this research have been supported, as the t-value has been significant. The following sections present and discuss the hypotheses using results from the full conceptual model 'Section 4.3'.

7.2.2.1 Relations between Service Quality Dimensions and Overall Customer Satisfaction

The first set of hypotheses of this research focuses on the relationship between quality dimensions from customers' perspectives and the overall customer satisfaction with the service provided by hotels. Recalling the model, five constructs of service quality dimensions have been defined and built through the analysis of the literature. The tested hypothesis is H1: there is a relationship between quality dimensions (employee attitude/behaviour, price fairness, technological tangibility, non-technological tangibility, in-consumption positive emotion and in-consumption negative emotion) and the overall customer satisfaction and the results are represented in Table 7.1

Table 7.1: Service Quality Dimensions and overall Customer satisfaction Hypotheses

Hypothesis	Significance	Result
H1a: There is a relationship between customers' perception of employee attitude/behaviour and the overall customer satisfaction.	High	Supported
H1b: There is a relationship between customers' perception of price fairness and the overall customer satisfaction.	High	Supported
H1c: There is a relationship between customers' perception of technological tangibility and the overall customer satisfaction.	High	Supported
H1d: There is a relationship between customers' perception of non-technological tangibility and the overall customer satisfaction.	High	Supported
H1e: There is a relationship between customers' perception of in-consumption positive emotion and the overall customer satisfaction.	High	Supported
H1f: There is a relationship between customers' perception of in-consumption negative emotion and the overall customer satisfaction.	High	Supported

Results showed that the overall customer satisfaction of service quality is influenced by employees' attitude/behaviour, price fairness, tangibility 'technological and non technological, in-consumption emotions 'positive and negative'. The results are consistent with previous studies which have discussed these effects theoretically or proved them empirically. Although some studies

have not used the same name for the constructs as this research, the items 'indicators' in the constructs are similar.

Employees' attitude/behaviour: understanding the nature of service is mainly about the interaction of customers with service employees. When hotel customers interact with employees the perceived quality of the staff's attitudes do significantly affect the overall customer satisfaction. The findings of this research have supported this relationship with high significance H1a. This relationship has been supported by the literature as well in the context of the service industry as a whole and the hotel industry in particular. Earlier, a study by Mei et al. (1999) conducted in the hotel industry found that employee attitude is the best predictor of overall service quality. In the hotel context, it was stated that employee attitude/behaviour is one of the most important factors for a hotel customer (Chu and Choi, 2000) and they proved empirically its significant affect on the overall customer satisfaction of service provided by hotel (Juwaheer, 2004, Akbaba, 2006; Ekinci et al., 2008). A recent study by Lenka et al. (2009) in banks has also proved empirically that human, technical and tangible aspects of service quality do significantly influence customer satisfaction with human aspects being the most important. In fact, it can be said that the main difference between excellent and poor service from the customers point of view is the personal touch (Briggs et al., 2007). In a very recent study on retail service by Lloyd et al. (2011) the customers' service quality assessment is impacted by employee-customer interaction and the response of the employee can effect the perception of the service quality negatively or positively (Lloyd et al., 2011).

Price Fairness: this research has proved empirically that price fairness has a highly significant effect on overall customer satisfaction H1b. Many researchers (Martin-Ruiz and Rondan-Cataluna, 2008; Andaleeb and Conway, 2006; Xia et al., 2004) have agreed that one of the factors that influences customer satisfaction and behavioural intentions is price fairness. However, there is still very little published in the service literature that includes a price fairness dimension in service quality (Herrmann et al., 2007). The results of this study are consistent with a study on airline industry by Martin-Consuegra et al. (2007) where it has been proved that there is a relationship between price fairness and satisfaction. In

the hotel industry, a study by Kandampully and Suhartanto (2000) has proved the relationship, but price was only included indirectly in their study. The findings of this study have enriched the available literature on hotels in term of the effect of price fairness on overall customer satisfaction.

Tangibility: although analysis of service delivery and concept is intangible, tangibility is important to provide a service quality that satisfies customers. It is equally important that both tangibles and intangibles are included when measuring service quality and its influence on customer satisfaction (Pandey and Joshi, 2010; Soliman and AlZaid, 2002). This research has divided tangibles into two constructs: non-technological and technological and both were found to significantly affect the overall customer satisfaction of service quality, supporting H1c and H1d. this finding agrees with previous studies and literature in the hotel and service industry context. In a study in hotels by Akbaba (2006) it was proved empirically using regression that adequacy in service supply and understanding and caring significantly affects the overall evaluation of service quality. Soliman and AlZaid (2002) have reached the same conclusion in their study on hotels in Saudi Arabia. Another recent study has also proved this point through structural equation modelling in a study on restaurants and hotels. It was stated by Chu and Choi (2000) that providing customers with technology facilities is effective for hoteliers. Later, the technological tangibility was defined as a separate dimension by Ramsaran-Fowdar (2006) using a qualitative approach by interviewing hotels' customers. However, the dimension was built based on judgment and no factor analysis was performed. The findings of this study have supported the relationship and its significance on the overall customer satisfaction, H1c, empirically. Achieving this finding has added to knowledge of the hotel context. Proving the reliability and validity of the technological tangibility construct and its effect on overall customer satisfaction has enriched the available literature as it has provided different aspect.

In-consumption emotions: emotions that occur as a result of employee-customer interaction and the usage of facilities in hotels do affect the customers' perceived overall satisfaction. This relationship has been supported with high significance as a positive effect of in-consumption positive emotions H1e and a

negative effect of in-consumption negative emotions H1f. Earlier, in 1994 a study by Oliver using regression has shown that cognitive variables 'positive and negative emotions' make a significant contribution to overall customer satisfaction. In fact, many researchers have stated that consumption emotions both positive and negative are found to affect satisfaction (Dube and Morgan, 1998; Philips and Baumgrartner, 2002; Han and Back, 2006; Han and Back, 2007; Zins, 2002). Dolen et al. (2001) have measured emotion 'positive and negative' in terms of the extent they are experienced by customers as a result of the interactions between employees and customers and the effect this has on customer satisfaction. Their empirical analysis found a positive effect of positive emotion on satisfaction, but failed to prove the significance of negative emotions on satisfaction as many studies have not agreed on their effect. Another study by Mudie et al. (2003) has proved the significance of emotion, but the variations explained by emotions is not explained with the variations of satisfaction which means other dimensions also affects the overall experience of satisfaction. The finding of the significance of the effect of in-consumption emotion has contributed to the literature of service quality in the hotel industry. So, when measuring customer perception of service quality; in-consumption emotions should be introduced as a dimension. In addition, emotions should not only be measured by their appearance after consumption; emotions should also be measured in terms of their frequency of appearance during service consumption.

Overall, it can be said using the results of the SEM that the overall customer satisfaction of service quality is affected by tangibility, employees' attitude, price fairness and customers' feelings and emotions which occur during the consumption of the service. The findings of this research are also supported by the literature of previous studies either in the service context as a whole or in hotels in particular. Yet, this research has enriched the available literature by filling the gaps 1 and 2. As was discussed previously in the literature in Chapter 2, the dimensions of service quality are not all agreed by researchers, especially in the hotel industry, in spite of agreement in using the same attributes or items when considering service quality. This research's findings will add more to the dimensions of service quality and highlights the importance of including

technology and emotions as constructs in the service quality model as it is proved that they affect overall customer satisfaction significantly.

7.2.2.2 Relations between Operations Management Practices and Overall Customer Satisfaction

The second hypothesis of this research is to test if there are any relationships between operations management practices and overall customer satisfaction with the service provided by hotels. Recalling the model, three constructs of operations management practices have been defined and built through an literature review. The tested hypothesis is H2: management practices 'managing employees', managing process', and 'customer feedback', influences the overall customer satisfaction of service quality. The results of the hypotheses are presented in Table 7.2

Table 7.2: Operations Management Practices and Overall Customers' Perception Hypotheses

Hypothesis	Significance	Result
H2a: There is a relationship between management practices of managing employees and the overall customer satisfaction of service quality	high	Supported
H2b: There is a relationship between management practices of managing process and the overall customers' satisfaction of service quality.	high	Supported
H2c: There is a relationship between management practices of taking customer feedback and the overall customers' satisfaction of service quality.	low	Supported

The findings supported all the relations with different significance levels. Literature on management practices has many criticisms in the list of practices and its dimensions, especially in operations management practices in managing service quality. This research has suggested three constructs through critical evaluation of the available literature which have been supported through factor analysis in Chapter 6, and proved through structural equation modelling of this significant effect on the overall customer satisfaction of service quality. The

findings are consistent with what have been highlighted in a recent study in the hotel industry by Pandey and Joshi (2010). The study has emphasized the importance of practices of management in managing quality as they have a significant positive relationship with customer satisfaction. Recently, an analytical study on the available literature on operations management of service has discussed the areas of operations service management and highlighted dimensions such as managing employees, customers' evaluation of service quality and process management (Gunawardane, 2006). In spite of a lack of literature in testing management practices and its effect on overall customer satisfaction 'Gap 3', there is a rich literature on proving the effects of those practices on performance 'section 2.5.4'. That customer satisfaction is considered as a part of performance, yet most previous studies have included it only as a managerial perception of their customers' satisfaction. For example, a study by Choi and Eboch (1998) where they have proved empirically in manufacturing that total quality management practices have significant influence on customer satisfaction where they have included managerial practices on employees and process quality as constructs within the research model.

Managing Employees: Considering hotel service quality, employees are an important asset that need to be managed by hotel managers in order to satisfy their customers. The findings of this research have supported the hypothesis of the effect of practices of management in managing employees, H2a, with a high significance. Management practices on managing their employees in providing a high service quality for customers do increase the customers' perceived value of service quality. The finding of such a relationship is also highlighted in the literature (Kuo, 2009; Hennig-Thurau, 2004; Mohsin, 2007; Juwaheer, 2004) and has been supported and proved empirically in a number of studies (Chand, 2010; Claver-Cortes et al., 2007). Service provided in hotels does depend on customer-employee interaction, so managing employees positively leads them to provide the skills and information needed for a quality service. At every level of an organization, employees need to contribute to the service quality provided to customers by possessing the necessary knowledge and skills (Keating and

Harrington, 2003). In fact, the personnel asset is important to achieve quality (Keating and Harrington, 2003).

Managing Process: Managers practices manage the service process by checking conditions of equipment and devices frequently and having standard operating procedures which leads to providing service quality that promotes customer satisfaction. The effect of managers' practices on managing the process of the service is proved to be highly significant where H2a has been supported. The available literature in the hotel industry has not proven this empirically, in spite of highlighting the importance of managerial practices in managing service quality and affecting the performance of the service provided (Claver-Cortes et al., 2007; Kandampully and Menguc, 2000; Mohsin, 2007; Briggs et al., 2007;. In fact, the focus on improving customer perception of service quality by managers is enough (Hu et al., 2009) and that supports the importance of management practices in managing the quality of service provided.

Customer Feedback: the importance of taking customers' feedback in any organization cannot be denied as it helps managers to be aware of customers needs and if the service provided is reaching customers expectations. Managers using customers' feedback on their service helps to maintain and improve the service quality provided which leads for better perceived value by customers. According to (Behara et al., 2001), customer feedback is one of the items under outcome measurement as a construct of quality management, yet their study lacked the empirical work of linking the construct to performance or satisfaction. The relationship proposed by hypothesis H2c has been proved with low significance ($p<0.1$). Service organizations such as hotels asking customers to evaluate the service provided and then considering the feedback received will increase the customers' satisfaction with the service provided (Ofir and Simonson, 2001).

To sum up, it can be said that according to these research findings operations management practices in managing employees and processes affect the overall customer satisfaction of service quality. Recalling the literature on management practices in the hotel industry, most of the studies were on human

resource management practices and total quality management practices 'Chapter 2'. Operations management practices were highlighted in the literature and their effects were studied either indirectly or through qualitative studies, only a few researchers have performed empirical studies. The findings of this study first used factor analysis generating three constructs of operations management practices which were then confirmed with an acceptable measurement of scale. The developed constructs have been proven to have a significant effect using structural equation modelling. So, in order for a management to increase their performance in terms of customer satisfaction, special considerations need to be carried through their practices. Managing employees by creating an understanding of the hotels' objectives and strategies, using incentives to boost employees' performance and arranging suitable training schemes will lead to an increase in overall customer satisfaction of service quality. Managing processes by creating standard operation process procedures and checking the working condition of facilities also increases this satisfaction. In addition, asking customers to evaluate the service quality provided by hotels does help create better customer service and that leads to greater satisfaction. Supporting the relationships empirically contributes to knowledge in terms of linking practices to customer satisfaction where customer satisfaction has been evaluated in terms of the customers' perception and not the managers' perception as most of previous studied have done. In spite of highlighting the importance of management practices and then effect on the service quality provided to satisfy the customer, no similar empirical study is available that tests the dimensions built in this research. So, the findings do enrich the literature of the hotel industry service quality measurements and fill the existing gap in linking operations management practices to overall customer satisfaction 'gap 3'.

7.2.2.3 Relations between Operations Management Practices and Performance

The third hypothesis of this research is to test if there is any relationship between operations management practices and hotels' performance where performance is measured subjectively through the management perceptions

survey. Through the analytical literature review three constructs of operations management practices have been defined and built. The tested hypothesis is H3: whether management practices 'managing employees', 'managing processes' and 'customer feedback' influence hotels' performance. The results of the hypotheses are represented in Table 7.3

Table 7.3: Operations Management Practices and Performance Hypotheses

Hypothesis	Significance	Result
H3a: There is a relationship between management practices of managing employees and hotel performance	high	Supported
H3b: There is a relationship between management practices of managing processes and hotel performance	high	Supported
H3c: There is a relationship between management practices of taking customer feedback and hotel performance	high	Supported

The findings have supported the proposed relationships with all the relationships being statistically significant, which is consistent with the available literature of the effect of management practices on performance. As was discussed earlier, there are many criticisms on the best list of operations management practices in particular and its dimension. For that reason the literature has been used to find the attributes that are most frequently considered by researchers 'Chapters 2 and 5' in terms of management practices and the dimensions have been built from the assembled list. Factor analysis has been used to first explore the constructs and later those constructs has been confirmed. All the constructs have a high reliability and their validity has been checked through multivariate statistical analysis. The developed constructs are consistent with operations service management practices as highlighted by Gunawardane (2006). Recently, it was stated by Sharma and Gadenne (2010) that some cases have provided a positive relationship between quality management practices and performance and their study provided empirical evidence of a significant relationship.

Managing Employees: Managerial practices on managing employees through increasing the employees' skills and knowledge to provide a quality

service to customers do lead to increase the performance of the hotel. The hypothesis, H3a, built on this relationship has been supported and the relationship found to be statistically significant. The available literature has also supported the relationship where previous researchers have concluded that managing employees affects performance positively (Chand, 2010; Kuo, 2009; Claver-Cortes et al., 2007; Haynes and Frayer, 2000). In fact, the relationship between human resources management practices and performance has been a subject of study for many researchers 'Chapter 2' and these results have proved this relationship.

Managing process: management practices in maintaining process standards and checking the working conditions of facilities provided by hotels do affect the performance of the hotel. The hypothesis of this relationship, H3b, has been tested and the findings supported the relationship. In a study by Kandampully and Menguc (2000) it has been stated that management practices in terms of service maintenance have the most significant long term impact on service provided and lead to the ability to maintain a superior quality of service. That is consistent with Mohsin's (2007) study; for better profitability and business success, managers should maintain service standards in their services. On the other hand, it was proved by Claver-Cortes et al. (2007) that hotels quality management practices have a significant positive influence on perceptual competitive performance and on stakeholders' satisfaction, but not on financial performance.

Customer feedback: it is important for management to ask their customers for feedback on the service experience. These practices do positively affect the performance of hotels. The findings of this research have supported the relationship, H3c, with a high statistical significance. It was stated by Ofir and Simonson (2001) that measuring customer satisfaction and using their feedback as a practice is consistent with the recognition of being close to customers in order to succeed in the marketplace. In fact, it is important for management to listen to their customers and be aware of their expectations to sustain profitability (Mohsin and Lockyer, 2010). This highlights the importance of taking customers feedback about the service experienced during their stay in the hotel to produce better performance.

Overall, Structural Equation Modelling analysis has proved the effects of operations management practices 'managing employees, managing performance and customer satisfaction' on hotels' performance. The findings of this study are consistent with the literature of management practices discussed in Chapter 2. In spite of the criticisms of the list of management best practices to be considered to maintain quality and achieve the business objectives, management practice list developed in this research have been proved to affect the performance of service. In order to increase the performance of their hotels, managers should develop the practices that help to do so. Managing employees by creating an understanding of the hotels' objectives and strategies, using incentives to boost employees' performance and arranging suitable training will lead to improved service quality and so to increase performance and standing in the competitive market. Managing processes by creating standard operating procedures, checking the condition of facilities and asking customers for service feedback also help in increasing the performance of the hotel. Achieving these results has contributed to knowledge in terms of the dimensions of operations management practices and its effects on the performance of the hotel. In fact, these findings enrich the literature available in the service quality in the hotel context.

7.2.2.4 The Relationship between Overall Customer Satisfaction and Performance

The fourth hypothesis of this research H4: there is a relationship between overall customer satisfaction and hotel performance. The findings of this research have supported the existence of this relationship 'Chapter 6'. This result has also been supported in the literature. A recent study by Zabkar et al. (2010) stated that it is generally believed in tourism that high service quality and achieving satisfaction lead to positive word-of-mouth endorsements, referrals and repeat visits which will ultimately positively affect performance. So hotels whose customers' have a high overall satisfaction of service quality do see an increase in sales and profitability. So, having a quality management system to provide quality service for its customers has a positive effect on customer satisfaction and that in turn has a positive effect on sales and profits (Claver-Cortes et al., 2007; Joseph et

al., 2005). In fact, many researchers have demonstrated a positive relationship between service quality and customer satisfaction (Jain and Gupta, 2004). In the hotel context, the relationship was supported through a qualitative study in Auckland by Haynes and Frayer (2000) and empirically through Structural Equation Modelling in India by Chand (2010).

7.2.2.5 Moderation of Customer Characteristics

The fifth hypothesis of this research is to test the moderating role of customers' characteristics H5: Customers' characteristics (gender, purpose of visit- business or leisure, age and education level) moderate the relationship between the quality dimensions, operations management practices and overall customer satisfaction. The results of testing the hypotheses are presented in Table 7.4.

Table 7.4: Customers' Characteristics Moderation Hypothesis

Hypothesis	Result
H5a: Gender moderates the relationship between quality dimensions, operations management practices and overall customer satisfaction.	Partially Supported
H5b: Purpose of stay moderates the relationship between quality dimensions, operations management practices and overall customer satisfaction.	Partially Supported
H5c: Age moderates the relationship between quality dimensions, operations management practices and overall customer satisfaction.	Partially Supported
H5d: Education moderates the relationship between quality dimensions, operations management practices and overall customer satisfaction.	Partially Supported

There was partial support for the hypotheses of the moderating role of customer characteristics to inter-relationships between quality dimensions, operations management practices and overall customer satisfaction and performance. Looking to the available literature, it was stated by (Anderson et al., 2008) that in spite of the rich research in the service quality, researchers ignored customer characteristics and treat all customers as identical. In contrast, Liu and Yen (2010) stated that some demographic variables may lead to significant differences in perceptions of service quality and total satisfaction (Liu and Yen,

2010). There is no agreement on the role of customer characteristics in moderating the relationships between quality dimensions and overall customer satisfaction. In fact, there is limited empirical work in the hotel industry, especially in terms of the relationship between operations management practices and performance, and this study is introducing the relationships to fill the gap in the literature. The empirical work of this research has supported the relationships partially and a reason for that could be the differences of the size of the samples between the different groups.

Gender: (H5a) although the results have shown differences in the values of the paths between males and females, not all differences are significant. In fact gender is a moderator of the relationships between employees' attitude/behaviour, technological tangibility, managing employees and managing processes and overall customer satisfaction. It was also proven empirically by Kuo (2009) and Mohsin (2007) that there are significant differences in the relationships between employees' attitude and satisfaction. Most of the paths' values of relationships between quality dimensions and overall customer satisfaction are higher for males except for technological tangibility. In a study by Floh and Treiblmaier (2006) on websites services it was stated that relationships are more explanatory of satisfaction in the male group.

Purpose of visit 'Business vs. Leisure': purpose of stay moderated the relations between technological tangibility, non-technological tangibility, managing processes and overall customer satisfaction (H5b). In addition, it moderated the relationships between managing processes and overall customer satisfaction. The path coefficients of all relationships are different between the two groups but the difference is not significant. The variance of overall customer satisfaction is explained in business customers more than it is in leisure customers. A previous study by Yavas and Babakus (2005) found that there are differences between leisure and business customers in those attributes considered important when choosing a hotel to stay in. A study conducted by Chu and Choi (2000) on the hotel industry in Hong Kong has also supported the significant differences between leisure and business hotel customers in their perception of service quality in terms of employee attitude\behaviour and value. In their study,

there is no empirical proof of the significance of the difference between the two groups in terms of employees' attitude/behaviour. However, the relationship between managing processes and overall customer satisfaction are significantly different.

Age: Only one relationship was moderated by age groups. The relationship between non-technological tangibility and overall customer satisfaction significantly differ between different age of customers. So, age is not considered as a moderator between quality dimensions and overall customer satisfaction (H1c). Other studies have also not proved the significance of differences between older and younger customers (Liu and Yen, 2010; Choi et al., 2005). Most of the paths of quality dimensions and overall customer satisfaction for younger customers are higher than those for older customers, which is consistent with the findings of Floh and Treiblmaier (2006). There is empirical evidence that there is a significant difference in the relationship between overall customer satisfaction and performance, where it is higher in younger customers. The reason may be that younger customers are more likely to come back to a hotel and share their experience of staying which is later going to affect the performance of the hotel.

Education: in a recent study by Liu and Yen (2010), it was found that customers who are highly educated have more expectations; which means less satisfaction. The empirical results have shown that most of the paths for highly educated customers are higher than the same paths for lower educated customers. However, there is no evidence that the difference is significant except for employees' attitude/behaviour and overall customer satisfaction (H5d).

In general, it can be concluded that customer characteristics are not all necessarily moderators of the interrelationships between quality dimensions, operations management practices and overall customer satisfaction. The available literature has also provided both significant and insignificant differences between the different groups of customer. However, no studies have tested the moderating effects of customers' characteristics on the relationship between operations management practices and overall customer satisfaction. This study has supported

the hypotheses partially, as some relationships were found to make a significant difference. It can be concluded from the results, customer characteristics are not considered as moderators.

7.2.2.6 Mediation of the Overall Customer Satisfaction

One of the gaps to be filled by this research was linking operations management practices to overall customer satisfaction. Accordingly, a hypothesis on mediation was built and tested (H6): Overall customer satisfaction mediates the relationships between quality dimensions, operations management practices and performance. The results are shown in Table 7.5

Table 7.5: Mediation Hypotheses of the Overall Customers' Satisfaction

Hypothesis	Result	Mediation
H6a: Overall customer satisfaction mediates the relationship between employees' attitude/behaviour and performance	Supported	Complete
H6b: Overall customer satisfaction mediates the relationship between price fairness and performance	Supported	Complete
H6c: Overall customer satisfaction mediates the relationship between technological tangibility and performance	Supported	Partial
H6d: Overall customer satisfaction mediates the relationship between non-technological and performance	Supported	Complete
H6e: Overall customer satisfaction mediates the relationship between in-consumption positive emotion and performance	Supported	Complete
H6f: Overall customer satisfaction mediates the relationship between in-consumption negative emotion and performance	Supported	Partial
H6g: Overall customer satisfaction mediates the relationship between managing employees and performance	Supported	Partial
H6h: Overall customer satisfaction mediates the relationship between managing process and performance	Supported	Partial
H6i: Overall customer satisfaction mediates the relationship between customer feedback and performance	Supported	Partial

Service Quality Dimensions: Overall customer satisfaction has proved its role of mediating the relationships between quality dimensions 'employee attitude/behaviour, price fairness, and tangibility and in-consumption emotions'.

Some of these relationships are mediated partially, where others have been mediated fully as shown in table 7.5. The previous literature has provided similar results in the mediating the role of overall customer satisfaction of the relationship between a satisfaction of one transaction and performance. It was stated by Jones and Suh (2000) that literature have provided evidence for both full and partial mediation of the overall satisfaction of the relationship between the satisfaction of transaction specific satisfaction and repurchase intentions (Jones and Suh, 2000). Their study has also proved empirically that there is partial mediation. Another study by Al-Hawari and Ward (2006) proved empirically the mediation of customer satisfaction between quality dimensions and performance in automated bank services. The results of this study are consistent with those available in the literature though it provides it in another context which is the hotel industry.

Operations Management Practices: There is a rich literature in proving the effect of management practices in affecting customer satisfaction which in turn affects performance. Positive customer satisfaction is affected by the management system that serves quality to its customers, that in turn will affect sales and profits positively (Chand 2010; Claver-Cortes et al., 2007; Joseph et al., 2005). However, to the knowledge of this researcher there is no empirical evidence provided for mediating overall customer satisfaction. A recent study of hotels in India by Chand (2010) has provided a model which linked human resource management practices and service quality dimensions to customer satisfaction and hotel performance. All relationships have been proved for significance. However, his study has not included other management practices as this research did and mediation testing was not run as well in his study. The findings of this study have enriched the literature of service quality in the hotel industry. Management needs to be aware that their practices when managing employees, processes and customer feedback will affect hotel performance both directly and indirectly through overall customer satisfaction. This result has provided a breakthrough in the current literature as the indirect relation between operations management practices and performance has been proved to be significant and partially mediated by overall customer satisfaction.

7.3 Conclusion

This chapter has discussed the findings of the research linking the data analyses of the previous chapter to the conceptual framework. The hypotheses have also been illustrated, discussed and linked to the current literature. The next chapter will provide recommendations from the current research and draw conclusions. The implications and limitations of the research also will be highlighted.

Chapter 8 Conclusion and Recommendations

8.1 Introduction

In this chapter some recommendations are proposed to help the hotel industry develop in terms of its' provision of service quality and in developing the role of management in surviving in a competitive market. Then the managerial and theoretical implications of the research are highlighted. In addition, the research implications are discussed in the context of helping improve service quality in the hotel industry in Oman with the aim of eventually helping in the planning of Oman's' development by raising the contribution of the tourist industry to the country's' economic future. Finally, the research limitations and future research directions are discussed.

8.2 Contributions and Implications

This research has indicated several important findings regarding the interrelationships between quality dimensions, service quality from the customers' perspective, operations management practices and performance. The results have enhanced the understanding of the service quality of the hotel industry in the Sultanate of Oman as it is a targeted tourism destination, especially for Europeans. The conceptualized model of service quality has been tested empirically using advanced statistical methods. Factor analysis has been used to validate the measurement model and Structural Equation Modelling has been used to test the paths of the proposed relationships.

The findings of the research have managerial implications for hotel managers wanting to provide a better service quality. In addition, the research has contributed to the available literature on service quality measurement in the hotel industry. Finally, the research has also added to and enriched the context of Oman in terms of hospitality as a whole and hotels in particular. This section will discuss these implications and contributions.

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8.2.1 Managerial Implications

Research into the interrelationship between customers' perceptions of service quality, operations management practices and performance is important from both a managerial perspective as well as for its theoretical implications. The conceptualized model is recommended to be used by service quality evaluators to evaluate the service quality of the hotel industry, for instance by the Ministry of Tourism.

This research helps to answer the question of the dimensions of service quality and highlights the importance of considering in-consumption emotion as it significantly affects overall customer satisfaction, which in turn affects performance. Therefore, managers should consider the in-consumption emotion when assessing service quality. Knowing that in-consumption emotion appears during the interaction between employees and customers and the use of the physical facilities in hotel, managers are recommended to have good practices in managing employees and facilities of their hotel. Thus, managers are recommended to interview and ask customers what kind of employees' behaviour or facilities conditions results in the generation positive or negative emotions. Then managers should come up with a list of practices that increase positive in-consumption emotions that lead to better overall customer satisfaction and that decreases in-consumption negative emotions, which effects overall customer satisfaction negatively. This is one of the main contribution of this research that reflects on the managerial implication.

This research has also supported the effect of operations' management practices on the customers' satisfaction with the quality of the service provided in a hotel. Being aware of such relationships will help managers to know the practices that need to be considered in managing the services provided in their hotel. In addition to customer satisfaction with services provided, managerial practices do lead to improved performance as well as increased customer satisfaction leading to improved performance. The conceptualized model has connected customer perception of service quality, customer satisfaction,

operations management practices and performance using perceptions of both managers and customers.

To help managers achieve a more in-depth understanding of customer perceptions of the perceived service quality and the effect this has on customer satisfaction, the present research has introduced the service quality dimensions of the service provided in the hotel. To facilitate interpretation and enable a more accurate prediction of customer satisfaction, this research applied multiple-item measurement scales for the developed constructs. The six developed constructs: employee attitude/behaviour, price fairness, non-technological tangibility, technological tangibility, in-consumption positive emotion and in-consumption negative emotion do significantly affect the customers' overall satisfaction with the service provided. Factor analyses have validated the resulting constructs with high reliability. From this perspective managers should focus on employees' interaction with their customers, tangibles and facilities provided in the hotel, whether they are technological or not, and the role of the emotions that occur during consumption as they all lead to improving customer satisfaction and building a competitive advantage. So, managers are recommended to provide a service that increases the overall customer satisfaction. To do so, customers should be satisfied with the employees' behaviour. Employees should be prompt, friendly, keen to help and available when requested by customers. The price of stay and services should be fair and services provided should reflect the price charged as it affects the overall customer satisfaction significantly. In addition, managers are recommended to make sure that tangibles and physical facilities such as T.V, iron and plugs in hotel are in good conditions, clean and work properly. Thus, rooms and toilets should be clean and hygienic.

Managers should also be aware that achieving overall customer satisfaction will lead to better performance for the hotel. Hotel managers need to have a good understanding of customers' wants and which dimensions significantly affect the customers' overall satisfaction, leading to better performance and to survival in the competitive marketplace (Akbaba, 2006). In fact, focusing just on improving customer satisfaction is not enough and managers should target improving customers' overall perception of the service quality

provided (Hu et al., 2009). As a result, managers should be aware that satisfying their customers and increasing their overall perceived value leads customers to return (Ekinci et al., 2008), spreads positive word-of mouth to attract others (Ramsaran-Fowdar, 2006) and recommend the hotel to others (Stickdorn and Zehrer, 2009).

Another implication of this research is that hotel managers are recommended to follow the practices that help to increase overall customer satisfaction, leading to increasing the hotel's performance. The empirical results from this research have proved that managerial practices in terms of managing employees, managing process and customer feedback do affect both overall customer satisfaction and performance. As a result of factor analyses and SEM and in terms of employees, hotel managers should consider employee awareness of the objectives of the service strategy. Employees also need to go through training programs to provide better service quality and to develop best practice in customer-employee interactions. An incentive system also needs to be applied to boost the employees' performance. For example, managers could give bonuses for employees who perform well in servicing customers. The findings of this research have proved that operations management practices in managing employees has a significant effect on both overall customer satisfaction and performance.

Operations management practices in managing the service process are also important as it significantly affects' the satisfaction of the customer and thus the performance of the hotel. Looking to the converged elements under operations management practices in managing process, hotel managers are recommended to create standard operations process procedures. In addition, the working condition of facilities needs to be checked and hotels need to have appropriate software and equipment to help manage the quality of the service provided to customers.

As for any organization's success, customer feedback needs to be taken into consideration as appropriate responses to it positively affect the overall customers' perceived value and satisfaction of the service provided. Hotel managers should ask their customers to evaluate the service quality provided by

hotels to be aware if the service is meeting the customers' expectations, or not. Hotels also need to provide an e-mail or a suggestion box for their customers where their suggestions can be taken into consideration to develop and improve the service. All of these practices are proven to have a significant effect on customers' satisfaction as well as the hotels performance in a competitive market. In addition, managers should be aware that overall customers' satisfaction mediates the relationship between their practices and performance. In other words, managerial practices on managing employees, operational processes and customer feedback do affect performance both directly and indirectly through overall customer satisfaction.

It is also important to know that some customers' characteristics, such as gender and purpose of stay, do affect some of the interrelationships between operations management practices, customers' perceptions of service quality and performance. This understanding will help managers in marketing segmentation or in planning management practices according to their targeted customers.

To sum up, one of the key managerial implication of this research is that when evaluating the quality of service provided in hotels, service quality dimensions should include in-consumption emotions and technological tangibility. As the research has filled the gap of testing the effect of in-consumption emotion on the overall customer satisfaction. In terms of tangibility, factor analyses has proved that it should be divided into: technological and non-technological. So, managers should take into consideration both when evaluating the service quality provided. The results proved that the higher customers' satisfaction with employees' attitude/behaviour, price fairness, technological tangibility and non-technological tangibility the higher in the overall customer satisfaction. In addition, the more frequently positive in-consumption emotions and the less frequently negative in-consumption emotion occur during the service process, the higher is the overall customer satisfaction. Thus, the higher is the overall customer satisfaction the better is the performance.

In terms of operations management practices, the factor results have divided the practices into three dimensions: employees, process and customer

feedback and all have been proved to have significant effects on overall customer satisfaction and performance. Accordingly, managers should establish practices introduced in this research to enhance the overall customer satisfaction and performance. The results that the more practices are established and performed by managers the higher is the overall customer satisfaction and the higher is performance. In conclusion, training managers with the interrelationships between service quality dimensions and operations management practices would create more satisfied customers and better performance.

8.2.2 Theoretical Implications and Filling Research Gaps

This study has contributed to the current available literature in many aspects. The relationships between dimensions of perceived service quality of service provided by hotels and operations management practices and performance have been empirically validated through a multivariate data analysis.

In terms of service quality dimensions this study has mainly highlighted three aspects of service quality: employee attitude/behaviour, tangibility and in-consumption emotions. Tangibility was divided into two constructs: technological and non-technological and emotions into positive and negative. All the constructs have exceeded the minimum level of reliability and the full model provided an acceptable measurement of scale in terms of its reliability and validity. As was discussed earlier in Chapter 2, previous studies have not provided a single unified model that can be used to evaluate service quality for hotels and its dimensions. Different studies have provided different dimensions depending on the context of the application. In spite of using more or less the same attributes for evaluation, different dimensions or constructs are resulted empirically through factor analysis.

This study has added to knowledge by filling the gaps highlighted in the literature discussed in Chapters 2 and 3.

GAP 1: Including technological tangibility as a construct and studying its effect on the overall customer satisfaction of service quality. A study introduced

the dimension through a qualitative study but suggested the construct without any empirical proof. This research has added to the knowledge that technological tangibility needs to be considered as a construct for quality dimension where the construct had a high reliability. Technological tangibility has also been proved to have a significant effect on the overall customer satisfaction of service quality.

GAP 2: The study of in-consumption emotion and its effect on the overall customer satisfaction of service quality. The available literatures have highlighted the importance of including emotions in the service satisfaction model. Most previous studies have measured the emotion as it occurs at the end of the service process. This research has measured in-consumption emotion in terms of its frequency of occurrence during the service process. The constructs have been confirmed with a high reliability and were validated in the scale of the measurement model. In addition, the structural equation model has proved the significance of the path of the effect of in-consumption emotions on overall customer satisfaction. In-consumption positive emotions have been proved to have a positive effect whereas in-consumption negative emotions have a negative effect on overall customer satisfaction.

GAP 3: Linking operations management practices to the overall customer satisfaction of service quality. There is a rich literature about human resource management practices and their effect on service quality. However, there are a limited number of studies on other management practices and their effect on service quality, especially in the hotel industry. This study has contributed to knowledge by introducing three dimensions of management practices in hotels: managing employees, managing processes and customer feedback. The entire developed construct has a validated measurement with high reliability. Path analysis through structural equation modelling has proved the significant effects of operations management practices on the overall customer satisfaction and so on performance.

GAP 4: The moderating effects of customer characteristics on the interrelationships between quality dimensions, operations management practices and overall customer satisfaction and performance: This research has found that

not all customer characteristics can be considered as moderators for all the available relationships. Of the moderations proved, most were in the relationships between employee attitude/behaviour and tangibility and overall customer satisfaction. These findings of the research have enriched the literature available on this subject in the context of the hotel industry.

GAP 5: In relation to filling gap 3 identified by this research of linking operations management practices to overall customer satisfaction, it was essential to test the mediating role of overall customer satisfaction on the relationship between operations management practices and performance. This research has added to the available literature in terms of proving the indirect effect of operations management practices on performance. This finding in particular will open new directions for future research in the hotel industry in particular and in the service industry as a whole.

Beside the gaps filled in the literature, this research has provided a different way of empirically testing the research model. It was highlighted previously in the literature review in Chapter 2 that previous studies when linking managerial practices to customer satisfaction, measured customer satisfaction in terms of managerial perception. This study has measured it in terms of the customer's perception. All of this contributes to the available literature on customer service as a whole, and in hotels in particular, opening a new direction for future research. This study has also contributed to practice as the study was applied in Oman, which will be discussed in the next section.

8.2.3 The Omani Context and Filling the Practical Gap

Recalling the literature on the Omani hotel industry, this research has contributed considering both the customers' perception of service quality provided by hotels and management practices in those hotels. So far as this researcher knows, there has been no published paper on the service quality of hotels in Oman as most published studies are on customer service in banks and the health industries. There has been study on tourism in Oman as a whole. So

this study enriches the Omani context in terms of the service quality in the hospitality industry and in particular the hotel sector.

In terms of management practices, there are also limited studies on Oman as a whole and on the service industry in particular which is discussed in Chapter 3. Most of the published work on Oman is about human resource management, yet this published work has not considered the hotel industry.

Besides adding to the knowledge of operations management practices in Oman and its effect on customer satisfaction and the performance of hotels, this study would be for the benefit of the government. As it was discussed earlier in Chapter 3, the Ministry of Tourism in Oman does concern itself about the quality of service provided in hotels and has established a department to check, control and develop the service quality of the hotel industry. The service quality of hotels is checked by the ministry; however, there is no clear method to do so as a suitable method is still under development. Currently, the method uses both announced visits of inspection for hotels and the mystery guest approach. So, the conceptualized model of this research might be used as a base to build a model that can be used by the ministry to evaluate the service quality of hotels through customers' perceptions.

GAP 6: Conducting the research in Oman has helped in filling the gap by contributing to the literature on the service industry in the Omani context. In general, most of the previously available studies are on the health and banking industries, with a few studies on education. In addition, the findings of this research contribute to the hotel industry in Oman as there are no other publications in this context, in spite of its importance and contribution to the country's economic future growth and development.

8.3 Limitations and Direction for Future Research

Despite the significance of the contributions made by this research, there are some limitations that need to be addressed. Those limitations provide several research opportunities and investigative opportunities for future research.

Timing of Data Collection: A longitudinal study might be better to understand the relationships between operations management practices and customer satisfaction as there is a delay between practices being implemented and their effect on satisfaction and performance. In this research, data of both customers' and managers' survey have been collected at the same time. It is recommended in future to avoid such a limitation if possible.

Operations Management Practices: this research has taken into consideration operation management practices of managing employees, managing process and customer feedback only. Other management practices (e.g. sustainability, accounting and information system practices) could be taken into consideration as they may affect customers' satisfaction and performance as well. Including other such management practices will enrich the knowledge of practices that affect both overall customer satisfaction and performance. In fact, in the literature there are criticisms of the list of management practices that need to be considered to achieve the customer satisfaction and for better performance. So, the result of this research has only tested a limited number of management practices where in fact other practices may also affect the overall customer satisfaction and performance as well. So the findings of this research have been limited only to the three dimensions considered under operations management practices. This limitation could be considered in future.

Employees' Perceptions Exclusion: this research has taken into consideration customers' perceptions and managers' perceptions only, which has limited the findings. Future studies can also include the employees' perception of the service quality provided in the hotel and link it with the customers' perception, since employees are an important stakeholder for hotels. This limitation should be noted as employees' perceptions also are an important, as employees play an important role in service quality. In fact, service quality relies more on employees' attitude and behaviour as employees interact with customers. Accordingly, employees may be more knowledgeable with customers' needs and what affects overall customer satisfaction, which in turn affects performance. Moreover, employees may be asked about management practices implemented in the hotel. As a recommendation, future studies on service quality in hotels should take

employees into consideration when evaluating the factors affecting overall customer satisfaction and performance.

__Data Collection Procedure:__ Recalling the data collection procedure, most of the respondent customers were international tourists travelling through air aviation. As a result, there was not many domestic customers participating in the data collection. In addition, most of customers from gulf countries travel to Oman by land routes and not by air. Although some hotels were targeted to collect data from customers after their check out to include domestic tourists and tourists from Gulf countries, only a limited number has been included in data collection. This limitation should be considered in future as data collection may also take place in the board security check. Yet, this is not that easy as many travellers by road do not necessarily spend the night in a hotel as they return the same day. So, the findings of this research may more presenting international tourists who visit the country through aviation and not local customers. As a result, perceptions of the two different customers may differ.

Another limitation that may be considered is the selection of only one management person from each hotel. This has limited the evaluation of operations management practices and performance from one respondent only per hotel. This limitation could not be avoided in this research as it has taken into consideration the hotel industry as a whole where it includes small hotels that have only one manager. However, it is important to highlight this limitation so it can be avoided in future research where possible.

__Performance Measurement:__ Two other limitations that should be highlighted relate to the measurement of performance. In this research, performance has been measured through managers' perceptions and not financial reports. Accordingly, the measurement is considered to be subjective. The reason is that the researcher could not get access to objective performance measures as they considered being confidential.

The second limitation under performance measurement is that in the survey managers were asked about their perceptions of their hotels' performance in terms of its profitability, sales growth, achieving target and stakeholders' satisfaction.

That has limited the findings to test the effect of overall customer satisfaction and operations management practices to performance. Performance in relation to competitors has not been tested. Performance in relation to competitors is important to be considered in future research as it is essential for hotels to operate in the competitive market. What concerns businesses is not only the knowledge of what affects profit, sales and quality, knowledge of how they affect competitors and gain advantage in the market is also important. Such knowledge may provide better decision making in managing service quality.

It is recommended for researchers in the future to include objective measurement of performance. That will lead to more objectivity in the findings. In addition, the limitation of including measurement of performance in terms of competitors should be considered in future. That will add value to results and managerial implications of research outcomes.

Hotel Industry Selection: The developed conceptualized model of this research has been tested for the hotel industry only. So, mediating the role of overall customer satisfaction can also be tested in other service contexts where further evidence needs to be provided, as the mediation test was one of the gaps filled by this research and has been tested previously in the literature. Moreover, the inclusion of technological tangibility and in-consumption emotions dimensions also need to be tested in other service industry contexts for further empirical evidence. So, the finding of this research is limited to hotel industry. Accordingly, taking into consideration the mediation test as well as the two new dimensions will open a new direction for future research in service industries as a whole.

Oman Selection: This research has been applied in Oman only, which is one of the Gulf countries, so similar studies could be applied in other countries in other parts of the world.

8.4 Research Conclusions

Considering the limited empirical studies available linking operations management practices, customers' perception of service quality and the performance of hotels, this study has contributed significantly to the available literature on the hotel industry. The findings of the research have contributed to both theory and practice in this industry. Most of the developed hypotheses and their relationships have been proved empirically using advanced statistical analysis.

From the customers' perspective, the service quality model needs to consider tangibility, employees' behaviour and customer emotions as they all affect the overall customer satisfaction of the service quality provided by hotels. The demands made by customers on the technology provided by hotels also need to be taken into consideration when measuring service quality. From the managements' perspective, management practices need to be taken into consideration as they also affect customer perceptions of service quality. Managers of service quality need to develop practices which help in managing employees and service processes. In addition, management needs to ask their customers to evaluate the service quality of the hotel and also provide suggestions for maintaining and improving quality. Overall, considering the dimensions of service quality from the customers' perspective and developing appropriate management practices do affect the performance of the hotel both directly and indirectly through overall customer satisfaction with the particular hotel and help in gaining standing in the competitive market.

Finally, the findings of this research may be of interest to hotel management teams who are planning and developing strategies for better service quality that meets customer expectations and leads to success in business performance. In addition, the findings may be useful to the Omani government for their development plan in encouraging tourism for economic diversification. Future investors in the hotel industry may also use the findings of this research.

8.5 Conclusion

This chapter has discussed the implications of the findings of this research. Managerial and theoretical implications have been discussed and how this study has contributed to knowledge and practice in the hotel industry. Discussions of how research gaps were filled have also been highlighted. Then, the Omani context was discussed and how this study has enriched that context.

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Appendices

Appendix A: Customers' Survey

This questionnaire has been developed for evaluating service quality of the hotel you stayed in Oman

IF YOU STAYED IN MORE THAN ONE HOTEL, PLEASE SELECT <u>ONE AND ONLY ONE FOR EVALUATION</u>

Part 1: Personal Information

Nationality: _____

Gender: a. Female   b. Male

Age: a. 25 years or less   b. 26-35 years   c. 36-45 years   d. 46-55 years   e. 56 years or more

Education degree: a. School   b. Diploma   c. Bachelor's Degree   c. Master's and above

Part 2: Visit Information

Name of hotel: _____   **City/Location:** _____

Duration of stay: a. ____ days   b. From: --- / --- / ---   To: --- / --- / ---

Purpose of visit: a. Business   b. Leisure   c. Business and leisure   d. Other: _____

My visit was: a. Individual   b. Family   c. Group

This is my first visit to Oman: a. Yes   b. No

I stayed in more than one hotel: a. Yes   b. No

Appendix A: Customers' survey

Part 3: The following set of statements relate to your evaluation about the service quality of the hotel you stayed in Oman. **IF YOU STAYED IN MORE THAN ONE HOTEL USE ONE AND ONLY ONE FOR EVALUATION.** For each statement, please show the extent of your feelings 1 "strongly disagree" to 5 "strongly agree" and "N/A" if the statement is not applicable. You may put a cross '×' any of the numbers in the middle that show how strong your feelings are. There are no right or wrong answers, all we are interested in is a number that best reflects your perceptions about the hotel you stayed in.

		Strongly Disagree		Neutral		Strongly Agree	N/A
		1	2	3	4	5	
1	When employees at the hotel promised to do something by a certain time, they did.						
2	When employees at the hotel promised to do something in a certain way, they did.						
3	Employees were able to provide the service right the first time.						
4	Employees introduced available hotel services and equipment to me.						
5	Employees informed me of promotional programs of the hotel.						
6	Employees paid attention to my requirements as much as possible.						
7	Employees' behaviour was satisfactory during my stay.						
8	Employees acted friendly and treated me nicely.						
9	Employees were willing to solve my problems.						
10	Employees solved problems adequately and quickly.						

Appendix A: Customers' survey

		Strongly Disagree		Neutral		Strongly Agree	N/A
		1	2	3	4	5	
11	Employees provided a personalized service.						
13	Employees always made me their first priority.						
14	Employees were concerned about my safety and privacy.						
15	Employees were trustworthy.						
16	Employees took adequate care of me.						
17	Employees were available all time.						
18	Employees had good communication skills.						
19	Employees were able to tell me when a service was going to be provided.						
20	Employees answered my questions and queries.						
21	In general, the price I paid for my stay in hotel was fair .						
22	Price of hotel facilities (gym, laundry, ironing, shoe-shinning, child care etc.) was fair.						

Appendix A: Customers' survey

		Strongly Disagree		Neutral		Strongly Agree	N/A
		1	2	3	4	5	
23	Price of food and beverages was fair.						
24	The price satisfactorily reflected the value of service provided in hotel.						
25	In comparison to the quality of room furniture, the price was satisfactory.						
26	Technology (internet, telephone calls etc.) prices were satisfactory.						
27	Hotel furniture was modern.						
28	Hotel furniture was comfortable.						
29	Furniture was in good condition.						
30	The hotel had an appealing décor.						
31	The room was spacious.						
32	Bathroom/toilets were hygienic.						
33	The room was clean.						
34	The hotel was clean.						
35	The hotel's location was convenient.						

Appendix A: Customers' survey

	Strongly Disagree		Neutral		Strongly Agree	N/A
	1	2	3	4	5	
36	Hotel facilities (swimming pool, gym etc.) were functioning well.					
37	Food and beverages were good.					
38	Adequate business facilities (fax, meeting room etc.) were available in the hotel.					
39	The hotel was secured and safe.					
40	The hotel was quiet.					
41	The hotel employees had a smart appearance.					
42	Internet facilities in the hotel were convenient.					
43	Telephone facilities were satisfactory.					
44	Television facilities were satisfactory.					
45	Plug availability was satisfactory.					
46	The hotel wake-up system was satisfactory and reliable.					
47	International calling facilities were satisfactory.					

Appendix A: Customers' survey

#	Statement	Strongly Disagree 1	2	Neutral 3	4	Strongly Agree 5	N/A
48	The available facilities and devices were in good condition and working properly.						
49	The hotel had adequate facilities for processing transactions, including credit/debit cards.						
50	The hotel responded to my e-mail/fax reservations quickly.						
51	The hotel responded to my e-mail/fax satisfactorily.						
52	In general I was satisfied with the service of the hotel.						
53	I am willing to stay in the same hotel in future.						
54	I will recommend this hotel to my friends.						
55	I will say positive things about the hotel to other people.						
56	Choosing this hotel was a right decision.						
57	The choice to stay in this hotel was a wise one.						

Part 4: **Feelings and Emotions**

How often did the following feeling and emotions occur **DURING** your stay in the hotel as a **RESULT** of your interaction with hotels' employees, or when using hotel facilities?

	Never				Often
	1	2	3	4	5
Happy					
Pleased/Pleasure					
Excited					
Positively surprised					
Enjoyable					
Angry					
Displeased					
Annoyed					
Unhappy					
Negatively Surprised					

Appendix B: Managers' Survey

Questionnaire: Service Quality of Hotels in the Sultanate of Oman

This questionnaire has been developed for a research to link management practices in hotels to customer satisfaction. The researcher is a PhD student at the University of Nottingham, United Kingdom. All the information provided will remain strictly confidential. Thank you for your participation.

Part 1: Personal Information

Gender: a. Female   b. Male

Age: a. 35 years or less   b. 36-45 years   c. 46-55 years   d. 56 years or more

Your Highest educational degree: a. School   b. Diploma   c. Bachelor's Degree   c. Master's and above

I have a professional qualification in hotel management: a. Yes   b. No   If yes, please specify: _____

Your Nationality: _____

Your Position "job title": _____   **Your Experience in current job:** _____ Years

Your Experience in the hotel industry: _____ Years

I have worked previously in a hotel outside Oman: a. Yes   b. No

I have worked previously in another hotel in Oman: a. Yes   b. No

Part 2: Hotel Information

Name of your hotel: _____   **City/Location:** _____   **Star Rating:** _____

Type: a. Independent hotel   b. Part of a hotel chain

Number of Rooms in your hotel: a. Less than 25   b. 25-49   c. 50-64   d. 65-99   e. 100-199   f. 200 or more

Number of employees in your hotel: a. Less than 25   b. 25-49   c. 50-64   d. 65-99   e. 100-199   f. 200 or more

Age of your hotel (years): a. 5 years or less   b.6-10   c.11-15   d. 16-20   e.21 years or more

Part 3: Performance of your hotel

Rate the performance of your hotel in the *last five years*

		Very bad				Very good
		1	2	3	4	5
1	Sales growth					
2	Productivity					
3	Profitability					
4	Achieving targets					
5	Services provided					
6	Employee satisfaction					
7	Customer satisfaction					
8	Satisfaction of other stakeholders (government, shareholders, suppliers etc.)					

Appendix B: Managers' Survey

Part 4: Read the following statements about operations management practices and select the appropriate answer using "×" marks according to its implementation in your hotel (1 = strongly disagree to 5 = strongly agree)

		Strongly Disagree				Strongly Agree
		1	2	3	4	5
1	Employees in my hotel normally go through training programs every few years.					
2	There are formal training courses to teach new employees the skills they need to perform their jobs (e.g. service methods, and fire emergency procedures, etc.).					
3	My hotel conducts systematic analysis to determine the needs for training programs.					
4	My hotel assesses the effectiveness of training programs in terms of the degree to which customer satisfaction has improved.					
5	My hotel evaluates training programs to determine whether the training objectives are met.					
6	In the selection of new employees, my hotel often uses tests (e.g. knowledge test, personality test, language tests etc.).					
7	During the hiring process in my hotel, potential employees are often provided with a realistic picture of the job and the hotel, including negative aspects.					
8	My hotel conducts structured and standardized interviews (as opposed to unstructured interviews) for selection of jobs.					
9	Promotion in my hotel is based primarily on seniority.					
10	In my hotel, employees with good performance are rewarded.					

Appendix B: Managers' Survey

		Strongly Disagree				Strongly Agree
		1	2	3	4	5
11	My hotel constantly reviews and updates the range of benefits to meet the needs of employees.					
12	Employees in my hotel could know the result of their performance appraisal result by a formal feedback system.					
13	In my hotel, performance appraisal includes the supervisor setting objectives and goals of employees for the period ahead in consultation with them.					
14	In my hotel, promotions go to people who really deserve them.					
15	My hotel uses incentives to boost employees' performance.					
16	My hotel rewards employees who care about hotel objectives.					
17	My hotel emphasizes job-relevant criteria in its appraisal systems.					
18	My hotel has quality circle teams.					
19	My hotel uses statistical quality tools to maintain and manage quality.					
20	My hotel had ISO 9001 certificate.					

		Strongly Disagree				Strongly Agree
		1	2	3	4	5
21	In my hotel, employees participate in quality meetings.					
22	My hotel holds meetings with employees when problems occur.					
23	In my hotel, managers and employees meet frequently.					
24	Majority of employees in my hotel are involved in quality circles or quality improvement teams.					
25	In my hotel, employees do participate in suggestions process.					
26	My hotel has a good communications system with employees.					
27	My hotel encourages self-managed teams.					
28	In my hotel, technology and e-mails are used to communicate with employees.					
29	In my hotel, technology and e-mails are used to communicate with other partner organizations (travel agencies, transportation etc.).					
30	In my hotel, technology and e-mails are used to communicate with customers.					

	Strongly Disagree				Strongly Agree
	1	2	3	4	5
31	In my hotel, technology is used in reservation/online booking.				
32	In my hotel, technology is used in the registration system.				
33	My hotel uses appropriate software and equipment to manage service quality.				
34	My hotel has standard operating procedures.				
35	My hotel has planned maintenance policies (e.g. frequent check for lifts, paintings, etc.).				
36	My hotel checks working conditions of equipment and devices regularly.				
37	In my hotel, Failed equipment are repaired immediately when reported.				
38	Our employees fully understand our objectives and strategies.				
39	My hotel usually keeps records of errors.				

		Strongly Disagree				Strongly Agree
		1	2	3	4	5
40	My hotel provides Internet and Wi-Fi facilities to customers					
41	My hotel provides a wake-up system for customers.					
42	My hotel provides T.V facility for customers.					
43	My hotel provides phone facility for customers.					
44	My hotel usually asks customers to evaluate our service quality.					
45	In my hotel, customers' suggestions are always taken into consideration.					
46	My hotel has a box or e-mail for customers' suggestions and recommendations.					
47	My hotel has customer loyalty programs.					
48	My hotel provides option to customers to make payments on-line.					
49	My hotel accepts debit and credit cards for payments from customers.					

Part 5: open ended questions

- Do you think that this questionnaire missed any important practice for managing service quality in your hotel? If yes, please elaborate.

- If you have worked previously outside Oman, do you think the practices here (in Oman) are different? How?

- What tools/methods do you use in your hotel to manage and control quality?

- If you were asked to change or to mention bad practices in your hotel, what would be your answer?

- Do you think Omanization has any positive/negative effects on managerial practices? How?

- Other comments:

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