

**THE ROLE OF BUSINESS PROCESS MANAGEMENT (BPM)
AS A MEDIATOR BETWEEN EMPLOYEE JOB SATISFACTION AND
CUSTOMER SATISFACTION IN THE HOSPITALITY INDUSTRY
IN HONG KONG AND MACAU**

WAI FONG KAYOTT KATHRYN HO

BA(Hons) The University of Hong Kong
MBA The University of Technology, Sydney

A dissertation submitted for
The Doctorate Degree of Business Administration

February 2013

The University of Newcastle
Australia

STATEMENT OF ORIGINALITY

This dissertation contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by any person, except where due reference has been made in the text. I give consent to this copy of my dissertation, when deposited in the University of Library being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

Signed:

Acknowledgements

I would like to express my wholehearted appreciation to my Supervisor, Professor Ananda Kumar Palaniappan, for his great support, guidance and advice during the whole period of my dissertation study. I sincerely thank him for his professional supervision.

I would like to extend my special thanks to Mr. Michael Kam for his encouragement, professionalism and continuous assistance during the preparation of my dissertation.

I wish to take this opportunity to thank Ms Andrea Kam and Ms Wendy Tsang for their sincere support and love during the tough time of my study.

Abstract

It is widely recognized that customer satisfaction is imperative to the success of an organization. Investigating the factors affecting customer satisfaction is one of the strategic objectives of business leaders. This study aims to demystify the inconsistency of previous literature on the relationship between employee job satisfaction and customer satisfaction link in the hospitality industry. More recent research shows that Business Process Management (BPM) is the main driver for customer satisfaction; and the relationship of employee job satisfaction, technical service quality – a business process, and customer satisfaction. However, the inter-relationship of the three important variables – employee job satisfaction, BPM and customer satisfaction – in the same setting is unexplored. Investigating this unexplored gap is worthwhile as BPM may be a mediator in the employee-customer satisfaction link. Hospitality is a growing and important industry, which makes it appropriate for this study. Data was collected from 188 employees and 189 customers from nine hotels in Hong Kong and Macau to test the hypotheses in a thriving industry. Exploratory factor analysis followed by confirmatory factor analysis indicated two factors in employee satisfaction, one factor in BPM, and three factors in customer satisfaction. Findings showed that there is a positive relationship between employee job satisfaction and customer satisfaction, and that BPM is a significant mediator between these two variables from Structural Equation Modelling (SEM) – path analysis, as well as from regression analysis. Moreover, the results also highlight the effect of climate and culture of an organization in creating a homogenous effect of employee job satisfaction amongst all

employee groups with different levels of customer contact intensity. The empirical results of this study support the conceptual framework of BPM as a mediator between employee job satisfaction and customer satisfaction, which helps future research in BPM.

Table of Content

	Page
Title of Dissertation	i
Statement of Originality	ii
Acknowledgements	iii
Abstract	iv
Table of Content	vi
List of Tables	xi
List of Figures	xvi
List of Appendices	xviii

		Page
Chapter 1	INTRODUCTION	
1.1	Background	1
1.2	Purpose of the study	11
1.3	Significance of the study	11
1.4	Structure of the thesis	11
Chapter 2	LITERATURE REVIEW	
2.1	Impact of customer satisfaction on financial performance	13
2.2	Relationship between employee job satisfaction and customer satisfaction	17
2.3	Relationship among employee job satisfaction, Business Process Management (BPM) and customer satisfaction	27

	2.4	Summary	39
	2.5	Theoretical framework	45
	2.6	Hypotheses	50
Chapter 3	RESEARCH METHODS		
	3.1	Measurement of constructs	51
	3.2	Research methodology	54
	3.3	Sample	54
	3.4	Instrument	57
	3.5	Data collection	64
	3.6	Data analysis	66
	3.7	Pilot study	68
	3.8	Summary	70

Chapter 4	ANALYSIS AND RESULTS	
4.1	Introduction	71
4.2	Findings and analysis	77
4.2.1	Exploratory factor analysis of employee and customer questionnaires	82
4.2.2	Confirmatory factor analysis of employment contexts	91
4.2.3	Confirmatory factor analysis of customer questionnaire	93
4.2.4	Path analysis to explore the mediating role of BPM between job satisfaction and customer satisfaction	106
4.2.5	Path analysis of relationships among employee job satisfaction, BPM, and customer satisfaction	109

4.2.6	Regression analysis of customer satisfaction variables	111
4.3	Discussion	120
4.4	Implications for management	128
4.5	Implications for research	136
4.6	Limitations of the study and recommendations for future research	137
Chapter 5	CONCLUSION	139
	REFERENCES	148
	APPENDICES	169

List of Tables

		page
Table 3.1	Means, Standard Deviations, Reliabilities and Correlation among Variables of Employee questionnaire – Pilot study	69
Table 3.2	Means, Standard Deviations, Reliabilities and Correlation among Variables of Customer questionnaire – Pilot study	69
Table 3.3	Means, Standard Deviations, Reliabilities and Correlation among Variables of BPM – Pilot Study	70
Table 4.1	Descriptive Statistics of items in the Employee Questionnaire	73
Table 4.2	Descriptive Statistics of items in the Customer Questionnaire	76

Table 4.3	ANOVA of Employees with Different Degree of Customer Contact Intensity	80
Table 4.4	KMO and Bartlett's Test of items in the Employee Questionnaire	83
Table 4.5	The Scree-plot of the Factor Analysis of items in the Employee Questionnaire	83
Table 4.6	Factor grouping of items measuring Employee Job Satisfaction (Varimax Rotated)	84
Table 4.7	KMO and Bartlett's Test of items in the BPM	85
Table 4.8	Factor grouping of items measuring Business Process Management	86
Table 4.9	KMO and Bartlett's Test of items in the Customer Questionnaire	87
Table 4.10	The Scree-plot of the Factor Analysis of items in the Customer Questionnaire	88

Table 4.11	Factor grouping of items Measuring Customer Satisfaction (Varimax Rotated)	89
Table 4.12	Goodness of fit indices for CFA of 5 dimensions of employment contexts with 16 items	92
Table 4.13	Goodness of fit indices for second-order CFA of 5 dimensions of employment contexts with 16 items	93
Table 4.14	Goodness of fit indices for CFA of 3 factors of customer questionnaire with 21 items	94
Table 4.15	Correlation between Employee Job Satisfaction and Customer Satisfaction (all employee groups)	100
Table 4.16	Regression Analysis of Employee Job Satisfaction and Customer Satisfaction	102

Table 4.17	Correlations between Employee Job satisfaction and Customer Satisfaction (by different groups of employees with different degrees of customer contact intensity)	105
Table 4.18	Parameters and fit indices of structural models on mediating effect of BPM	107
Table 4.19	Parameters and fit indices of structural model (Full model)	111
Table 4.20	Hierarchical Regression Analysis for Effects of Overall Job Satisfaction and BPM on Overall Customer Satisfaction (all employee groups)	114
Table 4.21a	Hierarchical Regression Analysis for Effects of Overall Job Satisfaction and BPM on Overall Customer Satisfaction (by employee groups with different degrees of customer contact intensity)	116

Table 4.21b	Hierarchical Regression Analysis for Effects of Team Climate & Superiors and BPM on Overall Customer Satisfaction (by employee groups with different degrees of customer contact intensity)	117
Table 4.21c	Hierarchical Regression Analysis for Effects of Overall Job Satisfaction and BPM on Service Quality (by employee groups with different degrees of customer contact intensity)	118
Table 4.21d	Hierarchical Regression Analysis for Effects of Team Climate & Superiors and BPM on Service Quality (by employee groups with different degrees of customer contact intensity)	119

List of Figures

		Page
Figure 2.1	Graphical Representation of Best Fit Structural Equation Modelling (Kumar et al., 2008, p.182)	39
Figure 2.2	Conceptual Framework of BPM as a Mediator Between Employee Job Satisfaction and Customer Satisfaction (Source: Designed for this study)	48
Figure 2.3	Proposed Model of BPM as a Mediator Between Employee Job Satisfaction and Customer Satisfaction (Source: Designed for this study)	49
Figure 4.1	Path diagram for second-order Confirmatory factor analysis of employment contexts	92
Figure 4.2	SEM results for the direct and mediating effects between job satisfaction and customer satisfaction	106

Figure 4.3	Structural Model of Employee Job Satisfaction (all employee groups), BPM and Customer Satisfaction (Full model)	110
Figure 4.4	The nature of mediator variables	112

List of Appendices

	Page
Appendix1a	Questionnaire for employees 169
Appendix 1b	Information statement for employee questionnaire 171
Appendix 1c	Questionnaire for employees (Chinese version) 173
Appendix 1d	Information statement for employee questionnaire (Chinese version) 175
Appendix 2a	Questionnaire for customers 177
Appendix 2b	Information statement for customer questionnaire 179
Appendix 2c	Questionnaire for customers (Chinese version) 181
Appendix 2d	Information statement for customer questionnaire (Chinese version) 183
Appendix 3a	Invitation letter to the Head of Human Resources 185
Appendix 3b	Invitation letter to the Head of Human Resources (Chinese version) 188

Chapter 1 INTRODUCTION

1.1 Background

In an era of fierce competition for all businesses, customer satisfaction is recognized as a key driver of competitive advantage. This is because customer satisfaction plays a very significant role in the financial performance of an organization. Customer satisfaction is critical to organizations, as highlighted in a classic study of Kotler (1991, p.19) in which he said that “high customer satisfaction ratings are widely believed to be the best indicator of a company’s future profits”. The positive effect of customer satisfaction on the financial performance of organizations is also supported by many other researchers, such as Dotson & Allenby (2010), Gupta & Zeithaml (2006), and Yeung & Ennew (2000). As early as in the 1970s, customer satisfaction has extensively drawn the attention of many researchers. Most of the studies investigate either the antecedents or the consequences of customer satisfaction. The notable service-profit chain suggested by Heskett, Jones, Loveman, Sasser & Schlesinger (1994, 2008) highlights both the antecedents and consequences of customer satisfaction. The chain indicates the positive link effect of customer loyalty and satisfaction on profitability, and the impact of employee job satisfaction as a driver for customer satisfaction.

Given the prominent role of customer satisfaction, this research aims to advance the understanding of customer satisfaction, with a focus on examining the linkage between employee job satisfaction and customer satisfaction. In general, there are two approaches to customer satisfaction, namely, the confirmation/ disconfirmation

approach (Kotler, 1991) and the cumulative perception of service (Churchill & Surprenant, 1982). When examining the correlation between employee job satisfaction and customer satisfaction, the emotional contagion theory (Hatfield, Cacioppo & Rapson, 1993) based on the confirmation/ disconfirmation approach or the cumulative perception of service is extensively adopted. The emotional contagion theory is used for studying the linkage between employee job satisfaction and customer satisfaction because human interaction is involved in the delivery of service, and human emotion is the element that can influence one another. The studies of Homburg & Stock (2004, 2005) are examples that apply the theory. The service-profit chain of Heskett et al. (1994, 2008) is a typical research adopting the emotional contagion theory and the cumulative perception of service concept to explain the relationship between employee job satisfaction and customer satisfaction. The explanation is that 'if employees like their job, there will be a high job satisfaction, then they will like and enjoy interacting with customers, creating a high customer satisfaction'. Thus, customer satisfaction is mirrored by employee satisfaction.

Service industry has become increasingly important in last two decades. Nowadays, even when people purchase products, they expect a high level of pre-purchase and post-purchase services. Iacobucci, Grayson & Ostrom (1994) and Reichheld & Sasser (1990) point out that the 1990s had emerged as the era of customer satisfaction in service industries. Gronroos (1988) highlights that service is a complex phenomenon, and is characterized by being produced and consumed simultaneously, and the customer participates in the production process to some extent. Thus, service involves frequent contact between employee and customer during the service

delivery. Accordingly, employee-customer satisfaction interaction draws much of the attention of researchers in the literature of employee job satisfaction and customer satisfaction.

This research examines the link between employee job satisfaction and customer satisfaction in a typical service sector, the hospitality industry, which is a service and people-oriented business involving a high degree of customer contact. Hostage (1975) highlights that the management of the Marriott hotel chain believe they cannot make guests happy with unhappy employees. The belief that satisfied employees will create satisfied customers is extensively accepted in the service industry. This represents a widely recognized belief of the correlation of 'emotional satisfaction' between employees and customers.

Despite extensive research examining the linkage between employee and customer satisfaction, only a limited number of studies on the hospitality industry have been done. The only studies identified are Chi & Gursoy (2009), Fisher, McPhail & Menghetti (2009), Spinelli & Canavos (2000), Bitner, Booms & Tetreault (1990). Moreover, the results are mixed. The findings reported by Chi & Gursoy (2009), Spinelli & Canavos (2000) and Bitner et al. (1990) show that there is a positive relationship between employee job satisfaction and customer satisfaction. However, the study (Fisher et al., 2009, p.6) reported that "Surprisingly, and contrary to the findings of Bitner (1990) and Spinelli & Canavos (2000), job satisfaction is not significantly associated with guest satisfaction". The work of Fisher et al. (2009) was researched in Mexico and China, which are emerging developing countries, while the other research studies were done in the US, which is a well-developed country. The

inconsistent results may be due to the differences between the hospitality industry in developing and well developed countries. Hong Kong and Macau are developed metropolitan cities, and ten hotels (including one hotel for pilot study) are covered in this study to clarify the relationship between employee job satisfaction and customer satisfaction.

The emotional contagion theory has been widely adopted to investigate the employee-customer satisfaction link. Applying this theory, the emotional feeling of employees resulting from their level of job satisfaction affects the emotional perception of customers, hence impacting customer satisfaction. This employee job satisfaction and customer satisfaction linkage is further extended by other researchers recognizing the significance of service climate. When a good service climate exists in an organization, it creates a homogeneous effect on all employees. The study of Wangenheim, Evanschitzky, & Wunderlich (2007) adopts the service climate concept in the attraction-selection (ASA) model to demonstrate that the service climate influences the attitude of service for employees of the whole organization. The findings illustrate that there is a positive relationship between employee job satisfaction and customer satisfaction, not only for employees with high customer contact, but also for those employees with minimal or even no customer contact.

The study of Wangenheim et al. (2007) in the retail industry is a research investigating the employee-customer satisfaction linkage for different groups of employees with different levels of customer interaction intensity. It suggests that further research should be tested in other industries. The hospitality industry is a people-intensive

business that consists of employees with a wide spectrum of customer interaction intensity. It is an appropriate industry for this study to examine if the employee-customer satisfaction link exists in the hospitality industry, and whether the linkage exists in all employee groups, covering the highest customer contact employees, and those with minimal or no customer contact in the hospitality industry.

While there are substantial studies supporting the impact of employee job satisfaction on customer satisfaction, there are researchers that investigate customer satisfaction from other perspectives, by indicating that service quality is the main driver for customer satisfaction. The growing importance of service in the mid 1980s began to attract the attention of researchers. The service quality model (Gronroos, 1984) suggests that service quality consists of evaluation on the outcome (technical quality) and evaluation on the process (functional quality). Functional service quality is very important and sometimes more important than the technical service. Gronroos (1998) further states that consumption of service is characterized as process consumption while consumption of products is regarded as outcome consumption. The study of Gronroos (1984, 1998) adds to the literature by analysing service quality in terms of functional and technical quality.

Parasuraman, Zeithaml & Berry (1985, 1988, 1991) highlight the characteristics of services are intangibility, heterogeneity and inseparability. Based on the confirmation/ disconfirmation theory, Parasuraman et al. (1985, 1988, 1991) developed a set of tools, the SERVQUAL, for measuring service quality. There are ten items for measurement in the model, namely, reliability, responsiveness,

competence, access, courtesy, communication, credibility, security, understanding/ knowing and tangibles. These items are classified into five dimensions: reliability, responsiveness, assurance, empathy and tangible elements. The assessment items in the tool developed by Parasuraman et al. (1985, 1988, 1991) emphasizes evaluation on the service consumption process between employees and customers which is regarded by Gronoos (1984, 1998) as functional quality.

For service industry, customer evaluation on the functional service quality is imperative as it involves the process of service delivery. Because of the characteristic of interaction of employees and customers during the process of delivery/ production in the 'factory' for service industry, many researchers, such as Parasuraman et al. (1985, 1988, 1991) and Gronoos (1984, 1998), give priority to functional service quality in influencing service quality. Functional service quality puts focus on the process of service delivery. For service activities, the delivery process is primarily the interaction between employees and customers, in impacting customer satisfaction. In examining the differences between product and service organizations, the study of Nilsson, Johnson & Gustafsson (2001) reports the focus is the outcome (technical quality) for the product industry, while the emphasis is the process (functional quality) for the service industry. The findings of Nilsson et al. (2001) echo Gronoos (1984, 1998) in giving priority to functional quality in influencing customer satisfaction for the service industry. The focus of functional quality on the process interaction between employees and customers during service delivery is consistent with the employee-customer satisfaction link examined by other researchers (such as Heskett et al, 1994, 2008; Pugh, 2001; Barger et al., 2006; Söderlund & Rosengren, 2004, 2008).

It is widely believed that, particularly for the service sector, functional quality (emphasizing the interaction process between employees and customers) is the driver affecting customer satisfaction. Nevertheless, in recent years, other researchers (such as Dabholkar & Overby, 2005) have indicated that Business Process Management (BPM) plays a key role in driving customer satisfaction. Applying the service model of Gronroos (1984, 1998), priority is given to functional service quality for SERVQUAL, whereas emphasis is given to technical service quality as a manifestation of BPM in driving customer satisfaction. Findings from the research study of Kumar, Smart, Maddern & Maull (2008), and Maddern, Maull & Smart (2007) show that BPM is the driver impacting customer satisfaction. The results suggest that focus should be put on BPM, which will impact technical service quality rather than just paying attention to functional service quality.

Literature has emerged since the 1990s on the definition of BPM. In general, BPM is characterized as a systematic, structural approach to improve, control and manage processes with a view to monitor the quality of products/ services. Documentation of processes/ procedures, measurement and continuous improvements are also highlighted by researchers as the main features of BPM as well. Moreover, the significance of the cross-functional nature perspective and holistic approach of process management are also highlighted by researchers. BPM has to be well-coordinated, with distinct process ownership and support from management of organizations. Smart, Maddern & Maull (2009) summarize that there are five components of BPM, namely, process strategy, process architecture, process measurement, process ownership and process improvement.

In an early research that highlighted the essential role of BPM, Elzinga, Horak, Lee & Bruner (1995, p.127) state that BPM is imperative to the manufacturing of products, and that it was equally important to apply BPM to services industries, which involve 'soft processes'. Business process is a series of inter-related activities that cross functional boundaries with activities within individual units (Llewellyn & Armistead, 2000). Thus, BPM is applicable to services industries with soft processes to achieve a high service quality, and hence customer satisfaction.

The significance of BPM on customer satisfaction and business is recognized by more researchers since the late 1990s and continued to attract attention in the 2000s. This became an important development in analyzing customer satisfaction, challenging the sole dominance of customer contact and interaction satisfaction in driving customer satisfaction. The research findings of Nilsson et al. (2001) began to show that, in service organizations where production and consumption happen simultaneously and customers are the co-producer, both process orientation and customer orientation (functional service quality and technical service quality) are essential in impacting customer satisfaction and hence profitability.

The importance of technical service quality in influencing the relationship between employee job satisfaction and customer satisfaction is also discussed in the research of Söderlund & Rosengren (2010). This study highlights the importance of technical service quality, which can be conceptualized as business process similar to BPM suggested by Elzinga et al. (1995) and Grover et al. (2000), in influencing the relationship between employee job satisfaction and customer satisfaction. These research studies provide a lot of leeway in thinking the possible role of BPM in linking

employee job satisfaction and customer satisfaction.

According to the service climate and culture concept, a homogeneous effect covering all employees will be created if there is a climate and culture in an organization. Applying the concept of service climate in the ASA model, the research of Wangenheim et al. (2007) illustrates that the employee-customer satisfaction link holds for all groups of employees with different intensity of customer contact. The spectrum of employees covers those with the highest customer contact frequency to employees with minimal and no customer contact. Applying the climate and culture approach, Zairi (1997) highlights the importance of the BPM culture in the organization for the success of BPM. However, there is no empirical evidence to support this concept. It is unknown whether BPM produces an intervening effect to the employee-customer satisfaction link not only for high customer contact employees, but also for employees with minimal or no customer contact. It is worth applying the climate and culture concept to examine whether the BPM culture has a homogenous effect in an organization.

The hotel industry is used for this research as hotels provide an appropriate environment with ample employee-customer contacts to test the hypotheses. Hong Kong and Macau are two regions for this study. Hong Kong is regarded as the “Pearl of Orient” with a very high level of tourism and financial activities. Macau is regarded as the ‘Las Vegas of the East’, and the casino-hotel business has been blossoming in the past decade, particularly after 2002 when the casino business was deregulated. The hypotheses of this research study will be tested by the data collected from randomly selected samples, consisting of both employees and

customers, selected from ten hotels in Hong Kong and Macau. The thriving hotel industry in Hong Kong and Macau is expected to continue to grow in the coming years. The findings of this study will not only contribute significantly to the hotel practitioners, but also give insights or act as a demonstration case to other service industries as well.

Customers are essential to the business and financial performance in the hospitality industry. This is because customer satisfaction affects customer intention of repurchase, hence impacting the financial performance and profits of an organization. Applying the service-profit chain framework in the hospitality industry, the research findings of Chi & Gursoy (2009) indicate the positive relationship between employee job satisfaction and customer satisfaction, and hence impacting the financial performance. The main objective of this research study is to investigate the role of BPM between employee job satisfaction and customer satisfaction. The results will contribute to the existing literature by providing a clearer explanation on the employee-customer satisfaction relationship. Hospitality is a customer contact oriented industry with abundant employees with different intensities of customer contact, providing a suitable environment for testing the hypotheses of this research. The findings will also provide insights to hospitality managers who are facing the challenges of intangibility, inseparability, and employee-customer co-production process characteristics of the industry. This is the background under which the hospitality industry is selected to examine the role of BPM in the employee-customer link.

1.2 Purpose of the study

To summarize, in light of the above discussion, the objective of this research is to contribute to the literature of employee job satisfaction and customer satisfaction, which are two important variables researchers in human resources and marketing research studies are very interested in, in a number of ways. First, it examines the employee-customer satisfaction link in the hospitality industry. Also, it explores the linkage of employee-customer satisfaction existing in all employees, no matter with high, minimal or no customer interaction. Furthermore, it studies the role of BPM between employee job satisfaction and customer satisfaction. Lastly, it investigates the effect of BPM in the employee-customer satisfaction link in employees with different customer interaction intensity.

1.3 Significance of the study

The empirical findings will support the conceptual framework of BPM as a strengthening mediator between employee job satisfaction and customer satisfaction. The development of constructs for BPM will contribute to further study in service industries beyond the hotel hospitality industry.

1.4 Structure of the dissertation

This study consists of five chapters. Chapter 1 serves as an introduction and provides a brief description of the background of the study, purpose and significance of the study, and outline of each chapter. Chapter 2 provides a review of the

literature on employee job satisfaction, BPM and customer satisfaction, and the links amongst them are presented. The research methods will be explained in chapter 3. It will be followed by findings, analysis, discussion, managerial/ research implications and limitations of the study in chapter 4. Lastly, Chapter 5 presents the conclusion of this study.

Chapter 2 LITERATURE REVIEW

With increased global competition, achieving a high level of customer satisfaction has become the focus of researchers and business leaders. This is particularly true in the service sector, where many organizations are striving to enhance service quality in order to drive a high level of customer satisfaction (Kumar et al., 2008). Organizations devote much effort in improving customer satisfaction, through enhancing the organization's business process management (BPM) and heightening employee job satisfaction, thus creating a positive impact on profitability. This chapter provides a review of the literature related to customer satisfaction in organizations, the relationship of employee job satisfaction and customer satisfaction, and the emergence of BPM in driving customer satisfaction.

2.1 Impact of customer satisfaction on financial performance

Since the 1970s, extensive research studies have emerged on customer satisfaction. In general, there are two approaches in defining customer satisfaction. Most of the studies at that period analyzed customer satisfaction from the perspective of confirmation/ disconfirmation expectations of customers (i.e. the variance between expectation and actual performance). This is the confirmation/ disconfirmation approach of customer satisfaction. Customer satisfaction is the customer's post-purchase evaluation on the perceived discrepancy between pre-purchase expectations and the actual performance of the product/ service (Kolter, 1991). The other approach is the cumulative perception of service. Customer satisfaction is the result of marketing activity, linking processes cumulating in purchase and

consumption with post-purchase/ post-consumption response such as attitude change, repeat purchase and brand loyalty (Churchill & Surprenant., 1982).

From the 1990s, with the growing global business competition, the impact of customer satisfaction on loyalty and financial performance of organizations has drawn the attention of many researchers. Customer satisfaction is essential to business organizations because of its impact on customer loyalty (Xiao & Tang, 2009; Guo, Vargo, Nagao, He & Morgan 2007; Gustafsson, Johnson & Roos, 2005; Reichheld & Schefter, 2000; Hallowell, 1996; Levesque & McDougall, 1996; Rust & Zahorik, 1993). Customer loyalty in turn influences business performance and profits of organizations (Morgan & Rego, 2006; Edvardsson, Johnson & Gustaffsson, 2000; Hallowell, 1996; Anderson, Fornell & Lehmann, 1994).

Profitability is critical to business organizations. There are extensive studies focusing on investigating the effect of customer satisfaction on profitability. Customer satisfaction is an indicator for organizational performance (Morgan & Rego, 2006; Fornell, 1992). The imperative importance of customer satisfaction to profits is stated in the classic study of Kotler (1991, p.19) that “high customer satisfaction ratings are widely believed to be the best indicator of a company’s future profits”. There are ample studies examining the positive relation between customer satisfaction and profitability (Gupta & Zeithaml, 2006; Rust & Chung, 2006; Gruca & Rego, 2005; Keiningham, Perkins-Munn, Aksoy & Estrin, 2005; Mittal, Anderson, Sayrak & Tadikamalla, 2005; Wiele, Boselie & Hesselink, 2002; Yeung, Ging & Ennew, 2002; Anderson & Mittal, 2000; Bernhardht, Donthu & Kennett, 2000; Anderson, Fornell & Rust, 1997; Anderson, Fornell & Lehmann, 1994; and Reichheld & Saaer, 1990).

There is also research investigating the differences between products and services, and the links between customer satisfaction and profitability (Anderson, Fornell & Rust, 1997). The study reveals that there is positive relation between customer satisfaction, productivity and profitability in products industry, however, the effect is significantly less in services industry. Other research shows that there is a negative effect of customer satisfaction and loyalty on financial performance for product firms, and a positive effect for service firms (Edvardsson et al., 2000). The negative effect for product firms is because they compete on prices of products, thus decreasing the profitability of the firms.

The above literature outlines the importance of customer satisfaction on the financial performance of organizations. From the 1990s, there have been studies suggesting an association between employee job satisfaction, customer satisfaction and profitability. Details on the link between employee job satisfaction and customer satisfaction will be discussed in Section 2.2 of this dissertation.

The service-profit chain illustrates the relationships between profitability, customer loyalty, customer satisfaction and employee satisfaction. The chain shows the positive link effect of customer loyalty and satisfaction on profitability, and the positive correlation between employee job satisfaction and customer satisfaction (Heskett et al., 2008). There is a substantial volume of research supporting and applying the service-profit chain (Lariviere, 2010; Smith, Lee & Gleim, 2009; Theoharakis, Sajtos & Hooley, 2009; Maritz & Nieman, 2008; Yoo & Park, 2007; Crotts, Ford, Heung & Ngai, 2007; Pritchard & Silvestro, 2005; Gelade & Young, 2005; Silvestro & Cross, 2000; Loveman, 1998; Rucci, Kirn & Quinn, 1998). There is a

positive effect of customer satisfaction on profitability in the hospitality industry, showing its significance on the service sector of hospitality (Chi & Gursoy, 2009). From the research, it is clear that customer satisfaction plays an essential role on the financial performance of an organization.

There are research findings challenging the importance of customer satisfaction and its effect on financial performance. The study of Anderson et al. (1994) indicates that the financial return from improved customer satisfaction cannot be immediately materialized due to financial investment on improving customer satisfaction. Such a relationship can only be realized in a longer time period.

The importance of customer satisfaction on financial returns can only be achieved in subsequent periods when customer satisfaction and profitability are examined by a time series analysis (Bernhardt, Donthu & Kennett, 2000). The findings show that there is no relationship between customer satisfaction and profit, employee job satisfaction and profit in a given point of time, but such relationship exists over a period of time. This is because when studies look at the relationship at a given point of time, upon when money was invested to strengthen the quality of customer satisfaction and/ or employee satisfaction, and therefore, the relationship could not be found. The importance of customer satisfaction on a long-term basis is highlighted by the conclusion of a study that “The impact of a decline in satisfaction may not be felt immediately..... The firm that does not realize the signal will end up being reactive, at best, when financial performance begins to decline” (Bernhardt et al., 2000, p.170).

The above is an overview highlighting the importance of customer satisfaction. There are mounting studies supporting the positive relationship between customer satisfaction and financial performance. The following section outlines literature and studies focusing on the relationship between employee job satisfaction and customer satisfaction.

2.2 Relationship between employee job satisfaction and customer satisfaction

Employee job satisfaction, customer satisfaction, and organization performance

Customer satisfaction is often regarded as the most important asset for an organization, it draws much attention from business leaders and researchers looking into the factors affecting the customer satisfaction. Many studies have revealed that employee job satisfaction is the driver for customer satisfaction. The overall job satisfaction is the sum of the evaluation by individual employees of all the distinct elements of which the job is composed, such as pay, work and supervision (Locke, 1969). Employee job satisfaction is based on satisfaction with the job components which is a combination of tasks, roles, responsibilities, relationships, benefits and rewards (Locke, 1995).

Realizing the importance of people in impacting the success of an organization, many organizations had begun to put more resources looking into employee job satisfaction since the 1980s (Matzler & Renzl, 2007). Early research (e.g., Schneider, Parkington & Buxton, 1980) illustrated that there is a strong positive relation between employee and customer perception on service, which paves the way for later research on employee and customer satisfaction. The positive relationship between employee

job satisfaction and customer satisfaction is also supported by other researchers (Wangenheim et al., 2007; Harter, Schmidt & Hayes, 2002; Bernhardt et al., 2000; Schmit & Allscheid, 1995; Schlesinger & Zornitsky, 1991). The positive link of employee job satisfaction and customer satisfaction also exists in the business-to-business context (Gil, Berenguer & Cervera, 2008).

Over the past two decades, there have been many studies examining the relationship between employee job satisfaction and customer satisfaction. However, systematic research with an explanation of the employee-customer link is scarce (Homburg & Stock, 2004, 2005). In general, most of the research studies apply two theoretical frameworks, the cumulative perception of service, and the confirmation/disconfirmation approach, in analyzing the association between employee job satisfaction and customer satisfaction. Applying the confirmation/disconfirmation approach, one school of thought is the emotional contagion framework (Hatfield et al., 1993). The contagion approach holds that the emotion transfer is essential for the employee-customer satisfaction link, because expressed moods of employees infect customers via an automatic process. The research results (Homburg & Stock, 2004) support the contagion framework and shows that there is positive relation between employee job satisfaction and customer satisfaction. The dyadic data approach was used by pairing the customer to the respective salesperson to investigate the employee-customer satisfaction link in a business-to-business context. The findings reveal that employee job satisfaction affects customer satisfaction directly through the process of emotional contagion, and indirectly through the way that employees interact with customers. Moreover, such positive relation is found to be stronger in situations with high intensity of customer interaction. The

research (Babbar & Koufteros, 2008) also supports the significance of personal touch in the employee-customer contact on customer satisfaction. Personal touch elements include individual attention, joy, courtesy, helpfulness and promptness.

There is research advocating 'service with a smile' by applying this emotional contagion framework of emotion transfer during the employees and customers interaction. Very often, delivering service with a smile is regarded as a common feature in the hotel industry. The findings (Barger & Grandey, 2006; Pugh, 2001) demonstrate that emotions expressed by employees (service with smile) positively relate to customer affect, customer evaluations on service quality, and hence customer satisfaction (Söderlund & Rosengren, 2004, 2008, 2010).

Another main school of thought explaining the link between employee job satisfaction and customer satisfaction is the cumulative perception of service in the service-profit chain study. Heskett et al. (1994, 2008) saw that there is a trend of more companies recognizing the imperative role of employee job satisfaction and customer satisfaction, which leads to fundamental changes in the way they manage and assess success. The service-profit-chain highlights a positive linear relationship between employee job satisfaction, service quality, customer satisfaction and profitability. The linkage between employee job satisfaction and customer satisfaction is explained by the interaction quality between employees and customers. Employees who enjoy or find their jobs enjoyable can deliver services to satisfy customers in a pleasant manner (Schlesinger & Zornitsky, 1991). The importance of employee job satisfaction and customer satisfaction is illustrated by Taco Bell, a subsidiary of Pepsi-Co as an example (Heskett et al., 2008). Taco Bell's management

keeps track on profits daily by units, and has found that stores whose customer satisfaction are in the top 25% outperform the others in profits. Moreover, stores with the lowest 20% in employee turnover experience 55% more in the profits than the highest 20% of stores in employee turnover. This supports the service-profit-chain model in revealing that employee job satisfaction and customer satisfaction have a significant impact on the profitability of an organization. Another example illustrating the positive relationship between employee job satisfaction and customer satisfaction is Sears (Rucci et al., 1998). The research indicated that although independent surveys show that national retail customer satisfaction in the US had fallen for several years, the situation at Sears in the last twelve months was totally different. The employee job satisfaction has risen by 4%, and customer satisfaction has increased by almost 4%, bringing an additional \$200 million revenue to the company as compared with the revenue in the preceding year. The cases of Taco Bell and Sears demonstrate the significance of employee job satisfaction on customer satisfaction, and subsequently on the financial outcome of an organization.

The service-profit chain of Heskett et al. (2008) highlights the chain effect of employee job satisfaction and customer satisfaction on the profitability of an organization. Back in the late 1800s and early 1900s, there were business leaders that highlighted the importance of employee job satisfaction and customer satisfaction. The research of Brown & Hyer (2007) analyzed this by focusing their study on Fred Harvey who was a visionary businessman. He operated the Fred Harvey Company, with a chain of restaurants and hotels, in a highly successful way, from 1876 to the early 1950s. Brown & Hyer (2007) state that Fred Harvey,

visualizing the importance of service concept, linked employee job satisfaction and customer satisfaction to profitability, and put the concept into practice more than one hundred years ago.

The research work of Yoo & Park (2007) also echoes the positive relationship amongst employees, perceived service quality, customers and finance performance. There are many other research studies that had applied the service-profit chain in different industries, such as travel agencies (Homburg, Wieseke & Hoyer, 2009), retail banking (Gelade & Young, 2005; Loveman, 1998), service shops (Yee, Yeung & Cheng, 2008), retail shops (Maxham, Netemeyer & Lichtenstein, 2008; Pritchard & Silvestro, 2005), the higher education service industry (Snipes, Oswald, LaTour & Armenakis, 2005), grocery retailers (Silvestro & Cross, 2000), merchandizing group (Rucci et al., 1998) and the computer software industry (Tornow & Wiley, 1991), showing the chain effect of employee satisfaction, customer satisfaction and profitability.

Theoharakis et al. (2009) extend the service-profit chain by examining the role of employee job satisfaction and customer satisfaction on performance outcomes in a Business-to-Business environment. The study found that satisfied employees are better in developing and maintaining relationship with customers and strategic partners, thus increasing customer satisfaction, and finally impacting on financial performance. The relationship of employee job satisfaction and customer satisfaction, and their impact on the profitability and financial performance highlighted by the service-profit chain (Heskett et al., 2008) is also applicable in the hospitality industry (Chi & Gursoy, 2009).

Apart from substantial research investigating the association between employee job satisfaction and customer satisfaction, there are further studies looking deeper into this relationship. The research investigation of Snipes et al. (2005) illustrates that the specific facets of employee satisfaction have the greatest impact on customer perception of service quality, and hence customer satisfaction. The result shows that intrinsic job satisfaction is the most dominant factor. Homburg & Stock (2005) further explore the conditions which strengthen or weaken the link between employee job satisfaction and customer satisfaction. The conditions found were empathy, expertise and reliability of the employees; and the customer trust, customer price conscientiousness, and the importance of product/ service to the customer. Findings from Hartline & Ferrell (1996) show that employee self efficacy and job satisfaction have direct impact on customer perceived service quality. The research of Vilares & Coelho (2003) explains the cause and effect of employee job satisfaction and customer satisfaction by showing the impact of three variables, i.e. perceived employee job satisfaction, perceived employee loyalty and perceived employee commitment to customer satisfaction.

While there are abundant research studies echoing the positive associations between employee job satisfaction and customer satisfaction of the service-profit link, some findings from other researchers are not really consistent with their association. In the research of supermarket chains, Silvestro (2002) revealed that there is a negative correlation between employee job satisfaction, productivity, and profitability. The stores with the least satisfied employees are most profitable. Following this finding, the study of Keiningham, Aksoy, Daly, Perrier & Solom (2006) showed that employee satisfaction has no relationship with store profitability; however, there is a positive

relationship when controlling the size of stores. The research results of Chun & Davies (2009) failed to indicate that there is positive link between employee satisfaction, customer satisfaction and organizational performance.

While there are numerous studies examining the linkage between employee and customer satisfaction, however, the research in the hospitality industry is limited and the results are mixed. Spinelli & Canovos (2000) showed that there is a positive relationship between employee job satisfaction and customer satisfaction in the hotel industry. From the research on the hospitality industry of airlines, hotels and restaurants (Bitner et al., 1990), the results also highlight that the motivation and satisfaction of employees influence the behaviours of employees when contacting with customers, which impact the experience and satisfaction of customers. However, in the research on hotel industry, the findings indicate that “Surprisingly, and contrary to the findings of Binter et. al., (1990) and Spinelli & Canavos (2000), job satisfaction is not significantly associated with guest satisfaction” (Fisher et al., 2009, p.6).

The hospitality industry is a fast growing industry, notably in Hong Kong and Macau. One of the major characteristics of the hospitality industry is the frequent interaction between employees and customers during the delivery of services. Customer experience and satisfaction during the service delivery is vital in sustaining repeat customers, and customer retention is critical for the financial performance and success to hospitality organizations. It is expected that the findings on the employee-customer satisfaction linkage from the hospitality industries will be stronger than the previous studies in other industries. This is because firstly, the

frequency of interaction between employees and customers is more intensive than other industries, and secondly, the degree of the importance of customer satisfaction to the success of hospitality industry is more acute than in the other industries. It is worth conducting research to clarify the mixed findings on the employee-customer satisfaction link for the hospitality industry. This is one of the objectives of this study.

Service climate, employee job satisfaction, and customer satisfaction

Although there are some analyses challenging the positive impact of employee job satisfaction in affecting customer satisfaction, the strong positive link between them is still the mainstream school of thought. There are substantial research studies that demonstrate the positive relationship between employee job satisfaction and customer satisfaction (Homburg & Stock, 2004). It is regarded as the satisfaction mirror of employee job satisfaction and customer satisfaction (Gil et al., 2008). There are studies further examining the employee-customer satisfaction linkage by applying the service climate theory. Service climate is defined as the shared perceptions of employees concerning the mindset and practices on service (Schneider et al., 1998, p.461). Johnson (1996) states that service climate exists when these perceptions are integrated into a theme that indicates service is important to the organization, demonstrating the impact of service climate on customer satisfaction. Liao & Chuang (2004) and Little & Dean (2006) identify the effect of service climate on employee service performance, and hence the impact on customer satisfaction. The findings from Dietz, Pugh & Wiley (2004) and Yoon, Beatty & Suh (2001) showed that service climate is an important element for the positive linkage between employee and customer attitude. The effect of service

climate on customer satisfaction is stronger when the frequency of customer contact grows (Mayer, Ehrhart & Schneider, 2009; Dietz et al., 2004).

There are more researchers investigating the effect of service climate on employee job satisfaction which in turn influences customer satisfaction. Little & Dean (2006) illustrated the positive effect of service climate, employee commitment on employee service quality capability and hence customer satisfaction. The relation of service climate shared by team on customer satisfaction explains further the strong mirror effect of employee satisfaction on customer satisfaction. The findings from the research of Yoon et al. (2001) and Johnson (1996) also show the effect of service climate on the attitude of employees, hence employee job satisfaction, and then service evaluation by customers. Gil et al. (2008) echoes this line of findings by illustrating the links in a Business-to-Business context. The support from top management in maintaining an overall service climate in establishing good employee job satisfaction and hence customer satisfaction is demonstrated by Ugboro & Obeng (2000). The research of Schmit & Allscheid (1995) also supports the impact of service climate on the attitude of employees hence influences customer satisfaction based on the Bagozzi's (1992) model (Schmit & Allschied, 1995, p.531). These studies show the significance of service climate on influencing employee commitment/ job satisfaction of all employees.

Leveraging on the prior research work advocating the impact of service climate on employee job satisfaction and hence customer satisfaction, Wangenheim et al. (2007) further analyzed the link in more details and showed that there is a positive relationship not only for employees with high customer interaction, but also for those

employees with minimal or even no customer interaction, though the effect is stronger for higher customer interaction employee groups. In reviewing the theoretical mechanisms for the analysis of employee job satisfaction and customer satisfaction, Wangenheim et al. (2007) expressed that there are three frameworks that can be used, namely, the Attraction-Selection model (ASA model), Balance Theory and Emotional Contagion.

The ASA model proposes that people in an organization, over time, becomes homogeneous as an outcome of the attraction-selection-attrition cycle (Schneider, Goldstein & Smith, 1995). Job satisfaction positively correlates with customer satisfaction due to the homogeneity of the working climates within a group of employees. Thus, positive service climate enhances employee job satisfaction and customer satisfaction, while the negative service climate will lower employee and customer satisfaction. The Balance Theory predicts that when there is a tendency for two persons having different attitudes towards a balanced state over time due to the influence on one and other, usually the stronger person is more influential on the weaker one. The imbalanced employee and customer relationship results in the employee influencing the customer. Thus, employees with high job satisfaction positively impact customer satisfaction. According to the emotional contagion theory, employee job satisfaction impacts customer satisfaction through the display of emotion that results in corresponding changes to customers' assessment on service quality and hence customer satisfaction. Wangenheim et al. (2007) adopted the ASA model to demonstrate that 'service climate' influences job satisfaction of employees of the group, is applicable to employees no matter with high intensity, low or even no customer interaction, and hence customer satisfaction.

From the study of Wangenheim et al. (2007), the findings show that the employee-customer satisfaction link not only exists in employees with high customer contact intensity, but also in employees with minimal or no customer contact. Wangenheim et al. (2007) commented that the results are analyzed with data from a franchise system in one industry, and therefore, the study should be replicated in other service industries to further examine the hypothesized relationships. Thus, another aim of this study is to investigate whether the employee-customer satisfaction linkage exists in all employees groups, covering the highest customer contact employees, and those with minimal or no customer contact in the hospitality industry. Hotel industry (including food and beverage) is a high customer contact industry (Chase, 1978). It also consists of employees with minimal or no customer contact. There is a wide spectrum of customer contact employees in the hotel environment which is appropriate to test the contact intensity and customer satisfaction. The findings contribute to test the applicability of the research of Wangenheim (2007) in a different context.

2.3 Relationship among employee job satisfaction, Business Process Management (BPM) and customer satisfaction

Employee job satisfaction, service quality and customer satisfaction

The relationship amongst the three variables of employee job satisfaction, service quality and customer satisfaction often attracts much attention from the management of the service industry. While there are substantial studies supporting the positive link of employee job satisfaction and customer satisfaction, some research findings show that the 'jump' from relating employee job satisfaction to

customer satisfaction is too big. The results of Brown & Lam (2008) and Yee et al. (2008) add to the literature by showing that customers perceived service quality mediates the relationship of employee job satisfaction and customer satisfaction. The research studies of Snipes et al. (2005); Matzler, Fuchs & Schubert (2004); Cronin & Taylor (1992); Schneider & Zornitsky (1991); and Schneider et al. (1980) also support the importance of employee job satisfaction on service quality, which in turn positively influences customer satisfaction. Researchers explain that satisfied employees are more likely to have higher job motivation (Eskildsen & Dahlgaard, 2000) and a higher tendency to improve job performance (Judge, Bono, Thoresen & Patton, 2001) which enhances service quality.

Early research literature on quality puts the focus on the quality of tangible products. The growing importance of service, an intangible product, in mid 1980s began to draw the attention of researchers. Research on service quality is basically unexplored and undefined in early 1980s (Parasuraman et al., 1985). The notable models proposed by Gronroos (1984, 1998) and Parasuraman et al. (1985, 1988) echo each other in examining quality for service. The service quality model (Gronroos, 1984) proposes that service quality composes of assessment on the outcome (technical quality) and the process (functional quality). Functional quality is very important and sometimes more important to perceived service quality than technical service quality. Gronroos (1998) further states that consumption of services is characterized as process consumption while consumption of products is regarded as outcome consumption. Moreover, both the employees and customers take part concurrently in the process which is an open one. The findings highlight that an organization must manage the service process well in order to achieve a good service

quality perceived by customers. Thus, customer evaluation is not only based on the outcome, i.e. technical service quality, but also the functional service quality, which involves the process of service delivery.

The research of Parasuraman et al. (1988) is a classic study on service quality. The characteristics of services are intangibility, heterogeneity and inseparability (Parasuraman et al., 1985, 1988). Based on the confirmation/ disconfirmation model theory (i.e. the gap theory), Parasuraman et al. (1985) developed a tool, the SERVQUAL, for measuring service quality. Customer satisfaction relates to confirmation or disconfirmation of their expectation. There are 10 items for measurement in the model, namely, reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/ knowing and tangibles (Parasuraman et al., 1988). Broadly speaking, in the research of Parasuraman et al. (1988), there are two service quality constructs, namely, functional service quality (doing things nicely) and technical service quality (doing things rightly). Priority has been given to functional service quality. The concepts of Parasuraman et al. (1985, 1988) and Gronoos (1984, 1998) are consistent in emphasizing functional quality on customer satisfaction.

From the analysis of customer satisfaction on product versus service organizations, Nilsson et al. (2001) indicates that customers of product organizations are only interested in the outcome of the product (technical quality), while for service organizations, the process orientation (functional quality) has greater impact on customer satisfaction, because the process is visible to customers in service organizations. Thus, priority given to functional quality in service is supported by

Gronoos (1984, 1998), Parasuraman et al. (1985, 1988, 1991), and Nilsson et al. (2001). Notwithstanding that the SERVQUAL by Parasuraman et al. (1985, 1988, 1991) is widely used as the framework for measuring service quality (Newman, 2001; Sivadas & Baker-Prewitt, 2000), it is subject to challenges by Newman (2001), Buttle (1996) and Babakus & Boller (1992). The study of Pollack (2008) challenges the classic linear correlation of service quality and customer satisfaction, by illustrating that their relationship is non-linear.

The study of Gronoos (1984, 1998) contributes much to literature by differentiating service quality into functional quality and technical quality. There are many researchers that support the view that functional quality emphasizing service process is the driver affecting customer satisfaction (Eshghi, Roy & Icfaï, 2008; Yoo & Park, 2007; Schlesinger & Heskett, 2000; Sivadas & Baker-Prewitt, 2000; Ruyter, Bloemer & Peeters, 1997; Johnston, 1995; Reichheld, 1990). Nevertheless, in a more recent research by Söderlund & Rosengren (2010), the results illustrate that employee emotional display (functional service quality) is effective only when the technical service quality is good. Söderlund & Rosengren (2010) construe technical service quality as promptness, accurateness, and the extent to which the customer is offered alternatives and individualized solution, which is in fact a business process similar to the conceptualization of BPM by Elzinga et al. (1995) and Grover et al. (2000). More details on BPM will be discussed in the next section.

The literature review highlights that there is a shift of the dominance of the functional service quality to technical service quality in explaining the relationship between employee job satisfaction and customer satisfaction. Moreover, the role of

Business Process Management (BPM) in driving customer satisfaction also began to attract the attention of more researchers in recent years.

Employee job satisfaction, Business process management and customer satisfaction

Based on the longitudinal data from a large UK bank on the main factors affecting customer satisfaction, Kumar et al. (2008) was able to indicate that BPM is an essential driver for technical service quality. The results suggest that focus should be put to process management which will impact technical service quality rather than just paying attention to functional service quality. Extending the research of Maddern et al. (2007), the findings show a deviation from the prevailing lines of thinking in explaining employee job satisfaction and customer satisfaction, i.e. the service-profit chain by Heskett et al. (2008) and the priority of functional service quality in SERQUAL by Parasuraman et al. (1985, 1988). It opens a new line of thought in factors affecting customer satisfaction.

Literature has emerged from the 1990s on the definition of BPM. Elzinga et al. (1995) defined BPM as a systematic, structural approach to analyze, improve, control, and manage processes with the aim of improving the quality of products and services. Zairi (1997) expressed that BPM has the following characteristics:

- Major activities of BPM, such as procedures and processes, have to be properly mapped and documented;
- BPM creates a focus on customers through horizontal departmental/ unit linkage between key activities;

- BPM relies on systems and documented procedures to ensure discipline, consistency and repeatability of quality performance;
- BPM relies on measurement activity to assess the performance of each individual process, set targets and deliver output levels which can meet corporate objectives;
- BPM has to be based on a continuous approach to optimization through problem solving and reaping out extra benefits;
- BPM has to be inspired by best practices to ensure that superior competitiveness is achieved;
- BPM is an approach for culture change and does not result simply through having good systems and the right structure in place.

There are other researchers whose studies outline the characteristics of BPM. Process management should involve planning, structuring and evaluation, continuous improvement of business processes (Grover, Kettinger & Teng, 2000). There are five common components of BPM: process strategy, process architecture, process measurement, process ownership and process improvement (Smart et al., 2009). The study of Grover et al. (2000) also recognizes the importance of the cross-functional perspective of process management, and found that employees should have a 'big picture' of their jobs relating to others instead of just looking at their own function. The overall approach to BPM is also echoed by Scheer & Klueckmann (2009). It is the 'basket' of processes rather than the performance of one or two processes, which influence the customer satisfaction level (Frei, Kalakota, Leone & Marx, 1999).

During the 1990s, there were studies indicating the importance of BPM to business. In the research of Roth & Jackson III (1995), the strategic determinants of service quality was investigated and evidence from the banking industry shows that business process capability influences service quality directly. Business process capability is essential as it covers the institutional knowledge of process which influences the determination of policy, rules, procedures and communications across different units/teams.

BPM emphasizes well coordinated company-wide business systems, processes and procedures are supported by a strong service culture of an organization. The research study of Frei et al. (1999) explored process variation as a determinant of bank performance. The analysis indicates that there are four main factors accounting for substantial discrepancy in service performance, namely, heterogeneous customers with various service standard expectations, lack of highly effective policies and processes, high employee turnover rate, and the incompatible customization. Their research suggests that there are three important consequences resulting from process variation: customer dissatisfaction, disruptions on day-to-day operations, and efforts spent on reactive/ remedial measures and repairs. One of the essential findings of the research is the impact of process performance and its management to organization profit performance, i.e. "bottom line". The results indicate that good and consistent service processes will improve the financial performance of an organization. Apart from this, there is another important finding from the research. That is, an organization should put more focus on holistic, or 'basket' approach in process management to minimize process variations than making improvement on individual processes.

The holistic approach in process management has also been explored by other researchers. Lee & Dale (1998) and Zairi (1997) expressed that one of the barriers for the effective implementation of BPM is the operational independence of business units in an organization instead of a big family concept where processes are operated in a cross functional manner. Llewellyn & Armistead (2000) suggested that business process is a series of inter-related activities covering different functional teams with individual inputs and outputs.

Subsequent to the study by Frei et al. (1999) which demonstrated the importance of process variation as a determinant of bank profit performance, the findings of the research Tsikriktsis & Heineke (2004) also suggested the impact of process variation on customer dissatisfaction with evidence from the airline industry. From the findings of Frei et al. (1999), there are four major factors contributing to process variation in service industry, namely, lack of well defined processes, high employee turnover, heterogeneity of customers, and customization. For the airline industry, Tsikriktsis & Heineke (2004) believe that only the first two factors, i.e. well defined processes and high employee turnover affect process variation. The results show that there is a relationship between process variation and customer dissatisfaction. The findings echo the results of the study by Frei et al. (1999) that good and consistent processes are essential to achieve the best results for an organization. However, there are two differences between the studies of Tsikriktsis & Heineke (2004) and Frei et al. (1999). Firstly, the former investigates process consistency over time while the latter looks into consistency of processes at a particular time. Secondly, Tsikriktsis & Heineke (2004) believe that linking process performance directly to financial performance is a 'big jump' which is not justified. The major

contribution of the research by Tsikriktsis & Heineke (2004) is demonstrating the impact of process variation on customer dissatisfaction, and making improvements to process performance for reducing customer dissatisfaction. Tsikriktsis & Heineke (2004) expressed that their research has investigated the importance of process variation in the airline context, and Frei et al. (1999) has tested it in the bank industry. The study suggests that future research may further explore the link between process variation and customer satisfaction/ dissatisfaction in other services, such as hotels, restaurants and pharmacies. Frei et al. (1999) and Tsikriktsis et al. (2004) showed that the lack of defined processes is the common factor for process variation which affects customer satisfaction. These studies arouse the interest of examining the influence of business process on customer satisfaction. BPM advocates process consistency which requires a set of clear business processes and procedures for an organization, opposed to process variation, to improve customer satisfaction.

The above reveals that during the late 1990s and the early 2000s, there were increasingly more studies looking into the drivers for customer satisfaction from the process perspective. This became an important development in analyzing customer satisfaction, challenging the sole dominance of customer contact in driving customer satisfaction. There are other studies showing the emphasis of process and practices to an organization. Nilsson et al. (2001) showed that for product organizations, internal quality practices impact customer satisfaction and business achievements mainly through an organization's customer orientation; for service organizations, both customer and process orientation affect customers directly, and employee management has a direct influence on business outcome. In service organizations, both process orientation and customer orientation have direct effects on customer

satisfaction. Dabholkar & Overby (2005) also illustrate how process positively correlates with service quality and hence customer satisfaction.

While the service quality delivered by employees is a critical element to strengthen perceived service quality, the perception of service quality is difficult to control directly, because of its intangibility nature (Yoo & Park, 2007). Hays & Hill (2001) illustrated the importance of control through employee training (such as interpreting customer needs, and handling customer complaints), and shared understanding on customer requirements. The critical role of quality control is also explored in the research of Burke (2001). His study supports the importance of 'best practice' in service industry. These studies commenced a new line of thinking which deviates from the traditional view of association between employee satisfaction and customer satisfaction. The challenge focuses on the simple and direct relationship between employee satisfaction and customer satisfaction. The call for 'tools', in the form of practices or processes, to guide and control the service quality delivered by employees is reflected in the studies.

The study of Maddern et al. (2007) challenges the sufficiency of the service-profit chain by Heskett et al. (2008) in the emphasis of the 'soft' factor – employee satisfaction and service quality on customer satisfaction and profit. The research explored the positive impact on BPM on customer satisfaction, opposed to the dominance of employee satisfaction on customer satisfaction. The study also questioned the emphasis on functional service quality of the SERVQUAL by Parasuraman et al. (1985). The research of Maddern et al. (2007) was an investigation on UK financial services. There was a five-year period for the study, i.e.

from year 2000 to 2004. A BPM program was launched in the company in 2000. It was an extensive process program covering process architecture, appointment of process owner teams, comprehensive process measurement, control and improvement. The performance levels throughout the said period were assessed by process experts. The findings bring about significant contributions to the relationship between employee job satisfaction and customer satisfaction; and the impact of service quality on customer satisfaction. The results challenge the simple, linear linkage between employee job satisfaction, service quality and customer satisfaction, although employee job satisfaction and service quality are essential factors in driving customer satisfaction. The findings also suggest that technical service quality is equally important to functional service quality in determining customer satisfaction. Moreover, the study indicates that effective management of processes is critical to technical service quality. In Maddern et al.'s (2007) conceptualization, processes are generic in all organizations that impact customers, and their findings show the effective management of process (BPM) has high correlation with technical service quality (TSQ) (correlation, $r=0.832$); in a regression analysis of TSQ with staff satisfaction and BPM, BPM is the key driver for changes in TSQ. In their Satisfaction framework correlations (Maddern et al., 2007, p.1009), staff satisfaction relates positively with TSQ (correlation, $r=0.730$), and they both are significant factors in determining customer satisfaction. Based on Maddern et al.'s study, BPM appears to be the mediation between staff satisfaction and customer satisfaction. The limitations of the study, Maddern et al. (2007) pointed out measuring BPM is relatively new and requires further research to explore its relationship with employee job satisfaction and customer satisfaction. Moreover, the findings were based on a single case within a specific time.

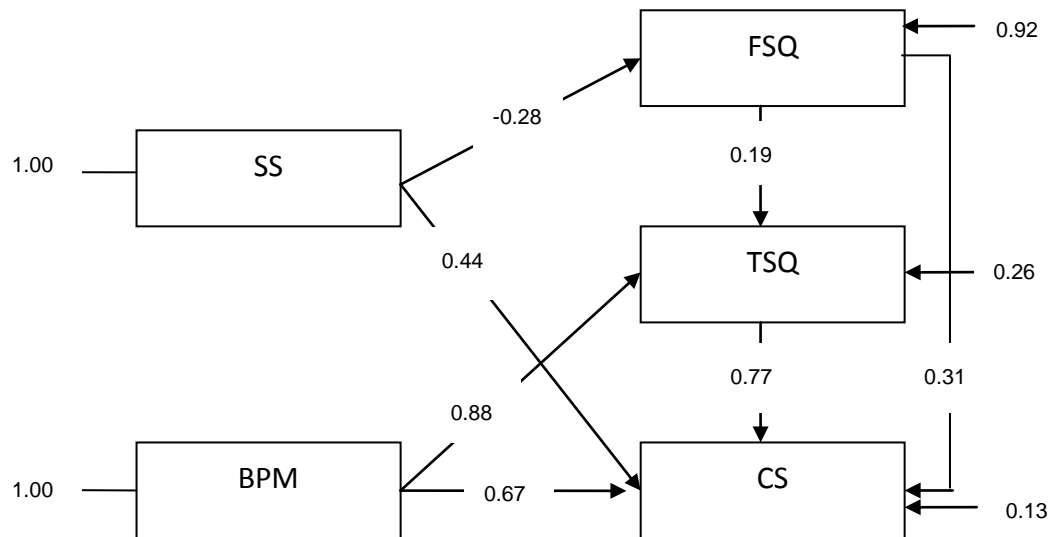
Structural equation modelling linking employee job satisfaction, BPM and customer satisfaction

The research of Kumar et al. (2008) attempts to extend the previous study of Maddern et al. (2007) to illustrate the link between BPM and customer satisfaction by using another analytical method, i.e. structured equation modelling (SEM) which is a multivariate quantitative analysis method. Based on longitudinal data from a UK bank, the findings support the previous results of Maddern et al. (2007), highlighting that BPM is an essential driver in determining customer satisfaction. Another important consequence of the study was the highlighting of the holistic approach and perspective of process management, emphasizing the entire set of processes and their interrelationship in delivering services to customers. The implications brought by the study is the suggestion of BPM and technical service quality instead of priority to functional service quality in influencing service quality, and hence customer satisfaction. The research concludes that 'BPM is a key driver of customer satisfaction'. It also suggests that future research is required to apply the model in different context.

The model in Figure 2.1 (Kumar et al., 2008) linking employee job satisfaction, BPM and customer satisfaction, provides a good overview of their relationship. The goodness of fit indices of the model are: Chi square =.97, GFI=.99, AGFI=.95, NFI=.97, RMSEA=.00. More importantly, the path coefficients between staff satisfaction (SS) and Customer Satisfaction (CS) is .44, while between BPM and CS is .67. The results indicate that there is a significant causal relationship between BPM and customer satisfaction. It is worthwhile to further explore BPM in a different industry in order to establish the general applicability of the relationship linking employee job

satisfaction, BPM, and customer satisfaction.

Figure 2.1 Graphical Representation of Best Fit Structural Equation Modelling
(Kumar et al., 2008, p.182)



chi-square=0.97, $df=3$, $p\text{-value}=0.61671$, RMSEA=0.000

Business process management (BPM)

Functional service quality (FSQ)

Technical service quality (TSQ)

Customer satisfaction (CS)

Staff satisfaction (SS)

2.4 Summary

With a comprehensive literature review on the long history of employee job satisfaction, customer satisfaction, and the emergence of the significance of BPM, the following paragraphs analyze the research gap of the existing literature, which provides a platform for the objective of this research study.

All in all, in the past decades, extensive research has been done on examining the links between employee job satisfaction and customer satisfaction, typically the service-profit chain by Heskett et al. (2008). The importance of employee job satisfaction on customer satisfaction is further emphasized by Wangenheim et al. (2007) that not only employee job satisfaction of employees with direct customer contact strongly relates to customer satisfaction, employee satisfaction of those with minimal or no customer interaction affects customer satisfaction as well.

Notwithstanding that there are previous research studies supporting the existence of the positive link between employee satisfaction and customer satisfaction, not many investigation studies have been done to deeply explore the 'explanation' of why there is such an association. Parasuraman et al. (1985, 1988, 1991) contributed much to research literature on service quality by developing a set of tools for measuring service quality. Gronroos (1998) further added to the literature by differentiating service quality into functional service quality (doing things nicely) and technical service quality (doing things right). Both the SERVQUAL by Parasuraman et al. (1985, 1988, 1991) and Gronroos (1998) put emphasis on the functional service quality which has direct influence on customer satisfaction.

Earlier studies examined the employee-customer satisfaction link mainly from the emotional contagion and cumulative perception of service perspective, notably the service-profit chain by Heskett et al. (2008). These approaches emphasize the importance of functional service quality, opposed to the technical service quality approach. There is research showing that emotional contagion is insufficient to reflect the employee job satisfaction and customer satisfaction. Implementing

'smiling service' in some organizations is a typical emotional contagion approach. Söderlund & Rosengren (2004, 2008) illustrate that the emotional contagion of smiling services by employees has a positive effect on customer satisfaction. However, from the study of a more recent research by Söderlund & Rosengren (2010), results indicate that the influence of employees emotional display (i.e. happy or unhappy, smile) is only effective when the technical service quality level is good. When the technical service quality level is unsatisfactory, the employees' emotional display has no influence on customer satisfaction. The findings of Chun & Davies (2009) also reveal that employee happiness is not enough to satisfy customers. This means that the emotional contagion of employees has an impact on customer satisfaction only when technical service quality is regarded as good by customers. These recent results contribute to a more precise picture of the emergence of the significance of technical service quality, rather than just the emotional contagion of employee-customer interaction, in explaining the relationship between employee job satisfaction and customer satisfaction.

The school of thought by Parasuraman et al. (1985) with priority given to functional service quality in explaining that customer satisfaction is significantly affected by employee-customer interaction (doing things nicely) also faces disputes from a number of researchers (e.g., Newman, 2001; Babakus & Boller, 1992; Buttle, 1996). Thus, the approach of emotional contagion and functional service quality in explaining the link of employee-customer satisfaction is challenged by researchers advocating technical service quality as the key driver for customer satisfaction. BPM, with emphasis on process and systems, has great impact on technical service quality in driving customer satisfaction, according to Kumar et al. (2008).

The school of thought linking BPM and customer satisfaction is relatively new as compared with the customer contact perspective. Since the mid 1990s, there have been findings displaying the significance of BPM in influencing customer satisfaction (Tsikriktsis & Heineke, 2004), and business performance (Crotts, Ford, Heung, & Ngai, 2007; Frei et al., 1999). The research of Armistead, Pritchard & Machin (1999) further indicates that BPM is so critical to an organization that it should be integrated as part of the management strategy and implemented by employees at task level. This 'business process' should be on-going, for the continual development and success of an organization. The findings of Garvin (1995) show that many organizations focusing and leveraging processes for strategic advantages.

The growing attention of BPM is highlighted by the study by Maddern et al. (2007) with evidence from financial services. The research results challenge and do not support the simple, linear positive relations between employee job satisfaction, service quality and customer satisfaction suggested by Heskett et al. (2008). The findings question the traditional SERVQUAL school of thought by Parasuraman et al. (1985) with priority given to functional service quality in influencing customer satisfaction. Building on the research work of Maddern et al. (2007), the findings from Kumar et al. (2008) in a bank, using the multivariate quantitative analysis methodology of structured equation modelling (SEM), illustrated that process management is a critical driver for customer satisfaction. The results conform to the conclusion made by Kumar et al. (2008) that there is a positive correlation between BPM and customer satisfaction, challenging the sole dominance of customer contact perspective in impacting customer satisfaction. While the results

corroborate the role of employee job satisfaction, they show substantial influence of BPM on customer satisfaction. The study also highlights that process management does impact technical service quality rather than just addressing service quality by the functional service quality perspective.

From the existing literature, there is a controversial phenomenon on explaining the relationship between employee job satisfaction and customer satisfaction. On one hand, there is abundant traditional research supporting the positive correlation between employee job satisfaction and customer satisfaction by applying the functional service quality, which primarily is the employee-customer contact approach (Heskett et al., 1994, 2008; Homburg et al., 2009; Yoo & Park, 2007; Gelade & Young, 2005; Snipes et al., 2005; Matzler et al., 2004) . On the other hand, there is the emergence of research findings, such as Maddern et al. (2007) and Kumar et al. (2008), that indicate that business process plays a significant role in affecting customer satisfaction. The results challenge the dominance of the interaction perspective approach, showing that the customer contact model is not sufficient in explaining the relationship between employee job satisfaction and customer satisfaction. More studies by Babbar & Koufteros (2008), Chun & Davies (2009), Garlick (2010) also reveal that happy employees with high employee satisfaction with good functional service quality (how the customers get) does not necessarily achieve good customer satisfaction, unless the technical service quality (what the customers get) is also good.

There is a shift on the explanation linking employee job satisfaction and customer satisfaction, from functional service quality (Söderlund & Rosengren, 2004, 2008) to

technical service quality (Söderlund & Rosengren, 2010). The result of this recent research, in addition to the findings by Maddern et al. (2007) and Kumar et al. (2008) that BPM has a strong link with technical service quality and customer satisfaction, stimulates that BPM may have a role to play, possibly as a mediator, in impacting the relationship between employee job satisfaction and customer satisfaction. By exploring the role of BPM, it may give a clearer picture in understanding the association between the two variables: employee job satisfaction and customer satisfaction.

Apart from the above analysis of research gap in examining the unexplored role of BPM as a mediator in the employee-customer satisfaction link, this study is also substantiated by other justifications. Firstly, the research studies by Maddern et al. (2007) and Kumar et al. (2008) have taken different analysis methodologies in showing the impact of BPM on service quality and customer satisfaction. However, the report is supported only with evidence from UK financial sector. As expressed by Kumar et al. (2008), future research is required to apply the model in a different context. To explore the model in different countries and industries will increase the generalization of BPM as the driver for customer satisfaction. Secondly, BPM is relatively new in the research literature. Maddern et al. (2007) commented that BPM is a 'vulnerable measurement'. This study exploring further on BPM and its measurement will contribute much to the future literature. Thirdly, by applying the concept of service climate in the ASA model, Wangenheim et al. (2007) shows that when there is a homogeneous service culture in the organization, the positive effect of employee job satisfaction occurs in all employees and creates a positive influence on customer satisfaction. The study used employees with different degrees of

customer contact intensity (the spectrum covers employees with the highest customer contact frequency to employees with no customer contact) to illustrate the effect of service climate on employee satisfaction for all employees, hence influencing customer satisfaction. Similarly, there is copious literature highlighting the importance of the BPM culture in the organization for the success of BPM (such as Zairi, 1997). However, there is no empirical evidence to support the concept. Thus, it is justified to examine if there is a BPM culture in the organization, there is a positive relationship between BPM and customer satisfaction, not only for employees with high customer contact, but also for those employees with minimal or no customer contact.

2.5 Theoretical Framework

As mentioned in Chapter 1, the emotional contagion framework (Hatfield, Cacioppo & Rapson, 1993) is widely applied in research examining the relationship between employee job satisfaction and customer satisfaction. The studies of Homburg & Stock (2004, 2005) are examples. The service-profit chain of Heskett et al. (2008) explains that cumulative perception of service is the base for the link of employee job satisfaction and customer satisfaction. The approach of this framework shows that employee job satisfaction affects customer satisfaction directly through the process of emotional contagion, and indirectly through the way that employees interact with customers.

The research work of Wangenheim et al. (2007) provides a sound framework to analyze not only the relationship between employee job satisfaction and customer

satisfaction, but also shows that the link exists in all employee groups, covering employees with frequent customer interaction, limited or even no customer interaction. Wangenheim et al. (2007) highlighted that, in examining the relationships between employee job satisfaction and customer satisfaction, there were three different theories, namely, the Attraction-selection-model (ASA), Balance theory, and Emotional contagion. The balance theory and emotional contagion framework are not sufficient to explain such a relationship. The ASA model explains the existence of the link for all employee groups by 'service climate'. Service climate is an environment under which employee perceptions of the policies, practices, procedures and behaviours that get rewarded and supported in relation to customer service and service quality (Schneider, White & Paul, 1998). The service climate of an organization shapes the mindset of all employees in delivering the level of service standard and affects customer satisfaction. The research of Wangenheim et al. (2007) applied the service climate concept of the ASA model to illustrate that there is a positive relationship between customer satisfaction and employee satisfaction, among all groups of employees with different degrees of customer interaction.

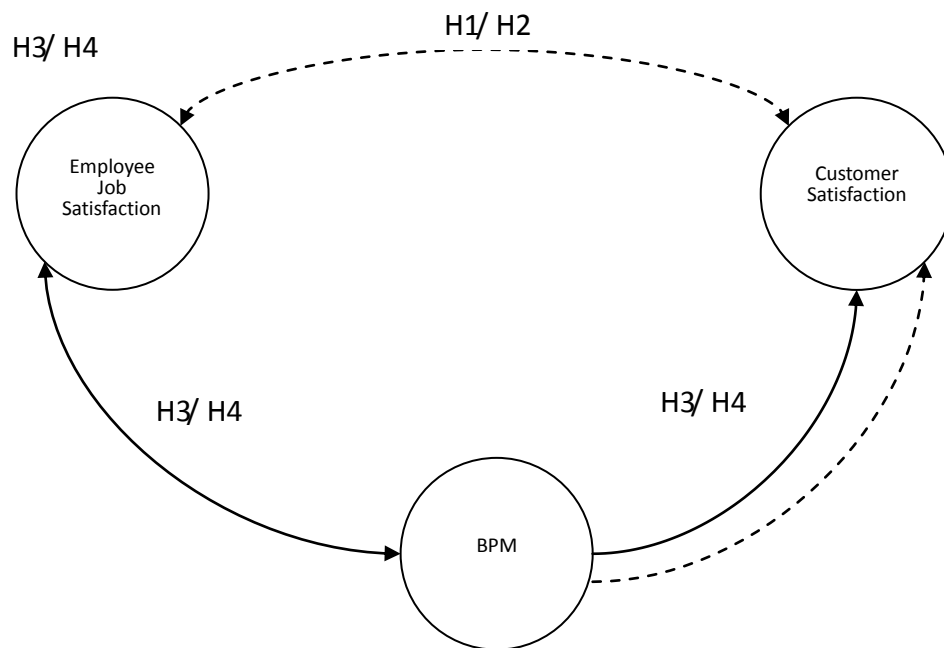
Following the discussion on the research gap in section 4.2, Figure 2.2 below presents the conceptual framework for this study. There are two sets of paths in the model. The dotted line (linking employee job satisfaction and customer satisfaction) represents the path consistent with the current literature demonstrating a positive linkage in the employee-customer satisfaction by applying the emotional contagion (e.g. Babbar & Koufteros, 2008; Barger & Grandey, 2006; Homburg & Stock, 2004; Söderlund & Rosengren, 2004, 2008; and Pugh, 2001), the service-profit chain (Maxham, Netemeyer, & Lichtenstein, 2008; Yee, Yeung, & Cheng, 2008; Gelade &

Young, 2005; Pritchard & Silvestro, 2005; Snipes et al., 2005; Silvestro, & Cross, 2000; Loveman, 1998; Rucci, Kirn, & Quinn, 1998; and Heskett et. al., 1994, 2008), and service climate (e.g. Little & Dean, 2006; Yoon, Beatty, & Suh, 2001; Johnson, 1996; Schmit & Allscheid, 1995) theories. The study of Wangenheim et al. (2007) further applies the service climate theory and the ASA (attraction-selection) approach to pioneer showing the employee-customer link holds for all employee groups. The other dotted line linking BPM and customer satisfaction represents the more recent literature on illustrating BPM is the key driver of customer satisfaction, typically the research of Maddern et al. (2007) and Kumar et al. (2008). Other examples are studies of Dabhokar et al. (2004) and Nilsson et al. (2001). Thus, the dotted line path is used to test the consistency of H1/H2 in the hospitality industry (since there are inconsistency in literature on the hospitality industry upon the links between employee job satisfaction and customer satisfaction, Fisher, McPhail & Menghetti, 2009 opposed Binter, Booms & Tetreault 1990 and Spinelli & Canavos, 2000. Please refer to Section 2.2 for more details). The hypothesized path, which is the main contribution of this study, is depicted by the solid line path.

There is research showing the impact of technical service quality on the relationship between employee job satisfaction and customer satisfaction (Söderlund & Rosengren, 2010), and studies demonstrating that BPM links to technical service quality and drives customer satisfaction (Maddern et al., 2007; Kumar et al., 2008). These results show that BPM may be a mediator in influencing the relationship between employee job satisfaction and customer satisfaction. The main objective of this study is to fill the literature gap of linking the three variables, employee job satisfaction, BPM and customer satisfaction. Thus, the solid line path joining

employee job satisfaction, BPM and customer satisfaction represents H3 and H4 to be pioneered in this research.

Figure 2.2 Conceptual Framework of BPM as a Mediator Between Employee Job Satisfaction and Customer Satisfaction (Source: Designed for this study)

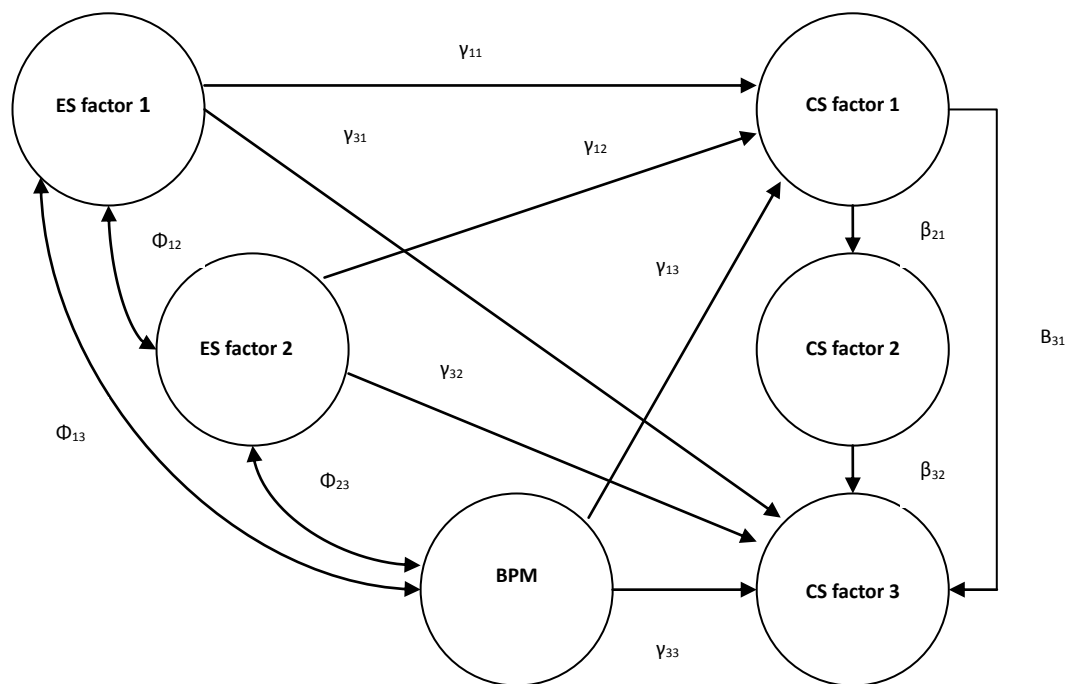


Source: Designed for this study

Basing on the conceptual framework in Figure 2.2, the proposed model is developed in Figure 2.3. After factor analysis on the items from the employee and customer questionnaire, it is expected to have several key factors for employee job satisfaction and customer satisfaction. The items from the customer questionnaire (Appendix 2) are broadly classified into service quality, product quality and customer overall satisfaction. It is likely that these three factors are identified for customer satisfaction cluster (CS factor 1, 2 & 3). For items from the employee questionnaire (Appendix 1), BPM is a distinct factor. Other items are broadly grouped into team climate and employee overall job satisfaction (ES factor 1 & 2). The other factors such as career & rewards, and quality of superiors, will likely be identified either as a

stand-alone factor or grouped into other factors as a result of factor analysis. The arrows from ES factors and BPM point to only two CS factors. This is because there are substantial research supporting the positive relationship between team climate/ job satisfaction and service quality/ customer satisfaction (such as Little & Dean, 2006; Davidson, 2003; Yoon, Beatty & Suh, 2001; Schneider, White & Paul, 1998; Johnson, 1996), and no studies have been found supporting the relationship between team climate/ job satisfaction and product quality alone.

Figure 2.3 Proposed Model of BPM as a Mediator Between Employee Job Satisfaction and Customer Satisfaction (Source: Designed for this study)



ES = employee job satisfaction

CS = customer satisfaction

Φ_{12} – correlation between ES factor 1 and ES factor 2

β_{21} – path coefficient of predicted variables from CS factor1 to CS factor2

γ_{31} – path coefficient of predicting variable to predicted variable from ES factor1 to CS factor 3

Source: Designed for this study

2.6 Hypotheses

Based on the review of literature and the theoretical framework, four hypotheses were developed for the study.

Hypothesis 1 (H1): *Employee job satisfaction is positively related to customer satisfaction.*

Hypothesis 2 (H2): *The positive relationship between employee job satisfaction and customer satisfaction exists not only in employee groups with high intensity of customer interaction, but also in employee groups with minimal or no customer contact.*

Hypothesis 3 (H3): *BPM is a strengthening mediator between employee job satisfaction and customer satisfaction*

Hypothesis 4 (H4): *The effect of BPM, as a mediator between employee job satisfaction and customer satisfaction, exists not only in employees with high customer interaction, but also in employees with minimal or with no customer interaction.*

Chapter 3 RESEARCH METHODS

The subjects in this study are hotels in two cities – Hong Kong and Macau. There are 149 hotels in these cities. A sample size of 10 hotels represents 6.7 per cent of the hotel population. Within which, 7 hotels are from Hong Kong and 3 hotels are from Macau. The ratio is comparable to the relative size of the hotel population in these two cities. This study was a cross-sectional survey conducted in August to September 2010. There are two sets of questionnaires - one for hotel employees and one for hotel customers. Quantitative analysis approach is used in this study. The following outlines the measurement of constructs, research methods, research sample, research instruments, data collection, and pilot study.

3.1 Measurement of Constructs

The variables of the study are the overall job satisfaction and overall customer satisfaction. The overall job satisfaction is the sum of the evaluation by individual employees on all the distinct elements of the job which is a combination of task, supervision, relationships, pay, benefits and rewards (Locke, 1969, 1995). The constructs for employee job satisfaction of this study are team climate, work organization, quality of superiors, and career and rewards. These constructs, except career, are adopted from the research studies of Netemeyer, Boles, McKee & McMurrian (1997), Locke (1969, 1995), and Snipes et al. (2005). The studies by Srivastava, Locke, Judge, & Adams (2010) and Bowling, Beehr & Lepisto (2006) showed that career satisfaction contributes significantly to employee job satisfaction. Thus, career satisfaction constitutes the construct of career and rewards, and it is

also one of the key aspects affecting employee satisfaction.

The five common application components of BPM identified by Smart et al. (2009) will be applied, namely, process strategy, process architecture, process measurement, process ownership and process improvement. These components facilitate investigating BPM from different perspectives. Grover et al. (2000) highlighted that process management should involve planning, structuring and evaluation, continuous improvement of business processes. These components echo significantly to the major elements of BPM by Smart et al. (2009). Moreover, a holistic approach should be taken to look into the situation of BPM in an organisation. The research of Frei et al. (1999) investigated the relationship between process performance and customer satisfaction. The results show that it is the overall “basket” of process rather than performance of one or two processes, which influence the customer satisfaction level.

The results of the research by Lee & Dale (1998) show that one of the barriers of BPM is fragmented focus of process without a bigger picture or cross-functional characteristic. Grover et al. (2000) also recognized the importance of the cross-functional perspective of process management. The study stressed that employees should incorporate process thinking into their day-to-day jobs, to make progressive improvements, and perceive a mind-set of the ‘big picture’ of their jobs relating to others instead of just focusing on their own function. Similar views are also shared by Scheer & Klueckmann (2009). Therefore, a holistic approach for BPM in the research is recommended if it is to be successful, and the items under the process architecture of the questionnaires have built in the cross-functional element.

These five components are also consistent with the BPM characteristics described by Zairi (1997) outlined in Chapter 2. Based on the five components, 11 items on BPM below are developed in this research to evaluate the BPM situation of organizations for this research. The 11 items were judged by a team of experts (management teams of 2 hotels) called for the purpose as measuring the BPM of an organization to achieve content validity.

The reliability of the 11 BPM items was pilot tested. The reliability of the BPM construct is reported in Table 3 under Section 3.7 Pilot Study of this chapter. The internal consistency result of 11 BPM items, $\alpha = .96$, reflects that the reliability is high. Moreover, Table 3.3 under Section 3.7 Pilot Study further reports the reliability and correlation coefficients of the five components of the BPM construct. The results indicate that all the 11 items of BPM are reliable and valid.

For the purpose of this research, customer satisfaction is defined as the summary of evaluation response to the pleasurable emotional state of customers after their service experience (Fornell, 1992; Anderson et al., 1994). The 'gap model' (confirmation/ disconfirmation) is not applied as more customers are looking for 'exceed expectation' standard (Iacobucci et al., 1994) in the service industry. With slight modifications, the constructs for customer satisfaction were based on the multiple items adapted from the research study of Westbrook (1981). Service quality, product quality, price satisfaction and quality of assortment were used as determinants for customer satisfaction. Iacobucci et al. (1994) expressed that customers evaluate satisfaction as an aggregate function of a number of factors, and their perceived value is a tradeoff between the quality and cost of the product/

service. Thus, items on price satisfaction are added. Items on the physical environment, such as lighting and spaciousness, and assortment of products/ services are also included in the product quality and assortment constructs. It is pointed out by Bitner (1990, 1992) and Heide & Gronhaug (2009) that such items affect customer satisfaction in service industry such as hotels because the service is produced and consumed simultaneously in the 'factory'- the place where service takes place.

3.2 Research Methodology

The study takes an epistemological aspect of positivism through the gathering of facts under strict scrutiny of their statistical characteristics of validity and reliability. Data will be collected through questionnaire survey of the views of respondents on customer service. This is a theory building cross-sectional design to study the employee job satisfaction and customer satisfaction (Hays & Hill, 2001; Lee & Jun, 2007; Komunda & Osarenkhoe, 2012). The units of the study are hotel customer as an informant of service received and employee who provides service. There are two sets of questionnaires, one for employees of hotels and the other for collecting views of customers on the service quality and satisfaction of the hotels they are being served.

3.3 Sample

The hypotheses stated in Chapter 1 of this dissertation are tested on samples from the hotel industry in Hong Kong and Macau in 2010. The hotel industry is chosen for this research study for three main reasons. Firstly, one of the limitations of the

two theoretical frameworks (ie Wangenheim et al., 2007, and Kumar et al., 2008) of the research study is that the hypotheses are investigated based on a single industry. A large franchised retail industry is used for analysis for the study of Wangenheim et al. (2007), and a banking industry is chosen for investigation for the research of Kumar et al. (2008). Both of the research studies suggest further investigation to apply the models/ findings in different industries or context is recommended. An industry with frequent employee-customer contact should be chosen for testing the hypothesis. The hotel industry is a typical industry where services are produced and consumed in the 'factory', and there are ample opportunities for employees to contact with customers. The industry is suitable for testing the hypotheses. Secondly, to test the hypotheses of this research, an industry with samples from three distinct categories of employees (i.e. employee with high customer interaction, with limited customer interaction and with no customer interaction), and convenient accessible customers for the survey are required. Thirdly, the hotel industry is a fast growing industry in Hong Kong and Macau at the moment and the foreseeable coming years. It is anticipated that the results and findings of the research will bring meaningful and make fruitful contributions to the hotel industry in Hong Kong and Macau in the area of re-engineering of business process to train employees with customer-oriented service provision.

According to the figures presented by the Hong Kong Hotel Association (www.hkha.com.hk) and Macau Hotel Association (www.macaubotel.org), there are 110 hotels in Hong Kong and 39 in Macau. Therefore, the sampling frame in selecting Hong Kong and Macau hotels is set to be 7:3. There are 5 five-star, 4 four-star, and 1 three-star hotels. The study is a quantitative research survey. The

sample target is 210 employees and 210 customers from 10 hotels (7 from Hong Kong and 3 from Macau). One hotel was piloted tested to ensure the validity and reliability of constructs in the employee and customer questionnaires via expert judgement on questionnaire items and determining coefficient alphas of the constituent constructs (refer to Section 3.7 for details).

For the main study, the target is to have a total of 189 employees from 9 hotels covering jobs with different degrees of customer interaction, namely, high intensity, minimal, and none. In the questionnaire, in order to have a clearer picture on the frequency of customer contact, there are four categories in the questionnaire for the employee to respond. They are 20 times or more per day, 10-19 times per day, less than 10 times per day and no customer contact. After considering the frequency of distribution and the occupation of employees, the customer contact is re-classified into three groups of employees for this study: high customer contact group (20 times or more customer contact per day); minimal customer contact group (19 times or less customer contact per day); and no customer contact group. The aim is having one-third of the respondent employees from each of the three categories of employees. Examples of high intensity groups are frontline staff such as customer service officers, restaurant service employees. Examples of the group with limited customer interaction are cashiers and housekeepers. Storeroom workers and IT support workers are examples with no customer interaction. A total of 21 employees were randomly sampled (using random table) from each hotel.

The sample was chosen via stratified random sampling. When selecting employee samples, employees were classified into three groups. The three groups of

employees were employees of positions with high customer contact, employees of position with limited employee contact and employees with none customer contact. For each participating hotel, seven employees from each of these three categories were randomly selected.

For the sample of 189 customers, 21 from each 9 hotels were sampled. Customers came from hotel room guests, customers of food and beverage, or retail outlets. Customers were randomly selected (every the fifth customer) from different outlets of the participating hotels. Outlets include all business operating units of the hotels, such as hotel rooms, café, restaurants, cake shops and retail shops. A total of 21 customers from each 9 hotels was the target.

Before inviting hotels to participate in the study, approval has been sought from the Ethics Committee of the University of Newcastle (Approval no. H-2010-1072). When hotels were invited to join the research survey, they were advised that participation was voluntary and anonymous. The names of individual persons or the names of the hotels will not be shown in the results of the research.

3.4 Instrument

A questionnaire survey is used to collect data for testing the hypotheses. There are two sets of questionnaires for employees and for customers respectively. The questionnaire on employee survey (Appendix 1) is referred as the employee questionnaire; and the questionnaire on customer service survey (Appendix 2) is referred as the customer questionnaire hereafter. They are self-administered.

Completion of the questionnaires is voluntary and anonymous. To achieve confidentiality, the questionnaires are administered by the researcher and the Human Resources Division of each hotel.

In the employee questionnaire, demographic information such as the nature of job, education band, frequency and nature of customer interaction are included. The total number of items measuring employee satisfaction and BPM is 27, whereas the total number of items measuring the customer satisfaction is 21. Selected samples are required to respond to items in a 5-point Likert scale on strongly disagree to strongly agree (1 to 5). For example, for the item 'My superior(s) always gives me feedback on my performance which helps me for continued development', the employee had to respond according to the 5-point scale (i.e. 1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree). The score ranges from one score for 'strongly disagree' to 5 scores for 'strongly agree'. If the employee responded 'strongly agree', the score for this item is five scores. This means that higher score reflects higher satisfaction level. The same scoring system is adopted for customer satisfaction.

There are 16 items on employee job satisfaction modified from Wangenheim et al. (2007) and Kumar et al. (2008). Details of the items are shown in Appendix 1. Major topics are team climate, work organization, quality of superiors, career and rewards, and overall job satisfaction. Eleven items under the section 'business process/ workflow' relating to BPM are included in the employee survey questionnaire. Details of the items are presented in Appendix 1. Justifications of the items on BPM are outlined in the Literature Review Section 2.3 of this dissertation.

To ensure the validity and reliability of the questionnaire, the draft employee questionnaire constructed were viewed by experts and pilot tested in a hotel before the actual study. The expert panel were of the opinion that the items were appropriately describing the content intended to measure, and the high internal consistency of the constructs in the questionnaire. The findings indicate that the content validity and reliability of the constructs are high, and no major amendments are required. The results are reported in Table 1 under Section 3.7 Pilot Study of this chapter.

The variables used in the employee questionnaire are presented below:

Team climate is measured using three items

- Team members in my hotel/ outlet are very supportive to me.
- The working environment/ atmosphere is satisfactory in my hotel/ outlet.
- I feel like to be a member of the team member in my hotel/ outlet.

Work organization is measured using three items.

- Staff are empowered to apply flexibility in dealing with customers.
- Members of my team are competent and capable in delivering responsibilities.
- Staff are equipped with adequate resources and equipment.

Quality of supervisor(s) is/are measured using five items

- I can keep on learning from my supervisor(s).
- I respect my supervisor(s) who leads by example.
- My supervisor(s) is competent and helps me to resolve problems.
- My supervisor(s) is reliable and trustworthy.

- My supervisor(s) always gives me feedback on my performance which helps me for continued development.

Careers and rewards is measured using two items

- I am satisfied with the career and promotion opportunity.
- The pay level and benefits are reasonable.

The **Overall employee job satisfaction** is measured using three items

- I like to work for my hotel/ outlet.
- I have job satisfaction in my job.
- I have no intention to leave the present job.

Business process/ workflow (Business Process Management) is measured using 11 items

- There are clear process procedures and documentation for core process(es) so that staff know how to work.
- The working processes cover different teams/ work units.
- Most staff understand the service/ performance standard required.
- The major working processes will be measured and evaluated.
- The working processes are reviewed regularly and continued improvements will be made.
- The results of service/ performance level are communicated to staff.
- Staff are motivated to participate in the development and improvements of the workflow.
- Changes to process/ workflow are made to cope with service improvement.
- Staff know who are the process owners.
- Management/ supervisor(s) regards service supported by good process/ workflow as the long-term strategy.

- Management/ supervisor(s) always emphasises the importance on workflow/ process management to support good service.

In the customer questionnaire, demographic information such as sex, age band, education band are included. Other information contained is the nature of service received (room guest, food and beverage outlets, retail shops). In order to measure the satisfaction of customers who have received the service of hotel employees, a number of satisfaction indices were constructed. There are 21 items in the questionnaire modified from Wangenheim et al (2007). Major topics are service quality, price satisfaction, quality of assortment, and overall customer satisfaction. To ensure the validity and reliability of the questionnaires, the draft customer questionnaire was constructed with a team of experts and pilot tested in a hotel before the actual study. The experts advised that the items were found relevant in measuring the satisfaction of customers, and scored high α values of the constructs in the questionnaire. The findings (reported in Table 2 under Section 3.7 Pilot Study of this chapter) indicate that the reliability coefficients of the constructs are high, and no major amendments are required.

The first variable described below is service quality. **Service quality** is measured using nine items covering the service per se, appearance and the attitudes of the hotel employees

- The service level of the sales/ service staff is up to my expectation.
- The attitude of the service employee(s) is friendly and helpful.
- The speed of the employees in delivering the service is satisfactory.
- The know-how of the employees is competent and professional.

- The service process is smooth and satisfactory.
- The sales/ service staff can understand and respond rightly to my request.
- The appearance of sales/ service staff is satisfactory.
- The sales/ service staff knows what kind of product/ service I want.
- There are sufficient sales/ service staff in the outlet.

The second variable measuring **Product quality** is

- The quality of the product is up to my expectation.
- The presentation/ appearance of the product/ service is satisfactory.
- The kind of product/ service is fashionable/ innovative.
- The environment is neat, tidy and comfortable.
- The furniture, fittings, lighting and spaciousness of the outlet is appealing.

The third variable measuring **Price satisfaction** is

- The price of the product/ service is reasonable.
- The product/ service offered is value for money.

The fourth variable measuring **Quality of assortment**

- The range of choice of the product/ service is sufficient.
- The products/ services are properly arranged and presented.

The fifth variable measuring **Overall customer satisfaction** is

- You are satisfied with overall standard of the outlet.
- You will recommend the outlet to your friends/ relatives.
- You will become a repeated customer of the outlet.

Attached to the employee questionnaire is the Information Statement which clearly stipulates the purpose of the research, who the participants are, what choices the participants have, what the participants are required to do if they agree to participate,

how much time is required for completing the questionnaire, whether there any risks or benefits to participating, how the privacy of the participants will be protected, how the information collected will be used, and details on the contact person for further information, contact details of an independent person, and the channels for complaints about the research. Questionnaires, together with envelopes for return, are distributed to employees (selected by random sampling) by the Human Resources Division of each hotel. Completed questionnaires are returned in sealed envelopes to the Human Resources Division and are kept in a safe place with a locking system. The questionnaires are arranged to be collected by the researcher.

The questionnaire on employee survey and the Information Statement are attached in Appendix 1 for reference.

Information Statement is also attached to the customer questionnaire. The Information Statement states clearly the purpose of the research, who the participants are, what choices the participants have, what the participants have to do, how much time is required to complete the questionnaire, whether there any risks or benefits to participating, how the privacy of participants can be protected, how the information collected will be used, the information for contact persons in case of queries, and the contact details of an independent person. Randomly selected customers (every the fifth customer from different outlets) are invited to participate in the survey. Completed questionnaires are returned in a sealed box at each hotel. Arrangements are made to collect the questionnaires by the researcher. The questionnaire on customer survey and the Information Statement are attached in Appendix 2 for reference.

The two questionnaires (i.e. employee survey and customer survey) are administered in English and Chinese to facilitate the multi-languages preference of employees and customers in Hong Kong and Macau. After the English version has been approved by the University of Newcastle, the Chinese version was verified by a former Hong Kong Government Officer who is proficient in English and Chinese, and endorsed by the Newcastle University.

3.5 Data collection

The researcher approached more than 18 hotels from Hong Kong and Macau, and obtained agreement to participate from 12 hotels. Two hotels eventually declined to join the survey leaving 10 hotels participated in the study. The major reasons for declining to participate were the heavy workload of hotels due to peak season i.e. summer vacation of school children, policy of hotels to not participate in surveys from outsiders, and that there were similar surveys conducted by their own hotels. One hotel was used in pilot study, and 9 hotels were included in the main study - 7 from Hong Kong and 2 from Macau. Some of the managers of those hotels who supported and agreed to participate in the survey expressed that the research was meaningful, and some of them regarded it as a social responsibility to contribute to the hospitality industry as the research results would give useful insight to management.

This study is a cross-sectional study. After the General Manager or the respective manager responded positively to the invitation to the research survey, a letter enclosing questionnaires for 21 employees and 21 customers were sent to the project

hotels. The researcher worked with the head of Human Resources of individual hotels for the implementation of the research survey. The target of the research survey is to collect 21 responses from employees and 21 responses from customers of each participating hotels, the role of Human Resources in each hotel is very significant. Human Resources Division took the lead for the employee survey, and co-worked with operation/ outlet managers of hotels for the customer survey. In view of the substantial role of Human Resources Division in the survey, a letter of invitation outlining the details on the implementation, including random sampling, distribution of questionnaires, return of questionnaires, confidentiality aspect, voluntary and anonymous nature of the survey, contact information, was sent out to the respective Human Resources head. The letter clearly spells out that the survey is anonymous, the names of individual persons and the names of hotels will not be shown in the results of the research. A sample of the letter is attached in Appendix 3 for reference. Occasional informal discussion sessions on the hotel business were arranged partly for liaison purpose and partly for the clarification of administrative procedure of the questionnaires.

Randomly selected employees and customers were invited to participate in the survey. The Information Statement and the questionnaires were presented to them for consider to participate. When they filled in the questionnaire, an implied consent to participate was presumed. It took around 20 minutes to complete the questionnaire. After completion, employee participants returned the questionnaires in sealed envelopes to the respective Human Resources Division. For customer participants, they returned the completed questionnaires to the collection box located at the respective outlet counters. Human Resources Division of each

participating hotel was responsible for keeping the completed questionnaires in a safe place with locking system. The researcher contacted the Human Resources Division and collected the completed questionnaires.

3.6 Data analysis

Data Processing and Statistical Analysis

The following analytic procedures of SPSS 17 will be used to analyze the data:

1. Descriptive statistics of the following variables:
 - a. Employee: sex, education level, nature of business, nature of job, educational level, and customer contact frequency
 - b. Customer: sex, nature of service received.
2. Descriptive statistics of each item of the questionnaires (Part B of employee and customer questionnaires).
3. *t*-text and ANOVA will be performed to describe the relationships in different categories of employee's customer contact.
4. Principal axis factoring analysis followed by varimax rotation of the employee questionnaire and customer questionnaire. Factor analysis will reduce the data into manageable numbers of factors pertinent to the conceptual relationship. This is used in the main study.
5. Confirmatory factor analysis of five components of employee satisfaction, business process management in employee questionnaire, and five components of customer satisfaction in customer questionnaire. Structural equation modelling analysis enables us to analyse the various latent variables or factors of an instrument; the relationships between the observed variables, the

measurement errors and latent variables.

6. Reliabilities of each subscale (construct) of the two questionnaires to confirm their internal consistencies.
7. Linear regression analysis is used to determine the contribution of employee job satisfaction, BPM to the customer satisfaction. Results of regression can also show how much the variance in customer satisfaction can be explained by the variances of employee job satisfaction and BPM.
8. Hypothesis 1 (H1) will be investigated via Pearson Product Correlation between employee satisfaction and customer satisfaction.
9. Hypothesis 2 (H2) will be investigated using Pearson Product Correlation and ANOVA for understanding the relationship between employee job satisfaction and customer satisfaction for employees with different levels of customer contact intensity.
10. Path Analysis and Regression analysis will be conducted to examine the role of BPM between employee job satisfaction and customer satisfaction for testing Hypothesis 3 (H3) for the whole sample. Regression analysis will be used for testing Hypothesis 4 (H4) for subsamples of employees with different levels of customer interaction intensity.

The structural equation modelling (SEM) analysis (path analysis) allows the analysis of variables in one shot, and at the same time account for the measurement errors of each variable in establishing the relationships among the variables. The use of structural equation model intends to provide an unbiased estimate of the “working” relationships between the variables and can provide a better description of the association between the variables. Path analysis can show whether mediating

variables, BPM, exist between predicting variables (employee job satisfaction variables) and outcome variables (customer satisfaction variables).

The effect of BPM as a mediator may be deduced from the path coefficient on the proposed model in Figure 2.3. However, as highlighted by Gelade & Young (2005), the standard procedures in assessing the effect of mediator (Baron & Kenny, 1986) is more widely adopted in organizational research, this study adopts the procedures of Gelade & Young (2005). Whether a variable is regarded as a mediator depends on the extent that it accounts for the relation between the predicting variable and outcome variable. The procedures for examining the mediating effect involve the calculation of two regression equations. For the first equation, the outcome variable is regressed on the predicting variable. For the second equation, the outcome variable is regressed on the predicting variable and the mediator. The mediation effect is the coefficient of the first equation minus the second equation.

3.7 Pilot study

One hotel was pilot tested on the draft employee and customer questionnaires before the main study. To ensure the validity and reliability, Table 3.1 and Table 3.2 indicate the means, standard deviations, reliability and correlations among the variables from employee questionnaire and customer questionnaire respectively. The findings were in order and no major amendments are required. The research then rolled out to the other hotels.

Table 3.1 Means, Standard Deviations, Reliabilities and Correlation among Variables of Employee questionnaire – Pilot study

Variable	No. of items	Mean	SD	α	Correlation				
					1	2	3	4	5
1. Team Climate	3	11.57	2.20	.86					
2. Work Organization	3	10.67	2.83	.69	.73**				
3. Quality of Superior(s)	5	19.70	11.27	.95	.34	.54*			
4. Careers & Rewards	2	6.29	3.21	.83	.08	.34	.69**		
5. Overall Job Satisfaction	3	10.19	4.56	.87	.29	.47*	.75**	.81**	
6. Business Process/workflow	11	37.90	8.38	.96	.52*	.72**	.68**	.54*	.68**

* correlation is significant at the 0.05 level (2-tailed).

** correlation is significant at the 0.01 level (2-tailed).

N=21

The α results above indicate that the constructs of the employee questionnaire are of good reliability and validity.

Table 3.2 Means, Standard Deviations, Reliabilities and Correlation among Variables of Customer questionnaire – Pilot study

Variable	No. of items	Mean	SD	α	Correlation			
					1	2	3	4
1. Service Quality	9	33.43	7.86	.96				
2. Product Quality	5	18.81	3.70	.88	.91**			
3. Price Satisfaction	2	7.29	1.45	.88	.65**	.73**		
4. Quality of Assortment	2	6.81	1.63	.79	.57**	.57**	.49*	
5. Overall Satisfaction	3	11.14	2.22	.86	.82**	.91**	.84**	.56**

* correlation is significant at the 0.05 level (2-tailed).

** correlation is significant at the 0.01 level (2-tailed).

N=21

The α results above indicate that the constructs of the customer questionnaire are of good reliability and validity.

Table 3.3 Means, Standard Deviations, Reliabilities and Correlation among Variables of BPM – Pilot Study

Variable	No. of items	Mean	SD	α	Correlation			
					1	2	3	4
1. Process Architecture	2	6.81	1.60	.68				
2. Process Measurement	2	6.90	1.61	.90	.79**			
3. Process Improvement	4	13.52	3.28	.92	.81**	.91**		
4. Process Ownership	1	3.43	1.01	--#	.75**	.84**	.86**	
5. Process Strategy	2	7.24	1.51	.96	.66**	.83**	.81**	.77**

No α value because only one item in the construct.

**correlation is significant at the 0.01 level (2-tailed).

Reliability alpha of the 11 items = .96

N=21

Table 3.3 shows that the five components of the BPM construct (i.e. process architecture, process measurement, process improvement, process ownership and process strategy) developed in this research are valid and reliable. The results of the pilot study report that the constructs of the employee and customer questionnaires are reliable and valid. Hence, the research for the main study was conducted.

3.8 Summary

This chapter discusses the methodological considerations, the context, the research instruments, and the methods of analysis for the present study. In addition, the validity and the reliability findings of the instruments are expounded in this chapter.

Chapter 4 ANALYSIS AND RESULTS

4.1 Introduction

After analyzing the findings of the pilot study which indicated that the constructs are valid and reliable (the result details are shown in Section 3.7), the research was rolled out for the main study. This section reports the descriptive statistics, findings and analysis. A discussion of the implications for management, implications for future research and limitations of this research are also presented.

As mentioned in Section 3.4, the questionnaire on employee survey (Appendix 1) is referred as employee questionnaire; and questionnaire on customer service survey (Appendix 2) is referred as customer questionnaire. Descriptive statistics on the responses for the employee questionnaire and customer questionnaire for the main study are reported in Tables 4.1 and 4.2 respectively.

A total of 377 questionnaires were collected from 9 hotels in the main study. A total of 188 responses were received from employees and 189 responses came from customers. One questionnaire from employee was missing as it was found that only 20 questionnaires from employees were collected from one of the 9 hotels instead of the targeted 21 questionnaires. The ratio of male employees to female employees responded was 45% to 55% (6 employees did not fill in 'sex' box in the questionnaires). The ratios of the nature of business of employees were 46% work in hotel rooms, 4% in retail shops, 26% in food and beverage, and 24% in other categories. Regarding the occupation of the employees, 46% were customer

service/ frontline staff, 10% were cashiers/ housekeeping staff, and 7% were back office supporting staff such as storekeeping/ IT jobs, and 37% belonged to other categories. The nature of business and occupation of the employees are useful to verify the frequency of customer contact for this research analysis. From the information indicated by employees, 34% of employees contact external customers 20 or more times per day, 16% with 10-19 times per day, 21% with less than 10 times per day, and 29% with no customer interaction. About 64% of the respondents are of secondary/ high school educational level, 29% with university or higher level, and 8% with primary school level (6 respondents had not shown their educational level).

There were 27 items in the employee questionnaire (Appendix 1), on team climate, work organization, quality of superior(s), career and rewards, overall job satisfaction, and business process/ workflow. Randomly selected employees were invited to respond on the 27 items by showing their opinions in a five-point scale from 1 to 5 (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). Descriptive statistics on employee questionnaire items are reported in Table 4.1. The 188 employees responded to most of the items in the questionnaire. Only a few cases have missed out in filling in one of the 27 items. From Table 4.1, there is a tendency of more responses on neutral, agree and strongly agree.

Table 4.1 Descriptive Statistics of items in the Employee Questionnaire

Items	Five-point scale#					Mean	SD	
	1	2	3	4	5			
	Frequency (%)							
Team Climate								
1. Team members in my hotel/ outlet are very supportive to me	2(1.1)	7(3.7)	28(14.9)	92(48.9)	59(31.4)	4.06	.84	
2. The working environment/ atmosphere is satisfactory in my hotel/ outlet	2(1.1)	9(4.8)	42(22.5)	85(45.5)	49(26.2)	3.90	.88	
3. I feel like to be a member of the team member in my hotel/ outlet	1(0.5)	6(3.2)	28(15.1)	85(45.7)	66(35.5)	4.12	.82	
Work Organization								
4. Staff are empowered to apply flexibility in dealing with customers	3(1.6)	13(7.0)	56(30.1)	79(42.5)	35(18.8)	3.70	.91	
5. Members of my team are competent and capable in delivering responsibilities	2(1.1)	12(6.4)	28(14.9)	96(51.1)	50(26.6)	3.96	.88	
6. Staff are equipped with adequate resources and equipment	4(2.1)	30(16.0)	58(31.0)	72(38.5)	23(12.3)	3.43	.97	
Quality of Superior(s)								
7. I can keep on learning from my superior(s)	3(1.6)	7(3.7)	34(18.1)	97(51.6)	47(25.0)	3.95	.85	
8. I respect my superior(s) who leads by example	3(1.6)	8(4.3)	33(17.6)	89(47.6)	54(28.9)	3.98	.89	
9. My superior(s) is competent and helps me to resolve problems	2(1.1)	13(7.0)	30(16.1)	80(43.0)	61(32.8)	3.99	.93	
10. My superior(s) is reliable and trustworthy	1(0.5)	14(7.5)	33(17.6)	75(40.1)	64(34.2)	4.00	.93	
11. My superior(s) always gives me feedback on my performance which helps me for continued development	3(1.6)	11(5.9)	32(17.3)	78(42.2)	61(33.0)	3.99	.94	

Career & Rewards							
12. I am satisfied with the career and promotion opportunity	2(1.1)	16(8.5)	60(31.9)	79(42.0)	31(16.5)	3.64	.89
13. The pay level and benefits are reasonable	3(1.6)	23(12.2)	64(34.0)	73(38.8)	25(13.3)	3.50	.93
Overall Job Satisfaction							
14. I like to work for my hotel/ outlet	3(1.6)	14(7.4)	45(23.9)	93(49.5)	33(17.6)	3.74	.89
15. I have job satisfaction in my job	2(1.1)	11(5.9)	45(23.9)	93(49.5)	37(19.7)	3.81	.86
16. I have no intention to leave the present job	4(2.1)	17(9.0)	50(26.6)	80(42.6)	37(19.7)	3.69	.96
Business Process/ Workflow							
17. There are clear process procedures and documentation for core process(es) so that staff know how to work	2(1.1)	17(9.1)	46(24.7)	87(46.8)	34(18.3)	3.72	.91
18. The working processes cover different teams/ work units	1(0.5)	10(5.3)	58(31.0)	88(47.1)	30(16.0)	3.73	.81
19. Most staff understand the service/ performance standard required	2(1.1)	12(6.4)	51(27.1)	89(47.3)	34(18.1)	3.75	.86
20. The major working processes will be measured and evaluated	2(1.1)	11(5.9)	47(25.0)	97(51.6)	31(16.5)	3.77	.83
21. The working processes are reviewed regularly and continued improvements will be made	3(1.6)	14(7.4)	47(25.0)	90(47.9)	34(18.1)	3.73	.90
22. The results of service/ performance level are communicated to staff	1(0.5)	12(6.4)	37(19.7)	92(48.9)	46(24.5)	3.90	.86
23. Staff are motivated to participate in the development and improvements of the workflow	1(0.5)	12(6.4)	59(31.4)	80(42.6)	36(19.1)	3.73	.86
24. Changes to process/ workflow are made to cope with service improvement	1(0.5)	13(6.9)	48(25.5)	94(50.0)	32(17.0)	3.76	.84
25. Staff know who are the process owners	1(0.5)	15(8.0)	41(21.9)	87(46.5)	43(23.0)	3.83	.89

26. Management/ superior(s) regards service supported by good process/ workflow as the long-term strategy	2(1.1)	5(2.7)	56(29.8)	87(46.3)	38(20.2)	3.82	.82
27. Management/ superior(s) always emphasises the importance of workflow/ process management to support good service	2(1.1)	7(3.7)	49(26.1)	91(48.4)	39(20.7)	3.84	.83

five-point scale:

1 = strongly disagree 2 = disagree 3 = neutral 4 = agree 5 = strongly agree

N=188

A total of 189 customer questionnaires were collected from 9 hotel customers. The ratio of male to female respondents was 37%: 63% (One respondent did not indicate the 'sex' box in the questionnaire). Respondents were customers of different outlets; 18% were guests of hotel rooms, 63% were customers of food and beverage outlets, 18% from retail outlets, and 1% from other outlets.

There were 21 items in the customer questionnaire (Appendix 2), on service quality, product quality, price satisfaction, quality of assortment and overall satisfaction. Randomly selected customers were invited to fill in 21 items on the questionnaire by indicating their response in a five-point scale, from a scale of 1 to 5 (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). Descriptive statistics on customer questionnaire items are reported in Table 4.2. It is observed that there is a tendency of responses centring on 'neutral', 'agree' and 'strongly agree'. All 189 customers responded to all the items of the customer questionnaire.

Table 4.2 Descriptive Statistics of items in the Customer Questionnaire

Items	Five-point scale#					Mean	SD
	1	2	3	4	5		
	Frequency (%)						
Service Quality							
1. The service level of the sales/ service staff is up to my expectation	0(0)	11(5.8)	77(40.7)	92(48.7)	9(4.8)	3.52	.68
2. The attitude of the service employee(s) is friendly and helpful	0(0)	11(5.8)	69(36.5)	93(49.2)	16(8.5)	3.60	.73
3. The speed of the employees in delivering the service is satisfactory	0(0)	12(6.3)	87(46.0)	77(40.7)	13(6.9)	3.48	.72
4. The know-how of the employees is competent and professional	1(0.5)	14(7.4)	80(42.3)	75(39.7)	19(10.1)	3.51	.80
5. The service process is smooth and satisfactory	0(0)	10(5.3)	89(47.1)	77(40.7)	13(6.9)	3.49	.70
6. The sales/ service staff can understand and respond rightly to my request	0(0)	6(3.2)	82(43.4)	84(44.4)	17(9.0)	3.59	.70
7. The appearance of sales/ service staff is satisfactory	0(0)	11(5.8)	81(42.9)	79(41.8)	18(9.5)	3.55	.75
8. The sales/ service staff knows what kind of product/ service I want	0(0)	7(3.7)	89(47.1)	78(41.3)	15(7.9)	3.53	.70
9. There are sufficient sales/ service staff in the outlet	0(0)	14(7.4)	81(42.9)	75(39.7)	19(10.1)	3.52	.78
Product Quality							
10. The quality of the product is up to my expectation	0(0)	8(4.2)	84(44.4)	84(44.4)	13(6.9)	3.54	.69
11. The presentation/ appearance of the product/ service is satisfactory	0(0)	12(6.3)	72(38.1)	93(49.2)	12(6.3)	3.56	.71
12. The kind of product/ service is fashionable/ innovative	0(0)	16(8.5)	82(43.4)	78(41.3)	13(6.9)	3.47	.75
13. The environment is neat, tidy and comfortable	0(0)	7(3.7)	71(37.6)	91(48.1)	20(10.6)	3.66	.72

14. The furniture, fittings, lighting and spaciousness of outlet is appealing	0(0)	7(3.7)	74(39.2)	84(44.4)	24(12.7)	3.66	.75
Price Satisfaction							
15. The price of the product/ service is reasonable	0(0)	14(7.4)	108(57.1)	61(32.3)	6(3.2)	3.31	.66
16. The product/ service offered is value for money	0(0)	18(9.5)	111(58.7)	50(26.5)	10(5.3)	3.28	.71
Quality of Assortment							
17. The range of choice of the product/ service is sufficient	0(0)	16(8.5)	93(49.2)	70(37.0)	10(5.3)	3.39	.72
18. The products/ services are properly arranged and presented	0(0)	13(6.9)	90(47.6)	78(41.3)	8(4.2)	3.43	.69
Overall Satisfaction							
19. You are satisfied with the overall standard of the outlet	0(0)	10(5.3)	91(48.1)	77(40.7)	11(5.8)	3.47	.69
20. You will recommend the outlet to your friends/ relatives	1(0.5)	14(7.4)	90(47.6)	67(35.4)	17(9.0)	3.45	.78
21. You will become a repeated customer of the outlet	1(0.5)	9(4.8)	91(48.1)	72(38.1)	16(8.5)	3.49	.74

five-point scale:

1 = strongly disagree 2 = disagree 3 = neutral 4 = agree 5 = strongly agree

N=189

4.2 Findings and analysis

Before testing the four hypotheses of this study, factor analysis was used as it helps to reduce the large number of variables (27 items in employee questionnaires and 21 items in customer questionnaire in this research) to interpretable and manageable groups of factors. Since the respondent employees have been stratified into three

groups by different degree of customer interaction intensity for the purpose of testing H2 and H4 in this study, it is worth using ANOVA to examine if there are significant differences on the response of different groups of employees on the items of the employee questionnaire.

To examine the linkage of employee-customer satisfaction, surveyed employees from the research of Wangenheim et al. (2007) in the retail chain industry came from three groups with different levels of customer contact intensity: service and sales employees (high intensity customer interaction); cashiers (limited customer interaction); storeroom workers (no customer interaction). In a hotel industry environment of this research, there is a wider range of occupation than a retail chain, and the number of employees of a certain occupation is not as many as in the retail environment. Therefore, stratified sampling of employees was used in this research. Responded employees were requested to indicate the number of customer contact per day and their occupation. The result of the grouping is presented as follows:

	No. of employees
Group 1: 20 times or more customer contact per day	64 (34%)
Group 2: 19 times or less customer contact per day	69 (37%)
Group 3: No customer contact	54 (29%)

To analyze whether there is a significant difference in the responses to the items of the employee questionnaire by different groups of employees with different levels of customer contact intensity in the job, the One-way ANOVA, *F*-test was used. The significance of all statistical tests was set at $p=.05$. All the *p*-values in Table 4.3 are

higher than .05 means that there are no significant differences in the responses of employees with different customer contact intensities. As a few employees did not respond to a certain item(s) in the questionnaire, there were slight variations in the reported frequencies.

Table 4.3 ANOVA of Employees with Different Degree of Customer Contact Intensity

Items from employee questionnaire N = 188	Contact						ANOVA			
	High		Minimal		No		Between	Within	F	p
	M (n)	SE	M (n)	SE	M (n)	SE	Group Mean Square (df)	Group Mean Square (df)		
Team Climate										
- Team members in my hotel/ outlet are very supportive to me	4.13 (64)	.108	3.90 (69)	.099	4.19 (54)	.112	1.457(2)	.703(184)	2.072	.129
- The working environment/ atmosphere is satisfactory in my hotel/ outlet	3.94 (64)	.107	3.82 (68)	.098	3.98 (54)	.136	.416(2)	.779(183)	.534	.587
- I feel like to be a member of the team member in my hotel/ outlet	4.13 (64)	.110	4.03 (67)	.088	4.26 (54)	.116	.788(2)	.667(182)	1.182	.309
Work Organization										
- Staff are empowered to apply flexibility in dealing with customers	3.75 (64)	.107	3.76 (68)	.105	3.57 (53)	.141	.697(2)	.831(182)	.839	.434
- Members of my team are competent and capable in delivering responsibilities	3.97 (64)	.104	3.88 (69)	.108	4.04 (54)	.124	.361(2)	.777(184)	.465	.629
- Staff are equipped with adequate resources and equipment	3.42 (64)	.117	3.38 (68)	.115	3.50 (54)	.144	.212(2)	.957(183)	.221	.802
Quality of Superior(s)										
- I can keep on learning from my superior(s)	3.89 (64)	.114	3.88 (69)	.094	4.09 (54)	.119	.811(2)	.727(184)	1.114	.330
- I respect my superior(s) who leads by example	3.97 (64)	.111	3.90 (68)	.103	4.11 (54)	.126	.701(2)	.784(183)	.893	.411
- My superior(s) is competent and helps me to resolve problems	3.97 (64)	.113	3.90 (67)	.115	4.19 (54)	.124	1.320(2)	.848(182)	1.557	.214
- My superior(s) is reliable and trustworthy	4.00 (64)	.118	3.88 (68)	.106	4.19 (54)	.130	1.383(2)	.848(183)	1.634	.198

- My superior(s) always gives me feedback on my performance which helps me for continued development	4.02 (64)	.119	3.90 (67)	.115	4.11 (53)	.125	.713(2)	.876(181)	.814	.445
Career & Rewards										
- I am satisfied with the career and promotion opportunity	3.77 (64)	.113	3.54 (69)	.106	3.63 (54)	.122	.879(2)	.800(184)	1.099	.335
- The pay level and benefits are reasonable	3.56 (64)	.120	3.42 (69)	.108	3.52 (54)	.129	.353(2)	.870(184)	.406	.667
Overall Job Satisfaction										
- I like to work for my hotel/ outlet	3.83 (64)	.125	3.68 (69)	.102	3.70 (54)	.111	.403(2)	.801(184)	.503	.605
- I have job satisfaction in my job	3.89 (64)	.112	3.72 (69)	.109	3.81 (54)	.103	.459(2)	.740(184)	.621	.539
- I have no intention to leave the present job	3.70 (64)	.129	3.58 (69)	.118	3.81	.115	.846(2)	.926(184)	.914	.403
Business Process/ Workflow										
- There are clear process procedures and documentation for core process(es)	3.80 (64)	.112	3.63 (67)	.110	3.74 (54)	.127	.491(2)	.826(182)	.594	.553
- The working processes cover different teams/ work units	3.80 (64)	.107	3.70 (69)	.093	3.68 (53)	.114	.250(2)	.669(183)	.374	.688
- Most staff understand the service/ performance standard required	3.84 (64)	.105	3.75 (69)	.102	3.63 (54)	.125	.673(2)	.749(184)	.898	.409
- The major working processes will be measured and evaluated	3.83 (64)	.108	3.72 (69)	.092	3.74 (54)	.122	.200(2)	.702(184)	.284	.753
- The working processes are reviewed regularly and continued improvements will be made	3.84 (64)	.110	3.64 (69)	.099	3.72 (54)	.138	.709(2)	.811(184)	.874	.419
- The results of service/ performance level are communicated to staff	3.83 (64)	.119	3.83 (69)	.097	4.09 (54)	.110	1.354(2)	.737(184)	1.838	.162

- Staff are motivated to participate in the development and improvements of the workflow	3.77 (64)	.106	3.64 (69)	.101	3.81 (54)	.124	.528(2)	.748(184)	.706	.495
- Changes to process/ workflow are made to cope with service improvement	3.73 (64)	.120	3.72 (69)	.085	3.83 (54)	.114	.209(2)	.705(184)	.297	.744
- Staff know who are the process owners	3.84 (63)	.124	3.83 (69)	.105	3.83 (54)	.111	.004(2)	.808(183)	.005	.995
- Management/ superior(s) regards service supported by good process/ workflow as the long-term strategy	3.88 (64)	.103	3.72 (69)	.101	3.87 (54)	.109	.479(2)	.679(184)	.705	.495
- Management/ superior(s) always emphasises the importance of workflow/ process management to support good service	3.83 (64)	.106	3.84 (69)	.102	3.85 (54)	.110	.008(2)	.702(184)	.012	.998

Note: n = number in a subsample; M = Mean; SE = Standard error of measurement; * $p < .05$, ** $p < .01$

4.2.1 Exploratory factor analysis of employee and customer questionnaires

As discussed in Chapter 3, the 27 items of employee questionnaire can be conceptualized having five variables measuring employer contexts (Team climate, Work organization, Quality of supervisor(s), Career and rewards, and Overall job satisfaction); and the sixth variable measuring business process. Factor analysis technique was used to identify the possible factors of the employee contexts of employee questionnaire items. Table 4.4 reports the KMO and Bartlett's test result shows that the factor analysis is meaningful as the Kaiser-Meyer-Olkin Measure of Sampling Adequacy is far greater than .6.

Table 4.4 KMO and Bartlett's Test of items in the Employee Questionnaire

Kaiser-Meyer-Olkin Measure of Sampling Adequacy'		.945
Barlett's Test of Sphericity	Approx. Chi-Square	2804.343
	<i>df</i>	120
	Sig.	.000

By employing the principal axis factoring extraction method, the major factors are identified from the employee questionnaire items. There are two major factors account for 67.0% of the variance. This is a good result as the percentage of variance explained by two factors is far above 50%. Table 4.5 is the graphic presentation showing the percentage distribution of the 16 items of the employee contexts.

Table 4.5 The Scree-plot of the Factor Analysis of items in the Employee Questionnaire.

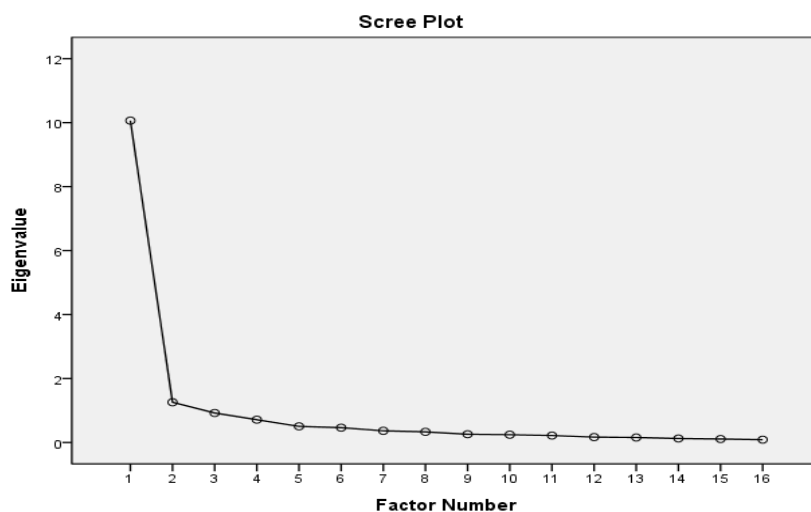


Table 4.6 indicates the items of the employee questionnaire falling into these two rotated factors. Rotated Factor Matrix (Varimax) was used because the loadings of the two factors would be more interpretable after the rotation.

Table 4.6 Factor grouping of items measuring Employee Job Satisfaction (Varimax Rotated)

Item	Factor	
	1	2
My superior(s) is reliable and trustworthy	.860	
My superior(s) always gives me feedback on my performance which helps me for continued development	.832	
My superior(s) is competent and helps me to resolve problems	.828	
I respect my superior(s) who leads by example	.821	
I can keep on learning from my superior(s)	.810	
I feel like to be a member of the team member In my hotel/ outlet	.701	
Team members in my hotel/ outlet are very supportive to me	.681	
The working environment/ atmosphere is satisfactory in my hotel/ outlet	.620	.514
The pay level and benefits are reasonable		.850
I am satisfied with the career and promotion opportunity		.723
I have no intention to leave the present job		.655
I have job satisfaction In my job	.497	.653
I like to work for my hotel/ outlet	.507	.653
Members of my team are competent and capable in delivering responsibilities	.486	.543
Staff are equipped with adequate resources and equipment		.526
Staff are empowered to apply flexibility in dealing with customers		.496

Note: only values greater than 0.45 are shown

From Table 4.6 above, the results reveal that there are two factors of the 16 items of the employee contexts. The first factor consists of all items under Team climate and

Quality of supervisor(s) of the questionnaire. The second factor comes from all items under Work organization, Career & Rewards, and Overall Job Satisfaction. Considering the nature of the items falling into these two factors, the two factors are named as follows, with Cronbach's alpha in bracket:

- Factor 1 Team Climate & Superiors (CLIMSUFA) ($\alpha = 0.959$)
- Factor 2 Work organization & Overall Job Satisfaction (JOBSATFA)
($\alpha = 0.908$)

All the responses on the 188 employee questionnaires contribute to the 16 items with different response loadings. A factor can be estimated as a linear combination of the original variables, and can be calculated by the expression:

$$\begin{aligned} \text{Factor 1} &= C_{1,1} \text{ TeamClimate1} + C_{1,2} \text{ TeamClimate2} + C_{1,3} \text{ TeamClimate3} + C_{1,4} \text{ TeamClimate4} \\ &\quad + C_{1,5} \text{ TeamClimate5} + C_{1,6} \text{ TeamClimate6} + C_{1,7} \text{ TeamClimate7} + C_{1,8} \text{ TeamClimate8} \\ &\quad + C_{1,9} \text{ TeamClimate9} + C_{1,10} \text{ TeamClimate10} + C_{1,11} \text{ TeamClimate11} + C_{1,12} \text{ TeamClimate12} \\ &\quad + C_{1,13} \text{ TeamClimate13} + C_{1,14} \text{ TeamClimate14} + C_{1,15} \text{ TeamClimate15} + C_{1,16} \text{ Overall Job Satisfaction} \\ \text{Factor 2} &= C_{2,1} \text{ TeamClimate1} + C_{2,2} \text{ TeamClimate2} + C_{2,3} \text{ TeamClimate3} + C_{2,4} \text{ TeamClimate4} \\ &\quad + C_{2,5} \text{ TeamClimate5} + C_{2,6} \text{ TeamClimate6} + C_{2,7} \text{ TeamClimate7} + C_{2,8} \text{ TeamClimate8} \\ &\quad + C_{2,9} \text{ TeamClimate9} + C_{2,10} \text{ TeamClimate10} + C_{2,11} \text{ TeamClimate11} + C_{2,12} \text{ TeamClimate12} \\ &\quad + C_{2,13} \text{ TeamClimate13} + C_{2,14} \text{ TeamClimate14} + C_{2,15} \text{ TeamClimate15} + C_{2,16} \text{ Overall Job Satisfaction} \end{aligned}$$

Cij : i=factor 1,2; j=item 1.2.3.....16

For the factor analysis of 11 BPM items, Table 4.7 reports the KMO and Bartlett's test result shows that the factor analysis is meaningful as the Kaiser-Meyer-Olkin Measure of Sampling Adequacy is far greater than .6.

Table 4.7 KMO and Bartlett's Test of items in the BPM

Kaiser-Meyer-Olkin Measure of Sampling Adequacy'		.954
Barlett's Test of Sphericity	Approx. Chi-Square	2013.902
	df	55
	Sig.	.000

By employing the principal axis factoring extraction method, the major factors are identified from the BPM items. There is only one factor account for 70.9% of the variance. This is a good result as the percentage of variance explained by two factors is far above 50%. Table 4.8 indicates the items of the business process management falling into one factor.

Table 4.8 Factor grouping of items measuring Business process management

Item	Factor loading
	1
Changes to process/ workflow are made to cope with service improvement	.873
Staff are motivated to participate in the development and improvements of the workflow	.864
Management/ superior(s) always emphasizes the importance of workflow/ process management to support good service	.864
Staff know who are the process owners	.846
The working processes are reviewed regularly and continued improvements will be made	.843
The major working processes will be measured and evaluated	.842
Management/ superior(s) regards service supported by good process/ workflow as the long-term strategy	.838
The results of service/ performance level are communicated to staff	.837
There are clear process procedures and documentation for core process(es) so that staff know how to work	.827
The working processes cover different teams/ work units	.818
Most staff understand the service/ performance standard required	.807

Note: only values greater than 0.45 are shown

The BPM factor can be estimated as a linear combination of the original variables, and can be calculated by the expression:

$$\text{Factor BPM} = C_{1,1} \text{ Business Process1} + C_{1,2} \text{ Business Process2} + C_{1,3} \text{ Business Process3} + C_{1,4} \text{ Business Process4} + \dots + C_{1,11} \text{ Business Process11}$$

Cij : i=factor 1; j=item 1.2.3.....11

Cronbach's alpha (α) of the factor BPM is 0.964.

Similarly, the factor analysis technique was used to identify the possible factors of the customer questionnaire items. Table 4.9 reports the KMO and Bartlett's test result shows that the factor analysis is meaningful as the Kaiser-Meyer-Olkin Measure of Sampling Adequacy is far greater than .6.

Table 4.9 KMO and Bartlett's Test of items in the Customer Questionnaire

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.946
Barlett's Test of Sphericity	Approx. Chi-Square	2289.838
	<i>df</i>	210
	Sig.	.000

By employing the principal axis factoring extraction method, the major factors are identified from the employee questionnaire items. There are three major factors accounting for 53.3% of the variance. This is a good result as the percentage of variance explained by three factors is more than 50%. Table 4.10 is the graphic

presentation showing the percentage distribution of the 21 items of the customer questionnaire.

Table 4.10 The Scree-plot of the Factor Analysis of items in the Customer Questionnaire

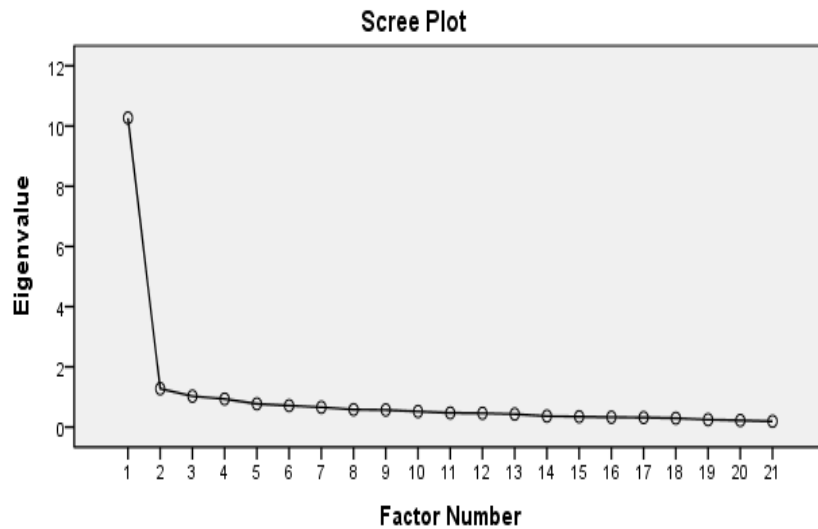


Table 4.11 indicates the items of the customer questionnaire falling into these three rotated factors. Rotated Factor Matrix (Varimax) was used because the loadings of the three factors would be more interpretable after the rotation.

Table 4.11 Factor grouping of items Measuring Customer Satisfaction (Varimax Rotated)

Item	Factor loading		
	1	2	3
There are sufficient sales/ service staff in the outlet	.704		
The appearance of sales/ service staff is satisfactory	.654		
The sales/ service staff knows what kind of product/ service I want	.649		
The know-how of the employees is competent and professional	.612		
The sales/ service staff can understand and respond rightly to my request	.611		
The attitude of the service employee(s) is friendly and helpful	.601		
The service process is smooth and satisfactory	.575		
The service level of the sales/ service staff is up to my expectation	.549		
The speed of the employees in delivering the service is satisfactory	.506		
The presentation/ appearance of the product/ service is satisfactory	.453		
You will recommend the outlet to your friends/ relatives		.747	
You will become a repeated customer of the outlet		.709	
You are satisfied with the overall standard of the outlet	.473	.583	
The price of the product/ service is reasonable		.538	
The product/ service offered is value for money		.525	
The range of choice of the product/ service is sufficient		.517	
The products/ services are properly arranged and presented		.516	
The furniture, fittings, lighting and spaciousness of the outlet is appealing			.692
The environment is neat, tidy and comfortable			.651
The kind of product/ service is fashionable/ innovative			.520
The quality of the product is up to my expectation			.457

Noted: only values greater than 0.45 are shown

From Table 4.11 above, the results reveal that there are three factors of the 21 items of the customer questionnaire. The first factor consists of all the 9 items under

Service Quality of the questionnaire and one item under Product Quality. The second factor comes from all the 5 factors of Overall Satisfaction and Price Satisfaction and two items under Quality of Assortment. The third factor composes of 4 items under Product Quality. Considering the nature of the items falling into these three factors, the three factors are named as follows, with Cronbach's alpha in bracket:

Factor 1	Service Quality (SERVQUFA) ($\alpha = 0.909$)
Factor 2	Customer Overall Satisfaction (CUSSATFA) ($\alpha = 0.886$)
Factor 3	Product Quality (PRODQUFA) ($\alpha = 0.818$)

All the responses on the 189 customer questionnaires contribute to the 21 items with different response loadings. A factor can be estimated as a linear combination of the original variables, and can be calculated by the expression:

$$\text{Factor 1} = C_{1,1} \text{ ServiceQuality1} + C_{1,2} \text{ ServiceQuality2} + C_{1,3} \text{ ServiceQuality3} + C_{1,4} \text{ ServiceQuality4} + \dots + C_{1,21} \text{ OverallCustomerSatisfaction3}$$

$$\text{Factor 2} = C_{2,1} \text{ ServiceQuality1} + C_{2,2} \text{ ServiceQuality2} + C_{2,3} \text{ ServiceQuality3} + C_{2,4} \text{ ServiceQuality4} + \dots + C_{2,21} \text{ OverallCustomerSatisfaction3}$$

$$\text{Factor 3} = C_{3,1} \text{ ServiceQuality1} + C_{3,2} \text{ ServiceQuality2} + C_{3,3} \text{ ServiceQuality3} + C_{3,4} \text{ ServiceQuality4} + \dots + C_{3,21} \text{ OverallCustomerSatisfaction3}$$

Cij : i=factor 1,2,3; j=item 1,2,3.....21

4.2.2 Confirmatory factor analysis of employment contexts

Structural equation modeling analysis provides a way of analyzing the various latent variables or factors of an instrument. The 16 items measuring employment contexts were analyzed by confirmatory factor analysis (CFA) using LISREL VIII program. Maximum likelihood estimation based on a covariance matrix was used for the analysis. The theoretical model proposes that there are five distinct factors (Team climate [TCFA], Work organization [WOFA], Quality of supervisor(s) [QSFA], Career & rewards [CRFA], and Overall job satisfaction [OSFA]). The fit indices are presented in Table 4.12. The CFI and IFI are greater than 0.9, indicating that there is a good fit between the theoretical model and data. The RMR and standardized RMR, measuring the mean square residual, are smaller than 0.05, also exhibiting a good fit between the model and data.

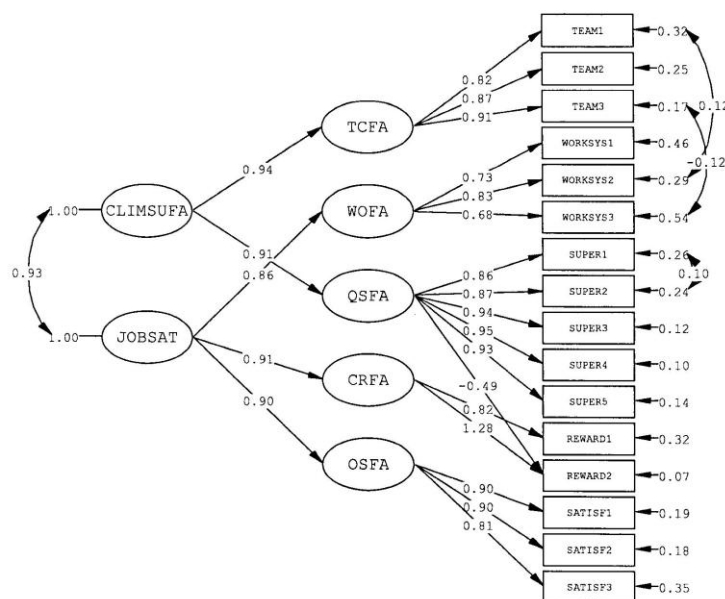
The LISREL program furnishes modification indices to suggest possible ways of modifying the model to achieve a better fit. After studying the modification indices, there appeared that a better fit model can be achieved if allowing correlations between error terms of some items. In the CFA of 16 employee contexts items, correlations were permitted between error teams of TeamClimate1 with WorkOrganization2; TeamClimate3 with WorkOrganization3; and Quality of supervisor(s)1 with Quality of supervisor(s)2.

Table 4.12 Goodness of fit indices for CFA of 5 dimensions of employment contexts with 16 items

Fit indicators	Value
Chi-Square, χ^2 , with degree of freedom (df)=90	111.88 ($p=0.06$)
Root mean square error of approximation, RMSEA	0.04
P-value for test of close fit (RMSEA<0.05)	0.85
Non-normed fit index, NNFI	0.99
Compared fit index, CFI	0.99
Incremental fit index, IFI	0.99
Goodness of fit index, GFI	0.93
Root mean square residual, RMR	0.031
Standardized RMR	0.031

A second-order factor analysis was carried out to explore further whether the five dimensions of employment contexts could be reduced to fewer factors. The path diagram and the relevant fit indices are presented in Figure 4.1, and Table 4.13.

Figure 4.1 Path diagram for second-order Confirmatory factor analysis of employment contexts



Chi-Square=125.39, df =94, p -value=0.01691, RMSEA=0.043

Table 4.13 Goodness of fit indices for second-order CFA of 5 dimensions of employment contexts with 16 items

Fit indices	Value
Chi-Square, χ^2 , with degree of freedom (<i>df</i>)=94	125.39 (<i>p</i> =0.017)
Root mean square error of approximation, RMSEA	0.04
P-value for test of close fit (RMSEA<0.05)	0.71
Non-normed fit index, NNFI	0.98
Compared fit index, CFI	0.99
Incremental fit index, IFI	0.99
Goodness of fit index, GFI	0.92
Root mean square residual, RMR	0.035
Standardized RMR	0.035

All the goodness of fit indices are higher than 0.9, implying that the second-order factor analysis of 16 items represent a good model for measuring two latent variables, Team climate + supervisor quality (CLIMSUFA), and Job satisfaction (JOBSAT). The *p* value of the Chi-Square statistic is quite small (0.017), indicating there may be correlation between error terms of some of the 16 items which may occur in responses to a questionnaire.

4.2.3 Confirmatory factor analysis of customer questionnaire

Confirmatory factor analysis was also employed to study the three factors of customer questionnaire. Exploratory factor analysis of the 21 items showed that there are three factors. Confirmatory factor analysis of the 21 items was conducted to test the goodness of fit of the data with the three-factor model. The goodness of fit indices are presented in Table 4.14. The CFI and IFI are greater than 0.9, indicating that there is a good fit between the theoretical model and data. The RMR and standardized RMR are smaller than 0.05, also showing a good fit between the

model and data. Three latent variables of customer questionnaires were determined: Service Quality (SERVQUFA), Customer Overall Satisfaction (CUSSATFA), and Product Quality (PRODQUFA). In achieving the better goodness of fit of data with the theoretical model, some correlations were permitted between error teams of measurement variables.

Table 4.14 Goodness of fit indices for CFA of 3 factors of customer questionnaire with 21 items

Fit indicators	Value
Chi-Square, χ^2 , with degree of freedom (df)=175	204.26 ($p=0.064$)
Root mean square error of approximation, RMSEA	0.03
P-value for test of close fit (RMSEA<0.05)	0.98
Non-normed fit index, NNFI	0.98
Compared fit index, CFI	0.98
Incremental fit index, IFI	0.98
Goodness of fit index, GFI	0.91
Root mean square residual, RMR	0.038
Standardized RMR	0.038

The prime goal of this study is to test the role of BPM as a mediator between employee job satisfaction and customer satisfaction. Before evaluating the role of BPM, the relationship between employee job satisfaction and customer satisfaction has to be found. The data collected from 9 hotels are nested at two levels – employee and customer. Customer data are aggregated at hotel level. The reasons are, firstly, customers at hotels are usually not served by an employee alone. For example, a room guest is served by different employees of the hotel, such as receptionist, concierge, housekeepers, and room service employees. When the customer responds to the questionnaire, he/ she evaluates the satisfaction level of

the employees who have served him/ her. Secondly, apart from the service level of employees, the customer also assesses satisfaction level on product range, quality and presentation, and price as well. Thirdly, from the hotel management point of view, the overall assessment of customers on different items of the questionnaire is more meaningful. Thus, the mean of each item of each hotel of the customer questionnaire is computed. This is the aggregated data of customers at the hotel level. The data of employee job satisfaction of employee level is used. The next step is to find the correlation between employee job satisfaction and customer satisfaction.

In testing H1, the correlation between employee job satisfaction and customer satisfaction has to be first determined. The correlation results of the two factors (CLIMSUFA, JOBSATFA), identified by the factor analysis from the 16 items of the employment contexts, and one factor (BPMFA) from the factor analysis of 11 business process items (both are from employee questionnaire), and the three factors (SERVQUFA, CUSSATFA, PRODQUFA) identified by the factor analysis from the 21 items of the customer questionnaire, are reported in Table 4.15.

The six factors in Table 4.15 consist of following items:

Employee questionnaire

Factor CLIMSUFA consists of the following items from the employee questionnaires in the sequence of loadings of the factor analysis:

- (i) My superior(s) is reliable and trustworthy.
- (ii) My superior(s) always gives me feedback on my performance which helps me for continued development.

- (iii) My superior(s) is competent and helps me to resolve problems.
- (iv) I respect my superior(s) who leads by example.
- (v) I can keep on learning from my superior(s).
- (vi) I feel like to be a member of the team member in my hotel/ outlet.
- (vii) Team members in my hotel/ outlet are very supportive to me.
- (viii) The working environment/ atmosphere is satisfactory in my hotel/ outlet.

Items from (1) to (v) are all items under Quality of Superior(s) of the employee questionnaire and items from (vi) to (viii) are all items under Team Climate of the questionnaire. This reflects that the employee respondents perceive the items under Quality of Superior(s) and Team Climate as one factor. The responses from employees support that supervisors play an essential role in shaping the climate of the team. Factor CLIMSUFA is named as Team Climate and Superiors.

Factor JOBSATFA consists of the following items of the employee questionnaire in the sequence of the loadings of factor analysis:

- (ix) The pay level and benefits are reasonable.
- (x) I am satisfied with the career and promotion opportunity.
- (xi) I have no intention to leave the present job.
- (xii) I have job satisfaction in my job.
- (xiii) I like to work for my hotel/ outlet.
- (xiv) Members of my team are competent and capable in delivering responsibilities.
- (xv) Staff are equipped with adequate resources and equipment.
- (xvi) Staff are empowered to apply flexibility in dealing with customers.

Items (ix) to (xvii) belong to the section Career & Rewards, section Overall Job Satisfaction, and section Work Organization of the employee questionnaire. This means that employee respondents regard the items under Career & Rewards, Overall Job Satisfaction, and Work Organization as one factor. The satisfaction of career development & rewards, and work organization relate to the job conditions and closely link to the overall job satisfaction of employees. Factor JOBSATFA is named as Overall Job Satisfaction.

Factor BPMFA consists of the following items from the employee questionnaire in the sequence of loadings (from high to low) from the factor analysis:

- (xvii) Changes to process/ workflow are made to cope with service improvement.
- (xviii) Staff are motivated to participate in the development and improvements of the workflow.
- (xix) Management/ superior(s) always emphasises the importance of workflow/ process management to support good service.
- (xx) Staff know who are the process owners.
- (xxi) The working processes are reviewed regularly and continued improvements will be made.
- (xxii) The major working processes will be measured and evaluated.
- (xxiii) Management/ superior(s) regards service supported by good process/ workflow as the long-term strategy.
- (xxiv) The results of service/ performance level are communicated to staff.
- (xxv) There are clear process procedures and documentation for core process(es) so that staff know how to work.

(xxvi) The working processes cover different teams/ work units.

(xxvii) Most staff understand the service/ performance standard required.

Items from (xvii) to (xxvii) above are all the items of Business Process Management (BPM) of the employee questionnaire. BPM forms a one-model construct that describes the business process in an organization. Thus, factor BPMFA is named to represent business process management.

Customer questionnaire

Factor SERVQUFA consists of the items below of the customer questionnaire in the sequence of loadings of the factor analysis:

- (i) There are sufficient sales/ service staff in the outlet.
- (ii) The appearance of sales/ service staff is satisfactory.
- (iii) The sales/ service staff knows what kind of product/ service I want.
- (iv) The know-how of the employees is competent and professional.
- (v) The sales/ service staff can understand and respond rightly to my request.
- (vi) The attitude of the service employee(s) is friendly and helpful.
- (vii) The service process is smooth and satisfactory.
- (viii) The service level of the sales/ service staff is up to my expectation.
- (ix) The speed of the employees in delivering the service is satisfactory.
- (x) The presentation/ appearance of the product/ service is satisfactory.

Items from (i) to (ix) are all the items from the section Service Quality of the customer questionnaire. Item (x) comes from Product Quality. Factor SERVQUFA is named as Service Quality.

Factor CUSSATFA composes of the following items of the customer questionnaire in the sequence of loadings of factor analysis:

- (xi) You will recommend the outlet to your friends/ relatives.
- (xii) You will become a repeated customer of the outlet.
- (xiii) You are satisfied with the overall standard of the outlet.
- (xiv) The price of the product/ service is reasonable.
- (xv) The product/ service offered is value for money.
- (xvi) The range of choice of the product/ service is sufficient.
- (xvii) The product/ service are properly arranged and presented.

Items (xi) to (xv) belong to all the items under the section of Customer Overall Satisfaction Price Satisfaction of the customer questionnaire. Items (xvi) to (xvii) come from the section Quality of Assortment. The results of the factor analysis indicate that customers perceive overall satisfaction, price satisfaction and quality of assortment as one factor. Factor CUSSATFA is named as Customer Overall Satisfaction.

Factor PRODQUFA consists of the items below of the customer questionnaire in the sequence of loadings of factor analysis:

- (xviii) The furniture, fitting, lighting and spaciousness of the outlet is appealing.
- (xix) The environment is neat, tidy and comfortable.
- (xx) The kind of product/ service is fashionable/ innovative.
- (xxi) The quality of the product is up to my expectation.

Items from (xviii) to (xxi) come from the section Product Quality of the questionnaire.

Factor PRODQUFA is named as Product Quality.

**Table 4.15 Correlation between Employee Job Satisfaction and Customer Satisfaction
(all employee groups)**

		CLIMSUFA	JOBSAFA	BPMFA	SEVRQUFA	CUSSATFA	PRODQUFA
CLIMSUFA	Pearson Correlation	1	.078	.599**	.180*	.253**	-.195
	Sig. (2-tailed)	.	.288	.000	.013	.000	.194
	N	189	189	189	189	189	189
JOBSAFA	Pearson Correlation	.078	1	.680**	.169*	.315**	-.018
	Sig. (2-tailed)	.288	.	.000	.020	.000	.810
	N	189	189	189	189	189	189
BPMFA	Pearson Correlation	.599**	.680**	1	.255**	.350**	.010
	Sig. (2-tailed)	.000	.000	.	.000	.000	.890
	N	189	189	189	189	189	189
SEVRQUFA	Pearson Correlation	.180*	.169*	.255**	1	.140	.138
	Sig. (2-tailed)	.013	.020	.000	.	.055	.058
	N	189	189	189	189	189	189
CUSSATFA	Pearson Correlation	.253**	.315**	.350**	.140	1	.135
	Sig. (2-tailed)	.000	.000	.000	.055	.	.063
	N	189	189	189	189	189	189
PRODQUFA	Pearson Correlation	-.095	-.018	.010	.138	.135	1
	Sig. (2-tailed)	.194	.810	.890	.058	.063	.
	N	189	189	189	189	189	189

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The results from the Pearson Correlation in Table 4.15 show that the correlations are significant between CLIMSUFA, JOBSATFA, BPMFA and SERVQUFA, CUSSATFA. However, there is no significant correlation found between PRODQUFA and factors of

Employment contexts and Business process. The results of the correlation analysis show that there is a positive correlation, between employee job satisfaction and customer satisfaction which support H1 of this study.

Hypothesis 1 (H1): *Employee job satisfaction is positively related to customer satisfaction.*

Moreover, another observation is that BPMFA (BPM) has the strongest correlation with the SERVQUFA and CUSSATFA of customer satisfaction. The next strongest correlation with customer satisfaction is JOBSATFA (Overall Job Satisfaction).

In order to investigate more deeply on the differences of effect of employment contexts, employee job satisfaction, and business process factors (i.e. CLIMSUFA, JOBSATFA, BPMFA) on the three factors of customer satisfaction (i.e. SERVQUFA, CUSSATFA, PRODQUFA), regression analysis was conducted. Table 4.16 shows the results of the regression analysis. The factor BPMFA (BPM) has the most significant contribution to the variation of SERVQUFA (Service Quality) and PRODQUFA (Product Quality) with Beta coefficients of .21 and .31 respectively. JOBSATFA (Overall Job Satisfaction) has the stronger contribution to the variation of CUSSATFA (Customer Overall Satisfaction).

Table 4.16 Regression Analysis of Employee Job Satisfaction and Customer Satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	<i>B</i>	Std. Error	<i>Beta</i>		
(Constant)	2.769	.126		21.936	.000
CLIMSUFA	.021	.040	.055	.513	.608
JOBSAFA	.010	.044	.025	.215	.830
BPMFA	.078	.056	.205	1.403	.162

Dependent Variable: SERVQUFA

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	<i>B</i>	Std. Error	<i>Beta</i>		
(Constant)	1.876	.111		16.934	.000
CLIMSUFA	.071	.035	.207	2.026	.044
JOBSATFA	.094	.039	.270	2.416	.017
BPMFA	.015	.049	.042	.306	.760

Dependent Variable: CUSSATFA

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	<i>B</i>	Std. Error	<i>Beta</i>		
(Constant)	2.702	.076		35.697	.000
1 CLIMSUFA	-.058	.024	-.264	-2.422	.016
JOBSATFA	-.046	.027	-.208	-1.743	.083
BPMFA	.070	.033	.310	2.087	.038

Dependent Variable: PRODQUFA

The next step is to investigate whether there is a positive link between employee job satisfaction and customer satisfaction in different groups of employees with different intensity of customer contact. From Table 4.17, it is shown that the correlation between the overall job satisfaction (JOBSATFA) and customer overall satisfaction (CUSSATFA) are significant for the group of employees with high customer contact and the group of employees with no customer contact. The correlation coefficients are .33 and .44 for the employee group with high customer interaction and with no customer interaction respectively. The correlations between BPM (BPMFA) and the Customer Overall Satisfaction (CUSSATFA) are significant for all groups of employees. The correlation coefficients between BPMFA and CUSSATFA are .34, .43 and .28 respectively. It is worth highlighting that the correlations between Customer Overall Satisfaction (CUSSATFA) and Overall Job Satisfaction (JOBSATFA) are significant for all employee groups., with correlation coefficients .33, .25 and .44 for employee group with high, minimal and no customer interaction respectively.

The correlation between Product Quality (PRODQUFA) and the Overall Job Satisfaction (JOBSATFA); and Product Quality (PRODQUFA) and Business Process Management (BPMFA) are not significant for the three groups of employees, with high, minimal and no customer contact. Moreover, the correlation between Service Quality (SERVQUFA) and Team Climate & Superiors (CLIMSUFA) is also not significant for all the three groups of employees. The findings reflect that there is positive relationship between employee job satisfaction and customer satisfaction in all groups of customer contact.

The above results support the study of Wangenheim et al. (2007) in applying the homogeneous effect concept of service climate in the ASA model to demonstrate that employee job satisfaction holds for all groups of employees, with high, minimal or no customer contact, in influencing customer satisfaction. Thus, the findings support H2 that the positive correlation of employee job satisfaction and customer satisfaction exists in all groups of employees. The positive relation not only can be found in employees the highest intensity of customer interaction, but also in employee groups with minimal or no customer contact.

Hypothesis 2 (H2): *The positive relationship between employee job satisfaction and customer satisfaction exists not only in employee groups with high intensity of customer interaction, but also in employee groups with minimal or no customer contact.*

Table 4.17 Correlations between Employee Job satisfaction and Customer Satisfaction (by different groups of employees with different degrees of customer contact intensity)

Pearson Correlations						
	CLIMSUFA	JOBSATFA	BPMFA	SERVQUFA	CUSSATFA	PRODQUFA
	H M N	H M N	H M N	H M N	H M N	H M N
JOBSATFA						
H	.11	1				
M	.02	1				
N	.18	1				
BPMFA						
H	.65**	.73**	1			
M	.67**	.58**	1			
N	.50**	.75**	1			
SERVQUFA						
H	.16	.21	.24	1		
M	.23	-.01	.22	1		
N	.07	.39**	.32*	1		
CUSSATFA						
H	.23	.33**	.34**	.68**	1	
M	.32**	.25*	.43**	.80**	1	
N	.16	.44**	.28*	.64**	1	
PRODQUFA						
H	-.23	.03	-.04	.62**	.48**	1
M	.06	-.15	.04	.74**	.68**	1
N	-.31*	.18	.03	.52**	.36**	1

HMN denotes different intensity of customer contact shown by employees in the questionnaire:

H: employees with 20 or more times of customer contact per day (n = 128)

M: employees with customer contact of less than 20 times per day (n = 138)

N: employees with no customer contact (n = 108)

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

4.2.4 Path analysis to explore the mediating role of BPM between job satisfaction and customer satisfaction

Path analysis can be used to test for the two mediation paths (1) BPMFA between Climate & Supervisors (CLIMSUFA) and Service Quality (SERVQUFA), Customer overall satisfaction (CUSSATFA) and (2) BPMFA between Overall Job Satisfaction (JOBSATFA) and SERVQUFA, CUSSATFA. Figure 4.2 illustrates the sequence of path analysis in determining the mediating effect of BPM. The direct effect between job satisfaction and customer satisfaction was first determined, i.e. the path coefficients between CLIMSUFA and SERVQUFA, CUSSATFA (path coefficients a, and b). It was followed by path analysis with BPMFA included in the path model (i.e. path coefficients e, g and e, h). The procedure was repeated to find the coefficients of the direct effect between JOBSATFA and SERVQUFA, CUSSATFA (i.e. path coefficients c and d), and the mediating effect of BPM (i.e. path coefficients f, g and f, h). The results were presented in Table 4.18.

Figure 4.2 SEM results for the direct and mediating effects between job satisfaction and customer satisfaction

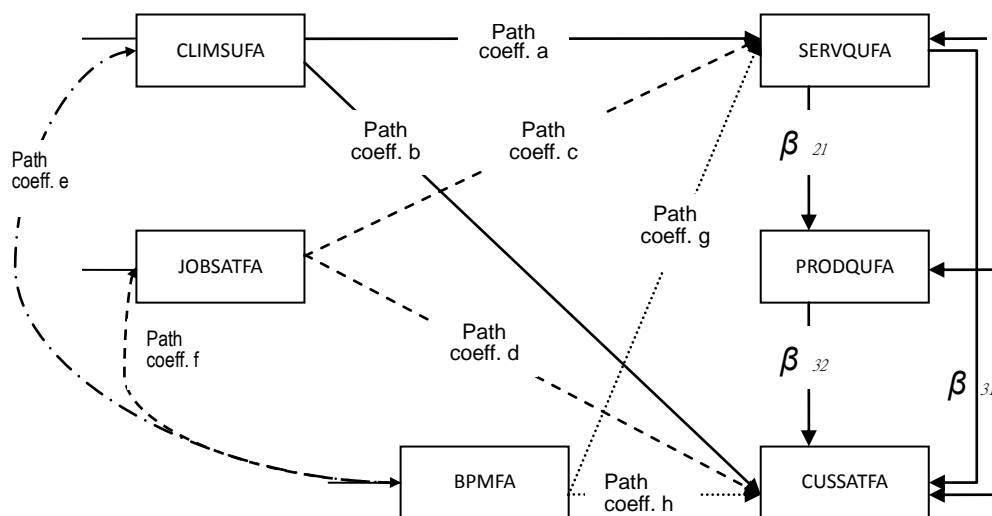


Table 4.18 Parameters and fit indices of structural models on mediating effect of BPM

	Standardized path coefficients	
Model parameter	Direct effect	With mediating effect
Model 1 (CLIMSUFA, SERVQUFA and CUSSATFA)		
SERVQUAL→PRODQU, β_{21}	0.14	0.14
PRODQU→CUSSATFA, β_{32}	0.15	0.14
SERVQUAL→CUSSAFA, β_{31}	0.07	0.03
CLIMSUFA→SERVQUFA (path coeff. a)	0.19	0.06
CLIMSUFA→CUSSATFA (path coeff. b)	0.25	0.09
CLIMSUFA→BPMFA→SERVQUFA (path coefficients e, g)		0.60, 0.22
CLIMSUFA→BPMFA→CUSSATFA (path coefficients e, h)		0.60, 0.29
Model 2 (JOBSATFA, SERVQUFA and CUSSATFA)		
SERVQUAL→PRODQU, β_{21}	0.14	0.14
PRODQU→CUSSATFA, β_{32}	0.13	0.13
SERVQUAL→CUSSATFA, β_{31}	0.07	0.04
JOBSATFA→SERVQUFA (path coeff. c)	0.17	-0.01
JOBSATFA→CUSSATFA (path coeff. d)	0.31	0.15
JOBSATFA→BPMFA→SERVQUFA (path coefficients f, g)		0.68, 0.26
JOBSATFA→BPMFA→CUSSATFA (path coefficients f, h)		0.68, 0.24
Fit indices	Model 1	Model 2
Chi-Square, χ^2 , with degree of freedom (df)=7	13.97 ($p=0.052$)	12.73 ($p=0.079$)
Root mean square error of approximation, RMSEA	0.073	0.067
P-value for test of close fit (RMSEA<0.05)	0.21	0.27
Non-normed fit index, NNFI	0.95	0.96
Compared fit index, CFI	0.98	0.98
Incremental fit index, IFI	0.98	0.98
Goodness of fit index, GFI	0.98	0.98
Root mean square residual, RMR	0.037	0.035
Standardized RMR	0.037	0.035

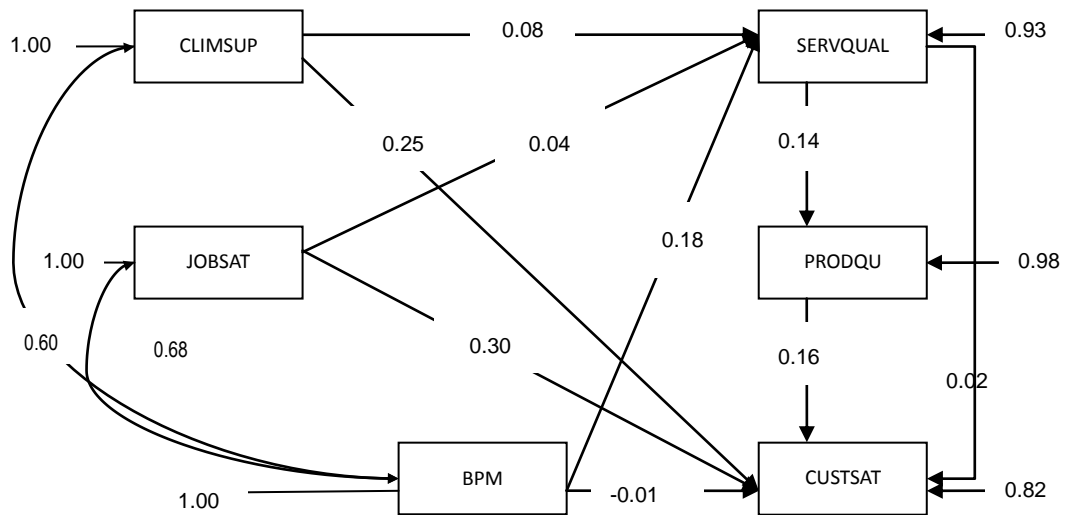
When testing the fit of the inclusion of mediator, (X-M-Y), the paths of the direct path (X-Y) and the paths with the mediator (X-M, M-Y) will be compared. If mediating effect is present, the paths X-M and M-Y will be significant, and the original significant relationship between independent and dependent variables (X-Y) will become weaker or insignificant (Mach, Dolan & Tsafirir, 2010). Refer to Model 1 of Table 4.18, the path coefficient of direct effect (CLIMSUFA→SERVQUAF), $a = 0.19$ was reduced to 0.06 when mediation effect BPMFA was included; the path coefficient of another direct effect (CLIMSUFA→CUSSATFA), $b = 0.25$ was reduced to 0.09 with mediator effect of BPMFA. This decrease in the relationship between direct effect between X-Y upon the inclusion of mediator, M, indicates the presence of mediator effect. Similarly, refer to Model 2 of Table 4.18, the path coefficients of direct effects (JOBSAFA→CUSSATFA) and (SERVQUFA→CUSSATFA) were reduced from $c = 0.17$ to -0.01 and from $d = 0.31$ to 0.15 respectively. The findings confirm the mediating role of Business Process Management (BPMFA) between employee satisfaction and customer satisfaction.

For Model 1, the Chi-Square, χ^2 , 13.97, with degree of freedom (df)=7 and p -value=0.052 ($p>0.05$) indicates that the model is fit. The Goodness of Fit Indices (GFI, IFI, GFI) are 0.98 and imply very good fit. For Model 2, the relevant indicators are: the Chi-Square, χ^2 , 12.73, with degree of freedom (df)=7 and p -value=0.079 ($p>0.05$) indicates that the model is fit. The Goodness of Fit Indices (GFI, IFI, GFI) are 0.98 and also imply very good fit.

4.2.5 Path analysis of relationships among employee job satisfaction, BPM, and customer satisfaction

Using path analysis methodology, the relationship amongst the three variables – employee job satisfaction, BPM and customer satisfaction is shown in Figure 4.3 and the parameters of fit indices are presented in Table 4.19. The Chi-Square, χ^2 , 6.7, with degree of freedom (df)=4 has p -value=0.15 ($p>0.05$) indicates that the model is fit. Another indication showing the model is well-fit can be judged by the value of the Expected Cross-Validation Index, ECVI (0.22) in this model which is less than the ECVI for the saturated model (0.23). The point estimate of RMSEA (0.061) is slightly above 0.05, and RMR (0.03) is below 0.05 indicating that the model is good fit. The Goodness of Fit Index (GFI) is 0.99, and the Adjusted Goodness of Fit Index (AGFI) is 0.94. For the paths between employee job satisfaction factors and customer satisfaction factors, the path coefficients are relatively high and positively related in the path BPM→Service Quality (.18, $p=0.15$), Team Climate & Superiors→Customer Overall Satisfaction (.25, $p=0.25$), and Overall Job Satisfaction→Customer Overall Satisfaction (.30, $p=0.11$).

Figure 4.3 Structural Model of Employee Job Satisfaction (all employee groups), BPM and Customer Satisfaction (Full model)



chi-Square=6.74, $df=4$, p -value=0.15002, RMSEA=0.061

BPM = Business Process Management

JOBSAT = Overall Job Satisfaction

CLIMSUP = Team Climate & Superiors

CUSTSAT = Customer Overall Satisfaction

SERVQUAL = Service Quality

PRODQU = Product Quality

Table 4.19 Parameters and fit indices of structural model (full model)

Model parameters	Standardized path coefficients (N=377)
JOB SAT \leftrightarrow BPM, Φ_{23}	.68
CLIM SUP \leftrightarrow BPM, Φ_{13}	.60
SERVQUAL \rightarrow PRODQU, β_{21}	.14
PRODQU \rightarrow CUSTSAT, β_{32}	.16
SERVQUAL \rightarrow CUSTSAT, β_{31}	.02
CLIM SUP \rightarrow SERVQUAL, γ_{11}	.08
JOB SAT \rightarrow SERVQUAL, γ_{12}	.04
BPM \rightarrow SERVQUAL, γ_{13}	.18
CLIM SUP \rightarrow CUSTSAT, γ_{31}	.25
JOB SAT \rightarrow CUSTSAT, γ_{32}	.30
BPM \rightarrow CUSTSAT, γ_{33}	-.01
Fit indices	
Chi-Square, χ^2 , with degree of freedom (df)=4	6.74 ($p=0.15$)
Root mean square error of approximation, RMSEA	0.06
P-value for test of close fit (RMSEA<0.05)	0.33
Expected cross-validation index (ECVI)	0.22
ECVI for saturated model	0.23
Normed fit index, NFI	0.98
Non-normed fit index, NNFI	0.97
Compared fit index, CFI	0.99
Incremental fit index, IFI	0.99
Relative fit index, RFI	0.92
Goodness of fit index, GFI	0.99
Adjusted goodness of fit index, AGFI	0.94
Root mean square residual, RMR	0.03

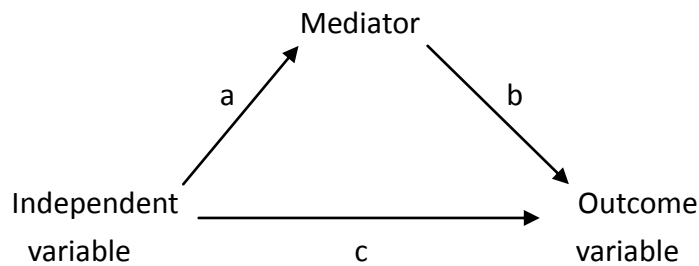
*coefficient is significant at the 0.05 level.

4.2.6 Regression analysis of customer satisfaction variables

As mentioned in Section 3.6, the effect of BPM as a mediator can be deduced from the path coefficients. However, the standard procedure of Baron & Kenny (1986) is also widely applied in organizational research (Gardner, Dyne & Pierce, 2004;

Restubog, Bordia & Tang, 2006; Wong & Wong, 2011), this study adopts the applied procedures in the research of Gelade & Young (2005).

Figure 4.4 The nature of mediator variables



Source: Baron & Kenny, 1986, p.1176

Baron & Kenny (1986) described the criteria on how to establish whether a variable functions as a mediator (Figure 4.4). Firstly, the variations of the independent variable significantly account for variations in the presumed mediator (i.e. path a). Secondly, the variations in the mediator significantly account for variations in the dependent variables (i.e. path b). Finally, when paths a and b are controlled, the previous significant relation between the independent and dependent variables (i.e. path c) is no longer significant. A variable is regarded to function as a mediator (BPM in this study) depends on the extent that it accounts for the relation between the predicting variable (employee job satisfaction in this study) and outcome variable (customer satisfaction in this study).

The procedures for examining the mediating effect involve the calculation of two regression equations. For the first equation (step 1), the outcome variable is regressed on the predicting variable. For the second equation (step 2), the outcome

variable is regressed at the same time on the predicting variable and the mediator. The mediation effect is defined by the reduction in the effect of original variables when mediator is included in the regression analysis. The mediation effect is calculated by subtracting the coefficient of the predicting variable in the first equation from the coefficient in the second equation and divided by the coefficient of the first equation. R^2 in step 1 is the percentage the predicting variable accounts for the variance in the outcome variable, and R^2 in step 2 is the percentage of the predicting variable and the mediator account for the variance of the outcome variable. Thus, the difference of R^2 in step 1 and step 2 indicates the intervening effect of the mediator. The analysis of the mediation effect of BPM is reported in Table 4.20.

The column of Mediation Effect in Table 4.20 shows the intervention impact of BPM for all employees. It indicates that BPM is a strong variable mediating the overall job satisfaction and service quality. The mediation effect is 105%. The intervening influence of BPM is also prominent between team climate & supervisors and service quality (76.7%), between team climate & superiors and overall job satisfaction (73.6%), and between overall job satisfaction and customer overall satisfaction (54.6%). The results report that BPM is a strong intervening variable between employee job satisfaction and customer satisfaction variables. Thus, the findings support H3 that BPM is a strengthening mediator between employee job satisfaction and customer satisfaction.

Hypothesis 3 (H3): *BPM is a strengthening mediator between employee job satisfaction and customer satisfaction*

Table 4.20 Hierarchical Regression Analysis for Effects of Overall Job Satisfaction and BPM on Overall Customer Satisfaction (all employee groups)

Dependent variable =Customer overall satisfaction

Path	N	Independent Variables	Step 1 β	Step 2 β	Mediation Effect
JOBSAT →BPM →CUSTSAT	377	1. Job Satisfaction	.315***	.143	54.6%
		2. BPM		.253**	
		β change		-.172	
		R^2	9.9%	13.3%	
CLIMSUP →BPM →CUSTSAT		1. Team Climate & Superiors	.253**	.068	73.6%
		2. BPM		.309**	
		β change		-.185	
		R^2	6.4%	12.5%	
JOBSAT →BPM →SERVQUAL		1. Job Satisfaction	.169	-.009	105%
		2. BPM		.261	
		β change		-.178	
		R^2	2.8%	6.5%	
CLIMSUP →BPM →SERVQUAL		1. Team Climate & Superiors	.180*	.042	76.7%
		2. BPM		.230**	
		β change		-.138	
		R^2	5.2%	6.6%	

*correlation is significant at .05 level.

**correlation is significant at .01 level.

***correlation is significant at .001 level.

JOBSAT –Overall Job Satisfaction

CUSTSAT – Overall Customer Satisfaction

CLIMSUP – Team Climate & Superiors

SERVQUAL – Service Quality

Applying the same methodology, the mediating effect of BPM between employee job satisfaction and customer satisfaction for different groups of employees with

different degrees of customer contact intensity is reported in Tables 4.21a, 4.21b, 4.21c and 4.21d below. The intervening effect of BPM is strong for all groups of employees despite there are some variations of intervention for different employee job satisfaction variables and customer variables. In general, the effect of BPM is stronger for the group of employees with high and minimal intensity of customer contact than the employee group with no customer contact. The paths that the mediation effect of BPM is the strongest for the employee group with the highest intensity of contact include team climate & superiors→BPM→service quality (101%), team climate & superiors→BPM→customer overall satisfaction (98.2%). The BPM mediation effect is very prominent in the employee group with minimal customer contact for the paths overall job satisfaction→BPM→service quality (5050%), and overall job satisfaction→BPM→customer overall satisfaction (100%). Mediation influence of BPM is also found in employee group with no customer contact in all the four paths, namely, overall job satisfaction→BPM→customer overall satisfaction (18.3%), team climate & superiors→BPM→customer overall satisfaction (85.1%), overall job satisfaction→BPM→service quality (11.7%), team climate & superiors→BPM→service quality(277%). Thus, the analysis supports H4 that the effect of BPM, as a mediator between employee job satisfaction and customer satisfaction, exists not only in employees with high customer interaction, but also in employees with minimal or with no customer interaction.

Hypothesis 4 (H4): *The effect of BPM, as a mediator between employee job satisfaction and customer satisfaction, exists not only in employees with high customer interaction, but also in employees with minimal or no customer interaction.*

Table 4.21a Hierarchical Regression Analysis for Effects of Overall Job Satisfaction and BPM on Overall Customer Satisfaction (by employee groups with different degrees of customer contact intensity)

Dependent variable = Overall customer satisfaction

Independent variables = Overall job satisfaction, BPM

Path	N	Variable	Step 1 β	Step 2 β	Mediation effect
ALL Groups	377	1. Job satisfaction	.315***	.143	54.6%
JOBSAT →BPM→CUSTSAT		2. BPM		.253**	
		β change		-.172	
		R^2	9.9%	13.3%	
High Contact Group	128	1. Job satisfaction	.332**	.177	46.7%
JOBSAT →BPM→CUSTSAT		2. BPM		.212	
		β change		-.155	
		R^2	11.0%	13.1%	
Minimal Contact Group	138	1. Job satisfaction	.249*	.000	100%
JOBSAT →BPM→CUSTSAT		2. BPM		.431**	
		β change		-.249	
		R^2	6.2%	18.5%	
No Contact Group	108	1. Job satisfaction	.442**	.523**	18.3%
JOBSAT →BPM→CUSTSAT		2. BPM		-.108	
		β change		.081	
		R^2	19.5%	20.0%	

*correlation is significant at .05 level.

**correlation is significant at .01 level.

***correlation is significant at .001 level.

JOBSAT –Overall Job Satisfaction

CUSTSAT – Overall Customer Satisfaction

Table 4.21b Hierarchical Regression Analysis for Effects of Team Climate & Superiors and BPM on Overall Customer Satisfaction (by employee groups with different degrees of customer contact intensity)

Dependent variable = Overall customer satisfaction

Independent variables = Team climate & superiors, BPM

Path	N	Variable	Step 1 β	Step 2 β	Mediation effect
ALL Groups	377	1.Team climate & superiors	.253**	.068	73.1%
CLIMSU →BPM→CUSTSAT		2.BPM		.309**	
		β change		-.185	
		R^2	6.4%	12.5%	
High Contact Group	128	1. Team climate & superiors	.225	.004	98.2%
CLIMSU →BPM→CUSTSAT		2.BPM		.339*	
		β change		-.221	
		R^2	5.0%	11.6%	
Minimal Contact Group	138	1. Team climate & superiors	.319**	.058	81.8%
CLIMSU →BPM→CUSTSAT		2.BPM		.392*	
		β change		-.289	
		R^2	10.2%	18.7%	
No Contact Group	108	1. Team climate & superiors	.161	.024	85.1%
CLIMSU →BPM→CUSTSAT		2.BPM		.272	
		β change		-.197	
		R^2	2.6%	8.1%	

*correlation is significant at .05 level.

**correlation is significant at .01 level.

CLIMSUP – Team Climate & Superiors

CUSTSAT – Overall Customer Satisfaction

Table 4.21c Hierarchical Regression Analysis for Effects of Overall Job Satisfaction and BPM on Service Quality (by employee groups with different degrees of customer contact intensity)

Dependent variable = Service quality

Independent variables = Overall job satisfaction, BPM

Path	N	Variable	Step 1 β	Step 2 β	Mediation effect
ALL Groups	377	1.Job satisfaction	.169	-.009	105%
JOBSAT →BPM→SERVQU		2.BPM		.261	
		β change		-.178	
		R^2	2.8%	6.5%	
High Contact Group	128	1.Job satisfaction	.210	.075	64.4%
JOBSAT →BPM→SERVQU		2.BPM		.185	
		β change		-.135	
		R^2	5.2%	6.0%	
Minimal Contact Group	138	1.Job satisfaction	-.004	-.198	5050%
JOBSAT →BPM→SERVQU		2.BPM		.336*	
		β change		-.202	
		R^2	0.0%	7.5%	
No Contact Group	108	1.Job satisfaction	.392**	.346	11.7%
JOBSAT →BPM→SERVQU		2.BPM		.060	
		β change		-.046	
		R^2	15.3%	15.5%	

*correlation is significant at .05 level.

**correlation is significant at .01 level.

JOBSAT –Overall Job Satisfaction

SERVQUAL – Service Quality

Table 4.21d Hierarchical Regression Analysis for Effects of Team Climate & Superiors and BPM on Service Quality (by employee groups with different degrees of customer contact intensity)

Dependent variable = Service quality

Independent variables = Team climate & superiors, BPM

Path	N	Variable	Step 1 β	Step 2 β	Mediation effect
ALL Groups	377	1.Team climate & superiors	.180*	.042	76.7%
CLIMSU →BPM→SERVQU		2.BPM		.230**	
		β change		-.138	
		R^2	3.2%	6.6%	
High Contact Group	128	1. Team climate & superiors	.155	-.002	101%
CLIMSU →BPM→SERVQU		2.BPM		.241	
		β change		-.157	
		R^2	2.4%	5.7%	
Minimal Contact Group	138	1. Team climate & superiors	.233	.154	33.9%
CLIMSU →BPM→SERVQU		2.BPM		.118	
		β change		-.079	
		R^2	5.4%	6.2%	
No Contact Group	108	1. Team climate & superiors	.069	-.122	277%
CLIMSU →BPM→SERVQU		2.BPM		.383*	
		β change		-.191	
		R^2	5.0%	11.4%	

*correlation is significant at .05 level.

**correlation is significant at .01 level.

CLIMSUP – Team Climate & Superiors

SERVQUAL – Service Quality

4.3 Discussion

Customer satisfaction is the heart of any organization. The aim of this research was to extend the prior research works on the linkage between employee job satisfaction and customer satisfaction, with particular emphasis on the exploring the role of BPM as a mediator between them. The hotel industry is a people business, characterized by frequent customer encounters by employees. Previous research highlight that whether employees are satisfied or not will affect their attitude and emotion when they interact with customers, which will impact the perceived quality of service by the customers, thus affecting customer satisfaction. Therefore, customer satisfaction is mirrored by employee satisfaction. This is the 'transaction satisfaction' approach. The notable service-profit chain of Haskett et al. (2008) is one example that applies this approach to explain the employee-customer satisfaction relationship. By means of factor analysis, three factors are identified from the employee questionnaire. The three factors are BPM, team climate & superiors, and overall job satisfaction. There are three factors identified from the customer questionnaire by factor analysis, namely, service quality, product quality and customer overall satisfaction. The findings show that the factors relating to employee job satisfaction (team climate & superiors, overall job satisfaction, BPM) are significantly correlated with the three factors relating to two factors of customer satisfaction (service quality and customer overall satisfaction). The correlation figures ranges from .18 to .35. This supports prior research, for example, Little & Dean (2006), Liao & Chuang (2004), Yoon et al. (2001), Johnson (1996), and the service-profit chain of Haskett et al. (2008) on the linkage between employee job satisfaction and customer satisfaction, in the context of the hospitality industry.

The study of Wangenheim et al. (2007) demonstrated the homogeneous effect of service climate concept in the ASA model in influencing the job satisfaction of employees (covering all employee groups, from high customer contact to minimal and no customer contact), which in turn impacts the customer satisfaction level. To further investigate if the linkage between employee job satisfaction and customer satisfaction also occurs in employees with frequent, minimal or no customer contact; employees of this study are classified into groups with different levels of customer contact intensity. Findings indicate that the employee-customer satisfaction link exists in different groups of employees with different degrees of customer interaction intensity. One more point worth noting is that the correlation of the employee satisfaction factors and customer satisfaction factors are also significantly high in the group of employees with no customer contact. The results of this research in the hospitality industry support the research of Wangenheim et al. (2007) whose study is the pioneer in testing the employee-customer satisfaction link exists in different groups of employees with different degree of customer contact frequency. Research applies the emotional contagion framework to explain the employee-customer satisfaction linkage, focusing on the employee-customer encounter influence for employee groups with frequent customer contact. This study adds to reveal that the employee-customer satisfaction link is also significantly strong in employees with no customer encounter in the hotel industry.

There are two reasons explaining this phenomenon. Firstly, organizational climate influences the attitude of employees, the perceived service quality, hence customer satisfaction in hotels (Davidson, 2003). Employee commitment in a service culture

and climate is the basis for the success of an organization. Culture and climate shapes the behaviour and commitment of employees. Service culture and climate exists throughout the whole team and the attitudes of all employees are influenced towards the direction. This helps to explain why team climate affects the employee job satisfaction of all employees, ranging from frontline employees (with the highest customer contact intensity in a hotel) to back office support employees (with no customer contact), in achieving a high level of customer satisfaction. Secondly, in the hotel industry, there are some 'products' produced by employees with no customer contact, such as the cleaning of hotel rooms by housekeeping employees, or food and beverage products by kitchen employees. The quality of such products are also evaluated by customers and reflected in the customer satisfaction results, despite the producers are not seen or encountered by the customers. When there is an environment with a strong service climate in the hotel, all employees, with a very high customer encounter intensity or with no customer contact, devote their full efforts to achieve the best standard of service during the delivery service or the process of producing the 'products' for the customers.

There is one more point worth discussing about organizational climate. The items on the team climate and quality of superiors are under two different sections of the employee questionnaire, however, from the results of factor analysis on all the items of the employee questionnaires, all the items under team climate and quality of supervisors are grouped into one 'big' factor. This means that team climate and quality of superiors are perceived by employees as one factor. Superiors or managers play an essential role in shaping the climate of the team.

The three factors of customer satisfaction, namely, service quality, product strength and customer overall satisfaction are not significantly correlated with each other. The correlation figures are all .14 with each other (See Table 4.15). Items under the section of service quality in this research are the attitude, responsiveness, know-how and appearance of the employees (Cronbach's alpha = 0.91). Items under the product quality in this study include the quality level, the presentation, and the environment of the product/ service being served (Cronbach's alpha = 0.82). Customer overall satisfaction in this study includes price satisfaction of customer and the assortment of product/ service as well (Cronbach's alpha = 0.89). The findings show that all the items of the three factors of customer satisfaction are reliable and significant. This reflects that all these items are the elements of concern to the satisfaction and evaluation of customers.

It is shown from this research that BPM is the factor with the highest correlation with the other employee job satisfaction factors. The correlation is .60 with team climate and superiors, and .68 with rewards and satisfaction. The correlation between team climate and superiors, and rewards and satisfaction is .08. This reflects that the initiatives of BPM are the most essential element from the perspectives of employees, even more important than pay and rewards, in influencing employee job satisfaction. With the implementation of BPM, employees are provided with clear policies and procedures for service delivery, and it is unnecessary for them to guess what are the processes, requirements and standards of the organization which will cause frustrations and sometimes even create negative feelings on the job.

Moreover, out of the three factors: team climate & superiors, overall job satisfaction, and BPM, BPM is the factor that mostly significantly correlates with service quality, and customer overall satisfaction, but not with product quality. The correlation coefficients are .26, .24 and .01. As mentioned at the beginning of this section, the results of this study conform to the prior research showing the correlation between employee job satisfaction and customer satisfaction. This study adds further to the literature by illustrating the specific factor of BPM (as one of the key constructs of employee job satisfaction) with the most significant correlation with customer satisfaction.

The regression analysis investigates further into the differences of the impact of the three employee satisfaction factors on customer satisfaction. Using the three customer satisfaction factors as the dependent variables, the regression coefficients show that BPM is the most significant factor contributing to the variation of all the two customer satisfaction - service quality (.21), and customer overall satisfaction (.31). Therefore, apart from correlation analysis, the effect of BPM on customer satisfaction factors is also illustrated by regression analysis. Both the findings from correlation analysis and regression analysis echo the previous research studies in demonstrating that BPM is the driver for service quality (Roth & Jackson III, 1995) and customer satisfaction (Frei et al., 1999; Maddern et al., 2007; and Kumar et al., 2008).

One major purpose of this study is to extend the prior works to investigate the impact of BPM as a variable between employee job satisfaction and customer satisfaction. The path analysis and hierarchical regression analysis methodology are used. The path coefficients of employee job satisfaction variables and customer overall

satisfaction are significant. As shown in Table 4.19, the mediation effect of BPM between overall job satisfaction and service quality is substantial (105%). Mediated effect of BPM is also found between team climate & superiors and service quality (76.7%); and between climate & superiors and customer overall satisfaction (73.1%). The intervening influence of BPM between overall job satisfaction and overall customer satisfaction is not prominent (54.6%). The findings indicate that BPM is an 'intervening variable' in influencing the relation between job satisfaction and customer satisfaction. This means that when we just look at the relationship between job satisfaction and customer satisfaction, the effect of BPM is not revealed. The results show that BPM is a significant element between employee job satisfaction and customer satisfaction.

This research aims at further investigating the mediating role of BPM in different groups with different levels of customer contact intensity. The design of the employee questionnaire of this research stratifies employees with different frequencies of customer interaction. Employees are classified into groups with customer contact of more than 20 times per day, 10-19 times per day, less than 10 times per day and none customer contact. For the hierarchical regression analysis on different groups of employees for this research, three groups of employees are used, namely, employees with customer interaction of 20 or more times per day, less than 20 times per day and with no customer contact, representing 34%, 37% and 29% of the customer respondents.

Tables 4.21a, b, c and d report the mediation effect of BPM for the three groups of employees with different levels of customer interaction intensity. For the employee

group with high customer contact, the mediation influence of BPM and employee job satisfaction factors as independent variables and customer overall satisfaction as dependent variables ranges from 46.7% to 101%. The mediation effect of BPM for employee group with minimal customer contact ranges from 33.9% to 5050%. For employee group with no customer contact, the mediation effect of BPM ranges from 11.7% to 277%. Therefore, overall speaking, the mediation impact of BPM is significant for all employee groups with different levels of customer interaction intensity. The results show that BPM is an obvious 'intervening variable' for all employee groups. The mediating influence of BPM is stronger for employee group with high customer contact and minimal customer contact than the employee group with no customer contact. This may indicate that company's business process is more important than physical contact with customers in engaging customers when receiving service.

Applying the technical service quality and functional service quality concept of Gronroos (1988, 1998), the results of this study not only spotlight the critical role of technical quality, but also show the influence of functional quality in the employee-customer satisfaction link. BPM, as a technical service quality, plays a strengthening mediating role between employee job satisfaction and customer satisfaction. The impact of the interaction satisfaction between employees and customers during the service delivery, as a functional service quality, also has influence on customer overall satisfaction. From the findings of this research, the positive 'intervening' effect of BPM is obvious when all employees are investigated as group, or examined by employee types classified into three groups by different levels of customer interaction intensity. Moreover, the positive relationship in the

employee-customer satisfaction link also exists in all the three employee groups. The results demonstrate that the existence of employee-customer interaction satisfaction link and BPM as a strengthening mediator in an organization covers all employee groups. These findings reinforce the prominent role of culture and climate in establishing a 'blanket coverage' effect of an organizational in influencing the employee-customer satisfaction link holds for all employee groups (Wangenheim et al., 2007) and extends the effect of culture and climate concept to BPM covering the whole organization.

While the findings of this study realize the importance of technical service quality in influencing the link between employee job satisfaction and customer satisfaction (Söderlund & Rosengren, 2010) and BPM as a key driver for customer satisfaction (Maddern et al., 2007; Kumar et al., 2008), the influence of employee interacting with customers as a functional service quality, should not be underestimated. This study supports the positive relationship between employee satisfaction and customer satisfaction in the hospitality industry. The results are consistent with the studies of Bitner et al. (1990), Spinelli & Canavos (2000) and Chi & Gursoy (2009) showing a positive relation between employee job satisfaction and customer satisfaction, but inconsistent to the findings of Fisher et al. (2009) which indicate that there is no significant relationship between employee job satisfaction and customer satisfaction. The study of Fisher et al. (2009) was conducted in Mexico and China which are developing countries, while the other studies were carried out in the US which is well-developed. Hong Kong and Macau are metropolitan cities and chosen for this study, and the findings will add empirical evidence in expanding the concept of job satisfaction and customer satisfaction.

Leveraging on the previous research of Maddern et al (2007), Kumar et al. (2008), and Söderlund & Rosengren (2010), this study examines the path relationship of three variables – employee job satisfaction, BPM and customer satisfaction simultaneously and adds to the existing literature by exploring a clearer explanation to the linkage between employee and customer satisfaction. The prominent ‘intervening’ position of BPM is indicated by correlation analysis, multiple regression analysis, path analysis and hierarchical regression analysis in this research. Moreover, this is the first study that examines the impact of ‘intervention’ of BPM on the employee-customer satisfaction link for different employee groups with different customer contact frequency. The findings of this research contribute to giving the following valuable insights to managerial leaders.

4.4 Implications for management

Although the link between employee job satisfaction, service quality and customer satisfaction has been studied extensively in the literature, research investigating BPM, with similar process elements as the technical service quality, to explain the relationship between employee job satisfaction and customer satisfaction, is scarce. This research study pioneers to examine simultaneously three important variables in the human resources, marketing and business operations literature – employee job satisfaction, customer satisfaction and BPM. The research provides empirical evidence in supporting the relationship amongst these three variables. Results indicate that the element of BPM is a prominent strengthening ‘intervening variable’ in explaining the employee-customer satisfaction relationship. The findings

contribute to give significant insights to top management, managers and supervisors of an organization.

From extensive previous studies showing the employee-customer satisfaction link, it is widely accepted that 'happy employees = happy customers' and satisfaction encounter is the key factor for delivering good customer experience. Service industries, such as hotels, are characterized by the frequent interaction between employees and customers. Managers believe that to make employees happy or satisfied is essential to ensure that employees have a satisfied emotion to create a good transaction encounter experience to customers. The findings of this research support the importance of 'transaction satisfaction' on customer satisfaction. As shown in Table 4.20, there is a significant positive relationship between overall job satisfaction and service quality, which positively influences customer satisfaction. Moreover, from the results indicated in Table 4.19, the path effect of overall job satisfaction on service quality is strengthened by the mediating effect of BPM. The prominent effect of BPM on service quality is also revealed in Figure 4.3. All these illustrate the important effect of overall job satisfaction on service quality.

The items under service quality in the customer questionnaire of this study are the attitude, responsiveness, appearance, know-how of employees evaluated by customers. These reveal that interaction satisfaction between employees and customers has significant impact on customer satisfaction. The implication for management is that making employees satisfied with a good emotion to interact with customers is important. The quality of customer contact or personal touch influences customer experience. However, it is important to note that impression

management engenders customer satisfaction, but impression such as friendliness or smile, only influences customer satisfaction when tasks are performed well (Grandey, Fish, Mattila, Jansen & Sideman, 2005). This echoes the findings from this study that BPM, as a technical quality, is essential in contributing to a good outcome of service delivery.

The results of this research contribute to highlighting the important role of superiors in an organization. First, the items on quality of superiors and team climate are under separate sections in the employee questionnaire design. From Table 4.6, the results from the factor analysis indicate that the items of quality of superiors and team climate are all grouped into one factor. This means that employees perceive team climate and quality of superiors as the same factor. Superiors are extremely influential on shaping the team climate. Second, from Table 4.15, there is a high correlation between team climate & superiors and BPM (.60). Thus, quality of superiors not only plays a critical role in cultivating the climate of team, but also impacts significantly on the business process. Third, in Figure 4.3, there is a path effect (path coefficient 0.25) between team climate & superiors and customer overall satisfaction. The items under the quality of superiors in the employee questionnaire of this research are leading by examples, reliability, trustworthiness; employees can keep on learning from superiors, competence of superiors and giving performance feedback to employees. This study yields the insight of the prominent position of superiors in impacting team climate, BPM and customer satisfaction.

Moreover, the findings of this study also indicate that the linkage of employee-customer satisfaction not only exists in employees with high customer

interaction, but also occurs in other groups of employees with minimal or with no customer contact. The results reinforce the importance of team/ service climate in maintaining a homogenous or 'blanket' effect on the mindset of employees. The concept is that when there is a high employee job satisfaction, the satisfaction establishes a good emotion which is felt by the experience of customers during service delivery, hence affecting customer satisfaction. The effect covers all employees through the culture and climate of the organization. Thus, managers should be aware that when a service climate exists throughout the whole team, the effect of employee job satisfaction, covering all employees, from those with high customer contact such as frontline employee to those with no customer contact, such as back office supporting employee, are equally influential in affecting customer satisfaction. Moreover, the path analysis of this study demonstrates that when there is a team climate for BPM, the culture for BPM exists throughout the whole organization. This explains why the 'intervening effect' of BPM occurs in employee groups with different customer interaction intensity. Managers should put their best efforts in cultivating a good climate for service and BPM culture to cover all employees in the organization, instead of just focusing on employees with frequent customer contact.

A prominent contribution of this study is the illustration of the intervening effect of BPM between employee job satisfaction and customer satisfaction. Table 4.20 reports the substantial mediating effect of BPM on employee job satisfaction and customer satisfaction variables. The mediating effect of different variables are: overall job satisfaction→BPM→overall customer satisfaction (54.6%); climate & superiors→BPM→overall customer satisfaction (73.6%); overall job satisfaction→

BPM→service quality (105%); climate & superiors→BPM→service quality (76.7%). Moreover, Tables 4.21a, b, c and d report that significant mediation effect is also found in different employee groups with different intensity of customer contact. It is clear that BPM plays a mediating role between employee job satisfaction and customer satisfaction.

An insight for the management is that 'transaction satisfaction' is not sufficient to create the best customer experience. They should go beyond by just making employees happy and satisfied. To provide employees with the BPM tools - processes and procedures, is critical to impact customer satisfaction. The reasons are two folded. First, with BPM, employees are under the guidance of the set of tools to deliver service, thus the quality are under control and can be ensured. Second, without BPM, employees very often have to guess what to do which creates frustrations when the guess is wrong. Furthermore, the results highlight that the mediating influence of BPM is prominent in all groups of employees with different frequencies of customer interaction. This gives insight to management that when reviewing or implementing BPM, attention should be paid to all employee groups.

The results of this research actually reflect that BPM and employee job satisfaction are highly correlated. It is widely recognized in conventional human resources literature that items such as pay, benefits, career opportunities, team climate, work organization, quality of superiors are the major factors impacting employee job satisfaction. The findings of this study contribute to the 'unknown' factor – BPM which is influential to employee job satisfaction. This means that when employees are provided with effective, well coordinated tools of policies, procedures and

processes, they are clear of the direction and know how to deliver their responsibilities, and the employee job satisfaction will be enhanced. Management should pay attention to the BPM factor in increasing employee job satisfaction, instead of just emphasizing the conventional human resources employee job satisfaction factors. This study corroborates the highlights of Way, Sturman & Raab (2010) which deserve the reference for managers - job performance of employees is not enhanced by a higher job satisfaction. Instead, managers should cultivate a climate/ culture under which employees will perceive that good practices, procedures and behaviours will be awarded and supported. This creates the insight that BPM not only can heighten the job satisfaction of employees, but also enhance the job performance of employees.

The critical position of BPM is reflected in this study by different research methodologies. The correlation analysis of this study reveals that the correlations between BPM and employee satisfaction, BPM and customer satisfaction are significant. Indicated from the regression analysis, BPM is a key driver for customer satisfaction. Results from path analysis and hierarchical regression analysis indicate that BPM is a mediator in the employee-customer satisfaction link. All these illustrate that BPM is vital in the literature of employee job satisfaction and customer satisfaction. Nevertheless, literature on BPM, particularly in service industries, is relatively new. It is commented by Maddern et al. (2007) that measurement for BPM is vulnerable. There are eleven items in the BPM construct in this research. BPM is essential to an organization, and the characteristics of BPM in this study deserve the attention of management. BPM drives customer satisfaction and thus, it should have a customer focus. The aim of BPM is to put the available resources

and related activities of individual units together into meaningful and effective business process, with the ultimate aim of customer satisfaction and financial performance of the organizations. The process and procedures of an organization must be coordinated as a whole set of activities linking all the functions of the organization to achieve the ultimate goal of delivering the highest value to customers.

BPM emphasizes a holistic process approach opposed to hierarchies with special emphasis on the overall outcomes/ achievements, especially on customer satisfaction, of the whole organization. Organizations are recommended to be structured into broad process units/ teams rather than narrow functional units/ teams. This will enhance the implementation of process across different functional teams of an organization; instead of focusing on the hierarchical functions hindering the materialization of a company-wide weaved business process, for the overall success of customer satisfaction. Grover et al. (2000) pointed out that some organizations fail to carry out BPM because they are positioned or too functionalized that they do not realize the need for a holistic company-wide process change and everyone in the functional/ departmental team puts focus only on his/ her own job or carrying out the 'narrow' or specific departmental/ unit goals. In the study on the status on BPM, Neubauer (2009) commented that although many companies have started the initiatives of BPM, only a few of the companies follow the holistic approach and the continuous development approach. The constructs of this research support the across functions nature and holistic approach of BPM. Management should pay particular attention to the holistic and coordinated approach of BPM.

Another characteristic of BPM highlighted in this research worth noting to management is the continuous nature of BPM. To be successful, organizations should make BPM a living organism, coping with the latest development of the organizational business strategy. Continuous measurement, evaluation and improvement are essential to ensure a sustained and effective implementation of BPM. Appointment of process owners is essential to ensure a continuous evaluation and improvement to BPM. This helps to ensure that BPM is not just a 'decoration' or a 'fashion' to an organization, but a 'life' to business.

The success of BPM requires support from top management and cultural change so that employees realize the objectives and are supportive as a 'big' team to implement the initiatives. As shown in Figure 4.3, there are two paths that team climate & superiors impact customer overall satisfaction. The first path is team climate & superiors, BPM and customer overall satisfaction. The second path is team climate & superiors, service quality and customer overall satisfaction. This demonstrates the critical importance of superiors in an organization on the ultimate customer satisfaction. To be successful, top management, managers and supervisors, are suggested to take the lead and establish the team climate to shape the thinking and behaviours of all employees towards the BPM and service culture. The findings of this study recognize the research of Ugboro & Obeng (2000) which reveals a positive correlation between top management, employee satisfaction and customer satisfaction for implementing quality initiatives. The results of this study also support the recommendation of Garvin (1995) in highlighting that effective BPM requires a shared culture to facilitate the flow of information, materials or customers across functional boundaries. All these characteristics of BPM – holistic approach,

across team/ functional unit nature, process measurement, continuous improvement, process ownership and support from management, are key constructs of BPM in this research. This contributes to a more specific understanding and reviewing of BPM for management.

Customer satisfaction strategy is essential to service business, and a hotel is a typical example. The key message to management from this research study is that BPM is a critical 'intervening variable' in the employee-customer satisfaction link. The role of superiors in establishing a good team climate on service and BPM culture is also influential on customer satisfaction. Management trying their best efforts to create a distinguish service climate in the whole organization coupled with holistic, well-coordinated and 'living' BPM are the competitive advantages. The two Ps – People and Process – are critical to customer satisfaction, which in turn impact the two Ps – Purchase and Profit (as a result of excellent customer satisfaction) of an organization.

4.5 Implications for research

Measuring BPM is particularly challenging given the limited amount of existing research and operational definitions (Maddern et al., 2007). The BPM factor of this research is identified from factor analysis. All the items on the work processes/ procedures section and work organization section of the questionnaire, a total of fourteen items, are grouped under into one factor – BPM, after using the factor analysis. The results indicate that the items are significant and reliable. The items validate the five application components of BPM highlighted by Smart et al. (2009),

namely, process strategy, process architecture, process measurement, process ownership and process improvement. Moreover, this study has developed 'smaller' constructs under the five broad constructs of BPM. This will facilitate future researchers or personnel to pursue further on BPM. This contributes to a clearer understanding of the application components of BPM and the items to be evaluated.

4.6 Limitations of the study and recommendations for future research

As in the case of any research effort, this study is not free of limitations. These limitations may serve as reference for future research. First, the ten hotels (including one hotel for pilot study) participated in the research are located in Hong Kong and Macau. Countries with different cultures and economic situations may have different responses from employees and customers. To achieve a wider representation of the findings in this research, future studies may have to cover countries with different cultural, social and economic context. Second, the sample size for the main study of this research is 188 employee respondents and 189 customer respondents. It is suggested to cover a larger sample size in future research in order to achieve a more reliable result. Third, the data of this research were collected in a specific time. In order to achieve a more detailed understanding on the changes of responses, a longitudinal research design is suggested for future research. Fourth, this research investigates the relationship amongst employee job satisfaction, BPM and customer satisfaction simultaneously. The hospitality industry is selected for the study, because customer satisfaction is an important and immediate feedback to the service provided. However, in order to examine if there is a generalization of the model, it is recommended that the importance of BPM on

customer satisfaction be tested in other service industries, such as airlines, retail chains or supermarkets.

Chapter 5 CONCLUSION

Extensive studies have identified that employee job satisfaction is the key driver for customer satisfaction. Traditional research emphasized the employee-customer contact approach (functional service quality) to explain the relationship between employee job satisfaction and customer satisfaction. While there are recent studies on business process management (technical service quality), employee job satisfaction and customer satisfaction, not much systematic research has been done to explore the precise link between employee job satisfaction, BPM and customer satisfaction. This study investigated whether BPM is the mediator for the employee-customer satisfaction link, so as to more clearly explain their relationship.

The purpose of this study was to examine the relationships between three important variables in the human resources, marketing and business operations literature – employee job satisfaction, customer satisfaction and BPM. From the literature review of this research, the linkage between employee satisfaction and customer satisfaction was extensively studied. The emotional cognition approach is widely applied to explain the employee-customer satisfaction. Ample studies reveal that the emotion of employees during the delivery of service will affect the perception of customers on the service quality, thus influencing customer satisfaction. This ‘employee-customer contact’ theory or emotion transfer theory is extensively adopted to examine the correlation between employee satisfaction and customer satisfaction.

The 'employee-customer contact' theory is particularly relevant for investigating employee-customer satisfaction in service industries where there is a high intensity of employee-customer interaction. In customer-contact service businesses, during the delivery of service to customers, the interaction between employees and customers occurs frequently, it is widely believed that the attitudes and behaviours of employees impact the perception of customers on service quality. Employees in the hospitality industry, and most other service industries, are always co-producers with customers when they are delivering services to them. Thus, the interaction satisfaction is of paramount importance to service industries.

This research examined the employee-customer satisfaction relationship in ten hotels (including one hotel for pilot study) in Hong Kong and Macau. The findings are in line with those studies demonstrating a positive correlation between employee job satisfaction and customer satisfaction, such as the notable service-profit chain of Heskett et al. (1994, 2008). For the hospitality industry, there is inconsistency in the results of studies on the positive relationship between employee job satisfaction and customer satisfaction. No significant positive association between the two variables is found in the study of Fisher et al. (2009) in Mexico and China, while positive relationship was reported in the studies of Binter et al. (1990), Spinelli & Canavos (2000) and Chi & Gursoy (2009) in the United States. This research covers Hong Kong and Macau, and the findings help to support the positive employee-customer link in the hospitality industry. Moreover, the results also extend the study of Wangenheim et al. (2007) illustrating that the positive relationship between employee job satisfaction and customer satisfaction exists in all groups of employees, with the strongest correlation in employees with high customer encounter, typically

the frontline employees. This study shows that the employee-customer satisfaction relationship also exists in employees with no customer contact, such as back office support employees.

While corroborating that there is a relationship between employee job satisfaction and customer satisfaction, the objective of this study was to further explore the role of BPM between these two variables. The regression analysis supports BPM as the most dominant factor (amongst other two employment context factors identified by factor analysis – team climate & superiors, and work organization & overall job satisfaction) in contributing to the variations of service quality, product quality and customer overall satisfaction. The regression analysis shows that BPM is a key driver on customer satisfaction, which is consistent with the findings of Maddern et al. (2007) and Kumar et al. (2008).

This study further explores the role of BPM, demonstrating that BPM is a mediator between employee job satisfaction and customer satisfaction by path analysis and regression analysis. (See Section 4.24 - 4.26) The analysis highlights that BPM is a prominent mediator variable between overall job satisfaction and customer overall satisfaction. The mediating effect of BPM is also significant between overall job satisfaction and service quality. The influence of BPM as a mediator is also found between team climate & superiors and service quality, and between team climate & superiors and customer overall satisfaction. Leveraging on the study of Söderlund & Rosengren (2010) reporting the significant role of technical service quality between employee job satisfaction and customer satisfaction, the results of this study contribute to the research literature by pioneering illustration of the significance of

BPM as a strengthening mediator between two essential variables – employee job satisfaction and customer satisfaction.

From the path analysis, one more point worth noting is that the results indicate a strong path impact of team climate & superiors (one of the construct of employment context identified by factor analysis), on service quality and customer satisfaction. The items of service quality in this study are primarily the attitude, responsiveness, service level, skills and appearance of the service employees. The results of this research also echo the findings of previous studies on the element of ‘interaction satisfaction’ or ‘customer contact’ in explaining the employee-customer satisfaction relationship.

There are recent research studies illustrating that BPM is the key driver for customer satisfaction (Maddern et al., 2007; Kumar et al., 2008), and technical service quality is a significant factor between employee job satisfaction and customer satisfaction (Söderlund & Rosengren, 2010), which challenge the sole dominance of the employee-customer satisfaction interaction on customer satisfaction. The results of this study not only show that BPM is the key driver for customer satisfaction, but also illustrate the mediating role of BPM in the employee-customer satisfaction link. This study further adds contribution to the literature by indicating that BPM, as an ‘intervening’ variable between employee job satisfaction and customer satisfaction, exists in all employee groups with different degree of customer interaction frequencies.

The essential insight achieved from this research study is that 'happy employees = happy customers' is only part of the picture to explain the linkage between employee job satisfaction and customer satisfaction. It is widely believed that employees with good job satisfaction will generate good emotions and feelings, and their state of affect will be felt by customer to create a 'mirror' effect on customer satisfaction through service transaction. The concept of happy employees make happy customers is based on this assumption of satisfaction interaction. The findings from this study indicate that there is a hidden element between the two satisfaction elements. It is found that BPM is a critical 'intervening variable' between happy employees and happy customers. BPM is the mediator in explaining more clearly the relationship between employee job satisfaction and customer satisfaction. The findings of this study highlight that simply making employees happy is not sufficient to ensure a high level of customer satisfaction experience. Management must go beyond to achieve happy employees, to create a good team management and provide employees with the appropriate tools, policies and procedures to achieve the best customer service.

In pursuing the role of BPM, the importance of team climate & superiors is highlighted. From the path analysis, there are two routes showing the significance of team climate & superiors to customer satisfaction. The first route is the team climate & superiors, BPM and customer satisfaction. The second route is the team climate & superiors, service quality and customer satisfaction. This finding corroborates the literature on organizational changes advocating the importance of team climate on organizational changes for the implementation of quality initiatives/ processes. The culture and climate of the whole team/ organization not only shape

the behaviour of the employees, but also their commitment to achieve a high standard of customer service. Moreover, the two routes of team climate & superiors to customer satisfaction also highlight the critical roles of superiors or managers in an organization. The implementation of BPM cannot be successful without the support of managers and the whole team, and one of the most key tasks of superiors and managers is to establish a climate/ culture for service quality and BPM in the organization.

When exploring the linkage of employee-customer satisfaction and the role of BPM in the link, this study investigated the results by employee groups, namely, all employee groups, employees with high customer contact (20 or more times per day), employees with minimal customer interaction (less than 20 times per day), and employees with no customer contact. The purpose was to see if the employee-customer satisfaction linkage and the mediating effect of BPM between employee job satisfaction and customer satisfaction exist in all employee groups with different levels of customer contact intensity. The results show that the positive correlation between employee job satisfaction and customer satisfaction occurs in all employee groups, covering employees with high, minimal and no customer interaction. The findings illustrate that the 'intervening' effect of BPM in the employee-customer satisfaction link is strong in all employee groups. This yields the implication that for service industries, where there is a conventional concept that only frontline employees with high customer contact are important in influencing the employee-customer satisfaction, the attention to employees with minimal or no customer contact needs to be addressed. All employees are contributory to customer satisfaction. The findings also illustrate the importance of team climate

again. Where there is a team climate or culture shared by employees of an organization, it covers the whole team including all employee types.

Although the critical position of BPM shown by its role as a mediator between employee job satisfaction and customer satisfaction is highly recognized in this study, the impact of employees on customer satisfaction should not be undermined. There are two aspects, first, service delivery involves employee-customer interaction, and customer satisfaction is mirrored by employee satisfaction through affect or emotional transfer, indicated by the correlation between service quality and customer satisfaction in this study. This is the transaction satisfaction, which impacts customer satisfaction. This is particularly true for employees with high customer contact. However, the impact of employee job satisfaction through transaction emotion is with boundary, on condition that the outcome of service is satisfactory. Second, the fundamental requirement for customer satisfaction is to get the tasks properly carried out. For this, BPM plays a critical role in supporting employees with the necessary tools and guidance – well coordinated policies, process and procedures. The key role of employees is to deliver the business processes, with the support of tools, to achieve the excellent standard of customer experience. Moreover, as mentioned in the implications for management in Section 4.4, there is an extra finding of this study in highlighting the prominent role of superiors and managers in their role of establishing a team and service climate of an organization which impact customer satisfaction through BPM and good service quality.

The findings of this research highlight new insights on some conventional concepts. First, BPM is the prominent factors contributing to employee job satisfaction. It has

been widely accepted that factors like pay, benefits, working environment, career and training are the important factors for employee job satisfaction. BPM is a 'latent factor'. The results of this study indicate that BPM is a key factor perceived by employees for job satisfaction. Second, it has been the traditional concept for management that for service industries where employee-customer encounter is frequent, emphasis is always given to frontline employees with high customer contact. The findings of this study reveal that attention on employee job satisfaction and BPM should be given to all employees. Third, technical service quality is commonly believed to be more applicable to product industries, the findings of this study adds to the breakthrough concept of applying technical service quality in the 'soft' processes of service industries.

This study yields a clearer understanding on the employee-customer satisfaction link. The findings show that the role of BPM as the key driver to customer satisfaction; and BPM is an 'intervening variable' between employee job satisfaction and customer satisfaction. With the growing awareness of BPM, a new paradigm is emerging. From the insights generated from this study, organizations competing in the new economy will need to generate their key business processes by a team of highly satisfied employees, turning into hard-to-imitate strategic capabilities that distinguish them from their competitors in the eyes of customers. Competitors can easily match or copy the hard products, but not the people and company-wide processes. This is the competitive advantage for business today and tomorrow.

Overall, the empirical findings of this research support the conceptual framework of BPM as a strengthening mediator between employee job satisfaction and customer

satisfaction. The development of constructs for BPM in this research would facilitate researchers to pursue further on the subject. Further research in other service industries would be helpful for a wider application and generalization of the model. Moreover, further investigation with longitudinal approach can be used to verify the mediation effect of BPM between employee job satisfaction and customer satisfaction.

REFERENCES

- Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: findings from Sweden. *Journal of Marketing*, **58**(3), 53-66.
- Anderson, E. W., Fornell, C., & Rust, R. T. (1997). Customer satisfaction, productivity, and profitability: differences between goods and services. *Marketing Science*, **16**(2), 129-145.
- Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, **3**(2), 107-120.
- Armistead, C., Pritchard, J., & Machin, S. (1999). Strategic business process management for organizational effectiveness. *Long Range Planning*, **32**(1), 96-106.
- Babakus, E., & Boller, G. W. (1992). An empirical assessment of the SERQUAL scale. *Journal of Business Research*, **24**, 253-268.
- Babbar, S., & Koufteros, X. (2008). The human element in airline service quality: contact personnel and the customer. *International Journal of Operations & Production Management*, **28**(9), 804-830.

- Barger, P. B., & Grandey, A. A. (2006). Service with a smile and encounter satisfaction: emotional contagion and appraisal mechanisms. *Academy of Management Journal*, **49**(6), 1229-1238.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, **51**(6), 1173-1182.
- Bernhardt, K. L., Donthu, N., & Kennett, P. A. (2000). A longitudinal analysis of satisfaction and profitability. *Journal of Business Research*, **47**, 161-171.
- Bitner, M. J. (1990). Evaluating service encounters: the effects of physical surroundings and employee responses. *Journal of Marketing*, **54**(April), 69-82.
- Bitner, M. J. (1992). Servicescapes: the impact of physical surroundings on customers and employees. *Journal of Marketing*, **56**(April), 57-71.
- Bitner, M. J., Booms B. H., & Tetreault, M. S. (1990). The service encounter: diagnosing favourable and unfavourable incidents. *Journal of Marketing*, **54**(January), 71-84.
- Bowling, N. A., Beehr, T. A. & Lepisto, L. R. (2006). Beyond job satisfaction: a five-year prospective analysis of the dispositional approach toward attitudes. *Journal of Vocational Behavior*, **69**, 315-330.

Brown, K. A., & Hyer, N. L. (2007). Archaeological benchmarking: Fred Harvey and the service profit chain, circa 1876. *Journal of Operations Management*, **25**(2), 284-299.

Brown, S. P., & Lam, S. K. (2008). A meta-analysis of relationships linking employee satisfaction to customer responses. *Journal of Retailing*, **84**(3), 243-255.

Burke, R. J. (2001). Supervision and service quality. *Measuring Business Excellence*, **5**(4), 28-31.

Buttle, F. (1996). SERQUAL: review, critique, research agenda. *European Journal of Marketing*, **30**(1), 8-32.

Chase, R. B. (1978). Where does the customer fit in a service operation? *Harvard Business Review*, (November-December), 137-142.

Chi, C. G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: an empirical examination. *International Journal of Hospitality Management*, **28**, 245-253.

Chun, R., & Davies, G. (2009). Employee happiness isn't enough to satisfy customers. *Harvard Business Review*, (April), 19-20.

Churchill, G. A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, **XIX**(November), 491-504.

- Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: a re-examination and extension. *Journal of Marketing*, **56**(July), 55-68.
- Crotts, J. C., Ford, R. C., Heung, V. C. S. & Ngai, E. W. T. (2007). Organizational alignment and hospitality firm performance. *International Journal of Culture, Tourism and Hospitality Research*, **3**(1), 3-12.
- Dabholkar, P. A., & Overby, J. W. (2005). Linking process and outcome to service quality and customer satisfaction. *International Journal of Service Industry Management*, **16**(1), 10-27.
- Davidson, C. G. M. (2003). Does organizational climate add to service quality in hotels? *International Journal of Contemporary Hospitality Management*, **15**(4), 206-213.
- Dietz, J., Pugh, S. D., & Wiley, J. W. (2004). Service climate effects on customer attitudes: an examination of boundary conditions. *Academy of Management Journal*, **47**(1), 81-92.
- Dotson, J. P., & Allenby, G. M. (2010). Investigating the strategic influence of customer and employee satisfaction on firm financial performance. *Marketing Science*, **29**(5), 895-908.

Edvardsson, B., Johnson, M. D., & Gustaffsson, A. (2000). The effects of satisfaction and loyalty on profits and growth: products versus services. *Total Quality Management*, **11**(7), S917-S927.

Elzinga, D. J., Horak, T., Lee, C., & Bruner, C. (1995). Business process management: survey and methodology. *IEEE Transactions on Engineering Management*, **42**(2), 119-127.

Eshghi, A., Roy, S. K., & Icfai, S. G. (2008). Service quality and customer satisfaction: an empirical investigation in Indian mobile telecommunications services. *Marketing Management Journal*, **18**(2), 119-144.

Eskildsen, J. K., & Dahlgaard, J. J. (2000). A causal model for employee satisfaction. *Total Quality Management*, **11**(8), 1081-1094.

Fisher, R., McPhail, R., & Menghetti, G. (2009). Linking employee attitudes and behaviours with business performance: a comparative analysis of hotels in Mexico and China. *International Journal of Hospitality Management*, 1-8.

Fornell, C. (1992). A national customer satisfaction barometer: the Swedish experience. *Journal of Marketing*, **56**(1), 6-21.

Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *Journal of Marketing*, 60(October), 7-18.

Frei, F. X., Kalakota, R., Leone, A. J., & Marx, L. M. (1999). Process variation as a determinant of bank performance: evidence from the retail banking study. *Management Science*, **45**(9), 1210-1220.

Gardner, D.G., Dyne, L.V. & Pierce, J.L. (2004). The effects of pay level on organization-based self-esteem and performance: A field study. *Journal of Occupational and Organizational Psychology*, **77**, 307-322.

Garlick, R. (2010). Do happy employees really mean happy customers? Or is there more to the equation? *Cornell Hospitality Quarterly*, **51**(3), 304-307.

Garvin, D. A. (1995). Leveraging processes for strategic advantage. *Harvard Business Review*, (September-October), 77-91.

Gelade, G. A., & Young, S. (2005). Test of service profit chain model in the retail banking sector. *Journal of Occupational and Organizational Psychology*, **78**(1), 1-22.

Gil, I., Berenguer, G., & Cervera, A. (2008). The roles of service encounters, service value, and job satisfaction in achieving customer satisfaction in business relationships. *Industrial Marketing Management*, **37**, 921-939.

Grandey, A. A., Fisk, G. M., Mattila, A. S., Jansen, K. J., & Sideman, L. A. (2005). Is "service with a smile" enough? Authenticity of positive displays during service encounters. *Organizational Behavior and Human Decision Process*, **96**, 38-55.

Gronroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, **18**(4), 36-44.

Gronroos, C. (1988). Service quality: the six criteria of good perceived services. *Review of Business*, **9**(3), 10-16.

Gronroos, C. (1998). Marketing services: the case of a missing product. *Journal of Business & Industrial Marketing*, **13**(4/5), 322-338.

Grover, V., Kettinger, W. J., & Teng, J. T. C. (2000). Business process change in the 21st century. *Business & Economic Review*, (January-March), 14-18.

Gruca, T. S., & Rego, L. L. (2005). Customer satisfaction, cash flow, and shareholder value. *Journal of Marketing*, **69**(July), 115-130.

Guo, L., Xiao, J. J., & Tang, C. (2009). Understanding the psychological process underlying customer satisfaction and retention in a relational service. *Journal of Business Research*, **62**, 1152-1159.

Gupta, S., & Zeithaml, V. (2006). Customer metrics and their impact on financial performance. *Marketing Science*, **25**(6), 718-739.

Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing*, **69**(October), 210-218.

- Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study. *International Journal of Service Industry Management*, **7**(4), 27-42.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of Applied Psychology*, **87**(2), 268-279.
- Hartline, M. D., & Ferrell, O. C. (1996). The management of customer-contact service employees: an empirical investigation. *Journal of Marketing*, **60**(4), 52-70.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional contagion. *Psychological Science*, **2**(3), 96-100.
- Hay, J. M., & Hill, A. V. (2001). A preliminary investigation of the relationships between employee motivation/ vision, service learning, and perceived service quality. *Journal of Operations Management*, **19**(3), 335-349.
- Heide, M., & Gronhaug, K. (2009). Key factors in guests' perception of hotel atmosphere. *Cornell Hospitality Quarterly*, **50**(1), 29-43.
- Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E., & Schlesinger, L. A. (1994). Putting the service-profit chain to work. *Harvard Business Review*, (March-April), 164-170.

- Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E., & Schlesinger, L. A. (2008). Putting the service-profit chain to work. *Harvard Business Review*, (July-August), 118-130.
- Homburg, C., & Stock, R. M. (2004). The link between salespeople's job satisfaction and customer satisfaction in a business-to-business context: a dyadic analysis. *Journal of the Academy of Marketing Science*, **32**(2), 144-158.
- Homburg, C., & Stock, R. M. (2005). Exploring the conditions under which salesperson work satisfaction can lead to customer satisfaction. *Psychology & Marketing*, **22**(5), 393-420.
- Homburg, C., Wieseke, J., & Hoyer, W. D. (2009). Social identity and the service-profit chain. *Journal of Marketing*, **73**(2), 38-54.
- Hostage, G. M. (1975). Quality control in a service business. *Harvard Business Review*, (July-August), 98-106.
- Iacobucci, D, Grayson, K., & Ostrom, A. (1994). Customer Satisfaction Fables. *Sloan Management Review*, **35**(4), 93-96.
- Johnson, J. W. (1996). Linking employee perceptions of service climate to customer satisfaction. *Personnel Psychology*, **49**, 831-851

Johnston, R. (1995). The determinants of service quality: satisfiers and dissatisfiers. *International Journal of Service Industry Management*, **6**(5), 53-71.

Judge, T. A., Bono, J. E., Thoresen, C. J., & Patton, G. K. (2001). The job satisfaction-job performance relationship: a qualitative and quantitative review. *Psychological Bulletin*, **127**(3), 376-407.

Keiningham, T. L., Aksoy, L., Daly, R. M., Perrier, K., & Solom, A. (2006). Reexamining the link between employee satisfaction and store performance in a retail environment. *International Journal of Service Industry Management*, **17**(1), 51-57.

Keiningham, T. L., Perkins-Munn, T., Aksoy, L., & Estrin, D. (2005). Does customer satisfaction lead to profitability? The mediating role of share-of-wallet. *Managing Service Quality*, **15**(2), 172-181.

Komunda, M., & Osarenkhoe, A. (2012). Remedy or cure for service failure? - Effects of service recovery on customer satisfaction and loyalty. *Business Process Management Journal*, **18**(1), 82-103.

Kotler, p. (1991). *Marketing management – analysis, planning, implementation and control* (7th ed.) New Jersey: Prentice-Hall.

- Kumar, V., Smart, P. A., Maddern, H., & Maull, R. S. (2008). Alternative perspectives on service quality and customer satisfaction: the role of BPM. *International Journal of Service Industry Management*, **19**(2), 176-187.
- Lariviere, B. (2010). Linking perceptual and behavioural customer metrics to multiperiod customer profitability – a comprehensive service-profit chain application. *Journal of Service Research*, **11**(1), 3-21.
- Lee, R. C., & Dale, B. G. (1998). Business process management: a review and evaluation. *Business Process Management Journal*, **4**(3), 214-225.
- Lee, T.M., & Jun, J.K. (2007). Contextual perceived value? - Investigating the role of contextual marketing for customer relationship management in a mobile commerce context. *Business Process Management Journal*, **13**(6), 2007.
- Levesque, T., & McDougall, G. H. G. (1996). Determinants of customer satisfaction in retail banking. *International Journal of Bank Marketing*, **14**(7), 12-20.
- Liao, H., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, **47**(1), 41-58.
- Little, M. M., & Dean, A. M. (2006). Links between service climate, employee commitment and employees' service quality capability. *Managing Service Quality*, **16**(5), 460-476.

- Llewellyn, N., & Armistead, C. (2000). Business process management- exploring social capital within processes. *International Journal of Service Industry Management*, **11**(3), 225-243.
- Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, **4**, 309-336.
- Locke, E. A. (1995). The micro-analysis of job satisfaction: comments on Taber and Alliger. *Journal of Organizational Behavior*, **16**(2), 123-125.
- Loveman, G. W. (1998). Employee satisfaction, customer loyalty and financial performance: an empirical examination of the service profit chain in retail banking. *Journal of Service Research*, **1**(1), 18-31.
- Mach, M., Dolan, S., & Tzafrir, S. (2010). The differential effect of team members' trust on team performance: The mediation role of team cohesion. *Journal of Occupational and Organizational Psychology*, **83**, 771-794.
- Maddern, H., Maull, R., & Smart, A. (2007). Customer satisfaction and service quality in UK financial services. *International Journal of Operations & Production Management*, **27**(9), 998-1019.
- Maritz, A., & Nieman, G. (2008). Implementation of service profit chain initiatives in a franchise system. *Journal of Services Marketing*, **23**(1), 13-23.

Matzler, K., Fuchs, M., & Schubert, A. K. (2004). Employee satisfaction: Does Kano's model apply? *Total Quality Management*, **15** (9/10), 1179-1198.

Matzler, K., & Renzl, B. (2007). Assessing asymmetric effects in the formation of employee satisfaction. *Tourism Management*, **28**, 1093-1103.

Maxham, J. G., Netemeyer, R. G., & Lichtenstein, D. R. (2008). The retail value chain: linking employee perceptions to employee performance, customer evaluations, and store performance. *Marketing Science*, **27**(2), 147-167.

Mayer, D. M., Ehrhart, M. G., & Schneider, B. (2009). Service attribute boundary conditions of the service climate-customer satisfaction link. *Academy of Management Journal*, **52**(5), 1034-1050.

Mittal, V., Anderson, E. W., Sayrak, A., & Tadikamalla, P. (2005). Dual emphasis and the long-term financial impact of customer satisfaction. *Marketing Science*, **24**(4), 544-555.

Morgan, N. A., & Rego, L. L. (2006). The value of different customer satisfaction and loyalty metrics in predicting business performance. *Marketing Science*, **25**(5), 426-439.

Netemeyer, R. G., Boles, J. S., McKee, D. O., & McMurrian, R. (1997). An investigation into the antecedents of organizational citizenship behaviours in a personal selling context. *Journal of Marketing*, **61**(July), 85-98.

- Neubauer, T. (2009). An empirical study about the status of business process management. *Business Process Management*, **15**(2), 166-183.
- Newman, K. (2001). Interrogating SERQUAL: a critical assessment of service quality measurement in a high street retail bank. *International Journal of Bank Marketing*, **19**(3), 126-139.
- Nilsson, L., Johnson, M. D., & Gustafsson, A. (2001). The impact of quality practices on customer satisfaction and business results: product versus service organizations. *Journal of Quality Management*, **6**, 5-27.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, **49**(Fall), 41-50.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, **64**(1), 5-6.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1991). Refinement and reassessment of the SERQUAL scale. *Journal of Retailing*, **67**(4), 420-450.
- Pollack, B. L. (2008). The nature of the service quality and satisfaction relationship-empirical evidence for the existence of satisfiers and dissatisfiers. *Managing Service Quality*, **18**(6), 537-558.

- Pritchard, M. & Silvestro, R. (2005). Applying the service profit chain to analyse retail performance – the case of the managerial strait-jacket? *International Journal of Service Industry Management*, **16** (3/4), 337-356.
- Pugh, S. D. (2001). Service with smile: emotional contagion in the service encounter. *Academy of Management Journal*, **44**(5), 1018-1027.
- Reichheld, F. F., & Saafer, W. E. Jr. (1990). Zero defections: quality comes to services. *Harvard Business Review*, **68**(5), 105-111.
- Reichheld, F. F., & Schefter, P. (2000). E-loyalty – your secret weapon on the web. *Harvard Business Review*, (July-August), 105-113.
- Roth, A. V., & Jackson III, W. E. (1995). Strategic determinants of service quality and performance: evidence from the banking industry. *Management Science*, **41**(11), 1720-1733.
- Restubog, S. L. D., Bordia, P., & Tang, R. L. (2006). Effects of psychological contract breach on performance of IT employees: The mediating role of affective commitment. *Journal of Occupational and Organizational Psychology*, **79**, 299-306.
- Rucci, A. J., Kirn, S. P., & Quinn, R. T. (1998). The employee-customer profit chain at SEARS. *Harvard Business Review*, **76**(1), 82-97.

- Rust, R. T., & Chung, T. S. (2006). Marketing models of service and relationships. *Marketing Science*, **25**(6), 560-580.
- Rust, R. T., & Zahorik, A. J. (1993). Customer satisfaction, customer retention, and market share. *Journal of Retailing*, **69**(2), 193-215.
- Ruyter, K., Bloemer, J., & Peeters, P. (1997). Merging service quality and service satisfaction- an empirical test of an integrative model. *Journal of Economic Psychology*, **18**, 387-406.
- Scheer, A., & Klueckmann, J. (2009). BPM. *7th International Conference, BPM 2009, Ulm, Germany, September 8-10, 2009 Proceedings, Business Process Management*, 15-27.
- Schlesinger, L., & Heskett, J. L. (2000). The service-driven service company. *Harvard Business Review*, (September-October), 71-82.
- Schlesinger, L. A., & Zornitsky, J. (1991). Job satisfaction, service capability, and customer satisfaction: an examination of linkage and management implications. *Human Resource Planning*, **14**(2), 141-149.
- Schmit, M. J., & Allscheid, S. P. (1995). Employee attitudes and customer satisfaction: making theoretical and empirical connections. *Personnel Psychology*, **48**(3), 521-536.

Schneider, B., Goldstein, H. W., & Smith, D.B. (1995). The ASA framework: an update. *Personnel Psychology*, **48**(4), 747-773.

Schneider, B., Parkington, J. J., & Buxton, V. M. (1980). Employee and customer perceptions of service in banks. *Administratively Science Quarterly*, **25**(2), 252-267.

Schneider, B., White, S. S., & Paul, M. C. (1998). Linking service climate and customer perceptions of service quality: test of a causal model. *Journal of Applied Psychology*, **83**(2), 150-163.

Silvestro, R. (2002). Dispelling the modern myth= employee satisfaction and loyalty drive service profitability. *International Journal of Operations & Production Management*, **22**(1), 30-49.

Silvestro, R., & Cross, S. (2000). Applying the service profit chain in a retail environment- challenging the "satisfaction mirror". *International Journal of Service Industry Management*, **11**(3), 244-268.

Sivadas, E., & Baker-Prewitt, F. L. (2000). An examination of the relationship between service quality, customer satisfaction, and store loyalty. *International Journal of Retail & Distribution Management*, **28**(2), 73-82.

- Smart, P. A., Maddern, H., & Maull, R. S. (2009). Understanding business process management: implications for theory and practice. *British Journal of Management*, 20, 491-507.
- Smith, J. S., Lee, L., & Gleim, M. (2009). The impact of RFID on service organizations: a service profit chain perspective. *Managing Service Quality*, 19(2), 179-194.
- Snipes, R. L., Oswald, S. L., LaTour, M., & Armenakis, A. A. (2005). The effects of specific job satisfaction facets on customer perceptions of service quality: an employee-level analysis. *Journal of Business Research*, 58(10), 1330-1339.
- Söderlund, M., & Rosengren, S. (2004). Dismantling “positive affect” and its effects on customer satisfaction: an empirical examination of customer joy in a service encounter. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 17, 27-41.
- Söderlund, M., & Rosengren, S. (2008). Revisiting the smiling service worker and customer satisfaction. *International Journal of Service Industry Management*, 19(5), 552-574.
- Söderlund, M., & Rosengren, S. (2010). The happy versus unhappy service worker in the service encounter: assessing the impact on customer satisfaction. *Journal of Retailing and Consumer Services*, 17, 161-169.

- Spinelli, M. A., & Canavos, G. C. (2000). Investigating the relationship between employee satisfaction and guest satisfaction. *The Cornell Hotel and Restaurant Administration Quarterly*, **41**(6), 29-33.
- Theoharakis, V., Sajtos, L., & Hooley, G. (2009). The strategic role of relational capabilities in the business-to-business service profit chain. *Industrial Marketing Management*, **38**, 914-924.
- Tornow, W. W., & Wiley, J. W. (1991). Service quality and management practices: a look at employee attitudes, customer satisfaction, and bottom-line consequences. *Human Resource Planning*, **14**(2), 105-115.
- Tsikriktsis, N., & Heineke, J. (2004). The impact of process variation on customer dissatisfaction: evidence from the U.S. domestic airline industry. *Decision Sciences*, **35**(1), 129-142.
- Ugboro, I. O., & Obeng, K. (2000). Top management leadership, employee empowerment, job satisfaction, and customer satisfaction in TQM organizations: an empirical study. *Journal of Quality Management*, **5**, 247-272.
- Vargo, S. L., Nagao, K., He, Y., & Morgan, F. W. (2007). Satisfiers, dissatisfiers, critical, and neutrals: a review of their relative effects on customer (dis)satisfaction. *Academy of Marketing Science Review*, **11**(2), 1-23.

Vilares, M. J., & Coelho, P. S. (2003). The employee-customer satisfaction chain in the ECSI model. *European Journal of Marketing*, **37**(11/12), 1703-1722.

Wall, E. A., & Berry, L. L. (2007). The combined effects of the physical environment and employee behaviour on customer perception of restaurant service quality. *Cornell Hotel and Restaurant Administration Quarterly*, **48**(1), 59-69.

Wangenheim, F., Evanschitzky, H., & Wunderlich, M. (2007). Does the employee-customer satisfaction link hold for all employee groups? *Journal of Business Research*, **60**, 690-697.

Way, S. A., Sturman, M. C., & Raab, C. (2010). What matters more? Contrasting the effects of job satisfaction and service climate on hotel food and beverage managers' job performance. *Cornell Hospitality Quarterly*, **51**(3), 379-397.

Westbrook, R. A. (1981). Sources of consumer satisfaction with retail outlets. *Journal of Retailing*, **57**(3), 68-83.

Wiele, T., Boselie, P., & Hesselink, M. (2002). Empirical evidence for the relationship between customer satisfaction and business performance. *Managing Service Quality*, **12**(3), 184-193.

Wong, W.P., & Wong, K.Y. (2011). Supply chain management, knowledge management capacity, and their linkages towards firm performance. *Business Process Management Journal*, **17**(6), 940-964.

- Yee, R. W. Y., Yeung, A. C. L., & Cheng, T. C. E. (2008). The impact of employee satisfaction on quality and profitability in high-contact service industries. *Journal of Operations Management*, **26**(5), 651-668.
- Yeung, M. C. H., & Ennew, C. T. (2000). From customer satisfaction to profitability. *Journal of Strategic Marketing*, **8**, 313-326.
- Yeung, M. C. H., Ging, L. C., & Ennew, C. T. (2002). Customer satisfaction and profitability: a reappraisal of the nature of the relationship. *Journal of Targeting, Measurement and Analysis for Marketing*, **11**(1), 24-33.
- Yoo, D. K., & Park, J. A. (2007). Perceived service quality – analysing relationships among employees, customers, and financial performance. *International Journal of Quality & Reliability Management*, **24**(9), 908-926.
- Yoon, M. H., Beatty, S. E., & Suh, J. (2001). The effect of work climate on critical employee and customer outcomes – an employee-level analysis. *International Journal of Service Industry Management*, **12**(5), 500-521.
- Zairi, M. (1997). Business process management: A boundaryless approach to modern competitiveness. *Business Process Management*, **3**(1), 64-80.

QUESTIONNAIRE SURVEY ON **Appendix 1a**
The role of Business Process Management (BPM) as a mediator between employee job satisfaction and customer satisfaction in the hospitality industry in Hong Kong and Macau.

Employee Survey (Hotel Industry)

Instruction: You are invited to join the captioned survey (Hotel industry) conducted by Dr. Ananda Kumar Palaniappan (the Chief Investigator, phone no. (603) 79675046, email: anandak@um.edu.my). Please fill in Part A for general information, and hence complete Part B on your opinions of your hotel/ outlet.

Part A:

You are: Male ☐ Female ☐

Nature of business: ☐Hotel rooms ☐Retail shops ☐Food & Beverage
 ☐Others: _____

Occupation: ☐Customer service/ frontline Cashier/ housekeeping ☐Storekeeping/ IT
 ☐Others: _____

Education: ☐Primary ☐Secondary ☐University

Frequency of customer contact (with external customers):
☐ ≥20 times/ day ☐ 10-19 times per day
☐ <10 times per day ☐ Nil

Part B:

Please read the following statements and put a “√” in the box expressing your opinion on your hotel/ outlet. There is no right or wrong answer, just be frank and honest in indicating your opinion. Please express your feeling in a five-point scale from 1 to 5 (strongly disagree to strongly agree):

1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

Team Climate		1	2	3	4	5
1.	Team members in my hotel/ outlet are very supportive to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	The working environment/ atmosphere is satisfactory in my hotel/ outlet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	I feel like to be a member of the team member in my hotel/ outlet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Work Organization		1	2	3	4	5
4.	Staff are empowered to apply flexibility in dealing with customers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Members of my team are competent and capable in delivering responsibilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Staff are equipped with adequate resources and equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Quality of superior(s)		1	2	3	4	5
7.	I can keep on learning from my superior(s).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	I respect my superior(s) who leads by example.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	My superior(s) is competent and helps me to resolve problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	My superior(s) is reliable and trustworthy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	My superior(s) always gives me feedback on my performance which helps me for continued development.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career & Rewards		1	2	3	4	5
12.	I am satisfied with the career and promotion opportunity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	The pay level and benefits are reasonable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall job satisfaction		1	2	3	4	5
14.	I like to work for my hotel/ outlet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	I have job satisfaction in my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	I have no intention to leave the present job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Business process/ workflow		1	2	3	4	5
17.	There are clear process procedures and documentation for core process(s) so that staff know how to work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	The working processes cover different teams/ work units.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	Most staff understand the service/ performance standard required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	The major working processes will be measured and evaluated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	The working processes are reviewed regularly and continued improvements will be made.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	The results of service/ performance level are communicated to staff.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23.	Staff are motivated to participate in the development and improvements of the workflow.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	Changes to process/ workflow are made to cope with service improvement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	Staff know who are the process owners.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.	Management/ superior(s) regards service supported by good process/ workflow as the long-term strategy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.	Management/ superior(s) always emphasizes the importance workflow/ process management to support good service..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

After completing the questionnaire, please put it in the sealed envelope provided and return it to the Human Resources Division.

Should there be any queries, please contact the researcher Kathryn WF Ho:

Phone number: (852) 9103 1188, or (853) 6631 1500

Email address: Kathryn_ho@yahoo.com

***** **THANK YOU** *****



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

Dr Ananda Kumar Palaniappan, PhD
Professor
Faculty of Education
University of Malaya
50603 Kuala Lumpur, Malaysia
Telephone: (603) 79675046
Cellphone: 019-9310956
Fax: (603) 79675010
Email: anandak@um.edu.my

Employee Questionnaire Survey

Information Statement for the Research Project: The Role of Business Process Management (BPM) as a mediator between employee job satisfaction and customer satisfaction in the hospitality industry in Hong Kong and Macau

You are invited to participate in the research project above which is being conducted by Kathryn WF Ho who undertakes Doctor of Business Administration from the University of Newcastle.

Why is the research being done?

Previous research has shown the positive relationship between employee job satisfaction and customer satisfaction. The purpose of the research is to investigate the role of Business Process Management (BPM) as a mediator between employee job satisfaction and customer satisfaction. Customer satisfaction is critical for the success of business organisations. The research is worthwhile because it will give more insight to business leaders that while employee job satisfaction highly correlates to customer satisfaction, the role of BPM is also important in a hospitality industry.

Who can participate in the research?

Except top management staff (General Manager or above), employees of all levels may be invited to participate in the survey.

What choice do you have?

Participation in this research is entirely your choice. Completion of the questionnaire will be taken as implied consent to participate. Whether or not you decide to participate, your decision will not disadvantage you.

What would you be asked to do?

If you agree to participate, please fill in the attached questionnaire and return it in sealed envelope to the Human Resources Division.

How much time will it take?

The questionnaire will take about 20 minutes to complete.

What are the risks and benefits of participating?

The participation in the survey is voluntary and anonymous. The participating organisations will remain anonymous. There is no risk involved. Regarding the benefits of this research, the results aims at looking into the relationship between employee job satisfaction and customer satisfaction of the hospitality industry, and thus participants will be benefit by the future improvement in the service level.

How will your privacy be protected?

The questionnaire is anonymous and it will not be possible to identify the participants from the answers. The participating organisation will remain anonymous. They will not be identified in the results of the research. Data will be retained for 5 years by the researcher. A copy of the data used for analysis will be held at the University of Newcastle.

How will the information collected be used?

The information collected will be used for analysis and the results of which will be presented in the thesis to be submitted for Ho Wai Fong, Kathryn's doctorate degree.

Individual participants will not be identified in any reports arising from the project. When the research is completed, a summary of results will be sent to the participating hotels.

What do you need to do to participate?

Please read this Information Statement before you participate, and fill in the questionnaire attached.

Further information

If there is anything you do not understand or further information is required, please contact:

Kathryn Ho Phone no. (852) 9103 1188

(853) 6646 0343

Email : kathryn_ho@yahoo.com

Address: 39A, Tower 6, The Belcher's, 89 Pokfulam Road, Hong Kong

Ananda Kumar Palaniappan Phone no. 019 – 9310956

Email anandak@um.edu.my

Contact details for an independent local person:

Wendy Tsang Phone No. (852) 61950838

Email: kwanho_tsang@yahoo.com.hk

Thank you for considering this invitation.

Dr. Ananda Kumar Palaniappan
[Professor

Kathryn WF Ho
Researcher

Complaints about this research

This project has been approved by the University's Human Research Ethics Committee, Approval No. H-2010-1072.

Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone (02) 49216333, email Human-Ethics@newcastle.edu.au.

問卷調查
業務流程管理在員工的滿意程度及顧客的滿意程度中所扮演的角色：
香港及澳門的服務性行業
員工意見 (酒店業)

指示：閣下被邀請參加 Anada Kumar Palaniappan 教授 (流動電話 (603)79675046，電郵 anandak@um.edu.my) 有關酒店業的員工意見調查。填寫甲部份一般的資料後，請在乙部份顯示你對你的酒店的滿意程度。

甲部份：

你是：☐ 男性

☐ 女性

業務性質：☐ 酒店房間 ☐ 銷售 ☐ 餐飲 ☐ 其他：_____

你的職業：☐ 顧客服務／前線員工 ☐ 收銀／布草房 ☐ 倉務／電腦 ☐ 其他：_____

教育程度：☐ 小學 ☐ 中學 ☐ 大學

與顧客接觸的頻率：

☐ 每天 20 次或以上

☐ 每天 10－19 次

☐ 每天少於 10 次

☐ 不需要

乙部份：

請閱讀以下的陳述並把你對服務的感受於適當的格內放上“√”號。答案是沒有正確或錯誤的，你只要坦白及誠實放上你的感受就可以了。請把你的感受用 5 度級顯示出來（由非常不同意到非常同意）。

1. 非常不同意 2. 不同意 3. 中立 4. 同意 5. 非常同意

團隊氣氛

		1	2	3	4	5
1.	我的工作團隊對我非常支持。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	我滿意現在的工作環境／氣氛。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	我喜歡我是現時團隊的一份子。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

工作體制

		1	2	3	4	5
4.	員工有權力運用彈性。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	我團隊有足夠能力去應付日常的責任。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	員工有足夠的資源及儀器。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

上司（們）的素質		1	2	3	4	5
7.	我不斷的向我上司（們）學習。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	我尊重我的上司，並以他（們）為榜樣。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	我的上司（們）很能幹為幫助我解決問題。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	我的上司（們）是可靠及可信任的。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	我的上司（們）常常給我意見，令我不斷學習。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

專業發展及回報		1	2	3	4	5
12.	我滿意公司給予的事業發展及晉升機會。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	公司給予合理的工質及福利。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

整體工作滿意程度		1	2	3	4	5
14.	我喜歡在現時的酒店／酒店餐飲／房間／銷售工作。.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	我滿意現時的工作。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	我沒有打算離開現時的工作。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

工作流程		1	2	3	4	5
17.	公司提供了清晰的工作流程及編寫了指示及員工跟從。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	工作的流程覆蓋 不同的部門／小組。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	大部員工都明白公司所要求的服務水平。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	主要的工作流程／標準均有量度及評核。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	有定時檢討工作流程及作出改善。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	員工均獲知評核及服務工作表現的結果。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23.	公司鼓勵員工參與工作流程及其改善。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	工作流程的改善都配合服務的改善。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	員工都清楚誰是工作流程的負責人。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.	公司管理層／上司（們）認為良好的工作流程是公司的長遠策略。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.	公司管理層／上司（們）常常強調良好的工作流程在提供良好服務上扮演一個重要的角色。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

填完問卷後，請把問卷放入已印好的信封內及送到人力資源部。

如有任何疑問，請聯絡研究員何蕙芳小姐。電話號碼：（852）9103 1188 或（853）6646 0343；電郵地址：kathryn_ho@yahoo.com

***** 謝謝 *****



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

Ananda Kumar Palaniappan 教授

馬來西亞大學教育系

馬來西亞吉隆坡 50603

電話號碼 (603) 7967546

流動電話 019 9310956

傳真 (603) 79675010

電郵 anandak@um.edu.my

研究項目資料說明書

員工問卷調查

業務流程管理在員工的滿意程度及顧客的滿意程度中所扮演的角色：香港及澳門的服務性行業。

你被邀請參與何蕙芳小姐在澳洲紐卡素大學的博士研究項目。

研究項目的目的？

有關研究顯示員工的工作滿意程度和顧客的滿意有著顯著正面的密切關係。這個研究的目的是給予服務性行業的業務領導層啟示，進一步了解業務流動管理在他們之間所扮演的重要角色。

那一些人士可以參與這個研究項目？

所有階層的員工均有機會被獲邀請參加（管理階層除外）。

你有那一些選擇？

你有自由選擇參加這個研究項目與否。你如果選擇完成問卷調查，就表示你願意參加。假若你不參加，對你絕無任何影響。

你需要做那些步驟？

你若願意參加，請把附上的問卷填好，放入信封並封好，交回人力資源／人事部就可以了。

涉及多少時間？

問卷調查大概 20 分鐘可以完成。

參加這個研究項目有沒有風險及有什麼好處？

參加與否是屬於自願及不記名性質。沒有風險。你的參與可以為服務性行業的將來發展作出貢獻。

怎樣保障你的私隱？

問卷是不記名的，研究不會顯示你的答案。資料純粹是作研究作用，被研究員存放 5 年及副本將放在澳洲紐卡素大學。

怎樣運用搜集到你的資料？

搜集到的資料將會是何蕙芳小姐在澳洲紐卡素大學的博士論文。個人的資料不會在研究報名顯示出來。個別參加的酒店將會獲發一份總結的資料。

你需要做的事項？

在參加是項目研究前，請閱讀這份資料說明書。如有任何詢問，可聯絡研究員：

何蕙芳 (852) 91031188

(853) 66311500

Kathryn_ho@yahoo.com

香港擗扶林道 89 號，39A，第六座。

Ananda Kumar Palaniappan 教授

anandak@um.edu.my

多謝你的參與。

簽名

姓名：Ananda Kumar Palaniappan 博士

職位：教授

簽名

姓名：何蕙芳

職位：研究員

投訴渠道

這研究項目已被澳洲紐卡素大學批核，號碼 H2020-1072

如閣下對於權益或對參與這研究項目有投訴或疑問，請聯絡研究員。如欲聯絡獨立部門，可接觸澳洲紐卡素大學人力研究道德主任，University Drive, Callaghan, NSW2308，電話 (02) 4921 6333，電郵 Human-Ethnics@newcastle.edu.au

Appendix 2a

Customer Service (Hotel industry)

Instruction: You are invited to join the survey on customer service (Hotel industry) conducted by Dr. Ananda Kumar Palaniappan (the Chief Investigator, phone no. (603) 79675046, email: anandak@um.edu.my). Please fill in Part A for general information, and hence complete Part B on your feel regarding customer service provided by the outlet(s) of the hotel, including hotel rooms, retail shops or food & beverage outlets.

Part A:

You are: Male ☐ Female ☐

Nature of service you received: Room service ☐ Food & Beverage ☐
Retail shops ☐ Others: _____

Part B:

Please read the following statements and put a “√” in the box expressing your feeling on the service provided. There is no right or wrong answer, just be frank and honest in indicating your feeling. Please express your feeling in a five-point scale from 1 to 5 (strongly disagree to strongly agree):

1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

Service Quality		1	2	3	4	5
1.	The service level of the sales/ service staff is up to my expectation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	The attitude of the service employee(s) is friendly and helpful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	The speed of the employees in delivering the service is satisfactory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	The know-how of the employees is competent and professional.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	The service process is smooth and satisfactory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	The sales/ service staff can understand and respond rightly to my request.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	The appearance of sales/ service staff is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	The sales/ service staff knows what kind of product/ service I want.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	There are sufficient sales/ service staff in the outlet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Product Quality		1	2	3	4	5
10.	The quality of the product is up to my expectation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	The presentation/ appearance of the product/ service is satisfactory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	The kind of product/ service is fashionable/ innovative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	The environment is neat, tidy and comfortable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	The furniture, fittings, lighting and spaciousness of the outlet is appealing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Price Satisfaction		1	2	3	4	5
15.	The price of the product/ service is reasonable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	The product/ service offered is value for money.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Quality of Assortment		1	2	3	4	5
17.	The range of choice of the product/ service is sufficient.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	The products/ services are properly arranged and presented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall Satisfaction		1	2	3	4	5
19.	You are satisfied with the overall standard of the outlet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	You will recommend the outlet to your friends/ relatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	You will become a repeated customer of the outlet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

After completing the questionnaire, please return it to the designated collection box at the outlet.

Should there be any queries, please contact the researcher, Kathryn WF Ho:

Phone number: (852) 9103 1188, or (853) 6631 1500

Email address: Kathryn_ho@yahoo.com

***** **THANK YOU** *****



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

Dr Ananda Kumar Palaniappan, PhD
Professor
Faculty of Education
University of Malaya
50603 Kuala Lumpur, Malaysia
Telephone: (603) 79675046
Cellphone: 019-9310956
Fax: (603) 79675010
Email: anandak@um.edu.my

Customers Questionnaire Survey

Information Statement for the Research Project:

The Role of Business Process Management (BPM) as a mediator between employee job satisfaction and customer satisfaction in the hospitality industry in Hong Kong and Macau

You are invited to participate in the research project above which is being conducted by Kathryn WF Ho who undertakes Doctor of Business Administration from the University of Newcastle.

Why is the research being done?

Customer satisfaction is critical for the success of business organisations. The research is worthwhile because it will give more insight to business leaders that while customer satisfaction is highly correlates to employee job satisfaction, the role of BPM is also important in a hospitality industry.

Who can participate in the research?

Customers from business outlets of hotels may be invited to participate in the research. Outlets include hotel rooms, restaurants, cafes, cake shops and retail shops.

What choice do you have?

Participation in this research is entirely your choice. Completion of the questionnaire will be taken as implied consent to participate. Whether or not you decide to participate, your decision will not disadvantage you.

What would you be asked to do?

If you agree to participate, please fill in the attached questionnaire and return it to the designated collection box of the outlet..

How much time will it take?

The questionnaire will take about 20 minutes to complete.

What are the risks and benefits of participating?

The participation in the survey is voluntary and anonymous. The participating organisations will remain anonymous. There is no risk involved. Regarding the benefits of this research, the results aims at looking into the relationship between customer satisfaction and the employee job satisfaction of the hospitality industry, and thus participants will be benefit by the future improvement in the service level.

How will your privacy be protected?

The questionnaire is anonymous and it will not be possible to identify the participants from the answers. The participating organisations will remain anonymous. They will not be identified in the results of the

research. Data will be retained for 5 years by the researcher. A copy of the data used for analysis will be held at the University of Newcastle.

How will the information collected be used?

The information collected will be used for analysis and the results of which will be presented in the thesis to be submitted for Ho Wai Fong, Kathryn's doctorate degree.

What do you need to do to participate?

Please read this Information Statement before you participate, and fill in the questionnaire attached.

Further information

If there is anything you do not understand or further information is required, please contact:

Kathryn Ho Phone no. (852) 9103 1188

(853) 6646 0343

Email kathryn_ho@yahoo.com

Address: 39A, Tower 6, The Belcher's, 89 Pokfulam Road, Hong Kong

Ananda Kumar Palaniappan Phone no. 019 – 9310956

Email anandak@um.edu.my

Contact details for an independent local person:

Wendy Tsang Phone no. (852) 6195 0838

Email kwanho_tsang@yahoo.com.hk

Thank you for considering this invitation.

Dr. Ananda Kumar Palaniappan
Professor

Kathryn WF Ho
Researcher

Complaints about this research

This project has been approved by the University's Human Research Ethics Committee, Approval No. H-2010-1072.

Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone (02) 49216333, email Human-Ethics@newcastle.edu.au.

問卷調查
業務流程管理在員工的滿意程度及顧客的滿意程度中所扮演的角色：
香港及澳門的服務性行業
顧客服務 (酒店業)

指引：你被邀請參加 Anada Kumar Palaniappan 教授 (流動電話(603)79675046，電郵 anandak@um.edu.my) 酒店業的顧客服務問卷調查。填寫甲部份一般的資料後，請在乙部份顯示你對酒店餐飲／房間／銷售的服務滿意程度。

甲部份：

你是： ☐ 男性 ☐ 女性
 你接受服務的性質： ☐ 酒店房間 ☐ 餐飲
 ☐ 銷售 ☐ 其他：_____

乙部份：

請閱讀以下的陳述並把你對服務的感受於適當的格內放上“√”號。答案是沒有正確或錯誤的，你只要坦白及誠實放上你的感受就可以了。請把你的感受用 5 度級顯示出來（由非常不同意到非常同意）。

1. 非常不同意 2. 不同意 3. 中立 4. 同意 5. 非常同意

服務素質

		1	2	3	4	5
1.	服務員／銷售員的服務素質達到我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	員工的態度是友善及有幫助的。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	員工的服務速度是令人滿意的。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	員工的知識是合乎水平及專業。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	服務的流程是順暢及令人滿意的。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	員工理解我的要求及作出正確的反應。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	服務員／銷售員的外表令人滿意。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	服務員／銷售員了解我所需要的服務／產品。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	有足夠的服務員／銷售員在酒店餐飲／房間／銷售服務。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

產品素質

		1	2	3	4	5
10.	產品的素質達到我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	產品／服務的外表／表達令人滿意。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	產品／服務合乎潮流及有創新性。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	環境整潔、整潔及舒適。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	傢俬裝修、燈光及空間均令人舒悅。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

訂價滿意度		1	2	3	4	5
15.	服務／產品的訂價是合理的。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	服務／產品是物有所值。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

服務／產品的分類		1	2	3	4	5
17.	有足夠的服務／產品及顧客挑選。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	產品／服務有系統地安排及陳列。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

整體滿意度		1	2	3	4	5
19.	你滿意這間酒店餐飲／房間／銷售的整體表現。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	你會推薦這間酒店的餐飲／房間／銷售給你的親友。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	你將會再來這間酒店的餐飲／房間／銷售消費。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

填完問卷後，請把問卷放在酒店指定的收集箱內。

如有任何疑問，請聯絡研究員何蕙芳小姐。電話號碼：（852）9103 1188 或（853）6646 0343；電郵地址：kathryn_ho@yahoo.com

***** 謝謝 *****



Ananda Kumar Palaniappan 教授

馬來西亞大學教育系

馬來西亞吉隆坡 50603

電話號碼 (603) 7967546

流動電話 019 9310956

傳真 (603) 79675010

電郵 anandak@um.edu.my

研究項目資料說明書

顧客問卷調查

業務流程管理在員工的滿意程度及顧客的滿意程度中所扮演的角色：香港及澳門的服務性行業。

你被邀請參與何蕙芳小姐在澳洲紐卡素大學的博士研究項目。

研究項目的目的？

顧客滿意對一間機構來說是極為重要的。這個研究的目的是給予服務性行業的業務領導層啟示，進一步了解業務流動管理在顧客的滿意與員工滿意之間所扮演的重要角色。

那一些人士可以參與這個研究項目？

酒店各業務單位的顧客均有機會被邀請參與。業務單位包括酒店的客房、餐廳、咖啡室、餅店及零售店。

你有那一些選擇？

你有自由選擇參加這個研究項目與否。你如果選擇完成問卷調查，就表示你願意參加。假若你不參加，對你絕無任何影響。

你需要做那些步驟？

你若願意參加，請把附上的問卷填好，放入指定的收集箱就可以了。

涉及多少時間？

問卷調查大概 20 分鐘可以完成。

參加這個研究項目有沒有風險及有什麼好處？

參加與否是屬於自願及不記名性質。沒有風險。你的參與可以為服務性行業的將來發展作出貢獻。

怎樣保障你的私隱？

問卷是不記名的，研究不會顯示你的答案。資料純粹是作研究作用，被研究員存放 5 年及副本將放在澳洲紐卡素大學。

怎樣運用搜集到你的資料？

搜集到的資料將會是何蕙芳小姐在澳洲紐卡素大學的博士論文。

你需要做的事項？

在參加是項目研究前，請閱讀這份資料說明書。如有任何詢問，可聯絡研究員：

何蕙芳 (852) 91031188

(853) 66311500

Kathryn_ho@yahoo.com

香港博扶林道 89 號，39A，第六座。

Ananda Kumar Palaniappan 教授

anandak@um.edu.my

多謝你的參與。

簽名

姓名：Ananda Kumar Palaniappan 博士

職位：教授

簽名

姓名：何蕙芳

職位：研究員

投訴渠道

這研究項目已被澳洲紐卡素大學批核，號碼 H2020-1072

如閣下對於權益或對參與這研究項目有投訴或疑問，請聯絡研究員。如欲聯絡獨立部門，可接觸澳洲紐卡素大學人力研究道德主任，University Drive, Callaghan, NSW2308，電話 (02) 4921 6333，電郵 Human-Ethnics@newcastle.edu.au

Dear Mr/ Ms XXXX,

Appendix 3a

I am pursuing Doctor of Business Administration in the Newcastle University of Australia under the supervision of Professor Ananda Kumar Palaniappan. The topic of my research study is : The role of Business Process Management (BPM) as a mediator between employee job satisfaction and customer satisfaction in the hospitality industry in Hong Kong and Macau.

Your hotel is invited to participate in the project. I have contacted Mr/ Ms XXXX of your hotel who agrees to join the project and understands that I will contact you for details on the implementation of the questionnaire surveys (employees and customers). The participation is voluntary and anonymous. The participating organizations will remain anonymous. They will not be identified in the results of the research. The attached Participant Information Statement of the project details the objectives of the project, choices of the employees and customers, time involved, procedures, protection on privacy and results of the survey. Please study the information statement with details.

There are two parts of the questionnaire survey: employees and customers. HR Division will assist in the implementation of both parts of the questionnaire survey. Please follow the procedures below:

Employee survey

- (i) Random sampling of the three categories of employees, i.e., high customer contact, limited customer contact, none customer contact.

Step 1:

- List employees of positions with high customer contact employees:
Customer Service/ frontline Officer according to employee number.
- List employees of positions with limited customer contact: Cashiers/
Housekeeping staff according to employee number.
- List employees of positions with none customer contact: Storeroom staff/
IT staff.

Step 2:

- Select 7 employees from each of these three categories according to the following sequence:
- In order to achieve randomness, generate a total 21 employees according the following random sequencing (assuming that there are 100 employees

in each category):

- High customer contact 67 02 79 87 34 11 52 07 04 01 92 61 73 42
- Limited customer contact 64 72 79 42 29 21 46 24 72 88 97 55 15 13
- None customer contact 10 78 41 93 47 81 37 44 07 13 24 90 31 14

(ii) Distribution of the questionnaires

Distribute the attached questionnaires together with the Participant Information Statement and a pre-printed envelope (Return to HR Division) to invite the 21 employees to participate in the survey. The participation is voluntary and anonymous. If the selected employee(s) do not wish to participate, please select other employee(s) according to the random sequence in (i) above.

(iii) Return of the questionnaires

After completion of the questionnaire, ask the employee to put the questionnaire to the pre-printed envelope and return it to HR Division.

Please keep the completed questionnaires, lock them in a safe place. The researcher will contact you and collect the questionnaires accordingly.

Customer survey

(i) Random sampling of customers

With assistance from outlet managers, randomly select customers of different outlets from your hotel. Outlets include all business operating units of your hotel, such as hotel rooms, café, restaurants, cake shops and retail shops. Customers will be selected on the every fifth occurrence / or appearance to achieve randomness. A total of 21 responses from customers is the target.

(ii) Distribution of questionnaires

Distribute the questionnaires together with the Participant Information Statement to customers from outlets of the hotel. Participation is voluntary and anonymous.

(iii) Return of the questionnaires

Please put collection box (with lock) at the outlets as appropriate. Ask the customers to return the completed questionnaire to the collection box. HR Division will be responsible to collect the completed questionnaires from the collection box every day and keep them in a save place with locking system. The researcher will contact the HR Division and collect the completed

questionnaires.

Confidentiality

The participation in the survey of employees and customers is voluntary and anonymous. Please brief them clearly the confidentiality nature when they participate in the survey. No names of the hotels and individuals will be identified and disclosed.

Contact information:

Should there be any queries, please do not hesitate to contact me at :

Phone number:

- (852) 9103 1188
- (853) 6646 0343

Email address: Kathryn_ho@yahoo.com

Thank you for your assistance.

Kathryn Ho

(給人力資源領導的信)

親愛的 XXX 先生／女士：

本人於澳洲紐卡素大學就讀工商管理博士學位，導師是 Ananda Palaniappan 教授。研究的項目是：業務流程在員工工作滿足感與顧客滿足之間扮演的角色：香港及澳門的服務行業。

現邀請貴酒店參與這研究項目。經過貴酒店的 XXX 先生／女士討論後，我會與你談及問卷調查（員工及顧客）執行的安排。參與這項研究是自願及不記名的。附件上的研究資料列出項目目的，員工／顧客的選擇，所需要的時間、流程、私隱及結果的安排。請閱讀附件的細節內容。

問卷調查反為兩部份：員工及顧客。人力資源將協助兩部份問卷調查。請依照以下的流程安排。

員工問卷

(i) 隨機選擇三類員工，即與顧客頻密接觸、有限度接觸 及無接觸的員工。

第一步

- ◆ 把與顧客有頻密接觸的員工：顧客服務／前線員工，按員工號碼排列。
- ◆ 把與顧客有限度接觸的員工：收銀員／酒店房間服務員的員工，按員工號碼排列
- ◆ 把與顧客無接觸的員工：貨倉員／電腦工作的員工，按員工號碼排列。

第二步

- ◆ 在以上的三個員工類別之中，每一類各選七名員工。
- ◆ 請按照以下隨機的號碼挑選員工，以達致隨機的目的：
 - 與顧客密接接觸的員工：_____
 - 與顧客有限度接觸的員工：_____
 - 與顧客無接觸的員工：_____

(ii) 問卷分發

將附上的問卷、研究資料及已印好的回覆信封（致人力資源部），分發給 21 位員工，邀請他們參與問卷調查。員工的參與是自願及把家記名的。如果被選的員工不欲參與，請按照以上（i）的隨機次序再挑選。

員工完成問卷後，請他們把問卷放入已印好的信封內，交回人事資源部。

(iii) 請把已完成的問卷鎖上。調查員會聯絡你收回問卷。

顧客問卷

(i) 隨機選擇顧客

在業務經理的協助下，隨機在各酒店的業務單位選擇顧客。

業務單位包括酒店房間、咖啡廊、餐廳、餅店及各零售店。為了達致隨機的目的，請選擇逢第五位出現的顧客。請挑選共 21 名顧客。

(ii) 問卷的分發

請把附上的顧客問卷及研究資料分派給被挑選的顧客，並向他們解釋研究資料的重點。顧客的參與是自願及不記名的。

(iii) 問卷的回收

請準備可以上鎖的箱子放在酒店各業務單位。請顧客完成回答問卷後放在箱子裏。人力資源部會每天從箱子裏收回問卷，並鎖放在人力資源部，調查員會聯絡人力資源部收回所有問卷。

聯絡資料

如有任何疑問，可直接向我聯絡：

電話號碼：

— (852) 9103 1188

— (853) 6631 1500

電郵：kathryn_ho@yahoo.com

多謝你的支持

何蕙芳