

CHAPTER 1

INTRODUCTION

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Intensifying competition and rapid deregulation have led many services and retail business to seek profitable ways to differentiate themselves. One strategy that has been related to the success in these businesses is the delivery of high Service Quality (Rudie and Wansley 1985; Thompson, and Gale 1985). Delivering superior service quality appears to be a prerequisite for success and survival of such business. Therefore, it is vital for services organisation to position themselves more effectively in the marketplace (Brown and Swartz 1989; Parasuraman, Zeithaml, and Berry 1988; Rudie and Wansley 1985; Thompson, and Gale 1985).

However, service quality is an elusive and abstract construct that is difficult to define and measure (Brown and Swartz 1989; Carman 1990; Crosby 1979; Gravin 1983; Parasuraman, Zeithaml, and Berry 1985, 1988; Rathmel 1966). In addition, to date the important relationships between service quality, customer satisfaction, and purchasing behaviour remain large unexplored.

10.1.1 数据库系统

数据库系统(Database System)是指由数据库、数据库管理系统(Database Management System, DBMS)以及数据库用户(Database User)组成的系统。数据库系统是数据库管理系统的核心,它负责数据库的创建、维护、查询、更新等操作。数据库用户是指使用数据库系统的用户,包括数据库管理员(Database Administrator, DBA)、应用程序员(Application Programmer)等。数据库系统是数据库管理系统的核心,它负责数据库的创建、维护、查询、更新等操作。数据库用户是指使用数据库系统的用户,包括数据库管理员(Database Administrator, DBA)、应用程序员(Application Programmer)等。

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SERVICES IN MALAYSIA

Services play a central role in the economy of the nations and world commerce. No economy can function without the infrastructure that services provide such as, transportation and communications, or without government services such as education, health care and utilities. Malaysia continues to experience the strong growth in the mid 1990's due the buoyant economy expansion and rapid industrialisation. Value added for service sector is estimated to record an increase of 8.9% 1995 (1994: 9.7%). In 1995, the service subsector that is expected to show the biggest growth due to increase in consumption is electricity, gas and water, at 14%. This is followed by the growth in wholesale and retail trade, hotel and restaurant, at 9%. The transport storage and communications grow, at 13%. Finance, insurance, real estate and business services grow, at 10%. Finally, the government services grow at 10%. Services contribution to overall output growth is estimated to be 40.8% in 1995 while its share to real GDP is estimated to be 44%.

In terms of electricity consumption, it is estimated to increase by 14.6% in 1995 while installed capacity is projected to increase significantly by 12.1% in 1995. This is the result of additional capacity from the Independent Power Producers (IPPs).

Table 1.1 - Growth Performance Indicator for Electricity, January - July
(Percentage annual change)

	1994	1995
TENAGA NASIONAL BERHAD		
Electricity consumption	15.1	14.6
Installed capacity	17.9	12.1

Source: Ministry of Finance, Malaysia, Economic Report 1995/96

TNB WILAYAH PERSEKUTUAN KUALA LUMPUR

In TNB Wilayah Persekutuan Kuala Lumpur, the growth rate of customer for financial year 1994/95 is 9.28% per annum. This includes customers who are new applicants of electricity for domestic, industrial and commercial purposes. The sales growth in terms of kilowatt-hour (kWh) and Ringgit Malaysia is 13.81% and 17.08% respectively.

ONE-STOP PAYMENT CENTRES

One-stop bill collection centres started several years ago in Malaysia after many utilities bodies then, now being public listed companies, started the computerisation of their accounting system. From the of National Electricity Board (NEB) Annual Report No: 36 for year ending 31/8/1985 (former name for TENAGA NATIONAL BERHAD), NEB first started the one-stop payment system with 21 individual collection agents. At

1. The first step in the process of writing a paper is to choose a topic.

2. The second step is to research the topic.

3. The third step is to organize the information.

4. The fourth step is to write the paper.

5. The fifth step is to revise the paper.

6. The sixth step is to proofread the paper.

7. The seventh step is to submit the paper.

8. The eighth step is to receive feedback on the paper.

the same period, the collection counters were launched. In order to improve customer services and optimise resources, one-stop bill collection concept was started. It is to provide the convenient way for customers to pay several different types of bills at one counter without having to visit other different utilities counters to pay different bills.

Currently, the one-stop payment centres service providers are: POS Malaysia, Telekom Berhad, Jabatan Bekalan Air and Tenaga Nasional Berhad. Customers can pay any of their utilities' bills in any of the above payment centres. POS Malaysia also collects bills for Telekom and Jabatan Bekalan Air. The three utilities organisations (POS, Telekom and TNB) will not charge each other for collecting bills not belonging to their organisation. Only POS Malaysia will charge the three utility organisations for collecting bills on their behalf. Thus, POS Malaysia is benefiting from the service rendered to these three utility organisations.

At the moment, TNB is paying a flat commission rate of RM 0.40 to POS Malaysia for each T.N.B.'s bill collected by their one-stop payment centres, regardless of the face value of each electricity bill. TNB Wilayah Persekutuan last financial years 1993/94 report showed that approximately RM 600,000 was paid in terms of commission to POS Malaysia. This worked out to about 1.5 million electricity bills paid through the post offices in and around Kuala Lumpur (source: TNB Wilayah Persekutuan Kuala Lumpur, 1993/94 Comparative Accounting Statement).

1. \mathcal{H} ist ein Hilbertraum, \mathcal{H}^* sein Dualraum. \mathcal{H} ist separabel, d.h. es gibt eine abzählbare Dichte. \mathcal{H} ist ein Banachraum, d.h. \mathcal{H} ist vollständig. \mathcal{H} ist ein Hilbertraum, d.h. \mathcal{H} ist ein Banachraum, der zusätzlich ein Skalarprodukt besitzt.

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The sales of electricity, in terms of Kilowatt-hour (kWh) and Ringgit Malaysia, as well as the commission paid to POS Malaysia for services rendered for each zone in the 1994/95 financial year ending 31st. August 1995 is shown in the table 1.2 below:

Table 1.2 - Sales and Commissions for financial year 1994/95

	ZONE 1	ZONE 2	ZONE 3	ZONE 4	TOTAL
SALES (kWh)	1,572,215,667	973,252,401	1,658,280,071	860,611,293	5,110,421,776
SALES (RM)	357,025,157	208,576,486	373,794,234	195,487,651	1,143,185,594
COMMISSION PAID TO POS MALAYSIA	317,556	299,922	125,148	219,007	961,633

(Source: TNB Wilayah Persekutuan Kuala Lumpur - Business Operation Department.)

HYPOTHESIS OF RESEARCH

Many customers prefer to pay bills at POS Malaysia counters instead of at TNB one-stop payment counters even though, they sometimes do coexist at one location or are nearby to each other. This is a concern to the TNB Wilayah Persekutuan Kuala Lumpur local management.

The management feels that much improvements can be done to the existing one-stop payment centres. It is believed that strategies could be formulated for new services centres already in the pipeline and future ones, so as to reach out to the customers and to providing them with quality services.

THE OBJECTIVES OF STUDY

This study is basically exploratory in nature and attempts to give an insight of the concept and the determinants of the service quality of one-stop payment centres, specifically for TENAGA NASIONAL BERHAD. POS MALAYSIA is included for the purpose of comparison. This study utilises the service quality concept developed by Parasuraman, Zeithaml and Berry in 1985. The concept is found in their paper entitled "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality". The items or variables used in this research have been modified to suit one-stop payment service centres for both the organisations. Details of the modification is discussed in Chapter 3 on the methodology used.

The understanding of the consumers' needs of the service quality of one-stop payment centres could help the management to improve the present and future services. The management could also attempt to develop new products or services to reach untapped market segments and at the same time penetrate existing markets.

LIMITATIONS OF THE STUDY

This study was confined to the population within the boundary of TNB Wilayah Persekutuan Kuala Lumpur. Their customers are connected electrically from the distribution substations in this particular super district. The boundary covers an area slightly larger than Kuala Lumpur political boundary. It contains some areas that belong to the state of Selangor Darul Ehsan, such as Puchong area. Thus, the population in this study covers Kuala Lumpur city, urban and suburban areas. Nevertheless, this gives a good gauge of the customer behaviour of Kuala Lumpur specifically.

The limitation of the study is also due to the lack of time and cost consideration.

ORGANISATION OF THE REPORT

This report consists of five chapters. Chapter 1, the Introduction, gives a general overview of the nature of the study. It discussed the importance of the service sector as a whole in Malaysia, the concept of One-Stop Payment Counters and the objectives and significance of this study.

Chapter 2, The Literature Review touches on the development of service quality models and the theories of service quality. It centres around the instrument SERVQUAL

QUESTION 1 (10 marks)

Let \mathcal{H} be a Hilbert space and let $T \in \mathcal{B}(\mathcal{H})$ be a bounded linear operator on \mathcal{H} . Suppose that T is self-adjoint, i.e. $T = T^*$. Let $\lambda \in \mathbb{R}$ be a real number. Suppose that λ is an eigenvalue of T , i.e. there exists a non-zero vector $v \in \mathcal{H}$ such that $Tv = \lambda v$. Show that λ is a real number. (Hint: Use the fact that $\langle Tv, v \rangle = \langle v, T^*v \rangle$ for any $v \in \mathcal{H}$.)

ANSWER: Let $v \in \mathcal{H}$ be a non-zero vector such that $Tv = \lambda v$.

QUESTION 2 (10 marks)

Let \mathcal{H} be a Hilbert space and let $T \in \mathcal{B}(\mathcal{H})$ be a bounded linear operator on \mathcal{H} . Suppose that T is normal, i.e. $TT^* = T^*T$. Let $\lambda \in \mathbb{C}$ be a complex number. Suppose that λ is an eigenvalue of T , i.e. there exists a non-zero vector $v \in \mathcal{H}$ such that $Tv = \lambda v$. Show that λ is a normal number, i.e. $\lambda \bar{\lambda} = \lambda \lambda$.

SOLUTION: Let $v \in \mathcal{H}$ be a non-zero vector such that $Tv = \lambda v$. Then $\langle Tv, v \rangle = \langle \lambda v, v \rangle = \lambda \langle v, v \rangle$. On the other hand, $\langle Tv, v \rangle = \langle v, T^*v \rangle = \langle v, \bar{\lambda}v \rangle = \bar{\lambda} \langle v, v \rangle$.

that is being used in this research. Latest development of SERVPERF instrument will be reviewed in this chapter.

Chapter 3 elaborates the methodology of the research process. This chapter covers the selection of sample from the total population, conducting of survey interview and coding of results obtained. Subsequently, the data was analysed using commercially available statistical software for personal computer called SPSS/PC+. The treatment of data analysis is discussed.

Chapter 4 provided the tabulation of results of the SPSS/PC+ analysis and reports. The results were interpreted based on observations as well as inference.

Chapter 5, Conclusion, is a summary of the total findings, implications of the results and the suggestions for future research. It also covers changes in consumer perception of service quality and how service providers should constantly monitor the service quality in order to be effective and competitive.

Vol. 42, No. 19

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