

MASTER OF BUSINESS ADMINISTRATION

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OUTSOURCING OF INFORMATION SYSTEMS IN
BUMIPUTRA-COMMERCE BANK BERHAD

BY

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A THESIS SUBMITTED IN PARTIAL
FULFILMENT FOR
THE DEGREE OF
MASTERS IN BUSINESS ADMINISTRATION

MANAGEMENT CENTER
INTERNATIONAL ISLAMIC UNIVERSITY
MALAYSIA

JULY 2002

ABSTRACT

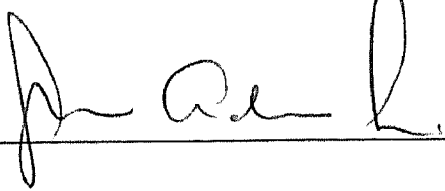
Outsourcing of information systems (IS) has experienced a tremendous growth in the last 10 to 12 years. The trend has exploded and is expected to continue especially when most corporations are relentlessly trying many strategies to achieve various organisational objectives such as improvement in efficiency and profitability. One of the strategies management turns to in order to achieve these objectives is outsourcing of IS. With full knowledge of apparent success and failure of IS outsourcing agreements throughout the globe, Bumiputra-Commerce Bank Berhad (BCB) has ambitiously embarked on IS outsourcing strategy. Being the first local bank to undertake such bold step, BCB is fully aware of the high level of uncertainty whether the strategy will bring the desired outcome or not. This study centres on the IS outsourcing decision in BCB. The scope of the study covers only on the understanding of the IS outsourcing decision-making process and the implementation of the decision in BCB. It is not intended however to study whether the decision will bring the desired results because at the time of writing, the decision has not been fully implemented and it is only six months old. This exploratory study seeks to understand the IS outsourcing undertaken by BCB and tries to identify potential challenges faced by the organisation. It also includes understanding the factors that lead BCB to outsource its IS management, the implementation of the IS outsourcing strategy and managing the IS outsourcing strategy. In summary, it is a case study that provides a real life example of IS outsourcing in comparison with information provided in IS outsourcing literature.

**OUTSOURCING OF INFORMATION SYSTEMS IN
BUMIPUTRA-COMMERCE BANK BERHAD**

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I certify that I have supervised / read this study and that in my opinion it conforms to acceptable standards of presentation and is fully adequate, in scope and quality, as project paper in partial fulfilment of the requirement for the degree of
Master in Business Administration

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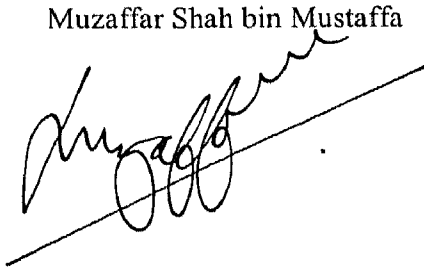
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DECLARATION

I hereby declare that this thesis is the result of my own investigation except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references and a bibliography is appended.

Name: Muzaffar Shah bin Mustaffa

Signature:

A handwritten signature in black ink, written over a horizontal line. The signature is cursive and appears to read 'Muzaffar'.

Date:

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ACKNOWLEDGEMENTS

The writer takes this opportunity to express his greatest gratitude to Dr Mohd Adam Suhaimi, Dean of Kuliyyah of Information and Communication Technology (KICT), International Islamic University Malaysia (IIUM) for his invaluable coaching, assistance and insights in ensuring better understanding of the subject matter. Without his assistance, the completion of this thesis may not be possible.

Many thanks also to Encik Azmi Abdullah, Executive Director of Bumiputra-Commerce Bank Berhad and also a Director of EPIC-I Sdn Bhd who has given his full support to the writer to take Bumiputra-Commerce Bank Berhad as a case study in understanding the issue of outsourcing IS especially in the context of Malaysian banking industry. In addition, the writer also expresses his gratitude to Mr Collin Lazaroo, Chief Executive Officer of EPIC-I Sdn Bhd for his time and effort to make this study possible.

Last but not least, the writer wishes to thank his colleagues in Bumiputra-Commerce Bank Berhad who participated in interviews thus providing the writer with invaluable information and insights for sound understanding on the issues related to the outsourcing of IS in Bumiputra-Commerce Bank Berhad.

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CHAPTER 1 – INTRODUCTION

1.1 Background

Outsourcing of information systems (IS) has experienced a tremendous growth in the last 10 to 12 years, ever since the landmark information technology (IT) outsourcing agreement signed between Eastman Kodak and service providers IBM, DEC and Businessland (Lacity et al. 1995: xii). This trend is expected to continue for many reasons such as to be cost effective, concentrating on organisation's core business activities and to keep abreast with rapid IT technological advancement, just to name a few. Outsourcing in general has been around for many years in many functional and divisional areas of organisation such as marketing and human resources management. Nonetheless, IS outsourcing is a relatively new area and its existence can be tracked to the 1950s during the dawn of computing age. Despite the fact that the area is relatively new, as a result of IT explosion in early 1990s and its growing importance in almost every aspect of life especially in business, many corporations or firms have courageously implemented the outsourcing of IS. Academicians and corporate strategists alike have studied in detail on the issue of IS outsourcing that includes the questions whether or not to outsource, the scope of outsourcing as well as how to outsource. Of course there are pros and cons and also varying opinions both in favour of outsourcing as well as those against it. However, it is thought that the divergent views on outsourcing are indeed healthy in the sense that they provide further understanding on the topic.

No matter how divergent the views are, one fact remains, that is the issue of outsourcing of IT or IS management demands equal emphasis if not more than maintaining in-house department from decision makers in an organisation. Management of a firm does not relinquish its responsibility to an outsider or a third party. However they are still held responsible and accountable to ensure that outsourcing yields the desired result.

1.2 Objectives, context and significance of the study

This project paper aims to understand the issues related to outsourcing in general and the issues unique to the IS outsourcing in Bumiputra-Commerce Bank Berhad (BCB). The main theme of the study centres on few fundamental questions, from the point of view of management and employees as well as other stakeholders such as customers and shareholders. Examples of the fundamental questions may include, 'What is IS outsourcing?', 'Why BCB implements IS outsourcing?', 'How to outsource IS?', 'Will the IS outsourcing work?', 'How does the IS outsourcing strategy affect both internal and external customers?', 'As a bank, we owe duty of secrecy to our customers. Do we have the strictest confidentiality of customers information when we outsource our IS?', 'Will service level increase or otherwise?' and 'How are we going to manage the IS outsourcing agreement in this fast changing information and communication technology (ICT)?'

In essence, the case study is to explore IS outsourcing practices in BCB with the following main objectives:

1. To understand the objectives of IS outsourcing in BCB,

2. To identify the rationale behind the IS outsourcing strategy adopted by BCB.
3. To explore the implementation of IS outsourcing strategy in BCB, and
4. To observe potential challenges faced by BCB following the IS outsourcing decision.

The study focuses only on the IS outsourcing strategy in BCB in comparison to general information available in IS outsourcing literature. The study of IS outsourcing strategy in BCB is based mostly on interviews with top and middle management, technical staff and other internal customers or users together with BCB's internal news bulletin. To complement those sources, there are information on BCB's IS outsourcing obtained from publicly available information such as newspaper and the company's annual report.

Though this is only an exploratory study on IS outsourcing strategy in BCB, it is hoped that it provides a link between ideas propounded in IS outsourcing literature and the issues faced in real life implementation. It also provides key information for further study on the level of successfulness of the IS outsourcing strategy in BCB in the future, possibly two to three years into its implementation.

1.3 Organisation of the study

The content of this study is organised in six chapters. Chapter Two provides the literature review of IS outsourcing. It briefly covers several aspects of outsourcing right from the conceptual stage to maintaining the IS outsourcing relationship with the service provider from several sources of IS outsourcing literature.

Chapter Three covers the background of BCB and its IS outsourcing strategy. It also covers from the conceptual stage to maintaining the IS outsourcing agreement. BCB is the first local bank to implement outsourcing in line with Malaysia's Financial Sector Master Plan as outlined by Bank Negara Malaysia (BNM), Malaysian Central Bank in 2001. In the Financial Master Plan, BNM encourages banks to outsource their non-core back-office and IT processes to enhance their internal efficiency and enable them to focus on selling and marketing financial services products. This move is consistent with trends in most developed nations.

Chapter Four explains the methodology used in the study of outsourcing of information systems in BCB. The questions asked in interviews are listed in this Chapter as well as some samples of the responses to the questions.

Chapter Five discusses the findings on the study of IS outsourcing in BCB. In this chapter, the objectives of the study are discussed and findings are compiled based on the interviews and reports available on IS outsourcing in BCB.

Chapter Six summarises and concludes the study on outsourcing of IS strategy in BCB.

CHAPTER 2 – LITERATURE REVIEW

2.1 The concept of IS outsourcing

Outsourcing in its generic sense as defined by The Economist Pocket Book on Strategy is the handing over of a fundamental corporate process to another organisation, for example the management of a company's IT systems, or car fleet management, or of its health insurance scheme (Hindle 1998: 127).

There are other writers who define outsourcing in a more 'rigorous' and 'strong' manner such as outsourcing is a strategy where companies use outside suppliers, shop around, play one seller against another, and go with the best deal (David 2001: 166).

Specifically, in regards to outsourcing of IS, outsourcing is defined as the practice of turning over responsibility of some to all of an organisation's IS applications and operations to an outside firm (Hoffer et al. 1999: 392).

Outsourcing is the buzzword in management in recent times. However, in substance outsourcing is not a new thing in management. Academicians and corporate strategists have long identified outsourcing as one of the strategies available for firms and companies to achieve its goals and objectives. Further, it has been said that outsourcing is a new name for old practice (Karpathiou et al. 1995: 8) and has been successfully implemented in various functional areas of a business such as marketing, building maintenance and security.

Initially, there are two key concerns in regards to IS outsourcing; (i) technology or technical capabilities of the service provider and (ii) the impact of such strategy on organisational issues. Considering the present time where there are many specialists in the area of IS outsourcing such as Electronic Data Services (EDS), International Business Machine (IBM) and Accenture, the issue of performance, that is ability to deliver their obligation under the outsourcing agreement may no longer be a major concern. These specialists have the financial muscle as well as technical capability in delivering what is expected of them.

While the issue of performance of the service providers has been more or less adequately addressed, the second key concern, that is the impact of IS outsourcing on organisational issues still lingers. Like any other strategies taken by organisations, IS outsourcing has repercussion in most if not all areas of an organisation. The outsourcing decision will have an impact on human resource management and on organisation's overall goals and objectives as the outsourcing decision has its strategic importance and significance and more importantly the impact it has on both internal and external customers of the organisation.

So what makes outsourcing of IS different from other areas of business and why the fuss about it? One thing for sure is that there are no other areas of business that have experienced a drastic growth as the growth in IS has shown. Rapid technological advancement in IS has led to growing importance of IS in businesses, thus the dependence of business on IS, which in turn has totally changed the role of IS in businesses.

The growing importance of IS in business is reflected in the change of its initial primary uses from mass and complicated calculation and record keeping only to using IS as a strategic competitive advantage that differentiates an organisation from the other.

Based on this, it is observed that only few business areas are as sensitive to failure as the impact of failure that could be brought upon by IS. Unlike failure in other business areas such as payroll system or building maintenance services, failure in IS can be very detrimental to businesses. For instance, failure of IS in a bank may result in chaotic rush of complaints from customers and loss of customer confidence that could eventually lead to business decline. On that score, one may appreciate the fact that managing IS in itself is delicate, difficult and dangerous, what more to outsource it. If at all the outsourcing of IS service is an option, it demands greater and careful consideration than outsourcing of other areas in business.

According to Lacity and Hirschheim (1995) outsourcing of IS is different from outsourcing of other functions in organisations because of the following six reasons:

- i. IT evolves rapidly
- ii. The underlying economics of IT changes rapidly
- iii. The penetration of IT to all business functions is ubiquitous
- iv. The switching costs to alternative IT suppliers is high
- v. Customers' inexperience with IT outsourcing
- vi. IT management practices rather than economies of scale lead of economic efficiency

i. IT evolves rapidly

The element of uncertainty always revolves around any IS outsourcing agreement because many outsourcing contracts are structured for a relatively long period, normally 8 to 10 years in a world of fast-moving technical and business changes of IT. Though the agreement may have covered a whole of range of services at the beginning of the contract period, after 3 years certain adjustments to the contract have to be made to ensure smooth operations as agreed by both the customer and service provider. If no adjustments are made, tension may arise on the relationship between both parties.

One of the expected benefits of outsourcing is the ability of the service provider to keep abreast with the change in technology. However, Lacity and Hirschheim observed that the outsourcing agreement actually locks firms into older technologies as defined in the outsourcing agreement especially if the service provider is more interested to maintain the same level of technology rather than implement advancement. To overcome this, outsourcing agreement should define on ways to manage the availability of latest technology.

ii. The underlying economics of IT changes rapidly

This issue is mainly as a result of difficulty in gauging the economics of IS activity. There are only few industries where the underlying economics and thus price per unit or service shift as fast as they do in IS. The price of software / hardware / services can cost 10% to 30% less next year than today. Because of this, certain agreed percentage of discount for subsequent years may be appealing. However, as a result of fast changing of the underlying

economics of IS, firms may be paying the service provider above the market price for IT resources even after taking into account the agreed percentage of discount.

It is also noted that most service providers have guaranteed certain percentage of cost reduction in their outsourcing agreement. Organisations should be wary of this as this may actually be an obvious feature of IS that has been used by service providers as a marketing strategy. The cost reduction is probably derived from the unique economics of IS where prices can be significantly lower next year than today. Based on this unique characteristic of IS more often than not service providers can afford to offer such cost-reduction guarantee.

iii. The penetration of IT to all business functions is ubiquitous

Unlike any other functions that can be outsourced, IS cannot be easily isolated from other organisational functions. IS penetrate every business function as well as all support activities. The ubiquitous nature of IS penetration makes outsourcing difficult (though possible) because idiosyncratic knowledge of an organisation is required. Each IS activity in each function in an organisation is somewhat interrelated with each other. For instance computer application used in production may be interrelated with payroll as well as computing systems used in administration department. Hence, a detail study has to be carried out to understand thoroughly the interrelationship.

iv. The switching cost to alternative IT suppliers is high

In the area of IS outsourcing, the switching cost to another vendor or to an in-house IS function is extremely expensive as well as time consuming. This is because whatever provided by the service provider is to a great extent has been customised to the need of the firm or customer. Though there are a number of service providers in the market, as a result of customisation, it makes it difficult for another service provider to continue what the previous service provider leaves behind.

It is also costly to revert to in-house IT because a firm has to start from scratch especially on the issue of employing qualified and experienced IT professionals.

v. Customers' inexperience with IT outsourcing

In most cases of IT or IS outsourcing, it is the first time for customers. Because of this customers do not have the necessary experience in regards to IS outsourcing and they rely heavily on the advice of consultants. On the other hand, the service providers are the specialists in this area having signed a number of contracts and after all, it is their business. In such cases, the service provider has the upper hand and there is a tendency for them to take advantage of customers' ignorance.

vi. IT management practices rather than economies of scale lead to economic efficiency

Most medium-sized and large corporations already have IS large enough to achieve economies of scale. Thus, the objective of outsourcing of IS for such organisations may not necessary to achieve the benefits of economies of scale. Rather, IS outsourcing is more about management practices of the service provider. David Ballantyne of PA Consulting Group also shared this point because the success of outsourcing comes about by the effective application of good business practice to the management of outsourcing (Aalder 2001: xiv).

A very good example of this point is illustrated by a well-known case study of IS outsourcing, Xerox. Xerox did not put emphasise on the issue of economies of scale in its IT outsourcing decision because Xerox already had the economies of scale. What is more important for Xerox is other characteristics of EDS and the services rendered. In addition to global presence provided by EDS and its proven technical capability which are of course unquestionable, Xerox noted that EDS has good business practices which include good human resources such as treatment of Xerox employees affected by the outsourcing decision (Applegate et al. 1999: 478-479).

The issue of outsourcing in general has also attracted a lot of criticism on whether outsourcing is an abrogation of management's corporate responsibility. There are some that view outsourcing as abrogation of management's corporate responsibility while some believe outsourcing is a shrewd way propounded by capable management with strong business acumen of turning high fixed cost into lower variable cost, of

improving service and gaining competitive advantage (Aalder 2001: 9). However, in the following discussion it will be apparently clear that outsourcing is not an abrogation of management's corporate responsibility. In fact, managing IT outsourcing demands as much management skills and dedication as managing in-house IT department, if not more.

2.2 Attributing factors to the growth of IS outsourcing

Applegate, McFarlan and McKenney identified two factors that have attributed to the tremendous growth of IS outsourcing (1) strategic alliances are now more common and (2) IT environment is changing rapidly (Applegate et al. 1999: 372-373).

Competitive environment in doing businesses has led to specialisation in certain areas. Such specialisation has brought specific strengths and weaknesses in an organisation while other organisations may have their own unique strengths and weaknesses. As an effort to stay competitive, those weaknesses have to be overcome. One of the ways to overcome the weaknesses is to form strategic alliances (Applegate et al. 1999: 372). Formation of strategic alliances is one of strategies that has received considerable attention from academicians as well as corporate strategists. In essence, strategic alliances hope to achieve synergistic effect by working together where the whole is greater than the sum of the parts i.e. a $2+2=5$ effect. In short, strategic alliance is about finding a suitable partner to overcome a firm's weaknesses. Having formed a strategic alliance, in a whole the firm is better off because it has converted its weaknesses into strengths. However for strategic alliance to work, it should be based on a win-win situation where both parties can benefit from relationship.

As mentioned above, the rapid change in IT environment has dramatically changed the way business is done. The use of IT and IS in business has evolved from just assisting in mass volume transaction processing to making IS a necessity in today's business environment. Today, no firm of a reasonable size can sustain its business without adequate IS. Though some firms may be able to survive initially without relying on IS, it is only a matter of time before they have to close down the business. Because of the rapid change in IT, most non-IT firms are unable to keep abreast without outside help. The rapid change in IT environment has also attributed to further specialisation in which firms just concentrate on what they are good at and not to be bogged down with things not value-adding to the firm.

In addition to the two points raised by Applegate, McFarlan and McKenney, it is also observed that the ever competitive business environment plays a major role that has contributed to the growth of IS outsourcing. Firms are trying their level best to outdo each other in order to maintain market share, to ensure survival and to enhance profitability. To achieve these objectives, firms are emphasising on its core business, embark on business process reengineering (BPR) and adopt various strategies. In some cases (however not in all cases), one of the strategies may include the outsourcing of some areas of business such as IS.

2.3 Factors to consider in deciding what and when to outsource

Before embarking on any business strategy, a firm should know where currently it stands and where it wants to go. To use an analogy, a firm should know where is its current location or position and which direction to take to reach its destination. It is imperative for the decision-makers to know what goals to be achieved by outsourcing and communicate those goals to every level in the organisation. The goals are the ends and outsourcing or other strategies are the means to meet those ends.

Take the case study on Xerox as an example. Xerox signed a USD3.2 billion, 10-year deal with EDS in June 1994. The objective of outsourcing for Xerox is to quickly create information infrastructure needed to support its new business processes. By allowing EDS to manage its legacy systems, run its mainframes and handle its voice and data communication in 19 countries, Xerox was able to concentrate on strategic and architectural information management functions and new applications development.

The question of what and when to outsource is a fundamental question in developing IS management strategy. In order to understand what and when to outsource, Applegate, McFarlan and McKenney (1999) identified five factors that can help organisations to decide. The five factors are as follows:

- i. Position on Strategic Grid
- ii. Development portfolio
- iii. Organisational learning
- iv. A firm's position in the market
- v. Current IT organisation