Examining IT Outsourcing Decisions and Practices of Small and Medium Enterprises in Malaysia

Siew Fan Wong, Universiti Tunku Abdul Rahman, Petaling Jaya, Malaysia, wongsf@mail.utar.edu.my

Abstract

IT outsourcing business tends to be the domain of large companies. However, with increase saturation of outsourcing market among large companies, the under-exploited SME market emerges as a potentially lucrative playground for vendors. SMEs, confined by limited resources, can benefit from having external services. Literature review shows a lack of outsourcing research among SMEs in Malaysia. This paper thus aims at examining IT outsourcing decisions and practices of Malaysia SMEs. Data was collected from SMEs in the manufacturing and service sectors in Malaysia. The findings show that the lack of internal competency is the primary reason that drives IT outsourcing and that SMEs prefer shorter-term contractual agreements. To attract SMEs, vendors have to establish trust prior to contract signing. This trust is critical for long-term outsourcing engagement. If resources permit, SMEs would revert to in-house IT services to minimize dependency on vendors.

Keywords: Outsourcing decisions, outsourcing practices, small-and-medium enterprises, Malaysia.

1. Introduction

The rapidly growing information technology (IT) outsourcing business tends to be the domain of large companies [3; 7]. Large vendors such as EDS, CSC, and Accenture are reluctant to target small-and-medium enterprises (SMEs) because IT budgets and requirements of these establishments are too modest in scale and scope to be profitable However, with increased saturation of outsourcing market among large companies, the presently under-exploited SME market emerges as a potentially lucrative playground for vendors. SMEs make up the major component of all economies [15]. In Malaysia, they account for 99.2%¹ of the total business establishments [1]. The dominant presence of these enterprises presents a new market niche for vendors' future business development.

is increasing [3] as they are in need of external assistance to help them exploit the full potential of

The demand for outsourcing services among SMEs

¹ The information comes from Baseline Census of Establishments and Enterprises conducted in 2005 (Census 2005). The study includes responses of 552,804 business enterprises. 87% of SMEs are in the services section, 7.2% in the manufacturing section, and 6.2% in the agriculture section.

IT. Constrained by limited resources, SMEs often do not have designated IT department. Even if they have an IT department, they face the problems of not having required expertise and knowledge to operate it efficiently and effectively [4]. They also do not have the financial capital to invest in technology to build up a strong IT department [4; 7]. These limitations culminate in their incapability to reap IT benefits afforded to their larger counterparts.

To overcome these limitations and to harness the opportunities and benefits of IT, an effective strategy, as proposed by Resource-based theory [2] and Resource dependence theory [13], is to look outward and search for solutions in the external market. A popular solution is IT outsourcing. IT outsourcing is the strategy of contracting with third party vendors to perform IT work that would normally be done within a company for a fee and for a period of time. Since large companies are able to gain values from IT outsourcing, it is believed that SMEs will also be able to achieve strategic, economic, and technological benefits from outsourcing.

A review of the literature shows that existing outsourcing research on large companies is abundant. However, the findings may not be directly applicable to SMEs as they are inherently different from large SMEs have simpler and more companies. centralized decision-making [12]. Owners of these enterprises are often actively involved in the running of the businesses. Due to limited resources, planning is often made on an ad hoc and short-term basis [12]. SMEs also have less sophisticated IT operations and requirements [6]. All these characteristics will have impacts on how SMEs approach IT outsourcing.

Furthermore, the characteristics of SMEs are bounded by cultural and social dimensions of a country. SMEs in Malaysia, therefore, may have different outsourcing practices compared to SMEs in other countries. Since there is a lack of outsourcing research in SMEs in general, and in SMEs in Malaysia in particular, this paper explores and examines outsourcing decisions and practices of SMEs in Malaysia.

The research findings in this study are of value to various parties. For SMEs, understanding outsourcing arrangements of other firms with similar size gives them the opportunity to compare and contrast their practices against others, and potentially learn from good practices. For vendors, understanding of outsourcing practices among SMEs can help them to better formulate their future

Communications of the IBIMA Volume 10, 2009 ISSN: 1943-7765 marketing and service strategies in an effort to attract new clients as well as retain existing clients. The rest of the paper is structured as follows. The next section presents the definition of SMEs in Malaysia as well as challenges and limitations faced by these SMEs. The third section explains the research approach. The fourth section is the main findings. The last section presents implications of the findings as well as future research avenues.

2. SME in Malaysia

There is no single definition of SMEs because of the wide diversity of sectors and business types, and different treatments in different nations. To enable more effective formulation of SME policies, implementation of SME development program, and provision of technical and financial assistance, National SME Development Council² of Malaysia came up with common definition of SMEs in 2005. These definitions (as shown in Table 1) are to be adopted by all government ministries and agencies involved in SME development.

and retaining best personnel. All these challenges and limitations contribute to their inability to reap full benefits from IT. Seeking external help, in the form of IT outsourcing, is therefore a feasible strategic alternative to address their challenges.

SMEs will approach IT outsourcing differently from their larger counterparts. The nature of SMEs – their size, structure, and challenges – positions them in a unique context with different management styles, strategies, and approaches. Such uniqueness is supported by literature from strategic management [5; 8] that has demonstrated that small and large companies require different theories and models to explain their behavior, strategy, and performance. This uniqueness also means that existing outsourcing research in large companies may not be applicable to the SME context. Thus, more attention is needed to understand outsourcing decisions and practices in SMEs.

Table	1.	Definitions	αf	SMFs	in	Malaysia
1 autc	1.	Deminions	OΙ	DIVILLO	111	iviaiaysia

Size	Sector	Primacy Agriculture	Manufacturing (including Agro-based) & MRS	Services Sector (including ICT)
Micro	No. of employees	Less than 5 employees	Less than 5 employees	Less than 5 employees
	Annual Turnover	Less than RM200k	Less than RM250k	Less than RM200k
Small	No. of employees	Between 5-19 employees	Between 5-50 employees	Between 5-19 employees
	Annual Turnover	Between RM200k- RM1m	Between RM250k- RM10m	Between RM200k- RM1m
Medium	No. of employees	Between 20-50 employees	Between 51-150 employees	Between 20-50 employees
	Annual Turnover	Between RM1m- RM5m	Between RM10m- RM25m	Between RM1m- RM5m

SMEs face many challenges and limitations. They have limited financial resources in contrast to the "deep pockets" of large companies. This is a contributing factor towards their difficulties in following technological trends in the market. As such, they often do not have latest hardware and software, and depend mostly on legacy systems. Due to its size, SMEs are also not able to enjoy economies of scale from investments in IT hardware and software. Their IT investments may even be more expensive compared to those of large companies. The skill sets and knowledge in SMEs are limited because of the difficulties in attracting

3. Research Approach

The research approach adopted was an in-depth exploratory case study [16]. Using the definition of SMEs presented in Table 1 as a guide, target participants were selected following the notion of 'theoretical sampling' [10]. This means participating organizations must be SMEs, and have or are currently outsourced part of all of their IT functions to vendors. Semi-structured interviews were conducted with owners of five SMEs³, who are actively involved in the running of their businesses. The profiles of these companies are provided in Table 2.

Communications of the IBIMA Volume 10, 2009 ISSN: 1943-7765

² Chaired by the Prime Minister, this council represents the Government's top-level commitment to promote SME development.

³ Information reported in this paper is part of a larger scale study to examine outsourcing practices among SMEs in Malaysia.

The main questions of the interviews were oriented around outsourcing decisions and practices in SMEs. While tape recording would have been the preferred route, this was not possible in all cases as some participants expressed their preference of not being taped-recorded. In such cases, interview notes were taken for record keeping purposes. The notes of each interview and the tape-recorded conversations were transcribed immediately. The procedure of note taking and immediate transcription is widely used in the management and information systems fields [see 11; 14]. Thus, some of the quotations cited in this paper have been paraphrased from the notes. Since the interviews were conducted in Mandarin, these transcripts were then translated into English by the researcher who is fluent in both languages. To ensure the English translation captures the original meaning in Mandarin, both versions of the transcripts were shown to a colleague who is also fluent in the two languages. The colleague verified that proper translation had been carried out.

Table 1: Profiles of Participating Companies

Company	Sector	No. of Employee s	Annual Turnover (RM in millions)
Alpha	Service	40	3.5
Beta	Service	10	1
Gamma	Service	15	2.5
Kappa	Manu- facturing	35	5
Lambda	Manu- facturing	50	8

The transcripts were then organized, coded, analyzed using a qualitative data analysis tool called Atlas.ti. A hermeneutic process of going back and forth between the data and the interpretation was conducted. To validate the interpretation reached and to ensure that relevant information related to outsourcing decision and practices was captured, a narrative of the case as well as the corresponding interpretation was shown to each participating organization for feedbacks. Then, all interpretations were collate together to form syntheses of the interpretations.

4. Findings

The following presents issues related to outsourcing decisions and practices in SMEs.

Lack of Internal Competency Drives Outsourcing SMEs usually have limited financial capital. Thus, the most common belief is that cost will be the main factor that leads to outsourcing. Such, however, is not the case with the SMEs that participated in this study. These participants acknowledged the weight of cost in vendor selection. However, they stressed that it is not the

primary driving factor. Instead, the lack of internal competency is the number one reason to look for external services. SMEs do not have internal expertise and knowledge to run efficient and effective IT services. Furthermore, their limited financial resources also prevent them from keeping up with latest technological trend. Through outsourcing, SMEs hope to gain access to resources, skills, and competencies that will enable them to maximize the value of IT to their business.

Preference for Short-Term Contract

SMEs prefer short term outsourcing agreements. The contractual duration usually ranges from a few months up to one year. A short-term agreement complements their practice of having short-term organizational planning. A short-term agreement also allows them to make business change when they see fit. Lambda noted "We usually do not plan that far ahead. So, a short-term contract fits us well. We do not want a long-term contract that ties us down. What if we have to change our planning unexpectedly?" Even though the duration of a contractual agreement is short, SMEs tend to renew contracts with existing vendors as long as the vendors meet their requirements. Compared to large companies, SMEs are not concern much about the flexibility of a contract. Customization of contract is also rare. Usually, they adopt standard contracts provided by vendors because these contracts require less effort to maintain.

Pre-contractual Trust Building is Essential

SMEs are very particular about 'trusting' a vendor. Subconsciously, they impose 'trust' as a pre-requisite for entering into an outsourcing agreement. They believe in having personal relationships with vendors before signing contracts. They want to feel comfortable and at ease with the vendors. One reason behind such mentality is that with limited resources, SMEs feel the burden of having to closely manage and monitor contractual relationships with vendors. As such, they need a vendor that they can trust to perform and act in their best interest.

Vendors that successfully close the deal are those that can convince SMEs of their trustworthiness, dependability, and ability to deliver. Usually, vendors prove their capability by working on a few pilot projects with SMEs. Beta used the term "trial marriage" to label this pilot period. During "trial marriage", both parties have the opportunities to learn about each other and examine if a longer term working relationship is possible. As such, by the time an outsourcing agreement is signed, the vendors have already formed good relationships with SMEs. Just like in a real-life marriage, such good relationships will carry both parties forward.

Trusting Relationship is a Pre-Cursor to Long-term Engagement

Once trusting relationship is established, SMEs tend to remain "loyal" to their vendors and will continue engaging the same vendors for a very long period of time. Kappa has been engaging the same vendor to provide and maintain hardware and software services for over 10 years. According to the owner, it is the trust he has on the vendor that makes him to continue employing its services. By now, the owner believes that the vendor will not act opportunistically, but instead will always have Kappa's best interest in mind when proposing new hardware and software. Gamma echoed the importance of trust in long-term relationship. The owner explained, "Contract is just a piece of paper. If a vendor does not abide by it, there is really nothing we can do. Suing the vendor would not help much. So, I believe more in having a trusting relationship. If I am comfortable with a vendor, I will continue using its services."

Having In-house IT Services is the Ultimate Goal Surprisingly, SMEs express their preference for having in-house IT services despite the lack of internal resources. While this contrasts IT sourcing practices in many large organizations [9], it echoes SME practices of "doing it yourself" and "trusting their own internal employees over any external parties". The main concern SMEs have towards outsourcing is over-dependence on vendors. They will hire vendors for skills they do not have in-house. However, if opportunities present themselves, SMEs prefer to have their own internal employees taking over the jobs performed by vendors.

5. Discussion and Conclusions

This paper examined outsourcing decisions and practices among SMEs in Malaysia. While some of the practices are similar to those of their larger counterparts, SME's approach to a larger extent differs from the practices of large companies. Outsourcing practices in SMEs seem to lie on one important philosophy, i.e., having a trusting relationship with vendors. SMEs want reliable and dependable vendors. They want to be able to trust the vendors and establish relationships at a personal level even before signing of contracts. The size of SMEs affords them such luxury. Their IT processes and requirements are less complicated. Thus, vendors will be able to pay full attention to the few things required by SMEs.

Another major difference in outsourcing practices between SMEs and large companies is their attitude towards contractual agreements. While large companies are having legal teams lining up to prepare detailed contracts and service level agreements, SMEs seem to take lightly the value of contractual binding. This again may be attributed to their emphasis on "trusting" relationship. To them, contracts will not guarantee vendor

performance. Contracts will also not prevent vendors from behaving opportunistically. Instead, it is "trust" that motivates vendors to act in the interest of SMEs. Despite how good a relationship may be, awareness should be raised among SMEs on the importance of contractual agreements in the event if any legal dispute arises.

The research findings in this study are of value to various parties. For SMEs, understanding outsourcing arrangements of other firms with similar size gives them the opportunity to compare and contrast their practices against others, and potentially learn from good practices. For vendors, understanding of outsourcing practices among SMEs can help them to better formulate their future marketing and service strategies in an effort to attract new clients as well as retain existing clients.

What we learned here represents the first step towards understanding IT outsourcing practices among SMEs in Malaysia. With limited financial and human resources, it looks like SMEs should employ external services to help them reap full benefits of IT. This paper has presented some of the existing practices. However, it is not known if these practices are beneficial to SMEs. Future research could explore this area by examining the effectiveness of each practice and identify ways to further improve these practices. Future research can also compare and contrast practices in IT outsourcing and business process outsourcing to see if SMEs adopt different approaches towards these two strategies.

6. Acknowledgement

The work reported in this paper article was supported by funding from Ministry of Science, Technology and Innovation, Malaysia (Science Fund, Project number: 06-02-11-SF0023).

7. References

- [1] Bank Negara Malaysia "The Malaysia Economy in 2007," Kuala Lumpur, Malaysia.
- [2] Barney, J.B. "Firm Resources and Sustained Competitive Advantage," *Journal of Management* (17:1) 1991, pp. 99-120.
- [3] Carmel, E., and Nicholson, B. "Small Firms and Offshore Software Outsourcing: High Transaction Costs and Their Mitigation," *Journal of Global Information Management* (13:3) 2005, pp. 33-54.
- [4] Chan, M.G.S., and Chung, W.W.C. "A Framework to Develop an Enterprise Information Portal for Contract Manufacturing," *International Journal of Production Economics* (75) 2002, pp. 13-26.

- [5] Chen, M., and Hambrick, D. "Speed, Stealth and Selective Attack: How Small Firms Differ from Large Firms in Competitive Behavior," *Academy of Management Journal* (38:2) 1995, pp. 453-482.
- [6] Coward, C.T. "Looking Beyond India: Factors that Shape the Global Outsourcing Decisions of Small and Medium Sized Companies in America," *The Electronic Journal of Information Systems in Developing Countries* (13:11) 2003, pp. 1-12.
- [7] Currie, W.L., and Seltsikas, P. "Exploring the Supply-Side of IT Outsourcing: Evaluating the Emerging Role of Application Service Providers," *European Journal of Information Systems* (10) 2001, pp. 123-134.
- [8] Dean, T., Brown, R., and Bamford, C. "Differences in Large and Small Firm Responses to Environmental Context: Strategic Implications from a Comparative Analysis of Business Formations," *Strategic Management Journal* (19:8) 1998, pp. 709-728.
- [9] Dibbern, J., Goles, T., Hirschheim, R.A., and Jayatilaka, B. "Information Systems Outsourcing: A Survey and Analysis of the Literature," *Database* (35:4) 2004, pp. 6-102.
- [10] Eisenhardt, K.M. "Building Theories from Case Study Research," *Academy of Management Review* (14:4) 1989, pp. 532-550.
- [11] Eisenhardt, K.M., and Bourgeois, L.J.I. "Politics as Strategic Decision Making in High-Velocity Environments Toward a Midrange Theory," *Academy of Management Journal* (31:4) 1988, pp. 737-770.
- [12] Levy, M., and Powell, P. "Exploring SME internet adoption: towards a contingent model," *Electron Mark* (13:2) 2003, pp. 173-181.
- [13] Pfeffer, J., and Salancik, G.R. *The External Control of Organizations: A Resource Dependence Perspective* Harper & Row, New York, 1978.
- [14] Walsham, G., and Sahay, S. "GIS for District-Level Administration in India: Problems and Opportunities," *MIS Quarterly* (23:1) 1999, pp. 39-66.
- [15] Werber, B., and Zupancic, J. "Adoption of information technology in small companies in Slovenia," *Organizacija* (35:1) 2002, p. 23 –32.

[16] Yin, R.K. Case Study Research: Design and Methods, (2nd ed.) Sage Publications, Inc., Thousand Oaks, CA, 1994.

Copyright © 2009 by the International Business Information Management Association (IBIMA). All rights reserved. Authors retain copyright for their manuscripts and provide this journal with a publication permission agreement as a part of IBIMA copyright agreement. IBIMA may not necessarily agree with the content of the manuscript. The content and proofreading of this manuscript as well as any errors are the sole responsibility of its author(s). No part or all of this work should be copied or reproduced in digital, hard, or any other format for commercial use without written permission. To purchase reprints of this article please e-mail: admin@ibima.org.