

The supply-side IT outsourcing competencies and relationship exchange in Malaysia

YUSRI ARSHAD, ABDUL RAHMAN AHLAN AND RAMLAH HUSSAIN

Department of Information Systems

Kulliyyah of Information and Communication Technology (KICT),

International Islamic University Malaysia (IIUM),

P.O. Box 10, 50728 Kuala Lumpur, MALAYSIA

yusriarshad@gmail.com; arahman@kict.iium.edu.my; ramlah@kict.iium.edu.my

<http://kict.iium.edu.my>

Abstract: - IT outsourcing (ITO) has experienced a considerable growth in recent years, so much so that some authors suggest we find ourselves in the outsourcing era. ITO growth seems to be guaranteed at least in the near future. Many past researches on IT outsourcing were done in North America, Europe and Australasia contexts with little evidence from developing countries perspectives [13, 26]. IT outsourcing relationship researches revealed its importance in improving the success of IT outsourcing arrangements. Many researches on relationship, however, were investigated from demand-side perspectives. Hence, it is the aim of this study to complement these one-dimensional findings by investigating the IT outsourcing relationship exchange from service providers' perspectives in Malaysian context. This report presents the first phase qualitative findings of an on-going research on IT outsourcing competencies and relationship. The study comprises three phases: 1) a focus group and in-depth interviews; 2) mass survey; and 3) final group discussion. The authors have arranged an expert focus group deliberating on the emerging issues and subsequently interviewed five senior executive managements in the service provider firms to explore further on key variables. The unstructured interviews were recorded and transcribed and analysed based on Miles and Huberman (1994) recommendations. The study found that all the variables are, in practice, important determinants of successful outsourcing projects as claimed by many other researches in the western context. The ranking of the determinants or factors, however, were of varying disputes depending on the types of ITO configurations the parties entered into.

Key-Words: - IT outsourcing, relationship exchange, competencies, supply-side, Malaysia, developing country

1 Introduction

IT outsourcing (ITO) has experienced a considerable growth in recent years, so much so that some authors suggest we find ourselves in the outsourcing era. ITO growth seems to be guaranteed at least in the near future. [49] projected significant growth for the managed services market which will grow at a compound annual growth rate (CAGR) of 8% from 2005 to 2008, exceeding USD25 billion by 2008. According to estimates in [6] study, the global outsourcing markets growth was USD758.1 billion in 2005. And this will continue to grow at a steady compound annual growth rate (CAGR) of 12 per cent. According to the 2002 [7] report, global ITO market is claimed to grow from USD180.5 billion in revenue in 2003 to USD253.1 billion in 2008 at an annual growth rate of 7.2 percent. In 2003 report, Gartner predicted that the global outsourcing market continues to grow at a steady pace, with a forecast growth rate of 8.1 (higher than 2002 forecast) percent in 2008. "In 2008, we expect to see some early adopters of multi-sourcing to consolidate around fewer providers to reduce their service integration costs and harvest the benefits of better relationship management with fewer strategic suppliers," said Mr. Potter (Gartner, 2008)ⁱ.

The global worldwide Shared Services and Outsourcing (SSO) market is expected to grow at a CAGR of 15 per cent over the next few years, reaching USD1.43 trillion by 2009 as compared to USD930 billion in 2006. "The outsourcing need is growing and we intend to fully leverage on our achievements to meet this need," said Badlisham of Multimedia Development Corporation's (MDec) Chief Executive Officer. He added that ICT services like SSO contributed RM2.8 billion to the nation's Gross Domestic Product of RM495.6 billion. David Wong, Outsourcing Malaysia and PIKOM chairman, cited that the local SSO industry is currently worth USD300 million growing at a CAGR of 30% year on year, compared with the current global IT outsourcing size of USD24 billion. In 2012, the Malaysian SSO industry is targeted to be worth USD2 billion providing 300,000 jobs.ⁱⁱ

Extant ITO researches indicate the growing complexities of IT outsourcing arrangement. As a result, many studies or news reported project failures. Literature reviews reflect the near maturity of ITO practices in Europe and United States. Despite this, meta-analyses by [3], [10] and [25] alerted us on various research gaps for future undertaking. Among those are researches on ITO relationship from service providers' perspectives and in less-developed countries context which is lacking. Studies on ITO relationship are mostly done in North

America, Europe and Australia context with little emphasis on developing countries.

This study is a response to fill the gaps from service providers' perspectives and developing countries especially Malaysia environment compared to previous researches done in developed countries and from the service receivers' perspectives [see 5, 8, 14, 20, 22, 21, 31, 32, 40 and 43]. We attempt to explore and investigate the impact of service receiver-service provider competencies, relationship exchange factors and strength on ITO project success from service providers' perspectives in Malaysia.

2 Literature Review

Recent researches indicate that the relationship between service receivers and service providers influence the overall success of an outsourcing arrangement [14, 18, 21, 31]. However, an analysis of this research reveals some gaps. Conceptually, most of the emphasis is on the service receivers' perspectives. There is little or no attention given to service provider (except [8] and [20]). In addition, the issue of participant competency is generally neglected in ITO studies. Differing levels of competencies might very well affect the ITO outcome. Empirically, different relationship factors are used in the various research models. Different measures of success are used as well. It is the main objective of this research to explore and attempt to fill in these gaps into a comprehensive model.

Even though the outsourcing phenomenon has been widely researched particularly in the developed world, not many researches were undertaken in Malaysian context until recent years. This posits the main motivator for the study. As mentioned earlier, most researches on ITO focused on service receivers' perspectives. Hence, it is necessary to balance the weight from service providers' point of views as well. Thirdly, Malaysia has recently launched its initiative to be a premier shared services and outsourcing (SSO) hub in Asia. Therefore, a study on participants' competencies and outsourcing relationship is timely to find "best practices" that can be adopted by relevant parties.

It is the researcher's aim to provide a current and comprehensive understanding of the important role that ITO relationship plays in an outsourcing project. Specifically, among the research questions are:

1. *What are the expected service receivers' and providers' competencies that characterize a successful outsourcing relationship and hence a project success? And why are they important?*
 - *How these competencies impact outsourcing relationship intensity?*
2. *What are the relationship governance mechanisms necessary for a successful outsourcing relationship*

and hence a project success? And why are they important?

- *How these governance mechanisms impact outsourcing relationship intensity?*
3. *What are the relationship factors that are important in an outsourcing relationship?*
 - *How these factors impact the outsourcing relationship intensity?*
 4. *How these competencies and relationship factors contribute to quality?*
 - *What quality types are often the results of a successful outsourcing arrangement?*
 5. *What are the relationship outcomes important to service providers and receivers from successful ITO arrangements?*

2.1 IT outsourcing in Malaysia

Among the early Malaysian government's large-scale systems integration projects were for Malaysian Postal Office and Amanah Saham Nasional Berhad for Permodalan Nasional Berhad (PNB). All these massive computerisation projects were outsourced to HeiTech Padu Berhad, which is Malaysian's leading total ICT solution and service provider [26]. It was reported that the Malaysian Government awarded the Smart Schools project to the Telekom Malaysia Consortium (EDS, 1999).

Realizing the benefits of outsourcing, the Central Bank of Malaysia (Bank Negara) had urged local banks to seek outsourcing partners to handle non-critical functions of the business. As a result, Bank Bumiputra-Commerce Bank (BCB) has become the first bank in Malaysia to outsource its IT functions to Electronic Data Systems (EDS) with a USD250 million 10-year contract. This is the largest outsourcing deal in Malaysia (IT World, 2002). Meanwhile, Malayan Banking Berhad (Maybank) had outsourced their IT tasks to Computer Science (CSC) in a 10-year deal valued at RM342 million.

The launch of Malaysian Shared Service and Outsourcing (SSO) in Austin, 2005 by the Prime Minister will catapult and exponent the growth of ITO practices in Malaysia as reported by [6]'s study in 2005. Malaysia is ranked third by AT Kearney (2006) in the location attractiveness index and also third in the overall vertical sectors by [6] study. Malaysia has also won the destination of the year award given out by the UK National Outsourcing Association.

2.2 IT outsourcing relationship

ITO relationships are complex [23, 31, 35, 47] and multifaceted. A key to achieving benefits from ITO is maintaining positive service receiver-service provider relationships [16, 25]. An outsourcing relationship is "an ongoing linkage between an outsourcing service provider and service receiver that has a long-term

orientation and a mutual recognition and understanding that the benefits attained by each firm are at least in part dependent on the other firm” [9]. It is regarded that better relationships lead to greater net benefits from ITO [21, 30, 31]. Service receiver organizations enter into ITO relationships seeking to gain the advantages of specialization, market discipline, flexibility, and access to lower cost service provision [4]. Relationships between service receiver and service provider in ITO arrangements are determined, in part, by actions and attitudes of managers and staff in both the service receiver and service provider organizations [17], but they are also determined, in part, by the “configuration” of the ITO arrangement [2].

2.3 Relationship exchange factors

[14] presents theoretical framework for an ITO relationship applied to various information exchanges between the service receiver and service provider such as service enforcement and monitoring. The factors include a working context consisting of trust, satisfaction, cooperation and power dependency. Later, [15] synthesises social exchange theory and social contract theory to provide insight into the ongoing interactions of an outsourcing relationship.

2.4 Participant’s competencies

Research directed towards identifying IT resources and competencies that could enhance a firm’s competitive position began to appear in the mid-1990s. For example, [24] set forth eight imperatives, or essential skills that are necessary in order to perform core IT activities. To compete successfully, a firm must master each one. Although [24] did not provide a framework for organizing the imperatives, a review of the paper suggests that they may be categorized according to their principal orientation: IT oriented (deliver and implement new systems, build and manage infrastructure, reskill the IT organization, build a high performance IT organization, redesign and manage the federal IT organization); business oriented (achieve two-way strategic alignment between IT and the business, develop effective relationships with business managers); and relationship oriented (manage service provider partnerships) [8].

2.5 IT outsourcing project success

Grover et al. [11] [12] studied ITO success in terms of strategic, technological and economic benefits. Strategic benefit is defined as “the ability of a firm to focus on its core business by outsourcing routine IT activities” [17, 27, 29, 35]. Economic benefit is “the ability of a firm to use expertise and economies of scale in human and technological resources of the vendor and to manage its cost structure through unambiguous contractual arrangement” [25, 27, 44]. Whereas technological

benefit is referred to as “the ability of a firm to gain access to leading-edge IT and to avoid the risk of technological obsolescence that results from dynamic changes in IT” [27, 28, 29, 32, 34, 35].

3 Methodology

To answer the research questions, this study integrated interviews and survey research methods, or what has been called ‘triangulation’ [27]. Theoretical bases are derived from the Resource-based view (RBV) and exchange theories. [1] highlighted the ‘complementarity between survey and fieldwork approaches to study information technology’, stating that ‘each is incomplete without the other’. [18] pointed out that survey research and fieldwork have always been alternative rather than competing sources of evidence and ideas. [1] suggested that it makes sense to do fieldwork first. Getting close to the phenomenon – gathering insights or discoveries about causal links, motivations, reasons why things happened – should precede verification by more objective techniques, such as survey.

A set of questionsⁱⁱⁱ was designed to collect data on the phenomenon, guiding the data collection process [10, 50]. The primary questions were unstructured to allow the interviewees to tell the story of their experiences. There were also probes which ensured that the insights that the researchers’ had regarding this phenomenon were addressed, if they did not arise during the unstructured part of the interview [23].

Fieldwork was conducted from August 2007 until April 2008. We interviewed five senior executive managements in service provider firms in Klang Valley, Malaysia. All of the interviews took place via in person, with at least two members of the research team present, and were recorded and transcribed. Where appropriate, company documentation available externally was also gathered and analysed.

3.1 Data analysis

We follow guidelines and tactics proposed by [22]. Full transcriptions were analysed using NVivo and manually. The objectives are to identify themes, variables or emerging topics to answer the research questions. Data reduction technique is achieved through understanding the meaning of a sentence or paragraph and not by word per se. They are then mapped to variables collected from extant literature. The findings are tabulated in Table 1, Appendix A.1 below.

4 Findings and discussion

The aim of the first phase study is to get in-depth insights on the topic as well as synthesizing the main variables for research model development.

Table 1 below tabulates the major variables and responses by the key informants under study such as participants' competencies, relationship exchange factors and intensity and success. The key informants mentioned all the considered important antecedents of relationship in their projects. Some antecedents are found to overlap with each other (as suggested by [8] in terms of meaning). Figure 1 summarises the key major variables and their relationship.^{iv}

Based on the findings from the first phase interviews and literature reviews, we relate the variables to past researches like [8], [15] and [19]. The reorganized and combined simplified model is shown in figure 1 below.

While IT outsourcing relationship antecedents have been widely researched and discussed globally, it is important to note the differing rankings of the important factors depending on each ITO arrangement or configuration. The most consensus antecedents for relationships are communication, cooperation, commitment, conflict and cultural proximity [14, 15, 31, 20]. Contract remains an important key governance mechanism protecting both parties in ITO relationship [14].

One of the major reasons motivated for IT outsourcing decisions is attributed to the access to technical competent external expertise provided by service providers. [24] set forth eight imperatives, or essential skills that are necessary in order to perform core IT activities. [5] proposed nine core competencies necessary to exploit IT for competitive advantage. And these competencies were categorized by orientation: IT (architecture planning, making technology work); business (integrate IT and business, understand interdependencies between IT and business get the business engaged in IT issues); and relationship (manages sourcing strategy, contract facilitation, contract monitoring, uncover potential for added value). Although [24] did not provide a framework for organizing the imperatives, a review of the paper by [8] suggests that they may be categorized according to their principal orientation: IT oriented (deliver and implement new systems, build and manage infrastructure, reskill the IT organization, build a high performance IT organization, redesign and manage the federal IT organization); business oriented (achieve two-way strategic alignment between IT and the business, develop effective relationships with business managers); and relationship oriented (manage service provider partnerships).

Though Malaysia is a developing country, the presence of many world-class ITO players such as CSC, ACS, IBM, HP, Satyam, HCL and Wipro, as part of MSC Malaysia's efforts to become Asia's leading SSO hub, contribute to the adoption of world-class best practices and models by other Malaysian ITO service providers.

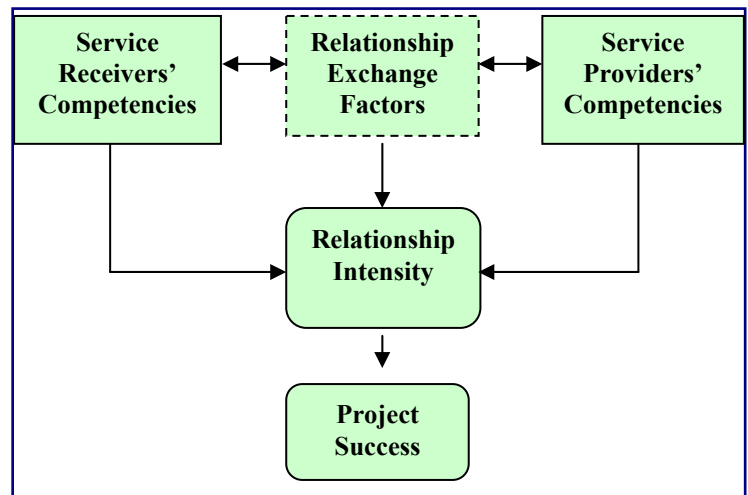


Figure 1- The modified research model

5 Limitations

The study is in-progress and therefore the main limitation is the robustness of the results to represent the whole Malaysia perspectives since the interviews were conducted with five key informants. Another limitation is due to the nature of qualitative data and analysis techniques. This poses the increase in subjectivity of the findings. It is therefore lessened by adopting [22] recommended techniques and tactics.

6 Contributions

6.1 Theoretical contributions

The contribution of this study is mainly fivefold:

- 1) Comprehensive study in Malaysia context on competencies, relationship governance and antecedents and quality and their impacts on ITO success;
- 2) A study from service providers' perspectives which has been in large neglected from academic studies on IT outsourcing. Thus, the study contributes to the literature by complementing the service receivers' perspectives for understanding the dynamics of IT outsourcing relationships;
- 3) Employing both case studies and survey approaches or famously known as mixed method;
- 4) Using multiple theories such as resource-based view and exchange theories to answer the research questions;
- 5) Creating avenues for further research on ITO relationship either onshore or offshore.

6.2 Practical Implications

a) For top management and managers of service provider firms:

- 1) Evaluate the effectiveness of their competencies and relationship management
- 2) Identify the contributing factors of ITO success including partnership and quality

- 3) Stress on the importance of quality that embodies all the determinants for success
- b) For decision makers and top management of service receiver organization:
 - 1) Serve as a guideline to incorporate technical, managerial and personal aspects to ensure project implementation success and also "pre-emptive measures when making decision to outsource.
 - 2) Shows the importance of both parties to work together rather than the onus is burdened on one party.
 - 3) Reassess their understanding of ITO, competencies and relationship before deciding on an outsourcing arrangement.
 - 4) Understand how different type of outsourcing arrangements, competencies and relationship emphasis will have a different impact on outsourcing success.

7 Conclusion

IT outsourcing relationship or partnership remains one of the most important areas in the recent trend globally. Many past researches seem to suggest that the findings found from all researches are differing due to many limitations in each research frameworks and models as well as the methodologies adopted. Hence, it is important for scholars to understand very well these factors before making any comparisons and conclusions. This study contributes to both theoretical and practical benefits for Malaysian readers particularly and cross-cultural researches internationally.

Malaysia is a unique multi-racial and cultural country which shapes the business practices among the service providers. Investigating ITO practices, trends, configurations and others in Malaysia context require different set of paradigm compared to other countries.

References:

- [1] Attewell P. and J.B. Rule, "Survey and other methodologies applied to IT impact research: experiences from a comparative study of business computing, in The Information Systems Research Challenge Survey Research Methods - Volume 3 (Kraemer K. L.Ed.), Boston: Harvard Business School Press, , 1991, pp. 299-315.
- [2] Cullen, S., Seddon, P.B., Willcocks, L.P., "Managing outsourcing: the life cycle imperative", MIS Quarterly Executive, Vol. 4 No.1, 2005a.
- [3] J. Dibbern, T. Goles, R. Hirschheim and B. Jayatilaka, Information systems outsourcing: a survey and analysis of the literature, ACM Data Base 35 (2004) (4), pp. 6-102.
- [4] Domberger, S., The Contracting Organization: A Strategic Guide to Outsourcing, Oxford University Press, Oxford, 1998.

- [5] Feeny, D., Willcocks, L., "Core IS capabilities for exploiting information technology", Sloan Management Review, Vol. 39 No.3, 1998, pp.9-21.
- [6] Frost and Sullivan, Shared Services and Outsourcing (SSO) Hub Potential Analysis (Abridged by Select Verticals), 2005.
- [7] Gartner, Strategic Sourcing "The Book", Gartner Inc, 2002.
- [8] Goles, T., The Impact of the Client-Vendor Relationship on Information Systems Outsourcing Success. Unpublished Ph.D. Thesis, University of Houston, Houston, 2001.
- [9] Goles, T. and Chin, W. W., In Information Systems Outsourcing (Eds, Hirschheim, R., Heinzl, A. and Dibbern, J.) Springer, Berlin, Germany, 2002, pp. 221-250.
- [10] Gonzalez, R., Gasco, J., Llopis, J., "Information systems outsourcing reasons in the largest Spanish firms", International Journal of Information Management, Vol. 25 No.2, 2005, pp.117-36.
- [11] Grover, V., Teng, J.T.C., "The decision to outsource information systems function", Journal of Systems Management, Vol. 22 No.11, 1993, pp.34-38.
- [12] Grover, V., Cheon, M.J., Teng, J.T.C., "The effects of service quality and partnership on the outsourcing of information systems functions", Journal of Management Information Systems, Vol. 12 No.4, 1996, pp.89-116.
- [13] Ismail, Z., IT outsourcing practices in Malaysia: Service quality, partnership quality, collectivism and success. Unpublished Ph.D. Thesis, International Islamic University Malaysia, 2006.
- [14] Kern, T., The Gestalt of an Information Technology Outsourcing Relationships: An Explanatory Analysis, Proceedings of the Eighteenth International Conference on Information Systems, 1997, pp. 37-58.
- [15] Kern, T. and Willcocks, L. P., Exploring Information Technology Outsourcing Relationships: Theory and Practice, Journal of Strategic Information Systems, 9, 2000, pp.321-350.
- [16] Kern, T. and Willcocks, L. P., The Relationship Advantage: Information Technologies, Sourcing, and Management, Oxford University Press, Oxford, 2001.
- [17] Klepper, R. and Jones, W. O., Outsourcing Information Technology, Systems and Services, Prentice Hall, Upper Saddle River; NJ, 1998.
- [18] Kraemer K L Ed., The Information Systems Research Challenge: Survey Research Methods, Harvard Business School Press, Boston, MA, 3, 1991.
- [19] Lee J-N., S.M. Miranda and Y-M. Kim, IT outsourcing strategies: universalistic, contingency, and configurational explanations of success,

Information Systems Research, 15, 2, 2004, pp.110–131.

[20] Levina, N., Ross, J.W. (2003), "From the vendor's perspective: exploring the value proposition in information technology outsourcing", MIS Quarterly, Vol. 27 No.3, pp.331-64.

[21] McFarlan, F. W. and Nolan, R. L., How to Manage an IT Outsourcing Alliance, MIT Sloan Management Review, 36, 2, 1995, pp.9-23.

[22] Miles, M. B. and Huberman, A. M., Qualitative Data Analysis: An Expanded Sourcebook, Sage Publications Inc., Newbury Park, CA, 1994.

[23] Perry, C. "Processes of a Case Study Methodology for Postgraduate Research in Marketing', European Journal of Marketing. 32, (9/10), 1998, pp.785-802.

[24] Rockart, J.F., Earl, M.J., Ross, J.W., "Eight imperatives for the new IT organization", Sloan Management Review, 38, 1, 1996, pp.43-55.

[25] Albert Sargent, Jr., Outsourcing relationship literature: an examination and implications for future research, Proceedings of the 2006 ACM SIGMIS CPR conference on computer personnel research: Forty four years of computer personnel research: achievements, challenges & the future, April 13-15, 2006, Claremont, California, USA.

[26] Suhaimi et al., Motivations and the implementation strategy in a Malaysian bank, Business Process Management Journal, 13, 5, 2007, pp: 644-661

[27] Webb et al., Unobtrusive measures: NonReactive research in the social sciences. Rand McNally, Chicago, 1996.

Appendix:

A1. Summary of interviews findings

VARIABLES/MEASURES	
Service Providers' Competencies	
<ul style="list-style-type: none"> • Technical skills • Relationship management • Project management • Certification /methodologies • Technology • Infrastructure • Business understanding • Size and presence 	
Service Receivers' Competencies	
<ul style="list-style-type: none"> • Business/functions/process understanding • Relationship management • Contract management/monitoring • Technical skills/understanding 	
Relationship Exchange Factors	
<ul style="list-style-type: none"> • Competency 	

- Trust
- Problem solving
- Regular/Face-to-face meeting
- Expectation
- Experience
- Follow guidelines
- Conflict
- Communication
- Best practice
- Monitoring – activity reports
- Mindset change
- Proper process
- Cooperation
- Ability to deliver/perform
- Respect
- Cultural proximity/similarity
- Benchmarking
- Documentation
- Commitment
- Comfort
- Convincing
- Assurance
- Factual
- Transparent
- Confidentiality
- Client type
- Fair
- Power
- Leadership
- Benefits and risks sharing
- Emphaty
- Flexibility
- Ethics
- Knowledge sharing

ITO Project Success

- Meeting expectation/SLA/KPIs
- Cost savings
- Business continuity/opportunity
- Client satisfaction
- Profitability
- Value propositions
- Increase staff confidence level to vendor

Table 1- The first phase findings: variables and measures

ⁱ <http://www.gartner.com/it/page.jsp?id=578307> accessed on 17.3.2008

ⁱⁱ <http://www.outsourcingmalaysia.org.my/index.php?pg=news> accessed on 18.7.2008

ⁱⁱⁱ Available upon request to the first author.

^{iv} The constructs and items are not presented here due to space limitations.