RELATIONSHIP BETWEEN SUPPLY CHAIN MANAGEMENT AND OUTSOURCING

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ABSTRACT: Supply Chain Management (SCM) and Outsourcing have been widely recognised as important tools to enhance organisational performance. Each has their own key characteristics, procedures and processes, advantages and disadvantages, and has been viewed in various ways by many parties. As both are commonly implemented in separation of each other, this paper attempts to discuss the possible links between SCM and outsourcing. The views on SCM and outsourcing are respectively elaborated, followed by discussions on possible relationship and the study conducted.

KEYWORDS: Supply Chain Management, Outsourcing, Organisational Performance.

1 INTRODUCTION

Since the 1960s, organisations begun to develop various market strategies especially in creating and capturing customer’s loyalty (Handfield and Nichols, 1999). The increasing number of competitors both in local and international market has put enormous pressures on managers. Creative decisions have to be made, gaining customers trust and preference is vital to stay in business. One of the ways is through improvement of services and products.

Outsourcing and Supply Chain Management (SCM) have both been recognised as alternative strategies to gain higher competitive advantage, other than to achieve greater organisational performance. Outsourcing contracts secured with Service Level Agreement (SLA) is an instrument to ensure that an organisation’s needs from the outsourced functions are satisfactorily met by the service provider. It allows organisation to use the expertise from outside of the company for its own benefits. SCM, as strategy is practiced also to satisfy organisations’ needs. In comparison to outsourcing, it could have a bigger impact, thus signify a higher degree of direct involvement and effort from internal parts of an organisation, as well as from its external parties. This is further to the need of a more complex and complicated arrangements prior to its implementation.

2 OVERVIEW OF SUPPLY CHAIN MANAGEMENT

Supply Chain (SC) by Christoper (1998) as a network of various organisations involved both through *upstream* and *downstream* linkages in different kinds of activities and processes. Meanwhile, Stadler (2004) summed up the many definitions of SCM by various authors and researchers as *‘the task of integrating organisational units along a SC and coordinating materials, information and financial flows in order to fulfil (ultimate) customer demands with the aim of improving competitiveness of the supply* *chain as a whole'* (pp 2). Thus, in the end produce value whether in the form of products or services to end user

The key elements of SC and its management from these definitions are therefore the *upstream* parties, the *downstream* parties and the integration of all the organisations involved, together with the internal function of an organisation itself. The *upstream* parties, as been described by Handfield and Nichols (1999) consists of an organisation's functions, processes and network of suppliers while the *downstream* function on the other hand concerns the distribution channels, processes and functions where the product passes through to the end customer. Where external downstream and upstream functions are concerned, the managers involved in each upstream and downstream supplier and functions are responsible in making sure that the deliveries of products and services are done as scheduled to their destinations. If there are cases where delays are inevitable, the managers are to ensure that the impact of the delays to the SC and the value it carries will be minimal.

Meanwhile, where organisational units belong to one single enterprise, the hierarchical coordination is possible and prevailing (Stadtler, 2004). While managers in a SC involving external organisations have to deal with the people outside of its own company, in this situation mutual understanding have to be reached between the managers of departments inside the company itself. The term SCM has been used to describe the planning and control of materials and information flows as well as logistics activities not only internally within a company, but also externally between companies (Cooper *et al*, 1997). Due to the increasing number of players and forces, a SC may develop into a supply network which will require a more complex and complicated management system.

The idea of improving products and services through SCM; including to reduce the production time and cost without compromising the product quality, is that the managers have to work cooperatively with other organisations in the SC (Handfield and Nichols, 1999). Eventually, through mutual understanding between them and ability to reduce the risks of uncertainties in production processes, higher degree of efficiency can be achieved. Though originally it was used mainly in manufacturing industry to improve responsiveness and flexibility, and has been found to also improve organisational competitiveness (Gunasekaran, 2004), SCM has now been recognised by many to be an important strategic tool for organisation's efficiency and to gain competitive advantage.

Interestingly, Cox (1999) argues that the SCM practice at present day is merely a representation of what has been done by Toyota to minimise their waste production, although it may appear in various forms of products or services SC. The approach taken by Toyota for external resources management (commonly accepted as the 'lean approach') consists of eight main characters (Cox 1999).

Whatever happened, management today now realized that the way to survive is to prepare oneself a strong and responsive SC; because it will no longer be company against company, but SC against SC. The strongest competitors (Monczka and Morgan, 1997) are therefore those who could provide the leadership as well as management to the fully integrated SC; including external customers as well as suppliers, the prime, their suppliers and their supplier's supplier.

2.1 Risks and Challenges Associated With SCM

To implement SCM is not an easy task. The managers who decided to do so will most likely to face at least these challenges as been categorized into several categories (Handfield and Nichols, 1999) i.e. information systems, inventory management, and in establishing trust between SC members. In the implementation of information systems, problems occur when appropriate information is not available to the people who need it. Sometimes, the information is available but the SC members are reluctant to share it due to the lack of trust and the fear that the information will be revealed to competitors. For inventory management, although it has been shown to be improving, the need for expediting late shipments never seems to disappear entirely. There are always delays in shipments for various reasons; slowdown because of customs crossing international boarders, adverse weather patterns, poor communication and even simple human error are always inevitable. Finally, establishing trust between parties in SC which is believed to be the most challenging task of all. Legal experts may produce a huge quantity of contractual agreements which in the end is useless when parties inevitably have a conflict. Conflict management, especially in inter-organisational relationship is becoming more difficult to manage everyday. Having broken the bond of trust, it will become even more difficult to repair.

In conclusion, SCM has been seen as a new era, other than a tool to enhance performance and to gain higher competitive advantage. The significance of its implementation is increasing everyday. If the trend of competition against other SC or network should stay and proceed instead of amongst companies, it should also in the end become vital for every company's means of survival. The application of SCM however requires higher degree of commitment among the participants. Undoubtedly, to involve in SC collaboration will mean to put rather a lot of company's valuables at stakes. A company deciding to get involve in it should make adequate preparation, including analysis on various aspects to ensure the company's readiness to be engaged in such demanding relationship.

3 DEFINITION AND CURRENT VIEW ON OUTSOURCING

The numerously presented definitions of outsourcing have been varied from what is concerned with the transfer of goods and services that have been carried out internally to an external provider (Domberger, 1998) to the procurement of products or services from external sources of organisation (Lankford and Parsa, 1999). To describe the main features of outsourcing, the transaction involved normally consists of two parts; the transfer to a third party of the responsibility for the operation and management of part of an organisation, and the provision of services to the organisation by the supplier, usually for a period of several years.

The practice of outsourcing is believed by many to be sustainable. Lankford and Parsa (1999) for instance revealed that a study has indicated that outsourcing operations is the trend of the future, and those organisations which already involved with outsourcing are satisfied with the result. At present, the outsourcing of selected organisational activities is an integral part of corporate strategy.

Several outsourcing framework and models presented have signified the importance of identifying the organisations' core business (McIvor, 2002; Franceschini *et al*, 2003) and core competence (McIvor, 2003). The core competence paradigm is based on companies understanding what internal skills and resources they should own and control through internal contracts in order to sustain their business success. Other than core competence, the organisation must also first understand the business perfectly in every possible aspect, namely the operations, tactical and strategic (Gavin and Matherly, 1997).

Various forms of organisational benefits and advantages have been related to the idea of outsourcing. Since outsourcing has attracted many parties to explore the possible benefits and profits it may bring, outsourcing benefits, drivers and advantages have been carefully scrutinised and clearly explained by many researchers (Jennings, 2002; Lankford and Parsa, 1999; McIvor 2003; Linder *et al,* 2002).

To summarise from Lankford and Parsa (1999), outsourcing is claimed to reduce costs, expand services and expertise, improve employee productivity and morale, and create a more positive corporate image by allowing the organisation to refocus their resources on their core business, buy technologies from vendors that would be too expensive for them to reproduce internally, re-examine the organisations' plans, make them more efficient and save time and money while improving efficiencies, and improve the plans' service level to their employees by making the information more consistent and more available. Nevertheless, the cost efficiency advantage could be gained only if the right tasks are contracted out (Behara *et al*, 1995).

Outsourcing helps companies to improve competitive pressures, improve quality and efficiency, increase the access to functional expertise, and raise the potential for creating strategic business alliances and reduce internal administrative problems (Fill and Visser, 2000). The increasingly popular use of outsourcing is also caused by the strategic shift in the ways the organisations are managing their businesses (Winkleman *et al*, 1993) other than market forces and technical considerations (Gupta and Gupta, 1992).

Outsourcing allows organisations to take advantage of strengths within the supply market. It is therefore possible for one to conclude that the advantages could benefit not only the end service receivers (customers) who get much better value for their money, but also the numerous suppliers to be able to make profit. In the end, the practice of outsourcing should results in the widening of business opportunities for small firms and higher profit to the larger organisations practising it.

Franceschini *et al* (2003), conclude that the processes have evolved from ‘traditional’ to ‘strategic outsourcing’. ‘Traditional’, is referred to when the functions outsourced are perceived as non-core or business support functions – where the suppliers’ competencies are not specifically required. They may include catering, cleaning, maintenance and so forth. The outsourcing is said to be ‘strategic’ when a company delegates every other processes and functions, except those special activities that they could achieve a unique competitive edge (Quinn and Hilmer, 1994; Venka, 1992; Willcocks and Choi, 1995).

The problems and risks which may be associated with outsourcing have been classified by Gavin and Matherly (1997) into three main and overlapping aspects; people, process and technology. The ‘people’ problems ranged from the risk of employees’ emotional or psychological stress, reduction of loyalty to loss of internal expertise. Malhorta (1997) agreed to this by adding that the declining in the morale and performance of the remaining employees may also be one of the results of outsourcing. The ‘process’ meanwhile consists of two categories; incompatibilities between the service provider and the organisation, and the inability of organisations to sufficiently analyse their decision to outsource. Among others, the considerations of the future plans made for the company should be included. Nevertheless, many were revealed to have bound themselves with various kinds of outsourcing contracts covering long period of ten years, regardless of the fact that they have not made any future company plan beyond three years (Teresko, 1992). In the same time, Cox and Lonsdale (1997) have found that many companies have embarked on outsourcing without any formal methodology or guidance. As been noted earlier, core competencies have been highly related to outsourcing. Where determining core competencies of one’s organisation could be tricky and the impact of making mistake is very costly, the importance of careful analysis in making decision is therefore undoubtedly vital (Lankford and Parsa, 1999).

Sweet (1994) noted that organisations involved in outsourcing are in danger of signing a blank check, as it is very difficult to detail what are to be provided by the vendor, and it is very easy for the vendor to persuade them to be given the trust. Outsourcing have also been claimed to reduce the control of an organisation over the outsourced function, and thus in the end could result in loss of interests from its customers (Elmuti and Kathawala, 2000). Other problems are poor organisational communication, cross functional political problems, unclear expectations, uncertainties associated with the stability of the service firms, the issues of confidentiality, security, time schedules, lack of flexibility, and keeping a contract shorts and other priorities taking precedence.

4 RELATIONSHIP BETWEEN SCM AND OUTSOURCING

SCM and outsourcing have both been given increasing attention since their applications were recognised by many as significant profit and performance enhancers. Every business is a part of a big SC and supply network (Handfield and Nichols, 1999). Nevertheless, the management of a company could choose to either; (a) implement only SCM, or (b) implement only outsourcing or (c) implement both outsourcing and SCM.

The decision to apply either outsourcing or SCM or even both rests on the management’s readiness to face the consequences each application brings. As outsourcing may increase organisation’s operating flexibility and allows the transfer of operational risks to another party, SCM though utilises more resources in a way gives the organisation direct involvement with each stage of every processes and functions, and thus allowing clearer view and direct control for improvements. A fine example of situation (a) is a big company which has it all; from the acquiring of resources from mother earth, manufacturing, processing, delivering and finally the delivery of the final product to the end customer. It may not reside on one big area but scattered around, but the asset and management of all processes however trivial are the company’s own responsibility and done by its own staff.

A company may choose not to embark in the management of SC; the reasons may range from inadequacy of assets or expertise, to the nature of businesses they are in. It may however at that time outsource a number of the company’s functions, such as those perceived as non-core activities like cleaning, maintenance of buildings and so forth. These are the cases where outsourcing function stands individually to the respected companies, though they may be involved in a SC managed by another organization.

Increasing number of companies however has adopted a strategy which led to the outsourcing of more activities to suppliers (McIvor, 2003). This strategy has resulted in the company becoming a ‘systems integrator’, in which it manages and coordinates a network of best production and service providers. Such strategy is based on the premise that the company should outsource those activities (both production and service) where it can develop no strategic advantage, with the supply base comprising a network of specialist focusing on their distinct area of competence delivering products and services to the systems integrator. Therefore, it may be seen that the growing practice of outsourcing by a company could in the end lead to the implementation of SCM. This could be further encouraged by the intensifying competition among industry players, and the widening trend of supply network competing against other supply networks rather than single entity or company against others.

Interestingly, a company which has only been practicing SCM could also in the end exercise both SCM and outsourcing. In a broad sense, SCM may also simply mean to ‘manage a SC’. Where this is the condition, an SCM itself can be outsourced by a company to another, whereby the management of all external processes, information and material flows and so forth to meet the main company’s needs become the SC manager’s responsibility. The main company shall then focus on its internal core processes while monitoring the performance of SC manager, by setting a certain standard in which the service provider will have to meet. In this situation, the SLA will become vital in the relationship.

Outsourcing may also be one of the important tools for a company practicing SCM to reap as much benefits as possible (Bales *et al*). Whether outsourcing opens the door to practicing SCM and/or plays a beneficial role to make SCM more effective and efficient, or; the other way round, relies entirely on the practice and perception of a company.

5 SURVEY FINDINGS

A study has been carried out by random distribution of questionnaires to organisations in the UK, with the objectives of (i) to observe the current view and practices of SCM and outsourcing (ii) to distinguish the disadvantages and benefits of SCM and outsourcing practices (iii) to find possible relationship between SCM and outsourcing and, (iv) to gauge industry players’ view on both subject, focusing on their utilisation as competitive tools and possible relationship between them.

The survey results have shown that more often, outsourcing and supply chain management are practiced exclusively from one another. Meanwhile, majority of the respondents believe that the benefits gained from outsourcing activities are expected to be similar to those involved in supply chain, while the remaining believes that each outsourcing and supply chain management brings exclusive advantage from one to another.

The benefits which could not be gained by outsourcing but only by supply chain management as given by the respondents include; being able to retain knowledge and expertise within the organisation, appropriate allocation of risks, knowledge sharing, common goals, long term cost and quality benefits, and that the advantage of supply chain management is more to the end product quality than to service.

Meanwhile, the advantages which the respondents believe could be gained by outsourcing but not through supply chain management activities are including ability to change supplier more easily, internal headcount reduction, avoidance of internal politics, reducing of staffing issues such as pension benefits and the like, transfer of risks, reduced cost for better service quality, more control on workforce than in-house, technical expertise on economy of scale, reduced risks, and focus on core business.

Nevertheless, as to propose a possible link between SCM and outsourcing, 80% of the respondents believe consensusly with the statement that outsourcing could in the end, results in the implementation of supply chain management

6 CONCLUSION

The act of outsourcing has been found to be able to promote the implementation of SCM. The respondents in the survey also agree that SCM can be an eminent tool to reap the maximum benefits of outsourcing. Outsourcing can also become an element of great magnitude in SCM; especially since collaboration with downstream and upstream parties appears to be one of the significant features in successful SCM. Individually, each strategy has been proven to help to gain many benefits and has their own exclusive advantages. Nevertheless, many also agree that they do have common benefits, and together, they can offer a higher degree of impact towards an organisation.

SCM and outsourcing have both been given increasing interest by organisations worldwide, especially due to intensifying competition at both national and global level. Managers have to act proactively and creatively in finding the best strategy for their organisation to survive and excel in their market. As the consequence, improvement in purchasing strategy and collaboration with suppliers and customers emerged as one of the most widespread measures.

A conclusion can be made that there is a link between SCM and outsourcing. The implementation of either strategy can also have impact on the other. The implementation of both strategies however needs careful consideration. Detailed analysis especially on the organisation’s readiness to embark on such decision should also be done and not to be taken lightly. It has been shown that there are many challenges to be faced and the risks associated with each strategy will affect various aspects of an organisation. Though the price to pay is high, the benefits they provide should in return ensure greater performance and even improve the chance of higher profit. Most importantly, to survive the rapid wave of development and competition, one has to be ready to invest and take risks.

REFERENCES

Bales, R. R., Maull, R. S. and Radnor, Z. (2004) The Development of Supply Chain Management, *Supply Chain Management: An International Journal*, **9**(3), pp 250 – 255.

Behara, R. S., Gundersen, D. E. and Capozzoli, E. A. (1995) Trends in Information Systems Outsourcing. *International Journal of Purchasing*, **31**(2), pp 46 – 51.

Christoper, M. (1998) Logistics and Supply Chain Management, Strategies for Reducing Cost and Improving Services, 2nd Ed, London.

Cooper, M.C., Lambert, D.M. and Pagh, J. D. (1997) Supply Chain Management: More than a New Name for Logistics, *International Journal of Logistics Management*, **8**(1), pp 1-13.

Cox, A. (1999) Power, Value and Supply Chain Management. *Supply Chain Management: An International Journal*, **4**(4), pp 167 – 175.

Cox, A. and Lonsdale, C. (1997) Strategic Outsourcing Methodologies in UK Companies. *CBSP Working Paper*, The University of Birmingham, Birmingham.

Domberger, S. (1998) The Contracting Organisation: A Strategic Guide to Outsourcing. Oxford: Oxford University Press.

Elmuti, D. and Kathawala, Y. (2000) The Effects of Global Outsourcing Strategies on Participants' Attitudes and Organisational Effectiveness. *International Journal of Manpower*, **21**(2), pp 112 – 128.

Fill, C. and Visser, E. (2000) The Outsourcing Dilemma: A Composite Approach to the Make or Buy Decision. *Management Decision*, **38**(1), pp 43 – 50.

Franceschini, F., Galetto, M., Pignatelli, A., and Varetto, M. (2003) Outsourcing: Guidelines for a Structured Approach. *Benchmarking: An International Journal*, **10**(3), pp 246 – 240.

Gavin, T. A. and Matherly, C. M. (1997) Outsourcing: an Operational Auditing Perspective. *Managerial Auditing Journal*, **12**(3), pp 116 – 122.

Gunasekaran, A. (2004) Supply Chain Management: Theory and Application. *European Journal of Operational Research*, **159**, pp 265 – 268.

Gupta, U.G. and Gupta, A. (1992) Outsourcing the IS Function: Is It Necessary for Your Organisation? *Information Systems Management*, Summer, pp 44 – 50.

Handfield, R. B and Nichols, E. L. (1999) *Introduction to Supply Chain Management*, Prentice Hall Inc.

Jennings, D. (2002) Strategic Sourcing: Benefits, Problems and a Contextual Model. *Management Decision*, **40**(1), pp 26 – 34.

Lankford, W.M. and Parsa, F. (1999) Outsourcing: A Primer. *Management Decision*, **37**(4), pp 310 – 316.

Linder, J. C., Cole, M. I. and Jacobson, A. L. (2002) Business Transformation through Outsourcing. *Strategy and Leadership*, **30**(4), pp 23 – 28.

Malhorta, Y. (1997) An Empirical Analysis of the Determinants of Information Systems Productivity and the Role of the Outsourcing Policy, http://www.brint.com/papers/outsource (01.06.04)

McIvor, R. (2002) A Practical Framework for Understanding the Outsourcing Process. *Supply Chain Management: An International Journal*, **5**(1), pp 22 – 36.

McIvor, R. (2003) Outsourcing: Insights from the Telecommunications Industry. *Supply Chain Management: An International Journal*, **8**(4), pp 380 – 394.

Monczka, R. M. and Morgan, J. (1997) What's Wrong with Supply Chain Management, *Purchasing*, **122**(1), pp 69 - 73).

Stadtler, H. (2004) Supply Chain Management and Advanced Planning – Basics, Overview and Challenges, *European Journal of Operational Research,*

Sweet, P. (1994) It's Better Out than In. *Accountancy*, **114**(1211), pp 61 – 65.

Teresko, J. (1992) Outsourcing: Tie It to the Right Objectives. *Industry Week*, **241**(11), June 1, pp 42 - 44.

Quinn, J. and Hilmer, F. (1994) Strategic Outsourcing. *Sloan Management Review*, pp 43 – 55.

Willcocks, L. and Choi, C. J. (1995) Cooperative Partnership and Total IT Outsourcing: From Contractual Obligations to Strategic Alliance. *European Management Journal*, **17**(6), pp 645 – 654.

Winkleman, M., Dole, D., Pinkard, L., Molloy, J. *et al* (1993) The Outsourcing Source Book. *Journal of Business Strategy*, **14**(3), May/June, pp 52 – 56.

Venka, T. R. (1992) Strategic Sourcing: To Make or Not To Make. *Harvard Business Review*, pp 1 – 11.