

TRANSACTION COST AND ITS EFFECTS TOWARDS OUTSOURCING

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Abstract: *This paper explores the drawbacks of outsourcing which surfaces from the transaction costs. Coupled with the benefits to the host organisation are the drawbacks which include the information costs, negotiating and bargaining, and the costs of policing and enforcement. The paper is based on a case study carried out on the outsourcing of the healthcare support services by the Malaysian Ministry of Health. The case study attempts to generate an understanding on the causes of the significant increase in the operational costs of the abovesaid healthcare support services and relating it to transaction costs. Structured interviews were conducted on those directly involved in the planning, implementing and monitoring of the outsourcing process of the healthcare support services. The findings indicated that bounded rationality, opportunism and asset specificity are the main components of the transaction costs. However, the significant increase in the operational costs of the healthcare support services of the Malaysian Ministry of Health was not entirely due to the effects of the drawbacks of outsourcing.*

Keywords: Transaction Costs, Drawbacks, Outsourcing, and Healthcare support services.

AN OVERVIEW OF OUTSOURCING AND TRANSACTION COSTS

Outsourcing is a process of externalising tasks and services previously performed in-house, to outside vendors (Jenster and Pederson, 2000). It can be seen as an action taken to minimize the workload of any firm by subletting its services or tasks to another firm.

The aim of outsourcing for private sectors is to achieve cost reduction (Kakabadse and Kakabadse, 2002; Burnes and Anastasiadis, 2003) while the public sector on the other hand, seeks to achieve best practice, improve the cost discipline skills of managers and the quality of the service, and to help senior managers focus more clearly on the core competencies of the organizations" (Kakabadse and Kakabadse, 2001, 406).

The success of outsourcing lies heavily on the management of outsourcing relationships (Kakabadse and Kakabadse, 2001; Burnes and Anastasiadis, 2003; Stright and Candio, 2000; Wechsler, 2002; Malek, 2000; Kakabadse and Kakabadse, 2003; Heikkilä and Cordon, 2002). Wechsler (2002) suggested that defining the function, procedures and supporting processes are the main criteria for success.

Burnes and Anastasiadis (2003) illustrated that the public sector have more restrictions in their relationships which resulted in the gap between the host organizations and the service provider. This could be due to the nature of the public organizations which emphasize on implementing policies rather than seeking maximum profits as pursued by the private sector.

Managing understanding, efficacy and transparent relationships between the service provider and the host organisation are very crucial in achieving the aims and objectives of both parties. Without a transparent understanding of the management strategies and having mutual understanding with vendors, the choice to outsource might lead to bad consequences. The main issue in outsourcing is related to its transaction costs. As pointed out by Lyson (1996, 268), an organisation usually requires a minimum of two years before achieving any financial benefits from outsourcing.

Transaction costs are costs incurred while carrying out transactions, each transaction differs from one another subject to the nature of the transaction and its organisation (Milgrom and Roberts, 1992). There are two types of transaction costs namely the coordination costs and motivation costs. Transaction cost according to Williamson's is:

“The ex ante costs of drafting, negotiating and safeguarding an agreement and, more especially, the ex post costs of maladaptation and adjustment that arise when contract execution is misaligned as a result of gaps, errors, omissions, and unanticipated disturbances; the costs of running a system”

Williamson, 1996:379.

In a nutshell, transaction costs can also be described as ‘search and information costs’, ‘bargaining and decision costs’ and ‘policing and enforcement costs’. Two critical behavioural assumptions that are crucial and very much related to transaction costs are bounded rationality and opportunism (Ismail, 1997).

Human beings exhibit bounded rationality whereby they have limitations on information and hence restricts them to process the information (Davies and Lee Lam, 2001) meanwhile opportunism is defined as ‘self-interest-seeking with guile’ (Williamson, 1985,47) which carries the same meaning as lying, cheating, concealing information and breaking contracts (Davies and Lee Lam, 2001). Bounded rationality according to Williamson is:

“Any attempt to deal seriously with the study of economic organization must come to terms with the combined ramifications of bounded rationality and opportunism in conjunction with a condition of asset specificity.”

Williamson, 1985:42.

In a much simpler definition, bounded rationality explains the weaknesses that normal people could not possibly foresee the future and that they are all aware of it (Milgrom and Roberts, 1992).

Transaction costs constitute motivation costs and coordination costs in which both have different scopes (Milgrom and Roberts, 1992). For instance, motivation costs are the costs of motivating specialized agents to align their interests which usually derived from opportunism while coordination costs are the costs of coordinating the actions between the specialized agents and derived from bounded rationality (EncycloGov.com, 2004).

As communication can be imperfect, hence, maladaptation could occur due to the insufficient or inaccurate information the decision maker have at the point of time when a decision has to be made. Unlike the coordination costs, there are two types of motivation costs. The former is related to informational incompleteness and asymmetries where the parties do not have all the information needed when the agreement is being done whilst the latter explain the motivation problem from an imperfect commitment where both parties have difficulty to actually carry out the agreed arrangement due to threats and promises (Milgrom and Roberts, 1992).

There are five kinds of transaction attributes, namely the asset specificity of the investment required to perform the transaction, the frequency with which similar transactions occur and the duration or period of time over which they are repeated, the complexity of the transaction and the uncertainty about the performance required, the difficulty of measuring performance in the transaction and the connectedness of the transaction to other transactions involving other people (Milgrom and Roberts, 1992).

THE OUTSOURCING RATIONALE

The idea of outsourcing the public healthcare of Malaysian Ministry of Health (MoH) was raised by the Malaysian government in 1996. The aim was to increase the efficiency of services and to retain its own qualified and experienced manpower. While gradually reducing its role in the provision of health services, the Government on the other hand will increase its functions as enforcer and regulator (Economic Planning Unit, 1996). Its mechanisms of implementation are diverse which include the sale of equity or assets, lease of assets, management contracts, build-operate-transfer or build-own-operate, and management-buy-out (Chan, 2002).

The project has created a mixture of reactions from the public and other public interest groups concerning the low-income, the elderly, and the disabled (Sangaralingam and Raman, 2003; Chan, 2000). Their concern is based on an increased in the operational costs of support services (Chan, 2000). The same issue was also raised at the 3rd parliamentary meeting on the

increase of the operational costs from RM470 million to RM510 million in 1999. Additional issue raised was the function of Sistem Hospital Awasan Taraf Sdn. Bhd. (SIHAT) which is the performance monitoring agency.

Hence, this paper attempts to generate a better understanding on the causes of the significant increase in the operational costs of the Malaysian healthcare support services by understanding and relating it to transaction costs and its effects on the contractual arrangements essential in the outsourcing process.

RESEARCH METHODOLOGY

Structured interviews were carried out with those directly involved in the planning, implementing and monitoring of the outsourcing process of the Malaysian healthcare support services which include the client (Ministry of Health), the service provider (Faber Mediserve Sdn. Bhd) and the performance monitoring agency Sistem Hospital Awasan Taraf Sdn. Bhd. (SIHAT). The study covers the broad Malaysian healthcare outsourcing implementation. The interviews were based mainly on the brief history of the management of healthcare support services before and after outsourcing to scrutinize the contractual arrangements.

The scope of this paper covers the differences between the operational costs of in-house and outsourced provision of healthcare support services. It is based on the transaction costs in the scope of contractual arrangement particularly on the planning of work, the implementation, the performance monitoring, the parties involved and the equipment and machineries used to carry out the tasks.

RESEARCH FINDINGS

The Outsourcing Process

The decision to outsource involves an expenditure of about RM504M per year for an agreed concession period extending over 15 years. It involves the management and provision of clinical waste management services, cleansing services, linen and laundering services, facility engineering maintenance services and biomedical engineering maintenance services of 123 hospitals and 4 health institutions.

The Search and Information Costs

After several management and technical meetings, the tender board committee has agreed to appoint three companies based on their financial capability, personnel, proposed methodology of executing works and their physical equipments.

Table 1. Comparison on Parties Involved in the Planning of Work Before and After Outsourcing

Parties	Before Outsourcing	After Outsourcing
Ministry of Health	Contract and Supply Department	Procurement and Privatisation Department
		Regulatory Unit
Private Service Provider		Faber Mediserve Sdn. Bhd
		Radicare Sdn. Bhd.
		Pantai Medivest Sdn. Bhd. (previously known as Tongkah Medivest Sdn. Bhd.)

The Costs of Drafting the Operation Contract

A series of meeting between the concession companies and the specially formulated committees of MoH on privatization has been carried out to negotiate the concession contract mainly on the additional item in the scope of support services works, the output specifications, the machineries and equipments needed to carry out task, the transfer of government's servants, the concession periods, the monitoring of performance and job indicators. This is important as the needs to draft a contract between MoH and the private service provider is due to the risks of bounded rationality and opportunistic behavior of transaction analysis. The contract needs to be carefully written to safeguards both parties. It also involves search and information costs for the preparations of the standards and guidelines for the outsourced services in order to meet certain rules and requirements of the services. Although the costs of drafting and preparing the contract was borne by the private service provider, the costs however has been included in the operational costs and spread over the duration of the contract.

The Costs of Negotiating and Bargaining

The duration of the outsourcing projects is related to the risk of uncertainty. As noted, by transferring the work load to the private service provider, it transfers the risks of uncertainty to the private service provider which will make them risk averse. Hence, they tend to increase the price of the contract.

Additional type of services has increased the risks and hence contributed additional spending. Table 2 below shows the comparison in the scope of work of the in-house and outsourced provision.

Table 2. Comparison on the Scope of Works Between the In-House and Outsourced Service Provision

No.	Scope of Services	Before Outsourcing	After Outsourcing
CLEANING SERVICES			
1.	Guidelines on infection control	Yes	Yes
2.	Disinfection and sterilization Policy and Practice	Yes	Yes
3.	Code of Practice for prevention of infection accidents in the hospital, laboratory and post-mortem rooms	Yes	Yes
4.	Universal Infection Control Precautions, MOH	Yes	Yes
FACILITY ENGINEERING SERVICES			
1.	Comprehensive maintenance of all facilities, plant and equipment including infrastructure, utilities and services	Partial	Yes
2.	Planned preventive maintenance	Partial	Yes
3.	Breakdown maintenance	Partial	Yes
4.	Compliance to legislative requirements	Partial	Yes
5.	Quality Assurance Program for all equipment and systems	No	Yes

The Costs of Policing and Enforcement

The involvement of additional parties to the contract in lieu with some measurement was taken to avoid any act of opportunism by the private service provider. For example, the establishment of SIHAT clearly explains the action taken. The following Table 3 and Table 4 shows the comparison of parties involved in the planning, implementation and monitoring works between the in-house and outsourced service provision.

To safeguard both parties in the contract, a more comprehensive and stringent performance monitoring has been planned and practices to achieve value for money for both parties.

In addition to the contract, a comprehensive nationwide Computerized Management Information System (CMIS) together with the ISO 9000 and the Quality Assurance Program has been integrated to auto-pilot the project. The system is newly introduced and has been tailored for the outsourcing of healthcare support services. The system is build and managed under the

expense of the three private consortia. Apart from that, a special deduction formula and various guidelines and procedures were developed to effectively manage and ensure the quality of the services performed by the private consortia as well as complaint station and hotlines situated in all the contract hospitals in the hope to have a transparent supervision of the whole project.

Table 3. Comparison on the Parties Involved in the Implementation of healthcare support services Before and After Outsourcing

No.	Type of Services	Item	Before Outsourcing	After Outsourcing
1.	Cleaning Services	Scope of Work	Nil	Clearer with anticipated minimum frequency of cleaning services
		No. of workers involved	Limited and being burden with other jobs requirements	Significant increase in the number of appointed workers to carry out work
2.	Facility Engineering Services	Maintenance of medical equipments	Carried out by outside vendor via open tender for an agreed period of time stated in the contract	Carried out by the in-house expertise of the private service provider.
		Other maintenance works	Carried out in house but limited to the minor work only.	Carried out by the private service provider itself with a proper scheduling on checking of all the equipment.
		Buildings maintenance	Contractor by tender selection by virtue of the Contract and Supply Department.	Private service provider for the mechanical, electrical and civil engineering support.
		Scheduling for checking of electrical equipment	Done in randomly order.	Checked in a special schedule according to the frequency of use as well as the degree of importance of the machine.
		Plant Preventive Maintenance	Conducted partially for some equipment.	Total planned preventive is practiced with degree of tolerances at an agreed standard.
		Quality Assurance Program	Not recognized.	Implemented for all equipments and systems.

Table 4. Comparison on Monitoring of Performance of the support services Before and After Outsourcing

No.	Type of Services	Item	Before Outsourcing	After Outsourcing
1.	Cleaning services	Performance Monitoring	Hospital's supervisors.	Private service provider's supervisor, Hospital's committee management, the Regulatory Unit and SIHAT.
		Frequency of inspection	Nil	Monthly, daily and weekly inspections.
		Ad-Hoc inspections	Not stipulated, but for a very urgent case, the nurses can complaints to the supervisor.	Ad-hoc inspections and complaints could come from the hospitals staff and public users.
2.	Facility Engineering Maintenance	Contractors performance monitoring	Supply and Contract Department.	SIHAT with the aid of records from planned preventive reports and reports from the public hospitals through the CMIS.

The Outsourced Support Services

The outsourcing project involves the management and operation of hospital support services in medical institutions, general, district and nucleus hospitals. The outsourced support services are as shown in Table 5.

Table 5. Comparison on the Type Services

No.	Support Services	Before Outsourcing	After Outsourcing
1.	Cleaning Services	Yes	Yes
2.	Linen and Laundry Services	Yes	Yes
3.	Facility Engineering Maintenance Services	Partially	Yes
4.	Biomedical engineering Services	Partially	Yes
5.	Clinical Waste Management	Partially	Yes

ADDITIONAL ORGANIZATION CREATED DUE TO OUTSOURCING

As mentioned earlier, the implementation of outsourcing policy led to formation of a new division and unit. For example, the engineering services division was created as a regulatory unit after the selection of private companies in order to monitor and safeguards the governments especially the MOH.

Engineering Services Division

This Section was created on 1st September 1996 to monitor and ensure the effectiveness and efficiency of the hospital support services privatization programme. This division alongside the procurement and privatization division manage the Concession Agreements and formed the technical policies, standards, guidelines, procedures and circulars (Pillay, 2004). The main objectives of the division is to supervise and monitor the implementation of the overall hospital support services privatization programme, to safeguard the interest of the Ministry of Health and the hospital customers by ensuring all provisions in the Concession Agreement are fulfilled and to ensure safe and efficient hospital support services are provided.

Sistem Hospital Awasan Taraf Sdn. Bhd. (SIHAT)

Sistem Hospital Awasan Taraf Sdn. Bhd. (SIHAT) is an independent consulting company formed in 1994 with an ISO 9002 certification. The main function of SIHAT is to assists the Regulatory Unit in supervising the projects and provides necessary consultancy services to the ministry. In addition, SIHAT has developed the necessary instruments and state-of-the-art ICT based database systems to support the services. Table 6 is an overview of SIHAT and its interconnections between the parties involved in the outsourcing projects (Chua, 2004).

There are several committees set up namely the hospital development, the Quality Assurance Programme, Weekly Management Meeting, Drug's Committee, Finance and Productivity of Quality in assisting the management to plan and supervise the works. However, the Weekly management meeting is the one responsible for monitoring of performances of the healthcare support services (SIHAT, 2004).

**Privatisation of Hospital Support Services.
Ministry of Health Malaysia**

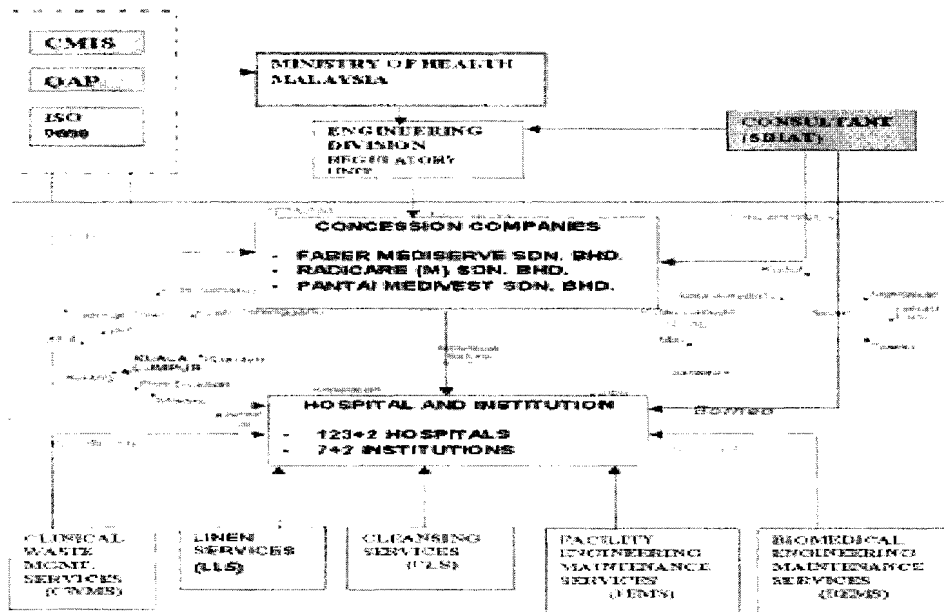


Figure 6. The Privatisation of Hospital Support Services, MOH.

The Private Service Provider

The appointment of the three private consortia was based on their technical and financial capabilities. The three companies have contributed their resources in helping the MoH in ensuring a better quality of healthcare support service. For instance, the Radicare Sdn. Bhd. and Faber Mediserve Sdn.Bhd. have been accredited with the ISO 9000:2000. Each company has their own resources in terms of financial, technical knowledge, technology and human resources to carry out the healthcare support services.

The Increased Operational Cost As a Result of the Outsourcing

As shown in Table 7, the costs of the healthcare support services increase from RM173M in 1996 to nearly RM476M in 1997. A 37% increased from the original expenditure is said to be the consequences of a few additional items related to the outsourcing's drawbacks.

Table 7. Breakdown of Operational Costs According to Service Type

Services	Year of Operations (RM)			
	1997	1998	1999	2000
Linen and Laundry Service	39,330,000	44,436,000	54,027,000	60,375,000
Clinical Waste Management Service	20,148,000	20,230,800	22,494,000	24,495,000
Cleaning Services	101,988,900	107,088,000	107,778,000	106,191,000
Biomedical Engineering Maintenance Services	102,051,000	106,398,000	108,951,000	101,430,000
Facility Engineering Maintenance Services	205,137,000	208,863,000	214,590,000	210,657,000

OTHER CAUSES THAT CONTRIBUTE TO THE INCREASED OPERATIONAL COSTS

There are a few factors that contribute to increased operational costs. The poor recording of the operational costs and the separation of the healthcare support services provision such as the costs of utilities, space rental, staff's salaries, tax payments, maintenance and depreciation makes the quantitative comparison impossible. Hence, the cause of increased operational costs could not be blame to outsourcing alone.

In addition, the transfer of risks from the public to the private service provider will lead to risk averse by the private service provider. As such, the longer the duration of the contracts, the longer will be the uncertainty.

CONCLUSION

The significant increase in operational costs could not be blame entirely on the drawbacks of outsourcing as there are no reliable records of historical costs and there are differences in the calculation of the operational costs. Moreover, the calculation for the operational costs was not based on the same base index. Hence, several causes have been identified in the case study that contributed to the increased operational costs in the healthcare support services. The additional spending might be due to the increased population of the patients or even perhaps additional new hospitals are being operated in that particular year. Earlier, the funds allocated for the healthcare support services provision was exclusive of the costs of staff's salaries, utility bills, rental costs, taxes, as well as the maintenance and depreciation costs.

In the case study, there are several causes identified that helps contribute to the increased operational costs in the healthcare support services. It is expected that the reasons of the increased operational costs is due to the cost of improved service provision that has been passed on to the client in reflection of the transaction cost's effect.

REFERENCES

- 3rd term Lower Parliamentary Meeting, (2001) "How much do the Government pays to SIHAT every year and why don't the government does its own supervision", (<http://moh.gov.my.DewanRakyat/101001.htm>), October.
- Burnes and Anastasiadis, (2003), "Professional Facilities Management in Public Sector Organisation", *Facilities*, Volume 8, No. 10/11/12, pp.435-443.
- Chan, CK, 2000, *Privatisation, the State and Healthcare Reforms: Global Influences and Local Contingencies in Malaysia*, (<http://www.stakes.fi/gaspp/seminars/papers/pachan.pdf>)
- Davies and Lee-Lam, 2001, *Managerial Economics: An analysis of business issue*, London, Prentice Hall.
- Heikkilä J and Cordon C (2002) *Outsourcing: a core or non-core strategic management decision?* Volume 11, Issue 4, Date: June/July 2002, pp. 183-193.
- Ismail, S, (1997) " *A Feasibility Study in Quantifying Transaction Costs in Construction Procurement Routes in UK: The Case of General Contracting and Integrated Design and Build*", unpublished dissertation, Bartlett, School of Graduate Studies, University College London, London.
- Kakabadse A and Kakabadse N (2000), Sourcing: "New Face to Economies of Scale and the Emergence of New Organizational Forms", *Knowledge and Process Management Journal*, Volume 7, No.2, pp. 107-118.
- Martin, A.B and Mcdermott, E.I (2001) "Outsourcing: A Growing Trend in EHS Management", *Environmental Quality Management* Volume 11, Issue 2, pp. 45-50.
- Milgrom, R and Roberts, J, "Economics, Organisation and Management", 1992, New Jersey, USA, Prentice-Hall.
- Stright J.F and Candio F.J (2000), "Using a reverse RFP process to assess your outsourcing options", *Employment Relations Today* Volume 27, Issue 2, pp. 7-13.
- Wechsler S (2002), "How to Outsource Treasury Functions Successfully", *Journal of Corporate Accounting & Finance*, Volume 14, Issue 1, pp. 21-26.
- Williamson, O (1985), "The Economic Institutions of Capitalism", London, Collier Macmillan.