



Strategy For Application Outsourcing Preparation

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ABSTRACT

Information systems outsourcing has gained more attention in the last decade. The strategy is meant to relieve some information systems management problems. The scope has improved from data processing and resource sharing to more complex functions e.g. application systems management. Outsourcing penetrations have occurred in functions earlier considered critical and strategic. There have been best practices on managing outsourcing known in industry and acknowledged by the scientific society. Among the important aspects are contract preparation, Service Level Agreement, method of pricing and human resources management. This journal will cover the strategies of outsourcing, which focus on the application systems outsourcing. Among the important goals of outsourcing are the need to focus on the company's core business, achieving cost effectiveness in the application systems management and increasing the service level. Other critical success factors will also be covered e.g. implementation of penalty and incentive mechanism and the anticipation of unexpected conditions.

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1. Introduction

A phenomenon that often occurs in the last decade, is the outsourcing of information systems or information technology. Outsourcing is often taken as a way to relieve some problems that arise in an organization. Usually the main reason is the need to increase the efficiency of the company or institution where the information systems or information technology department is located and to focus more attention on its core business. The granting of Information Technology management authority to outside provider companies can be carried out at a reliable level. In fact, the working relationship between the company and its service providers or outsourcers often encounter unexpected obstacles. These problems include the lack of proper means to assess the performance of outsourcers, the lack of flexibility of contracts to make changes, and the reluctance of internal staff. Not a few outsourcing cases that were originally expected to run smoothly, were ultimately less successful or had to be stopped. Given the things mentioned above, it is necessary to formulate what steps need to be taken in considering, starting and managing the implementation of outsourcing. The purpose of writing this journal is to conduct outsourcing strategy analysis activities carried out by an organization. The analysis activities include several things, with emphasis on scope, stages of implementation, and the planned cost structure. Limitation of issues are related to discussing outsourcing based on the study of information technology literature, and will focus more on outsourcing application system management. Information technology outsourcing was initially limited to outsourcing data processing problems as well as the use of machines with large capacities. But gradually the scope of outsourcing widened and penetrated into other aspects such as network handling, as well as support for desktop problems, end-user computing, and application systems. The following definition of outsourcing information systems or information technology are the opinions of some experts: Lacity & Hirschheim (1995): the third party management of IS assets, people and/or activities required to meet prespecified performance levels. De Looft (1997), and/or transferring the associated human and other IS resources, to one or more external IS Suppliers. In addition there is another option that is cosourcing where there is support from internal and external sources together for a



specific purpose. For example, with the purpose of transition assistance, namely the delegation of internal task authority to outside parties, as long as internal staff get related education or training for new types of skills. Or for the purpose of rehabilitation and return where the internal staff for a certain period of time get improvement or correction with the help of outside sources, and then released back after normal [1]. Especially for human resources, another thing that can be pursued that is similar to the selective sourcing option is to hire staff or contract programmers. The difference is that in the use of contract staff, the management or coordination of the work of the contract staff is one hundred percent on the part of the company [2]. Reasons for outsourcing: the desire to focus more on the core business, the pressure to do efficiency or cost reduction, increase cost control, increase cost effectiveness, the desire to reduce or have reduced the number of staff, the desire to get accountability, the desire to get an increase in the level of service, the desire to eliminate the functions that have not been properly worked out.

2. Method

2.1 Pre-Contract Outsourcing Stages

Before the outsourcing relationship is formalized in a contract agreement, there are several stages that must be passed, namely: Internal Assessment, company management begins by identifying what is the intended purpose of having an outsourcing, as well as what functions will be handed over to outside parties. Then this will be continued with the creation of a "Call for Tender" or "Request for Proposal" (RFP) which will be sent to several potential outsourcer candidates. Due Diligence At this stage the prospective outsourcer can dig deeper into the information in order to get a clearer picture.

2.2 Outsourcer Selection Criteria

Intangible factors such as the interests and attitudes of prospective outsourcers, which are seen in the initial talks, as well as other factors such as their proposals, which include things such as cost issues and implementation plans. These are some important factors that are recommended to be used in the selection of outsourcers, including: Technology Leadership. Outsourcing objectives are having access to better resources and higher skill, as well as handing over internal functions to competent external parties [3], Financial Stability, the prospective outsourcer must be in good financial condition. And if at the same time is undergoing changes such as mergers or acquisitions, then the development must always be followed and taken into account security. Companies should try to conduct intelligent research to find information to clients [4], [3]. Personnel Turnover, high staff turnover in and out of outsourcer candidates may affect outsourcing performance [3], Service Orientation, outsourcer candidates must be companies that really have a culture of serving customers. This service orientation during implementation can be measured by outsourcing performance [3]. Knowledge of Business, prospective outsourcer must have in-depth knowledge of the type and business model of the client company [3]. Price Reasonability, the convention in the implementation of the tender or bid is the selection of the lowest bid of those who meet the requirements, but the bids submitted should fall within a reasonable interval and desirable [3]. Staffing Level Vs. Business Volume, number and type of existing human resources, both already in the prospective outsourcer and to be transferred, must be able to support the needs or demands of the business [3]. Independent of Subcontractors, the prospective outsourcer should not be highly dependent on its subcontractors [3]. Compatible Culture, the leaders and staff of the prospective outsourcer should be able to adjust and blend in with the working atmosphere and culture within the company [3], [5]. Ease of Transition, the ease of implementation of the transition period is also worth considering because the transition period will greatly affect the success of the implementation period [4]. Portfolio of products/services, diversity of product or service types shows the variety of abilities and specialties of prospective outsourcers [6].

2.3 Cost Planning

When negotiating the formula for calculating the amount of costs to be incurred by the company and desired by the outsourcer, the company should conduct a comparative study with outside reality. Some alternatives proposed by Compass are as follows [7]: Price/bid, Price/market, Price/as-is cost, Price/should cost.

2.4 Staffing Issues

Outsourcing plans often cause a feeling of uneasiness for the internal staff. This is because in general the staff have a feeling that outsourcing will lead to the implementation of termination. The

openness of the company's management is very important to provide information from the first time the plan was rolled out [8]. In general, outsourcing is accompanied by the transfer of staff from the company to the outsourcer. This is based on the idea that the staff have excellent knowledge of the company's operations. In addition there is the possibility of staff who do not want to move to the outsourcer. If this happens, then you can think of the possibility of hiring him as a mentor during the early days of outsourcing implementation. In some cases of failed outsourcing, there are cases where the staff who have been transferred to the outsourcer, re-recruited by the original company [9].

2.4 Implementation Period Management

After the contract is signed by both parties, then formalize their strategic partnership relationship. The contract that has been drafted will be the only official handle to monitor the implementation of the cooperation. To further strengthen the implementation or operational period of outsourcing, it is necessary to have a short period that can be used as a transition to actual implementation. The transition period can last about 3 months, 6 months, or even more. When both parties have reached the actual implementation period, there are several things that must be done, including scheduling regular joint meetings. The meeting can be held every month, or every certain period of time agreed upon and is the right time to do some things like [10], [11]:

- a. Reconfirm the purpose of outsourcing.
- b. Perform outsourcer performance measurements based on existing SLA.
- c. Make adjustments or improvements to the SLA.
- d. Identify possible service improvements.
- e. Solve existing problems.

In order to support the success of this implementation period it is necessary that the outsourcer has the representation of a leader with high project management skills [4]. Then from the company side there is already a relationship manager. Then in order to build a healthy working relationship, especially during the implementation period, it is necessary to realize the difference between contracting and outsourcing. In contracting, although all processes can be carried out by the contractor, it is the management company that owns and has the right to these processes. But in outsourcing, all those processes are owned and controlled by the outsourcer [12].

2.5 Consultant Assistance

To avoid possible losses or wrong steps in implementing the outsourcing program, for companies that do outsourcing for the first time it is advisable to get assistance or help from expert consultants. It is recommended that companies seek input from two types of experts, namely consultants with technical backgrounds (information technology) and consultants in legal matters [1].

3. Result and Discussion

3.1 The decision to outsource.

An organization or company expects expenditures that have been fix cost could be turned into variable cost. In other words, they want to achieve conditions where there is flexibility in supply and demand management.

3.2 Implementation Outsourcing.

The organization is required to determine the choice of its partners through the tender process. The selection of partners through the tender process has its drawbacks, in addition to its advantages, especially when compared with the way direct negotiations without tenders. How to negotiate a partnership without a tender on the other hand, has the advantage that the company does not need to carefully create a framework of the work to be submitted, and with the contribution from both sides, open the possibility of obtaining a better solution than the framework that has been prepared by the company [5], [13].

3.3 Consequences of Outsourcing Decisions: Personnel Issues.

One of the important things caused by the outsourcing program is the release of staff. In order the program does not leave personnel problems, the following steps should be taken:

- a. Offer a better severance package for termination of employment (layoffs) than the standard severance package for layoffs. To obtain approval from senior management, department

management must be able to provide a strong justification, by providing comprehensive information about the outsourcing program plan.

- b. At the same time, the possibility of transferring staff to other departments or parts of the company is also sought.

Through the outsourcing, the organization expects the outsourcer will be able to absorb as much as possible the former staff of the organization, and will be achieved two main objectives of outsourcing, namely, First, focus on the core business which is to reduce effort to handle the application system included in its staffing, and Second, bring the cost of management application system from fix to variable.

But there is a possibility that there are staff who want or are forced to stay in I.S. Department. This happen where there are staffs are not interested to join the outsourcer company, and at the same time the persons have difficulties in transferring to another department. If the staff concerned is not listed in the new organizational structure, then this will give difficulties to the organization and the staff itself. For the organization, the case will be a test of the extent to which the consistency of planning is made, and if the number of staff of this kind is quite significant, it is necessary to question the seriousness of the organization's goal to outsource. For the staff concerned, it is also less advantageous because he or she will seat in an ad-hoc position, with all the consequences.

3.4 Consultant assistance.

The organization has received assistance from consultants who provide a lot of input on how to outsource management. This is important for the organization because this organization is going to do it for the first time. Although the input from the consultant is quite a lot that includes the problem of scope, service level and pricing method, but it would be better if it also gets input in the field of legal or contract [14], [15]. Another thing considered important, in the bid document or RFP, things need also to be enlisted, e.g. disagreement management and termination method.

3.5 Service Level.

In the transition period there will be a finalization of service level problems. It is a bit confusing, because even in the bid document the service level problem is quite detailed, but it still needs to be matured with the outsourcer during the transition period. Whereas the service level issue should have matured even before the signing of the contract [2], and it should be a clear framework and addressed by prospective outsourcers when submitting their proposals and offers. What is more acceptable is that the transition period becomes a time to discuss and define ways or steps for the implementation of the service level. In addition, with the maturity of the service level issue before the signing of the contract, it will be useful to reduce the subjects that must be worked on during the transition period. Other issues such as planning and discussion of standard operating procedures (SOP) and the implementation of staff transfer can be done in the transition period, but not for service level issues.

On the service level, need to be included two things, first, the speed of completion of requests, and second, the probability of completion of the number of requests received. Furthermore, a good service level agreement includes three (3) things, namely call wait time, problem resolution time and abandon rate [16].

In the example of pricing method below (Table 1) a classification of services is made that are completed within the targeted time limit as well as those that exceed it. Such Data can be used in the evaluation of outsourcer performance.

Table 1.
Examples of SLA implementation

Class of Service	Completion	Evaluation	Percentage
Fatal Fault Problem Resolution	4 hours	ACC	85%
	plus 20%	REF	X%
	plus 40%	BAD	Y%

Description: X+ Y= 15



Then in carrying out the survey to the user/customer, to get a representative and fair survey, the form and content of the questionnaire that will be used should get approval from the applications specialist or relationship manager of the organization.

3.6 Penalties.

Preferably penalties in the form of a number of written warnings that can recommend termination of the contract, are preceded by a real penalty and can be associated with financial obligations. In addition, to stimulate the performance of outsourcers, it is necessary to have a balanced penalty and incentive mechanism [17], [18]. One possibility of applying penalties and incentives that are directly linked to financial obligations is to reduce or increase by a certain percentage of the size of one of the cost components, for example margin. Examples of its application are as follows:

- a. For each type of request in a month, if less than 85% can be served in the targeted time interval, it can be subject to a 15% reduction in margin.
- b. Conversely, if it can reach 95%, it can be given an additional margin of 15% as well, with note that the remaining should not be in the BAD classification.

3.7 Outsourcing Cost.

In general, the formulation of costs made, namely both in the form of fixed price and time and material, is good because it can be directly related to the performance or volume of work performed by the outsourcer [1]. However, there should be several things to note, namely First, the problem of planning for multiple years of operation, and second, the need for internal benchmarks. The organization plans to outsource for four years for example, and requires an offer or quotation per year. The organization can understand if there is an increase from one year to the next due to inflation, for example, but also expects a downward trend in each year due to the assumption of an increasingly efficient operation. Planning per year provides losses and benefits. The disadvantage is that the organization can be "locked" in a contract that has already been signed, while the fact that prices on the market turned out to be out of the forecast down in the last years of the contract period [1]. Furthermore, determining the price through the tender or bid process is a good way because it will get the lowest price. However, it is necessary for each type of function to be compared with the lowest cost that can be done internally [7]. Another thing to note is the validity of the organization estimated cost used in the selection of outsourcer. According to the internal regulations, the estimated cost for each type of work tendered, must be based on: investigation of market prices, and prices used in the last similar tender process. In outsourcing this application system management there is a possibility of difficulty determining the estimated cost. This is because several types of financing have not yet been carried out by the organization, and it is a question of where a reasonable price estimate will be obtained. Will it be done by analogy with the existing tenders with the risk of less precise, or do the inquiry to the contractors of the desired qualifications, which are actually the potential bidders?

3.8 I.S. Strategic Support.

One form of service that will be sought in this outsourcing is I.S. Strategic Support, is paid by the method of "Level of Effort based Services". In this issue, there needs to be a review from the internal staff of the organization, i.e. from applications specialist or technology specialist against proposals that may be submitted by IT Strategy Expert or Technology Expert from the outsourcer. This is important so that, firstly, the proposal remains in line with the business interests of the organization [19], and secondly, a high level of confidence in the success of the proposed proposal, and thirdly, to reduce the possibility of vested interest from the outsourcer.

3.9 Some of the shortcomings.

From the preparation that has been done by the organization in outsourcing its application system management, there are several things need to be added, namely concerning the issue of data or information confidentiality, disagreement management and termination method, and can be explained as follows:

3.10 Confidentiality of data

The issue of confidentiality of data or information is important for every company. Although the problem of the quality of data or information contained in all Application Systems, has been stated to be beyond the scope of this outsourcing plan, but because later all data or information in various applications



becomes open to outsourcer staff, it is necessary that in the contract a clause is made that guarantees no leakage of company data or information, especially for those who have competitive value [20].

3.11 Disagreement Management

Even though there are various information technology outsourcing relationships, there is a possibility of differences of opinion or perspective, for example in solving a problem. Such things that have not or are not clearly accommodated in the details of the contract, can result in problems remain unsolved. Therefore, it is necessary to make a guideline to resolve the disagreement, for example, if a type of issue or disagreement has not been resolved within a certain period of time, it will be taken to higher management [21].

Termination Method, need to be defined how if desired premature termination, whereas this is very important in the outsourcing contract [4], [1], [22]. In general, if the organization only mentions that according to the Standard Contract Regulations, it has the right to terminate the contract unilaterally with one (1) month's notice. If this is applied because of the performance of the outsourcer that can no longer be improved, it will not be a problem. However, please note that the occurrence of unilateral early termination of the contract by the organization is very rare. This regulation is actually more intended to anticipate possible changes in the organization, for example, significant changes in revenue conditions, activities and business volumes. If early termination occurs, it is necessary to consider the condition or readiness of the organization, for example to make an alternative replacement, whether it is changing outsourcer or taking-over to be done internally again. It should be taken into account that the process of replacing the outsourcer or withdrawing all these functions requires high switching costs [1], [23]. This is reasonable because, firstly, if it is desired to change the ousourcer, it must go through a long process, and secondly, if it will be handled internally again, it must be prepared again the infrastructure and the recruitment of staffs.

4. Conclusion

Considering the concept of outsourcing, especially in its application at an organization, some important points are concluded: In carrying out outsourcing, the accuracy of the implementation of internal assessment, the implementation of due diligence, as well as the preparation of several things such as service level agreements, method of pricing, contract details and Human Resource Management, are critical success factors. With the outsourcing program which is characterized by a significant reduction in staff, it will cause a change in management patterns from taking care of staff-related matters such as assignments, development training, and giving evaluations, to shift to contract management. In the case of outsourcing application system management at an organization, there are two main objectives, namely, first, focusing attention on the core business which is characterized by reducing attention in managing application systems, and second, to obtain cost effectiveness. Another goal of outsourcing that is quite important and expected to be achieved at the same time is an increase in service level. The presence of staff who want to stay in the Applications Section but not in the new organizational structure, will be a problem, for both the organization and the staff concerned. If the number of staff is significant enough, the staffing cost will still be a fix cost.

Service Level Agreements must also cover the aspect of abandon rate. When applied, this aspect of abandon rate will provide more complete performance statistics. To create a fair working relationship and at the same time to stimulate the performance of the outsourcer, it is necessary to formulate a balanced pcnalty and incentive mechanism. The management of outsourcing must also cover articles on disagreement management, termination method, and contingency plan.

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