PRACTICES PROJECT MANAGEMENT STRATEGIES IN OUTSOURCING BEST PRACTICES

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Abstract

The successful implementation of outsourcing project within the manufacturing industries has lot of benefits to all party involved however, the management of such project come with huge pain and losses to the parties. Thus, this paper explores project management strategies in outsourcing best practices within Malaysia manufacturing sector. The study made use of quantitative research methodology by utilizing questionnaire for data collection through postal survey medium. The Malaysian Electrical and Electronic industries were chosen as the sample population where 865 organizations were considered based on Federation of Malaysian Manufacturer directory. The result of this study identified seven major project management strategies for outsourcing best practices namely communication management, performance management, knowledge transfer management, relationship management, crisis management, risk management and cost management. These strategies will guide the relationship between supplier-manufacturer to ensure best outsourcing practices within the manufacturing sector.

Keywords: Project management, management strategies, outsourcing, manufacturing management

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1.0 INTRODUCTION

Outsourcing is accompanied by numerous advantages, which includes, enhanced performance and quality of job, better management of risk and crisis, increased co-ordination and organization, marked reductions in overall expenses, improved streamlining of the outsourcing process and higher chances of recording project success. However, a good management procedure is required to make an outsourcing project a success. Beginning with how to select a provider, how to negotiate the deal, how to manage the relationship and how to deal with the distributed process, both the outsourcing client and service provider need to follow a good management strategy to record good success. Although, there have been many studies that investigate the issues of outsourcing project management [1], [2], [3], [4]. Nevertheless, none of these studies specifically considered outsourcing within manufacturing industries. This is important because many manufacturing industries encounter difficulties in the process of implementing outsourcing. These industries’ simply lack the economies of scale that allow them to effectively compete with their other competitors. Hence, this paper explored project management strategies that will enhance best outsourcing practices in manufacturing sector.

2.0 MATERIALS AND MIX PROPORTION

Numerous studies [5] to [13] have discussed significant concepts of outsourcing in literatures on management. Though, some of these studies inferred that issues in overseeing outsourcing regularly
originate from the inability to understand the idea at suitable levels of abstraction [5], [6], [9], and [10]. The choice to outsource an action may have significant impact for the outsourcer and outsourcee [14] yet little effect at the sector level. At the point where firms in a particular sector exhibit similar behaviour, however significant changes may happen in their sector and sectors related to them. This happened in the computing industry; choices to outsource most manufacturing outfits (which included the sale of factories) in the '90s brought about another sub-segment such as contract manufacturing. This is also known as Flextronics, Celestica, and Selectron for some other industries. Considering the national level, outsourcing exhibits a particularly distinctive nature and the contrasts between the private and public sectors turn out to be less obvious. Public policy on outsourcing has encouraged extensive debate, social justice, encompassing privatisation, and value for money [15].

Modern economies globalization and the switch to fundamental knowledge society comes with complex issues of being proficient in outsourcing activities and it has been perceived over many years that project management is an effective approach to handle both novel and complex activities, like, outsourcing. The definition of project management can be given as the procedure of controlling the accomplishments of the project objectives [62]. Using the current organizational resources and structures, it aims to manage the project by the application of a collection of techniques and tools, without disturbing adversely the standard operation of the organization [16]. The capacity of project management incorporates characterizing the prerequisite of the work, building up the extent of work, designating the required resources, arranging the execution of the work, checking the advancement of the work and modifying deviations from the plan.

A number of organizations tend not to accomplish the expected advantages from outsourcing. For instance, [17], [18] it was recommended that just 5 percent of organizations reviewed, accomplished significant advantages from outsourcing. Studies [17], [19] highlighted explanations behind this: concentrating on accomplishing short-term benefits; absence of formal outsource procedures for decision making, including analysis of medium and long-term cost-benefit; increase in the complexity of the total supply network. In a study of outsourcing in Australia, Beaumont [20] discovered that a further obstruction to outsourcing was quantifying and formulating requirements. It could be seen that many literature [62], [64], [65], [66], [67] on project management pointed out the importance of strategies in achieving project objectives. Most of these studies maintained on how successful implementation of strategies can effectively contribute to a successful project. Majority of these studies claim that project management is an important part in project success. For instance study [66] stressed that project failure could be avoided by paying careful attention to the project management factors which caused failure.

A study [21] proposed that project management is more productive than conventional systems for management, which includes the act of functional divisions in a formal hierarchical organisation, for taking care of such circumstances. The procedure of bringing new projects on stream and into the market enforces demands on already established organizations and requires diverse management methods from those required to keep up everyday operations. In such circumstances, whereby organizations encounter unfamiliar issues in any project implementation then adoption of project management strategies can be actualized. These endeavours would call for better and faster methods for decision making than conceivable in an ordinary operation and settling on the right decisions will be critical to the success of the organization [22].

Another study [23] recognized varying natures of the outsourcing management procedures connected with high, medium and low asset specificity. Others have created frameworks [24], [25], [26] and key positioning procedures for “make versus buy” decision making and outsource supplier selection [28]. There are numerous different motivations for outsourcing, beyond short-term cost savings. For instance, it can empower firms to concentrate on core activities [29], [30], [31].

Generally spread learning about outsourcing and its permanent growth has prompted the augmentation of its utilization in all business areas including the electronics/electrical manufacturing sector. However, recent research on outsourcing has focused on specific support services, logistics, notably facilities management, and IT provision. Some presume that true benefits and costs are hard to assess. A few assessments of outsourcing, favourable [32] and unfavourable [33], are established on ideology and management fashion [34], [35], [36]. One fundamental part of outsourcing is the management of the outsourcing process itself [37]. Hence, this study utilized project management strategies as a device for taking care of the difficulties confronting manufacturing outsourcing projects, taking a contextual investigation of electronics/electrical manufacturing companies in Malaysia.

### 3.0 Experimental Setup

A quantitative research methodology was seen as an adequate approach for this study due its novel feature of being able to accommodate large population sampling and generalization. Administration of questionnaire was adopted for gathering the required data for this study via postal survey. To accomplish the proposed scope of the study, the Malaysian Electrical and Electronic industries were selected as the sample space or
population size for this study. The industry’s listing was retrieved from Federation of Malaysian Manufacturer directory [38]. The decision of selection for the corresponding industry took into consideration the International Standard Industrial Classification Code (ISIC).

The organizations taken into consideration in this study are those having staff strength greater than 100. This follows from the selection made based on past study [39], that in studies on outsourcing management, the only organizations needed for consideration are those having workers greater than 100, and these are companies that are sufficiently substantial to participate actively in outsourcing management practices. Considering the criteria for selection, 865 organizations that were electrical and electronic organizations were chosen to participate in this study. The quality of the respondent is an important factor and the selected respondents are required to be staff with high level of proficiency in regards to the management and operation of the outsourcing organization. Subsequently, the respondents are the managers in materials planning, purchasing, directors or general managers.

The design of the questionnaire consists of six sections, which include, basic information of the organization, antecedents of supplier-manufacturer relationship, relational-oriented exchange to enhance the relational orientation perceived by suppliers, environmental dynamism, outsourcing performance and general profile of the respondent. The questions in Section 1 of the questionnaire recovered organization information that is related to company ownership, type of manufacturing, product type and respondent’s working experience with multinational organizations, outsourcing involvement, respondent’s organizational position and operation duration of the organization in Malaysia and also, the size of the organization with respect to the number of employee. This section aimed at having a foundational understanding about the profile of the organization. A preliminary understanding of the outsourcing engagement level is further developed as the next step which is part of the organizational competitive advantage. Besides, the objective of this section is to separate the respondents that do not leverage outsourcing programs from the data.

Twenty-nine (29) items were involved in Section 2. These items probe antecedents of supplier-manufacturer relationship to social factor (trust), economy factor (dependence) and communication behaviour (information quality, sharing and participation). The aim of this section is determining the factors as antecedents of supplier-manufacturer relationships. The measurement for dependence related to outsourcing management as adapted in past study [40] is newly developed and has been cross-referenced to available literature review. The instruments for measuring trust are applied in study [41], while the instruments for measuring information quality, sharing and participation can be found in study [42]. The relevant questions were grouped intentionally into sectional grid to avoid any form of confusion.

Section 3 took into consideration 8 measurement items which were adapted from study [43]. This section shows relational-oriented exchange determinants which were grouped as structure and process aspects such as continuity expectation, cooperation, team consciousness and communication. Information on customer demand and competition level in the organization is presented in Section 4 where ten (10) measurement items were adopted as seen in study [44]. In a similar manner, Section 5 contained fourteen (14) customer intangible benefits measurement which were designed for having a better understanding the advantages of outsourcing success acquired by the organization. In the final section (Section 6), the general information of the respondents, which include their education background and working experience were presented.

The measurement scale adopted for all the measurement items in the sections mentioned above is based on the 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The data are analyzed using SmartPLS. SmartPLS is a popular software applications for Partial Least Squares Structural Equation Modeling (PLS-SEM) developed by studies [45], [46]. PLS-SEM is a powerful statistical technique to explore the structural relationships among variables through the determination of the significant pathways existed [47].

4.0 RESULTS AND DISCUSSION

According to the reports received from responding organizations, 100% of the surveyed participants stated that they have been involved in outsourcing management. This statement gives an assurance that these organizations studied are relevant and valid for the analysis. The first analysis considered the summary of the company ownership Table 1 and their country origin, where 35.7% of the organizations surveyed are owned by Malaysians but 63.8% are owned by foreigners. In details, most of these organizations (about 59.7%) are constituted by Americans and Europeans whereas the remaining 40% are owned by Asians.

This scenario shows that local electrical and electronic manufacturing factories majorly rely on foreign investors. Also, there are two sectors under consideration which are the electrical sector and the electronic sector as seen in Table 2. The electrical sector constituted 51.4% of the total sample, which is slightly higher than the electronic sector, which is about 48.6%. However, both sectors can be deemed to have a balance response rate distribution.
Table 1: Company ownership and country origin

<table>
<thead>
<tr>
<th>Company ownership</th>
<th>Frequency / Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign</td>
<td>134 / 63.8%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>75 / 35.7%</td>
</tr>
<tr>
<td>Joint venture</td>
<td>1 / 0.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country origin</th>
<th>Frequency / Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA, European</td>
<td>80 / 38.1%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>75 / 35.7%</td>
</tr>
<tr>
<td>Korea, Japan, Taiwan</td>
<td>55 / 26.2%</td>
</tr>
</tbody>
</table>

The organizational size consists of three clusters. 79% of the organizations surveyed have staff strength of more than 150 employees whereas the remaining 21% are organizations having 50 to 150 employees. This scenario indicates that the most of the organizations surveyed have more than 100 employees to be involved in outsourcing practices as recommended [48].

The respondents of the target organization have adequate knowledge of supply chain management based on their job function, work experience and education level. Furthermore, the organizations that responded are of equal blend of electrical and electronic manufacturers with sufficient engagement in outsourcing management. This corresponds to the earlier targeted respondents’ objectives and the quality of the survey should be intact for further empirical analysis.

Table 2: Electrical and electronic sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Frequency / Percentage</th>
</tr>
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<tbody>
<tr>
<td>Electrical</td>
<td>108 / 51.4%</td>
</tr>
<tr>
<td>Electronic</td>
<td>102 / 48.6%</td>
</tr>
</tbody>
</table>

Table 3: Summary of analysis findings

<table>
<thead>
<tr>
<th>Nos</th>
<th>Variable Testing</th>
<th>Analysis Finding</th>
<th>Implication</th>
</tr>
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</table>
| 1   | Dependence and supplier-manufacturer relationship | $\beta = 0.5006$  
    |                                           | $t = 10.0607$   
    |                                           | $\alpha = 0.01$ | Accept      |
| 2   | Trust and supplier-manufacturer relationship | $\beta = 0.0186$  
    |                                           | $t = 3.3534$    
    |                                           | $\alpha = 0.01$ | Reject      |
| 3   | Communication behaviour and supplier-manufacturer relationship | $\beta = 0.3698$  
    |                                           | $t = 6.3109$    
    |                                           | $\alpha = 0.01$ | Accept      |
| 4   | Supplier-manufacturer relationship relate to outsourcing success | $\beta = 0.5120$  
    |                                           | $t = 10.2875$   
    |                                           | $\alpha = 0.01$ | Accept      |
| 5   | Environmental dynamism factor with       | $\beta = -0.1164$ 
    |                                           | $t = 2.0635$    | Accept      |

Giving a detailed report, the findings from the analysis indicate that both dependence and communication behaviour were significant in these relationships whereas only trust was not significant. Also, it revealed the determination of the integrated economic and social factor and the industrial supplier-manufacturer relationship. However, dependence was the strongest explanatory among these relationships. The study revealed findings that are consistent with past literatures [49], [50], [51].

Asides, the negative result of the second hypothesis gotten from the electrical and electronic manufacturing industries is also similar with other past studies [52], [53]. Furthermore, study [54] mentioned that lack of trust will still lead to continuous relationship, while the perspective of supplier revealed that trust is not considered as a strong determinant in long-term relationship.

In addition, the results obtained show consistency with past literatures [55] to [63]. These studies highlighted the positive impact of the partnership attribute and communication behaviour on the partnership success, whereas partnership success will be improved with sufficient level of communication behaviour. Moreover, communication challenges are connected with the failure of strategic relationship [61].

5.0 PROJECT MANAGEMENT STRATEGIES

This study has displayed the ability to illustrate that a positive relationship exist between supplier-manufacturing strategic relationship and outsourcing success, with further observation that, outsourcing success is dependent on relationship orientation, that is, the better the relationship orientation, the better the outsourcing success. The indication of this outcome is that the development of the exchange relationship is needed for obtaining higher returns. With reference to these findings, seven project management strategies were proposed namely communication management, performance management, knowledge transfer management, relationship management, crisis management, risk management and cost management. These seven strategies are summarized as given below:

5.1 Communication Management

The establishment of the appropriate channel for communication is absolutely necessary for the success of any outsourcing venture. The strategy of communication should be seen as being very important even right from the stage of negotiation,
with significant level of importance being attached to a fool proof communications system, regular contact between service provider and client, consistent feedback, instruction clarity and developing a reliable system with the aim of clarifying any points in question.

5.2 Performance Management

The concept of performance management in outsourcing merges between the quality of the project and adhering to timeframe as mentioned in the contract. It is necessary for the client to conduct checks regularly so as to establish if the quality of work is in conformation to the parameters established previously. It is also important for the client to also monitor how to adhere to deadlines and request for accountability reports, should the case of non-compliance arising.

5.3 Knowledge Transfer Management

The continual transfer of knowledge, having total transparency in all areas concerning the project, will aim towards facilitating better production, improving timelines and increasing the total quality of the outsourced project. To obtain a successful knowledge transfer management, it is necessary to perform close monitoring from time to time.

5.4 Relationship Management

It is very important for a client and the outsourcing provider to maintain a good level of relationship in order to ensure the success of the project. These relationships can be managed effectively by communicating regularly, continual transparency, and displaying the adequate amount of flexibility when required.

5.5 Crisis Management

The event of a crisis striking either party of the outsourcing venture can occur at any time. Therefore, both sides of the outsourcing venture must be adequately prepared for how to make the business continue. Hence, if a well-established outsourcing provider is chosen, then crisis management can be reduced substantially.

5.6 Risk Management

Just like any other aspect of a business relationship, one important factor to be considered is risk management. It is a safe approach for both sides of the outsourcing venture to study and analyse the different forms of risks that can be encountered and work on adequate back-up plans before signing the contract. Preforming this act will reduce any risk involved significantly.

5.7 Cost Management

One of the most important reasons for deciding to perform outsourcing as cited in literature is cost. This is because outsourcing allows both the service provider and the client to achieve considerable profit. Hence, it is expedient that both parties perform an analysis on the pricing and scope of the project to be outsourced before signing the contract.

6.0 CONCLUSION

Outsourcing has been acknowledged commonly and being seen as a growing practice in modern world. Hence, it is natural that outsourcing’s scope and extent is increasingly developing. Most importantly, the need for knowledgeable and sophisticated approach for outsourcing and its management are of greater value and importance to outsourcing partners. This study has been able to propose important areas that outsourced manufacturing partners need to pay greater attention in order to enhance successful outsourcing best practice within the manufacturing sector. Specifically, this study presented seven major project management strategies namely communication management, performance management, knowledge transfer management, relationship management, crisis management, risk management and cost management. These strategies will guide the relationship between supplier-manufacturer to ensure best outsourcing practices within the manufacturing sector.

References


[38] FMM. 2011. Federation of Malaysian manufacturers directory, Malaysian industries [42th ed.], Kuala Lumpur; FMM.


