

To Evaluate the Effectiveness of Strategic Outsourcing to Strategic Sourcing in Small Manufacturing Sector

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ABSTRACT

Procurement in 2020 will look different than it does today. In future new concepts will alter existing assumptions and introduce new thinking beyond purchasing raw-material. It will require additional skills, knowledge and tools to address new challenges while solving current ones more creatively. And it will likely change the very core of how companies look at procurement as an organisatioanl function and an overall company competence.

When we analyse the present economic scenario with the global competition and the thrust to reduce the manufacturing cost & overheads of any manufacturing company in order to survive make anyone think of bringing immediate change in manufacturing sector by concentrating on the biggest cost contributor in any product which is raw-material and its procurement strategy. This research paper evaluates the effectiveness of Strategic Outsourcing compared to presently followed Strategic Sourcing in manufacturing sector.

The main concept here is that instead of procuring raw-material, maintaining Inventory than off-loading for manufacturing which adds up purchase cost, Inventory cost, manpower, infrastructure, machines, tools, Jigs & fixtures, companies need to go for Strategic Outsourcing. The change by going for strategic outsourcing and reducing number of Suppliers by procuring the sub-assemblies or partly processed goods will reduce the product cost significantly. It is observed that many countries have taken advantage of Strategic outsourcing except in India. in this situation, we felt a research is required to evaluate the effectiveness of Outsourcing.

Keywords: Strategic sourcing, Strategic outsourcing, Manufacturing Raw-Material.

INTRODUCTION:

In this research we shall give a new outlook for procurement activities in any manufacturing Industry. As we know Procurement / Purchasing is to buy a product or service by an individual or business.

Strategic sourcing is an institutional procurement process that continuously improves and re-evaluates the purchasing activities of a company (Wikipedia) All these are well followed in manufacturing sector in India and still we feel lot needs to be done to improve the Procurement function with regard to lead time, resource utilisation, Quality compliance, Inventory levels, fund flow etc.

So, let us discuss on the terms of Strategic Outsourcing were-in we can overcome the shortcomings of Strategic Sourcing.

When most people think of the term outsourcing in regard to a manufacturing company, they immediately think of moving production out of the United States to another country or offshore outsourcing, which is usually in the case of Software Industries. Manufacturing companies have a myriad of reasons for outsourcing production, but the main impetus for deciding in favour of outsourcing usually boils down to one thing: cost reduction. (<https://smallbusiness.chron.com/reasons-outsourcing-manufacturing-industry-1292.html>)

Outsourcing has become a common word in today's manufacturing and service industry. It is very much required in today's competitive business environment to manage costs and to focus on core business or focus on

making products which the company infrastructure and resource permits. This situation is faced by any small manufacturing units which gets a big business opportunity to fulfil, but lacks with the required resource and infrastructure and needs to go for strategic outsourcing.

Some of the benefits that can be gained by small manufacturing units are:

- Cost reduction from purchase personnel head count, Inventory Control
- Cost of Labour for producing the item if not outsourced.
- Outsource from specific suppliers and earn better discounts.
- Can have options to reduce or increase the required quantities.
- Outsourced supplier knowledge will assist the industry to go for high end Customers
- Manage the most important aspect of a small unit working capital management.

This research will evaluate the effectiveness of Strategic Outsourcing to Strategic Sourcing in small manufacturing sector and not restricted as per the understanding that outsourcing procurement is often undertaken by only large companies to save money.

LITERATURE REVIEW:

2a. According to Mr. Mike Tayles and Mr. Colin Drury study on Moving from Make/Buy to Strategic Sourcing: The Outsource Decision Process ([https://doi.org/10.1016/S0024-6301\(01\)00080-2](https://doi.org/10.1016/S0024-6301(01)00080-2)) Companies are paying increasing attention to outsourcing components and processes. In most of today's business environments the decision to outsource has many ramifications, not least the impact on capital budgets. On the one hand, the decision to outsource releases capital that can be used elsewhere. On the other, the decision to continue in-house keeps open strategic options for the product in question, but has knock-on effects due to the reduction in capital. However most companies separate the process of making capital allocations from the purchasing function. This paper examines how one company moved to a position where purchasing was integrated with top functions, especially capital budgeting. It achieved this by working off the strategic sourcing model described in this paper. We understand from this research, that we can avoid investing on capital budget by outsourcing the required Job and reaching the required growth in production.

2b. In Citation by Ronan McIvor, (2000) "A practical framework for understanding the outsourcing process", *Supply Chain Management: An International Journal*, Vol. 5 Issue: 1, pp.22-36, <https://doi.org/10.1108/13598540010312945>.

Over the last number of years, outsourcing has become an important issue for many organisations. The potential for outsourcing has moved from peripheral activities such as cleaning and catering to critical activities such as design and manufacturing. However, there is evidence to suggest that organisations are not achieving the desired benefits from outsourcing. Outsourcing decisions are rarely taken within a thoroughly strategic perspective with many firms adopting a short-term perspective and being motivated primarily by the search for short-term cost reductions. The aim is to illustrate that outsourcing should be carried out from a strategic perspective and integrated into the overall strategy of the organisation by proposing an outsourcing framework. The framework attempts to overcome some of the problems associated with outsourcing by integrating a number of key strands related to outsourcing including a value chain perspective, core competency thinking and supply base influences into the decision-making process.

Here, it is clear that we need to take a strategic decision whether we go for Strategic Sourcing or Strategic Outsourcing within the company frame work.

2c. Steffen Kinkel , Bernhard Rieder , Djerdj Horvath and A. Jäger 's Conference paper in 2016 , provides novel empirical evidence that the establishment and development of in-house value-adding activities pays off for manufacturing companies in several economic respects. In contrast to common belief and management practices, extensive outsourcing of manufacturing activities has a strong negative impact on a firm's profit and total factor productivity (TFP). Mere cost-efficiency comparisons seem to be insufficient for appropriate make or buy decisions. Neglected factors like sub-par product variant and delivery flexibility capabilities of far-shore suppliers or internally disturbed competence formation and value creation processes are in many cases overcompensating the supposed cost benefits of outsourcing.

2d. Pinuccia Calia and Silvia Pacci in *International Journal of Business and Management* 12(11):87 · October 2017 study, presents an empirical analysis of the production outsourcing effect on firm productivity and profitability in the Italian manufacturing industry. This study uses firm-level panel data that were developed by the Italian National Statistical Institute. Using different estimation strategies, we develop panel data models and correct for possible endogeneity bias of the outsourcing with respect to the target variables. We find a non-significant effect of outsourcing on profitability and a significant negative effect of outsourcing on productivity.

2e. In Trang Nguyen Thi Thuy, TORNIO 2014 - Analyzing the potentials of outsourced manufacturing and selecting an efficient outsourced manufacturing model - The case of May Dai Phuc Ltd. aims to analyze the potentials of outsourcing strategy and select an efficient outsourcing model in the context of a manufacturing process within a single company. The first objective of this research is to find out the company's possibility and flexibility in outsourcing its manufacturing. The second objective is to discuss how outsourced manufacturing will influence the case company's current operational and financial performance. The third objective is to study the three most common outsourced manufacturing models currently used by national garment manufacturers and find out the most efficient one for the case company.

2f. Eiichi Tomiura 2007 in Journal of the Japanese and International Economies

Presented Foreign outsourcing and firm-level characteristics: Evidence from Japanese manufacturers study based on micro data of 118,300 firms without firm-size thresholds covering all manufacturing industries in Japan, this paper investigates the foreign outsourcing, distinguished explicitly from domestic outsourcing, at the firm level. Less than three percent of the firms are outsourcing their production across national borders. The fixed entry cost for foreign outsourcing is significant and related with the firm's human skills and foreign business experience. The firms tend to outsource more of their activities overseas when their productivity is higher or when their products are more labour-intensive.

NEED ANALYSIS:

Outsourcing is the term used for subcontracting certain processes to individuals or third-party agencies.

Outsourcing is used to put your company at a strategic advantage. Whether you're a sales, service, or manufacturing business, outsourcing provides opportunities that allow you to focus on your core competencies. (<http://ltxsolutions.com/outsourcing-opportunities-manufacturing/>)

Part of any analysis for a manufacturing company deciding to outsource any of its operations includes the cost of labour. Labour remains one of the biggest costs of any manufacturing company. Having employees on the company payroll means paying them a competitive wage and, for most companies, it also means providing some form of employee health benefits. But outsourcing labour costs doesn't always mean moving the production to another country. It can be done in a place logistically convenient to the small manufacturing unit. Also, a small manufacturing unit can take any number of orders with existing Infrastructure and do the work of small value addition to make it suitable as per the Customer needs and specification.

Hence here, we need to will evaluate the effectiveness of Strategic Outsourcing to Strategic Sourcing in small manufacturing sector.

RESEARCH METHODOLOGY:

Research Objective:

To analyse that the small manufacturing units gets benefitted by Outsourcing (subcontracting) certain processes to individuals or third-party agencies or units located in a place logistically convenient to the unit.

Research Question:

How Strategic Outsourcing is beneficial to a small manufacturing unit?

Research Hypothesis : Null(H0) & Alternate(H1) Hypothesis

H0 – The small manufacturing units do not get benefitted by Outsourcing few of its activities to another small or tiny sector units

H1 – The small manufacturing units gets benefitted by Outsourcing few of its activities to another small or tiny sector units.

SCOPE OF RESEARCH / EXTENT OF COVERAGE :

The study is for a Small Scale unit manufacturing components for Electrical Meters located in South India.

SAMPLE DATA :

The actual data collected by involving with company's Top Management and Production Planning team and analysing the existing demand for their products manufactured or assembled, their In-House Capacity, the lead time taken in satisfying their customers, their core area of manufacturing and trying to find the gap in getting more customer orders.

SAMPLE METHOD:

The actual data were collected by quoting for Customers enquiry (RFQ's), for an Electrical item used in Energy meter. Here, the customer order quantity was big (ie around 40 to 50 lakh assemblies annually). But, the company where the research was conducted did not have the infrastructure to make few operations to finish the assembly process suitable for the customer requirement.

But, we used the strategic outsourcing idea and searched a vendor who can fulfill our process gap by giving Job Work to his company (located around just 4 km from the company).

This idea was a motivation to go ahead and start giving offers to customer requirements of similar assemblies and gained a regular flow of orders.

RESEARCH ANALYSIS :

The company order value before and after taking new assemblies for supplies by outsourcing few operations for which the infrastructure was not available were compared before and after going ahead with strategic outsourcing.

RESEARCH DESIGN:

The company in which the research study was conducted were manufacturers of Cable Assy. & Wiring Harness and supplying to many major industries in south India. Due to Competition and value engineering from Customer companies the orders started reducing and the small manufacturing company approached us for a research study to draw strategy to sustain the Industry business and make profits. After few discussions, the team PD (Product Development) was formed. The existing customers were approached first and asked for orders from them, as the company had good relation already with the customers. One of the customer floated an RFQ (Request for Quotation) regarding an item called shunt assembly used in Energy Meter.

It had the following items and process which needs to be fulfilled by the Company;

- a. it had a copper and an alloy called manganin joined with Electronic beam welding with defined size,
 - b. It was supposed to be spot welded with a copper strip which required cutting, bending and punched to the given specification.
 - c. The final process was soldering of wires, heat shrinking of sleeves twisting of wires and tinning process were required.
- The company was able to source the copper alloy (Shunt Manganin) in roll form and the same was to be cut and punched. The needed copper strip was also sourced in roll form, needed to be cut, bend and punched to the required specification. Both components were made to order and not available over shelf.
 - Now, both the manganin and copper strip was required to be made to particular shape and size and it needed Dies, tools. Fixtures and machines. This infrastructure was not available at the company and after research analysis, it was decided to outsource the required machining work to a job-worker.
 - The research team along with company vendor development personnel visited few vendors who had the facility to do copper cutting, bending, punching process in large quantities by making their own tools/Jigs and fixtures.
 - After few hardships, a vendor located around 4 km was finalised to get the required JOB-Work activity done. The raw- material required for the process were decided to be supplied by the company on job-work basis.
 - Some new machines for spot welding were purchased for in-house final assembly process and the manpower was increased which enabled the company to make and despatch the customer required product successfully. Most important is to ensure good quality and keeping the cost under control, which was strategically planned.
 - The orders flow started and the idea of the strategic outsourcing worked very efficiently.

RESEARCH RESULTS:

In this Empirical research , the need to increase the Customer orders with the existing infrastructure was studied by analysing the gap and implementing the idea of Strategic outsourcing and getting few machining process from an outside vendor was very well achieved.

Initially, training the Outsourced Vendor till he is capable of handling the job independently was little difficult, but after two or three supplies the outsourced vendor started to give the required parts with good quality independently without any assistance from the parent company. The routine quality checks by the Company Quality personnel was defined to have a smooth flow of material from the outsourcing Vendor.

This resulted in an increased orders and turnover of the small manufacturing Company under study and it was possible to evaluate the effectiveness of Strategic Outsourcing to Strategic Sourcing in Small Manufacturing Sector which showed positive results.

CONCLUSION:

It is observed from this research study that even small scale units can utilise the idea of Strategic Outsourcing instead of strategic sourcing in few cases and the effectiveness can be achieved. Hence Null Hypothesis is proved wrong and alternative Hypothesis stands correct.

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