

BENEFITS E-PROCUREMENT SYSTEM

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Abstract

Procurement is one of the particular activities in business that demands high attention. In the service industry, the procurement department plays a major role in ensuring that the supply of raw materials and goods is planned, purchased, distributed, and consumed efficiently. An influx of activities such as requisition, acquisition, and quality checks are done in this department. In estimating the total cost of acquiring goods and services, it is important for organizations to identify unit costs and other costs associated with operations and maintenance that occur during purchasing and conserving of goods. Recent studies have reported the usage of an Electronic Procurement System (EPS) that replaces the conventional procurement system typically used in the service industry. This paper aims to explore the current practice, effectiveness and efficiency of the procurement systems used in the Malaysian service industry through a systematic review of literature. Findings of this study will assist service businesses to analyze their procurement activities and develop proper strategies that can reduce costs, increase efficiency, and most importantly, improve their bottom line.

Keywords: Procurement, E-Procurement, Purchasing, Supply Chain Management, Service Industry

Introduction

In the current situation, service organizations are competing with each other based on the characteristics of services offered to the customers (Razalli, 2018) besides price and other promotional activities. Despite this competition, one area that contributes to the success of a business is the back-office operation. One particular precursor that was known to contribute to the success is the procurement system. It was found that procurement plays a major role towards the success of the establishment (Mohd Nawi, Roslan, Salleh, Zulhumadi, & Harun, 2016).

One particular department that plays a very important role in the success of a business is the procurement and purchasing department (Ahmad Rosli & Ahmad Rahman, 2017). Procurement is an act of acquiring goods and services to fulfill the needs and wants of a particular operation that is guided by the right process, the right service provider or supplier and it should be in accordance with the quality and quantity needed at the specified time of the inventory (Awadallah & Saad, 2018). The procurement system plays a significant role as it deals with purchases, documentations, procedures and processes (Mohd Nawi et al., 2016). According to Ivanovska (2004), procurement system in the establishment is one of the most important elements to secure return on investment of businesses. However, as the world and industry progress, it was known that business establishments are vigorously trying to improve their procurement systems in order to minimize operating costs and maximize profits (Kothari, Hu, & Roehl, 2005). These establishments are indeed relying on a procurement system that can assist them to save money and time in order to optimize profits (Aikins, Asibey, Adjei, Broni, & Christian, 2014). Notwithstanding, new internet related technologies were found to be the solution and have high potential to improve the procurement process (Osmonbekov & Johnston, 2018).

Procurement is an important aspect in businesses (Bratt, Broman, Robèrt, & Sophie, 2012) and it is the

key aspect that can control the transaction of a deal in obtaining the products and services required by a company (Gunasekaran, McGaughey, Ngai, & Rai, 2009). Procurement processes have to be done carefully, because it is very crucial to ensure that every transaction can benefit an organization's efficiency, profitability, and sustainability (Bozarth & Handfield, 2006).

Procurement Issues

In most countries, the procurement role moves from a clerical non-strategic focus to an important socio-economic element that is capable of changing business decisions and improving value transactions (Kakwezi & Nyeko, 2010). The changes create tension on how the procurement role conducts its internal and external systems and processes to accomplish that goal (Tiwari, 2019). Improper procurement processes will lead to problems to the quality and quantity of a product or services acquired by the organization. Procurement process starts from the beginning (needs recognition) until the very end (record keeping). Every company needs a good procurement process that will help them to make an efficient transaction and save them on the costs of purchasing (Croom & Brandon-jones, 2007).

Some issues will occur if the procurement systems are not controlled efficiently. El Sawalhi and El Agha (2017) postulated that improper purchasing systems will lead to time wasting, prolonged processes and costs addition. This contention is further supported by Tiwari (2019), as the business enters the procurement phase, where time means money, and errors often occur in the procurement process. Therefore, a solid proper procurement system is vital for the organization's success (Tiwari, 2019). Sometimes incorrect invoices are frequently produced and the transactions are not verified and authorized and no one claims to be responsible or accountable for a particular transaction (Angeles & Nath, 2007). Eei, Husain, and Mustaffa (2012) proposed that despite specific policies set by the management, it was found that there is no assurance that the procurement system will be properly followed by the employee. This poses a major problem to many organizations.

Other than the additional labor costs incurred, improper procurement system will also require the company to spend more, if the procurement process fails to acquire the required resources (Gunasekaran et al., 2009). For example, there is a situation where the person who handles the purchasing is unable to verify the legitimacy of an invoice after the transaction is completed, to make things worse the company still has to pay the vendor. Late payments, extra fees and penalties result in additional costs to the company. Late payments also trigger dissatisfaction among suppliers, if this happens it will harm the good relationship between the organization and the supplier (Tiwari, 2019). Furthermore, Yu, Cotarla, Embury, and Nemeth (2017) stated that storage inventory costs can be eliminated when an effective procurement process is appropriately implemented.

Another important issue that arises when using improper procurement system is that employee motivation can drastically decrease. As mentioned by Toktaş-Palut, Baylav, Teoman, and Altunbey (2014), the impact of technology on work exponentially increases the rate of production and speed at which business occurs and technology in the workplace will facilitate workers to become more efficient than ever before (Larcinese & Miner, 2014). Razalli (2018) emphasized that a company that does not have a good procurement practice will lose their competitive advantage. Citing from the manufacturing experience, in today's competitive business environment, systematic procurement approaches aid businesses to gain competitive advantage in controlling inventories, reducing purchase overlaps and improving manufacturing cycles. Excellent procurement systems provide improved visibility towards day-to-day transactions and assist businesses in profiling the most suitable suppliers (Ahmad Rosli & Ahmad Rahman, 2017).

Although many studies have investigated the consequences of improper procurement systems, it is difficult to find a study that is able to propose a comprehensive and practical procurement model that can be regarded as the solution to the problems derived from the use

of improper procurement systems. This study is meant to integrate the existing procurement models into a comprehensive and practical model that can be used by organizations to achieve efficiency, productivity and sustainability.

Literature Review

Supply Chain Management

Supply chain management is a method or process flow which is often used by suppliers, manufacturers, warehouses, stores, and producers to ensure products (raw materials) are delivered, received, stored, and distributed at the right quantity and quality (Cho, Lee, Ahn, & Hwang, 2012). The method ensures accurate number of orders, time, and location without compromising the standard of goods and services as well as creating value for money (Bozarth & Handfield, 2006). Supply Chain Management (SCM) emphasizes the interactions that take place among the marketing, logistic and production departments within a firm and those interactions that take place between the legally separate firms within the product flow channel (Presutti, 2003). Opportunity for cost reduction or improving customer service can be achieved through coordination and collaboration among co-workers and the system (Kothari, Hu, & Roehl, 2007).

Procurement

Procurement is an activity or process to acquire goods and services. Importantly, it is distinguished from purchasing, and procurement comprises activities such as establishing fundamental requirements, sourcing activities such as market research, vendor evaluation, and negotiation of contract (Bratt et al., 2012). Procurement continues through the processes of risk assessment, seeking and evaluating alternative solutions, awarding of a contract, the delivery of and payment for the goods and services and, where relevant, the ongoing management of the contract and concern of disposal of goods (Awadallah & Saad, 2018). In many instances, many parties have mistaken the difference between procurement and purchasing. Part of the process in procurement is 'purchasing', this process consists of activities such as product and services requisition from the department, receiving goods or services from vendors and distributing them to the intended departments (Knudsen, 2003). In other words, procurement can be described as the whole process of acquiring goods and services between vendors and firms (Cho et al., 2012). It also ensures comprehension of how to satisfy particular needs like something arising suddenly with a tight deadline (Sigala, 2006). It also helps other staff in the same organization to understand how to select the best source without the need to reinitiate the preliminary steps once again.

Key Performance Drivers for Procurement Process

Five main key performance drivers have been identified for the procurement process, these include; time, cost, quality, reliability and technology (Turner, 2011).

Cost: There is no doubt that the search for lower costs of materials has been the greatest driver for procurement strategy. In order to win the preference of consumers, business enterprises are striving to produce cheaper and more distinct products to meet the needs of their potential customers. Raw materials or products supplied by a particular supplier may be too expensive, and the same materials are obtainable at a cheaper price from vendors elsewhere. This is the main feature for procurement strategy, which is motivated by cost minimization.

Time: Due to some difficulties like availability of capital and locations, some suppliers may be unavailable to supply the required materials or probably incapable of meeting the required delivery time. This has motivated the developments of procurement strategy in order to source

for the best candidate that could meet the company’s needs at the right time.

Quality: For some products, buyers usually put high emphasis on the quality. In many instances, the quality of raw materials or products obtained from a supplier is often unsatisfactory or insufficient. For a company to maintain its competitive advantage, it may adopt a procurement strategy to vigorously seek for raw materials that meet its requirement or specification.

Reliability: The procurement process is handled by a professional who oversees and manages the inflow of external resources into the company. The procurement process is quite a challenging and critical task depending on the extent of a project that a company is executing. Each company has its own characteristics, divergence in strategy, size, product range and market coverage.

Technology: Some suppliers do not have access to the state-of-the-art technology, therefore, affecting their reliability to provide raw materials based on the agreed arrangement. As a result, buyers develop their own procurement process to identify the most reliable suppliers.

To overcome the limitation of the existing conventional procurement system, e-procurement has been proposed by Kothari et al. (2005) that integrates the existing procurement system with information and communication technology. As a result, e-procurement is able to facilitate the procurement process by mostly reducing the time taken to order supplies and decreasing the rate of errors previously made by using the old system. The ensuing discussion will focus on the description and benefits of using e-procurement.

e-Procurement

The purchasing department in the buyer’s internal marketplace defines the scope of the products to buy and invites vendors to bid or negotiate prices. The agreed-upon prices (contract prices) are stored in the buyer’s internal electronic catalogue/ databases. The final buyer or end-user (not the purchasing department) can compare the various alternatives either from the electronic catalogue using the Internet or from the internal databases. An organizational purchasing decision would tightly follow the internal work flow management system where business and purchase rules are predefined. Supplier selection is extremely important to enhance quality, reduce delivery time, and minimize purchasing costs. The information in the internal databases or the electronic catalogues can be updated manually using software agents. These systems not only allow end-users to order products and services online without intervention by the purchasing department but also enable automatic fulfilment by the supplier organization and payment via electronic funds transfer or credit card payment as illustrated below (Kothari et al., 2005).

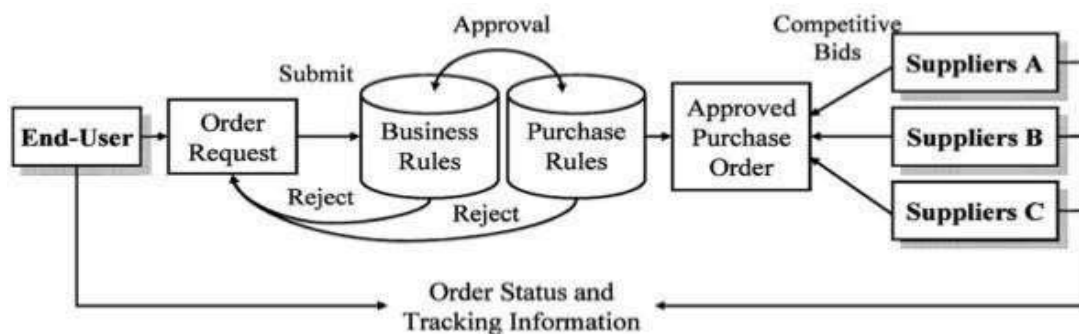


Figure 1 : e-Procurement (Kothari et al., 2005)

Although e-Procurement has substantially streamlined the procurement and coordination processes for indirect goods, many companies operate multiple e-Procurement solutions. For integrated procurement solutions, the paper recognizes the need for an overall procurement strategy and

organization, alignment of various e-Procurement solutions along the procurement process and the need for integrated system architectures. Companies also have to realize that no standardized e-Procurement solutions exist and the success factors are 'non- technical' in nature (Puschmann & Alt, 2005). On the other hand, the widespread use of information technology has changed the way businesses operate and compete in the industry. These changes have resulted in a substantial expansion in the availability and transparency of information and new forms of competition (Ronchi, Brun, Golini, & Fan, 2010). However, it was found that not all vendors are ready to adopt the e-Procurement system as many of them need to be educated before they are ready to be a partner with an establishment that employs e-Procurement. Although e-Procurement is still very much in its infancy stage in the lodging industry, one may expect to see a rapid increase in its functionality that will assist both buyers and suppliers in the electronic environment over the next few years, as Larcinese and Miner (2014) asserted that the low adoption of e-Procurement in service industry specifically in the hotel industry may explain why this industry is still very far from other industries, for example, the manufacturing industry. e-Procurement may be very influential and beneficial; however, if companies do not have clear visibility of costs and benefits of the system, they are unlikely to invest. This is one of the main reasons why companies are reluctant to implement e- Procurement (Tatsis, Mena, Van Wassenhove, & Whicker, 2006).

Level of Adoption

Not all e-Procurement vendors might be compelled to team with other organizations (Larcinese & Miner, 2014). According to Kothari et al., (2005), e- Procurement provides substantial market capacity as well as vulnerabilities, for example the organizations are unable to manage or have low capacities to deal with complicated procurement procedures, and this may lead to the rise of integrity risk level. Direct interaction with potential suppliers is more difficult to avoid at the local level, because of the close community is also one of the weaknesses (Saeed & Leitch, 2003). Even though e-procurement is still in its early stages in the service industry, a rapid increase in its compatibility can be expected to help both consumers and vendors in digitalizing their business environment for the next several years (Ahmad Rosli & Ahmad Rahman, 2017). The minimal implementation of e-procurement in the service industry primarily illustrates why e-procurement is clearly far behind the other industrial sectors.

Discussion

Due to changing customer demands, rapid development in technology, increase in the costs of production, availability of substitute products and others, e-procurement is the best alternative for companies to stay competitive in the business (Saha & Grover, 2011). E- procurement provides advantages for companies to achieve competitive edge such as reducing time to secure raw materials required to produce the required products, selecting the best suppliers who can reliably meet the quality and other product specifications as required, and those who have the compatible system that can facilitate the procurement process (Mohd Nawiet al., 2016).

However, e-procurement can also be regarded as an obstacle for companies that are using soft or intangible indicators in selecting suppliers (Gunasekaran et al., 2009). Supplier traits such as trustworthiness and honesty will be crossed out from the selection process when using the system (Saeed & Leitch, 2003). In some instances, supplier traits are crucial in ensuring that the procurement process can be executed without any unintended glitches (Angeles & Nath, 2007). Another issue is that the system is unable to predict future behaviour of the supplier (Turner, 2011). From the transaction history, the supplier might be shown as reliable but due to some business environmental changes, the capability of the supplier also changes, and the system will not be able to provide this valuable information.

It is suggested that companies that want to implement e-procurement should also consider other aspects of suppliers including intangible factors such as supplier traits and changes in economic

conditions and social trends so that the right decision can be made and the long-term relationship between the supplier and the organization can be sustained (Angeles & Nath, 2007). Combining the e-procurement system with the conventional way of making decisions will ensure the sustainability of businesses. Relying on only either technology (high tech) or human skills (high touch) will not guarantee future success (Mohd Nawi et al., 2016).

Lastly, e-procurement may reduce the size of eligible suppliers as some suppliers may exit the competition due to high investment required to implement e-procurement (Sitar, 2011). It is undeniable that some of these suppliers are very good and have the potential to be further developed. In this case, the buyers should be willing to invest in suppliers to grow them for the benefit of both parties. This kind of investment should be considered as a long term investment since those who are involved in this arrangement will harvest the yields perhaps ten years from the date of investment. But the most important thing is the establishment of long term relationship and commitment between parties.

CONCLUSION

This study will provide insights for industry players in improving their procurement system. The finding of this research will be published so as to ensure that the knowledge is well disseminated among the industry players. This would also assist academicians for future research and enrich the literature on procurement systems.

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