Whether eprocurement can achieve competitive advantage



In such competitive environment resulted from globalization, firms must create more dynamic strategy over their competitor to survive in the business sector. Due to competition from various companies has increased as advancements in technology; it has broken down the traditional barriers to entry the market. Therefore, at the ever changing world, procurement process has been transformed into strategic resources. The use of new technology in procurement has provided substantial benefits. However, some organizations are exploiting competitive advantage through mergers, acquisitions, supply and distribution channel imptovements (Hamel and Prahalad 1994), as cited in Longenecker and Ariss (2002).

- 2. 0 Research Objective
- 1. To determine that whether e-procurement can achieve competitive advantage
- 2. To investigate whether total quality management can achieve competitive advantage
- 3. To examining whether implementation of e-procurement in total quality management can help to achieve further competitive advantage.
- 3. 0 Research Questions
- 1. Does e-procurement results in competitive advantage?
- 2. Does total quality management results in competitive advantage?
- 3. Does implementation of e-procurement in total quality management can help to achieve further competitive advantage?

- 4. 0 Hypotheses
- 1. E-Procurement can result in competitive advantage.
- 2. Total quality management can result in competitive advantage.
- 3. Implementation of e-procurement in total quality management can provide further competitive advantage.

Literature Review

- 5. 0 E-Procurement and Competitive Advantage
- 5. 1 Conceptualization of E-Procurement

Nowadays, the evolution of e-procurement is becoming more successively and interested on a global scale. According to Min and Galle (2003), e-procurement is defined as 'business-to-business purchasing practice that utilizes electronic commerce to identify potential sources of supply, to purchase goods and services, to transfer payment, and to interact with suppliers' (as cited in Pearcy and Giunipero 2008, p. 26). Besides that, electronic procurement consists of e-Maintenance Repair Operate (MRO), web-based Enterprise Resource Planning (ERP), e-sourcing, e-tendering, e-auctioning, e-exchanges and e-informing (Min and Galle 2001; Knudsen 2003; Walker and Harland 2008).

Apart from that, an Aberdeen Group (2001) found that e-procurement technologies are divided into 2 categories: direct procurement and indirect procurement (cited in Angeles and Nath 2007). Direct procurement is the

purchase of high volume raw materials that used in the manufacturing process of a finished product (Harrigan et al. 2008). Whereas indirect procurement is the purchase of maintenance, materials and operation goods that are not directly involved in the production process such as office supplies, personal computers and advertising (Bof and Previtali 2007). Apart from that, procurement process involves a complex series of events which allows a firm to more from the basic need to reaching a final purchase decision through technical specification and potential supplier evaluation (Robinson et al. 1967, cited in Osmonbekov et al. 2002). Hence, many firms in diverse industries adopt the strategy of e-procurement and focus on restructuring the entire order-to-delivery process rather than specific task in order to improve the efficiency of purchasing or supply management function as well as reduce operation costs of organization.

5. 2 Conceptualization of Competitive Advantage

The achievement of sustainable competitive advantage has long been the goal of companies and organizations. However, due to the rapid change in the global environment, researchers from various backgrounds have come up with their own different perspectives to identify definition of competitive advantage. In traditional industry, the importance of industry structure and market position plays significant roles to achieve competitive advantage (Porter 1980, cited in Ma 1999; Passemard and Kleiner 2000).

According to Pfeffer and Vega (1991), the conceptualization of competitive advantage can be described as organizational practice, resource and asset that used to improve an organization's competitive position in the

marketplace (as cited in Longenecker and Ariss 2002). Porter (1985) further description on 'competitive advantage grows out of the firm's unique ability in creating superior customer value' (as cited in Ma 2002, p. 525). However, recently, Rindova and Fombrun (1999), state that competitive advantage is built on relationship and not an exchanges sustained social interactions in impressions which may affect future behaviors (cited in Tzokas and Saren 2004).

5. 3 Competitive strategies in E-Procurement

'E-procurement has been seen to have the potential to play a pivotal role in a firm's endeavours to create a competitive cost advantage that lasts for many years, hence grounding sustainable competitive advantage' (Bloomberg et al. 2002, p. 14) cited in (Pires and Stanton 2005). In order to achieve sustainable competitive advantage, company should concern on the implementation of organizational business strategy in area of e-procurement. However, if the organization fails to apply a successful strategy, it will result in loss of business productivity and competitiveness which will undermine the long-term performance of the organization. Apart from that, a firm can enhance its market position and competitive strength by developing procurement strategy. Below are the competitive strategies which e-procurement can achieve competitive advantage:

5. 3. 1 Cost Reduction

The reduction of purchasing cost has been recognized as one of the most significant purposes in procurement (Collis and Montgomery 1995), since the average manufacturing firm spends half of its sales revenue on the purchase https://assignbuster.com/whether-eprocurement-can-achieve-competitive-advantage/

of materials (cited in Ordanini and Rubera 2008). Furthermore, research shows that by using e-procurement can achieve cost saving which average reduction in purchase price of 17 per cent (Bartezzaghi and Ronchi 2005, cited as Harrigan et al. 2008). Additionally, by implementing e-procurement in an organization, it can help us to reduce purchase price of materials and costs that related to internal workflow of activities such as equipment and labour costs. With the use of electronic procurement, transactions can be proceed through HTML, EDI, e-mail and Internet which can eliminate the usage paper requisition for placing order, invoice as well as receipt (Sarkis et al. 2004). Additionally, 'Companies using e-procurement have reported savings up to 42% in purchasing transaction cost associated with less paperwork, which translates into fewer mistakes and more efficient purchasing process (Davila et al. 2002).

5. 3. 2 Efficiency Maximization

E-procurement can improve the efficiency of the process which order fulfillment time can shortened up to 80 per cent (Minahan 2001, cited in Harrigan et al. 2008) as well as reduced the inventory levels (Min and Galle 2003). Thus, e-procurement has impact on the purchasing cycle time and delivery time.

In order to achieve high quality performance, mostly organizations has seen the benefits of applying new technologies in its manufacturing processes because it can manufacture in a high volume production without any concerns in regards to cost. The investment in advanced equipment has enabled the company to achieve a high level of process capability that could

not achieve by manual processes. Due to there are many repetitive and complicated tasks that machines can do which human being cannot do it.

According to Bof and Previtali (2007), electronic procurement can accelerated the flow of important information between buyers and suppliers as well as elimination of transaction errors by transform the way of purchasing raw material from traditional methods to online. Currently, the use of internet serve as a foundation of data flow for strategic manufacturing purpose in e-procurement such as using barcodes in firms to manage the raw material. As the workflow automatically routes information through the purchasing process without re-keying all the date, user can use it easily and with a minimal error.

According to Smith and Correa (2005), they stated that by using e-business can lead to highly accurate information gathering though proper database via internet and it enable to indentify each product moving throughout supply chain. Apart from that, the information that recorded in the system are stored in a real-time fashion, therefore, users can acquire an accurate tracking in supply chain compared with the traditional manual methods. Therefore the adoption of e-procurement will improve efficiency that can strengthen competitive advantage in firms and industries.

In general, firms should adopt the e-procurement strategies to achieve competitive advantage among the competitors. For instance, firms need to learn the management practices which are reduce production costs by elimination waste and achieving higher efficiency to capture the attention of the suppliers.

- 6. 0 Total Quality Management and Competitive Advantage
- 6. 1 Conceptualization of Total Quality Management (TQM)

Since 1980s, TQM has been regarded as one of the competitive strategies for firm to improve their competitive advantage and has widely implemented throughout the world (Kuei et al. 2001; Brah et al. 2002; Rad 2006). Besides that, TQM has been widely regarded as rational structure and scientific tools for the improvement of quality as well as improve competitive advantage (Sun 2000; Li et al. 2002).

There is no universally agreed definition on TQM as many researchers have their own beliefs and prejudices towards the term (Martinez-Lorente 1998; Sun 2000; Psychogios and Priporas 2007; Klefsjö et al. 2008). However, the definition provided by researchers is more like vague descriptions than definitions and contain terms as "... a philosophy, which ...", "... an approach for ..." (Klefsjö et al. 2008). As just an example, Rad (2006) defines TQM as a philosophy which provides a template for success to an organization through customer satisfaction. On the other hand, in recent years, a tendency toward agreement on a system perspective of TQM has been suggested.

One such definition is from Hellsten and Klefsjö (2000), who define TQM as a continuously evolving management system consisting of core values, methodologies and tools, the aim of which is to increase external and internal customer satisfaction with a reduced amount of resources (cited in Klefsjö et al. 2008, p. 121).

The definition provided by Hellsten and Klefsjö (2000) is stated clearly as it consists of three components which are interdependent and supporting each of the values to sustaining a culture based on a kernel of core values.

6. 2 Competitive strategies in TQM

In order to compete with the increasingly of competitors, it has forced organizations find ways to reduce costs while maintaining customer satisfaction and making continuous improvement to the products. Since 1980, TQM has been recognized as a way to achieve goal by establishing a quality-based culture for improving customer satisfaction. Apart from that, TQM has been widely recognized as one of the most competitive weapon, if implemented successfully, provides a competitive advantage for organizations through quality (Martins and Toledo 2000; Beskese and Cebeci 2001; Prajogo and Sohal 2004). In order to achieve the goals of organization, they should implementing successful TQM strategies.

6. 2. 1 Quality Focus

Currently, TQM have become a key focus for organizations as it considers as tools for improvement quality. According to Mandel et al. (2000), he noted that the implication of quality as a factor of international planning. Quality improvement refers to the efforts on increasing effectiveness and efficiency in order to satisfy customer expectations (Talha 2004). Organizations must plan the strategic to implement quality improvement planning into their business plan. If the organization has emphasized quality as an important strategic, this will leads to higher sales and operating profits as well as

improve the competitive positions of the firm as the customers will pay more to quality products that satisfy them.

Also, nowadays customers are become more sophisticated, continuous improvement in product quality is essential to satisfy their needs. Therefore, once the organizations satisfy the requirements of customer, items are producing according to specifications, it will minimizing defective items and the cost of rework (Khan 2003).

Yet, TQM will increase the organization's competitive advantage because they concentrated on the improvements to offer superior quality of products to its customers (Martins and Toledo 2000). Hence, quality improvement is essential for the very survival of a company to achieve competitive advantage.

6. 2. 2 Customer Focus

Customers have their expectations towards an organization which they patronize. If the expectations are not met, they will get dissatisfied and stop patronizing the organization; hence customer satisfaction is one of the important elements to attain competitive advantage. According to Bergman and Klefsjo (2003), 'satisfied customer are loyal customers and loyal customers are profitable customers and profitable customers make lucrative businesses and happy owners' (cited in Bergquist et al. 2005, p. 312). However, customers are usually irrational. In order to develop their potential quality, companies need to develop the strategies on customer focus.

Generally, customer focus means as 'the activities of the companies are intended to benefit the customer but the customer is seen from the companies' own perspective' (Lagrosen 2001, p. 350). Organizations should make an effort to gain information regarding the needs and wants of the customer rather than always focus on the companies' view of product and its features.

6. 2. 3 Process Focus

The goal of process management is to zeroing down the defective and failures rate as well as reduce process variation by building quality into the production process which can reduced cost. According to Ou et al. (n. d.), inferior quality manufacturing process will increase high scrap rate and rework rate which will lead to use more resource to produce qualified products. Therefore, firms should concern on process management to avoid the occurrences of unnecessary costs such as waste costs by finding quality problems immediately. TQM implementation can directly increasing firms' quality performance by improving manufacturing process, has indirect effects on increasing customer satisfaction as well as the reputation of firms.

By reducing unnecessary waste cost such as waste of production, avoidable process and waste of defects, firms can put into practice of lean production. According to Womack and Jones (1996), 'lean production has its origin in philosophy of achieving improvements in most economical ways with special focus on reducing waste (cited in Dahlgaard and Dahlgaard-Park 2006, p. 264). For instance, firm can designing the production process and giving orders and instructions to the workers. The improvement of manufacturing

efficiency will improve customers' satisfaction and eventually the company's financial performance.

6. 3 Adoption of e-Procurement in Total Quality Management to achieve Competitive Advantage

There is no clearly evidence shows that the adoption of e-procurement in total quality management can achieve further competitive advantage, however it can be shows that the ways of both e-procurement and TQM are almost using same strategies to achieve competitive advantage.

6. 3. 1 Business-to-business (B2B) E-procurement

E-procurement is defined as the use of information technologies to facilitate business-to-business (B2B) purchase transactions for materials and services (Wu et al. 2007, cited in Walker and Harland 2008). With the development of B2B e-procurement, the traditional method of business are replaced by the electronically transactions. Besides that, BCB e-procurement can help TQM in achieving competitive advantage.

6. 3. 1. 1 Cost Minimization

Application of e-procurement practices into total quality management is beneficial as it can improve facilitation of efficient and cost-effective trading routes to conduct business. According to Harrigan et al. (2008), e-procurement can reduce purchasing costs by amending the way raw materials are purchasing from traditional methods to online ordering. With the implementation of e-procurement, transactions can be proceed via e-mail, electronic data interchange, fax which can directly eliminate paper https://assignbuster.com/whether-eprocurement-can-achieve-competitive-advantage/

usage such as invoice, receipts as well as paper catalogs. However, Turban et al. (2006) argues that systematic procurement transactions tend to waste time on non-value-adding activities such as handling errors in ordering and invoicing, data entry which often time consuming and costly to trace (cited in Aboelmaged 2009).

6. 3. 1. 2 Efficiency Maximization

Apart from the cost reductions arising from transactional, e-procurement can also contribute to efficient purchasing process in many ways. As earlier mention, TQM have been emphasized that its main focus is improving product's quality, therefore it may be less paying attention on giving maximize efficiency. Consequently, by implementation e-procurement in TQM can achieve maximum efficiency. It is obvious that e-procurement greatly helps improve communication with suppliers providing access to the information 24 hours a day. Therefore, the system availability can makes it easier for businesses to receive order from the supplier and summit an order. By providing greater access, firms can reduce the purchasing cycle time and improved performance between buyers and suppliers. According to Choudhury et al. (1998), repetition in the procurement system will increase the efficiency and result in a higher level of electronic integration between buyers and suppliers (cited in Walker and Harland 2008).

6. 3. 1. 3 Methods of B2B e-procurement

Previously, most of the organizations are using traditional modes of communication such as phone, fax, memo and face-to-face. However, through evolution of the technologies, organizations can improve the speed https://assignbuster.com/whether-eprocurement-can-achieve-competitive-advantage/

in business transactions through the utilization of the B2B e-procurement methods:

- 1. Reverse Auctions. A reverse e-auction is a form of the electronic data communication which provides a forum wherein several suppliers compete online for contracts offered by a customer (Tassabehji et al. 2006). Due to no human intervention along with computerized accessible format, it can help both parties gain form less paperwork, shorted cycle times for circulation requesters for quotations, faster responses to potential bidders and reduced transaction costs (Plouffe et al. 2001).
- 2. Lean procurement. Lean procurement generally imply on small quantity of products purchased frequently from few suppliers, who deliver the items in exact quantities at the specific time and place (Wilson and Roy 2009). It also further noted that lean procurement unlike the traditional purchasing system such as TQM where the price considerations, suppliers are evaluated through the reliability, behaviors, performance as well as price. Based on the traditional purchasing system, the relationship between buyers and suppliers are based on the long-term trust and commitment.
- 3. Internet. Through internet, companies have ability to speed up the business transactions through a faster way as it allows companies to pay invoices and payment electronically. Besides that, the use of internet through videoconferencing provides a visual contract which allows companies communicate with the suppliers (Samaniego 2006).