

ROLE & INFLUENCE OF SUPPLIERS IN ADOPTION OF E-PROCUREMENT BY BUSINESS FIRMS

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ABSTRACT

E-Procurement connects business houses and business processes with the suppliers by managing all the correspondence between them. With changes in their environment many organizations are looking at changes in their procurement applications and initiatives. Several organizations are unhappy with their current procurement platforms and are looking at other alternatives. The primary reason for e-procurement failure may be the lack of supplier acceptance. The available e-procurement tools are inherently complex and tedious, and supplier adoption has been a critical issue with almost all of them. Procuring organizations often complain of the lack of supplier participation & involvement. This paper focuses on the role & influence of supplier in adoption of e procurement.

KEYWORDS: E-Procurement, procurement platforms, supplier acceptance.

INTRODUCTION

Procurement is the process whereby companies purchase goods and services from various suppliers. These include everything from indirect goods like light bulbs, uniforms, toilet paper, and office supplies, to the direct goods used for manufacturing products. Procurement also involves the purchase of temporary labor, energy, vehicle leases, and more. Companies negotiate discount contracts for some goods and services, and buy others on the spot. Procurement can be an important part of a company's overall strategy for reducing costs. Historically, the individuals or departments responsible for purchasing a company's goods and services relied on various methods for doing so. The most basic included placing orders via telephone, fax, or mail. Electronic procurement methods, generally referred to as e-procurement, potentially enable the procurement process to unfold in a faster, more efficient manner, and with fewer errors. These methods include electronic data interchange (EDI), online marketplaces or e-marketplaces, and various blends of the two.

With changes in their environment many organizations are looking at changes in their procurement applications and initiatives. Several organizations are unhappy with their current procurement platforms and are looking at other alternatives. As with any other

business software application, a fairly large number of e-procurement implementations end up in a fiasco. And when e procurement fails, the primary reason may be the lack of supplier acceptance. The available e procurement tools are inherently complex and tedious, and supplier adoption has been a critical issue with almost all of them. Procuring organizations often complain of the lack of supplier participation & involvement.

DEFINITION OF E-PROCUREMENT

E-Procurement (Electronic Procurement) is the business-to-business purchase and sale of supplies and services through the Internet as well as other information and networking systems. E-Procurement connects business houses and business processes with the suppliers by managing all the correspondence between them.

Success of the B2B commerce sites have accelerated the popularity and need for the perfect E-Procurement solutions. This term is also referred to as Supplier Relationship Management, but its ultimate goal is automating the workflows , identifying new sourcing opportunities and optimizing the purchasing processes so that companies can utilize their management time towards earning revenues and serving to customer needs.

LITERATURE REVIEW

Supplier factors in the proposed model provide inputs to the model building process. For that reason, a brief literature review in the related areas is given below to sketch out the background of this research study.

SUPPLIER FACTORS

This paper proposes a model of electronic procurement adoption which portrays the role & influence of supplier. The various constructs of the proposed of model are power of supplier, trust on supplier, pressure of supplier & buyers, pressure from supplier, supplier & buyer relationship, supplier participation, supplier involvement, supplier support & dependency on supplier.

RESEARCH MODEL

The research model is illustrated in the below figure 1. It describes the role & influence of suppliers in adoption of e-procurement by business firms.

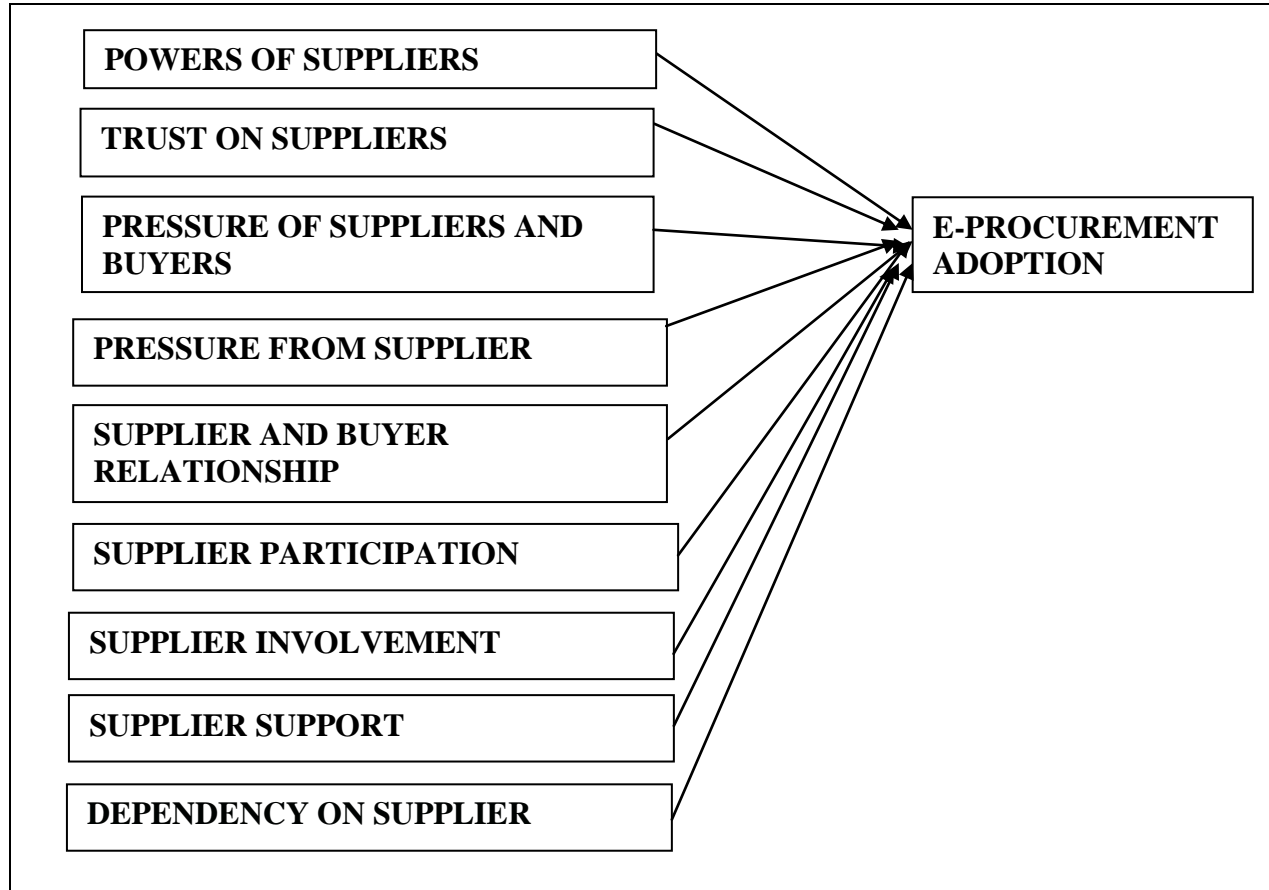


FIGURE 1. ELECTRONIC PROCUREMENT ADOPTION MODEL

POWERS OF SUPPLIERS

Meanwhile the power of supplier will be described in two ways, the power of suppliers (government) over its buyer (SME) and the power of external pressure to SME. Chan and Lee (2003) stated that, the seller has power over the buyer when it is not easy to find a substitute for its good and service. Meanwhile based on the studied done by Heck and Ribbers (1999), they suggested that external pressure has a power to influence SME to adopt new system approached. Power of external pressure can be define as competitive pressure and the imposition by trading partners. Chan and Lee (2003) found that there is not as significant as expected in the relationship between power of suppliers and level of e-procurement adoption.

TRUST ON SUPPLIERS

Trust on suppliers is ranked second in terms of significance in affecting e-procurement adoption by SME. The Internet is a important communication medium for SME to establish and tighten relationships with their suppliers. However, without trust, even low-

value transaction would not have been done. The level of trust the company has in its trading partner depends on how familiar it is with its partner. In other words, the longer the relationship the buyer company has with a particular supplier, the more it is familiar with that supplier, and trust is built in this way.

The dimensions of trust although the result from this study shows that there is a positive and significant correlation between trust on supplier and e-procurement adoption Malaysian SME, but it is in a low coefficient correlation value. This finding is contradicted to the research conducted by Chan and Lee (2003) who claimed that trust on suppliers is ranked second in terms of significance in affecting e-procurement adoption by SME.

PRESSURE OF SUPPLIERS AND BUYERS

Ling (2001), Rasid and Al-Qirim (2001) have addressed the relationship between the pressure of suppliers, and that of buyers, on the enterprise and the adoption of e-commerce. It seems that this influence depends on the characteristics of the suppliers and buyers, such as geographical distance, habits, tradition and purchase behavior. Another common form of external pressure to adopt e-commerce is that coming from customer demands, such as branded firms requiring their suppliers to adopt e-commerce. For example, multinational corporations create coercive pressures on their subsidiaries and suppliers by requiring them to use ecommerce technologies to link to global production networks. Several empirical studies have found such coercive or normative pressure from trading partners, customers or parent corporations to be a strong determinant of EDI adoption (Chwelos et al. 2001; Iacovou et al. 1995; Teo and Pian, 2004).

Supplier pressure is particular strong when the buyer side is less powerful or a significant proportion of other network players have adopted information technology. Subramanian and Shaw (2002) highlighted that competitive pressures are an important component in the adoption process.

PRESSURE FROM SUPPLIER

According to Fink and Kazakoff (1997), Small- and Medium-sized Enterprises are usually characterised by a high level of environmental uncertainty such as fluctuations in interest rates, reliability of supply, competition, etc. Related to this point that the use of IT and Electronic Commerce is often imposed on Small- and Medium-sized Enterprises by major customers or suppliers. Such pressure from trading partners plays a critical role in previous studies of IT and Electronic Commerce adoption by small firms (Beatty, 1998; Iacovou, Benasat and Dexter, 1995; Swatman and Swatman, 1991; Webster, 1994). The other variable that stems from the industry factor is the competitive pressure which Small- and Medium-sized Enterprises faced within the industry.

SUPPLIER AND BUYER RELATIONSHIP

Buyer-seller interactions in supply chain relationships generate innovation (Roy et al., 2004). A high level of interactions involves higher collaboration and information exchange which, in turn, positively influence innovation in services (Alam, 2002).

It has been shown that successful buyer–supplier relationships have high levels of trust, information transfer, coordination, and openness (Monczka et al., 1998). Successful buyer supplier relationships also have been shown to lead to improvements in quality, on time delivery of goods, and enhanced financial performance (Carr and Pearson, 1997; Stuart, 2003). In turn, successful relationships can be viewed as a source of competitive advantage and may lead to increased profits for both the buyer and seller (Carr and Pearson, 1997; Dyer 2000, 1996; Stuart, 2003).

When examining buyer-seller relationships, the notion of evolution is important and can be the source of paradox (O’Driscoll, 2008). Relationships are not stable, but constantly evolving. Various classifications of the development of the buyer-supplier relationship have been proposed and used in the academic literature, from transactional to relational (Archer and Yuan, 2000; Gro’nroos, 1994), opportunistic to collaborative (Cousins and Spekman, 2000), arm’s-length to partnership (Dyer, 2000; Sako, 1992), exit to voice (Mudambi and Helper, 1998), partner selection to relationship maintenance (Wilson, 1995), searching process to termination process (Batonda and Perry, 2003), etc. While the names differ, their central premise is identical: relationships evolve. However, deliberately making the relationship evolve in a given direction can be a delicate matter. Building closer relationships must be based on the appropriate tradeoff between relationship costs and benefits (Gadde, 2004). Existing interactions influence the organization and its network (Wilkinson, 2006). Therefore by modifying the interactions the buyer-seller relationship is ultimately influenced.

With regard to buyer–supplier relationships and online auctions, it has been proposed that online auctions may lead to reduced supplier coordination. This reduction in supplier coordination may stem from the fact that online auctions tend to increase the level of competition while simultaneously decreasing the level of trust and information transfer; both important factors in successful buyer–suppliers relationships. Therefore, online auctions have been recommended for commodity or near commodity items such as maintenance, repair, and operations (MRO) items, standard materials, and services delivered through suppliers with similar capabilities (Hartley et al., 2004). For these items it may be said that supplier collaboration need not be as important when employing online auctions as in the case of less commoditized goods and services.

SUPPLIER PARTICIPATION

Supplier participation has the strongest influence on e-procurement intentions. Such a result is not unexpected as both sides of the dyad need to incorporate e-procurement processes if benefits are to be obtained. Suppliers willing to participate in e procurement will have a strong influence on the intentions of their buyers. Previous research on supplier participation also had a positive influence though the strength of the influence was not as strong as in this case (Deeter-Schmelz et al., 2001). This strong finding though contradicts research which have shown that relationship priority and trust and not important influences in the adoption process (Carr and Smeltzer, 2002; Zahay and Handfield, 2004).

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SUPPLIER INVOLVEMENT

E-Procurement implementation success is closely related to early supplier involvement. It is important to demonstrate the proposed solution to the suppliers and discuss any necessary changes, issues, and concerns such as various options in developing and maintaining supplier catalogues (Birks et al., 2001). According to the OSD (2001), providing opportunities for suppliers to offer their feedback will allow the public procurement department to monitor areas for improvement and adjust practices accordingly. Because many suppliers may be unwilling to conduct business electronically with public sector agencies because they are unclear about the benefits to be gained, they might see e-Procurement as a means by which public sector agencies will simply attempt to force down prices (ECOM, 2002). Suppliers, therefore, should be educated on the e-Procurement benefits that can be provided to them through a process of consultation as early as possible in the project. The degree to which the success of an e-Procurement initiative can be realized may well be related to the level of e-readiness of suppliers, and appropriate communication with suppliers is therefore important (AOT, 2003).

SUPPLIER SUPPORT

Vendor support is also an important factor because vendors play a crucial role in shaping the ultimate success of any IT application by facilitating user acceptance (Zhang.L, et al., 2003). For any software package, vendor support is needed for technical assistance, organising training, and emergency maintenance.

Our finding about the influence of vendor support on e-procurement systems acceptance is also in harmony with the views expressed in the IT literature. Authors like Igbaria et al, 1995 and Raymond and Bergeron,1992 reported that vendor support in the form of technical support given to customer organisations and training users are essential for successful implementation of IT systems.

DEPENDENCY ON SUPPLIER

If a firm has only one or a few suppliers, it has higher dependency on its supplier. In other words, its supplier possesses higher power in this dyadic buyer-supplier relationship with this particular customer. The firm has to change to e-procurement when its main supplier requires it to do so. This is especially the case when the firm is a relatively small one that the supplier can be so aggressive to influence the decision of its customer. Kirby and Turner (1993) have confirmed this proposition in their study where they found that dependency of a small business customer on its suppliers has an effect on its decisions. To most companies, the most common source of pressure or motivation to adopt electronic procurement comes from trading partners who have already adopted it. As an e-

procurement system is an inter-organizational system based on the Internet, the importance of inter-organization relationship is apparent. This conjecture has been supported by empirical studies that pressure from trading partners plays a critical role in IT and electronic commerce adoption (e.g. Iacovou et al. 1995 and Chwelos et al. 2001).

Thus, hypotheses can be formulated as follows:

H1: Pressure from supplier is positively associated with adoption of e-procurement.

H2: Higher the involvement & participation of supplier, higher is the level of adoption of e-procurement.

H3: Power & Trust of suppliers is a positive predictor of adoption of e-procurement.

H4: Higher the support of suppliers; more likely is the adoption of e-procurement.

H5: Greater the dependency on supplier, greater is the rate of adoption of e-procurement.

H6: Positive Supplier & Buyer relationship enhances the rate of adoption of e-procurement.

CONCLUSION

This paper focused on the role and influence of Supplier in the adoption of e-procurement by business organisation. The formulated hypothesis can be tested for the future research. This can also help in identifying the degree of influence of supplier in the adoption behavior.

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