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Ahmed Altayyar
PhD Student
University of Bedfordshire
UK

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Athens Institute for Education and Research
8 Valaoritou Street, Kolonaki, 10671 Athens, Greece
Tel: + 30 210 3634210 Fax: + 30 210 3634209 Email: info@atiner.gr
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Ahmed Altayyar
PhD Student
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Abstract

This study investigates the current state of e-procurement in Saudi Arabian SMEs in order to evaluate benefits and barriers to the adoption of the process and finally presents a conclusion. A theoretical framework for the adoption of e-procurement used by Gunasekaran and Ngai (2008) in Hong Kong and also on SMEs on the south coast of Massachusetts in USA (2009) will be applied to selected Saudi Arabian SMEs in order to understand the adoption of technology and e-procurement by these selected SMEs.

Keywords: E-Procurement adoption,E-Commerce, Purchasing, current status or readiness, benefits and barriers.

Introduction

Information sharing, trust and communication with customers and suppliers have played a valuable role in the advancement of companies (Gunasekra et al, 2005). Such competition requires companies to adopt and use various electronic data exchange technologies such as World Wide Web, Electronic data interchange, Enterprise resource planning, the internet and E-procurement to automate and standardise various business processes. E-procurement is as important for domestic business operation as it is for global business operation (lee et al, 2008). E-procurement in SMEs has not gained much attention historically from vendors and researchers. More recently, the importance of e-procurement in international and domestic business operations has forced SMEs to adopt this approach (Arts, 2012).

Study Research Aim

The aim of this study was to explore the current status or readiness of selected Saudi Arabian SMEs for e-procurement adoption using the Gunasekaran and Ngai (2009) model and also to analyse the understanding of various people in the company about e-procurement and to evaluate the drivers and barriers of e-procurement adoption in the selected SME. The pilot study research objectives are as follows:

- examine the knowledge and understanding of participants from selected SMEs about e-procurement
- examine the current status and readiness of the selected SMEs
- examine the potential benefits, barriers and critical success factors to the adoption of e-procurement
- identify different types of procurement documents
- Investigate why IT and e-procurement is important for the future performance of the company.

Literature Review

E-procurement is an attempt to automate the traditional procurement system using various communication media to facilitate efficiently the process between different parties (Chang and wong, 2010). The media include mail, fax, and phone, and the most advanced and recent are e-mail and the internet (Thun, 2010 and Teo et al, 2009). So, this use of advanced electronic technologies to develop a traditional procurement process into a more advanced one is called e-procurement (Hawking et al., 2004). The complexity of the process depends on the type, size, and many other aspects of the business; therefore, agreeing on a single universal definition is not easy (Ronchi et al, 2010). The following paragraphs offer a number of definitions of

the e-procurement process.E-procurement can be defined as a comprehensive process in which organizations use IT systems, to establish agreements for the acquisition of products or services (contracting) or purchase, products or services in exchange for payment (purchasing)(Wu et al., 2007).Similarly, Croom and Brandon-Jones (2005) has defined e-procurement asthe use of web integrated Information technology to carry out search, sourcing, negotiation, ordering, receipt and review of products and services.

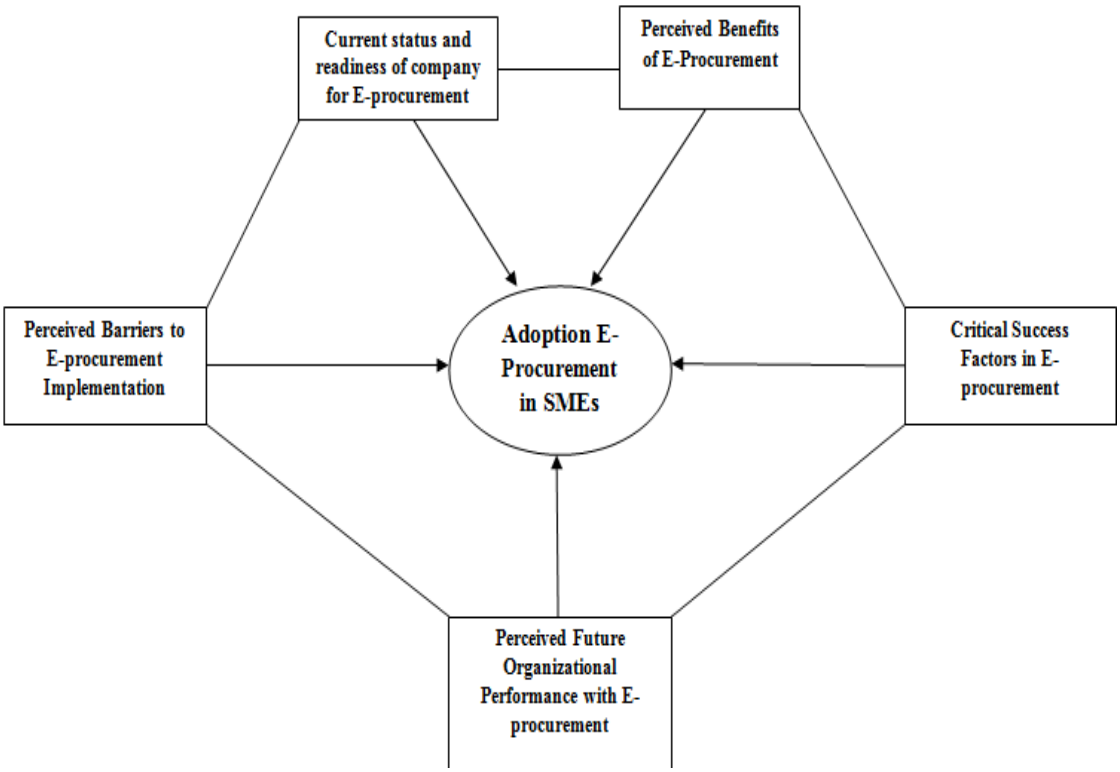
According to Chipiro (2010),since the start of e-boom in 1990s, consultants, investors and executives anticipated that e-procurement would play a central role in revolutionizing the way supply chain management and other business operations occurred. It was predicted that e-procurement would reduce the cost of procurement and enhance the flow of information along the supply chain management,and that, as a result, the bond of relationship between networked business organisations would become stronger and deeper (Makatsoris et al, 2001).Today, we see that almost all businesses have adapted to enterprise resource planning (ERP) systems, which are a strong foundation for e-procurement. As mentioned in the previous paragraphs, e-procurement is a complex process and includes various practices, such as e-coordination, e-sourcing and e-communities (Jap and Mohr, 2004).

Adoption of E-procurement

In order to meet the demands of dynamicity and the more competitive nature of the modern business world, the purchasing process in businesses has been transformed from a traditional clerical nature to a more strategic focus managerial function (Lutz, et AL, 2010). IT has been the main driver in transforming business purchasing activities into a more value-added strategic business function (Rajkumar, 2001). The two main reasons why businesses are looking to implement IT are because it makes the purchasing process more time efficient and less costly. MacManus (2002), in one of his surveys, found that 85% of people thought IT is time saving while 75% believed it to be cost effective. Similarly, Sharrard (2001) conducted a survey in Forrester Research Inc. and found that 45% of people in 35 local state governments believed that the use of IT had lowered printing/paper cost while 43% thought the response and turnaround time was faster. Reddick(2004) found that positive support for e-procurement in the e-government development model for state management capacity and high performance was indicated. Many firms who have implemented e-procurement believe that they have gained financial benefits, e.g., General Electric, a US firm, believes that it has saved more than US$10 billion per year (Hawking et al., 2004). Similarly, renowned global firms who have been using e-procurement for quite some time, such as Renault, Nestle and Motorola, all accept that the process has reduced annual costs hugely and has helped them achieve a competitive advantage over other similar firms (Yu et al., 2008).

Academic Theory and Gunasekaran and Ngai Model: A Theoretical Framework

E-procurement has the ability and potential to enable SMEs to adapt to the needs of modern-day business and is economically more productive and profitable for Businesses (Narayanasamy et al, 2008). Adoption of e-procurement is a challenging task for SMEs due to their small size and limited resources. Lack of awareness and its effects on organisation performance are the main reasons for SMEs' slow progress towards e-procurement adoption (Mohamed, 2010). A research study was conducted by Gunasekaran and Ngai (2008) in Hong Kong and in the South Coast of Massachusetts in the USA (2009). The model adopted shows factors that are of key importance for SMEs' owners and managers to consider while adopting e-procurement. This research will test the Gunasekra and Ngai (2009) model.The adoption of e-procurement in Saudi Arabian SMEs faces many challenges and barriers (Alshehri et al, 2012).One difficulty is the lack of knowledge and awareness about e-procurement and its effects on firms' performance (Abdallah and Albadri, 2010). . A theoretical framework for the adoption of e-procurement used by Gunasekaran and Ngai (2008) in Hong Kong and also on SMEs on the south coast of Massachusetts in USA (2009) will be applied to selected Saudi Arabian SMEs. From the literature, it is evident that the framework highlights the benefits and importance of e-procurement issues that might arise and the critical factors for the success of e-procurement, which include communication systems, financial systems, top management support, security systems and company priorities etc. Though extensive literature research, the study identifies issues specific to SMEs and will help owners and managers in their decisions about e-procurement adoption.



Current status and readiness of SMEs for e-procurement

According to the National e-procurement Research Project Australia(NePRA), readiness refers to the current use and expected future level of adoption of e-procurement (Basri and Dominic, 2010). It further states that the readiness of an organisation and its technological infrastructure are critical determinants of successful e-procurement adoption. E-procurement changes the way a business operates and interacts with both suppliers and customers and changes the manual hard way of dealing and placing orders to simple clicks of the mouse (Chien and Ahrens, 2001). The organisation gets many benefits from adopting e-procurement including a reduced purchasing cycle time, reduced costs, a minimum number of suppliers, less managerial complexity and an improved response time. The organisation can expand and obtain a competitive advantage in today's high paced dynamic business world, thereby grabbing a maximum market share in its industry of expertise. The organisation can derivea benefit from global suppliers and, at the same time, can make progress towards acting in the global business world (Basri and Dominic, 2010).

Perceived Benefits of E-procurement

Doherty et al (2013) argues that the extent to which an organisation understands and acknowledges the benefits of e-procurement will greatly influence e-procurement adoption. If an organisation doesnot know about the benefits of e-procurement, meaning the organisation lacks the technical and managerial knowledge required for e-procurement adoption, the organisation will not get any benefit from e-procurement(Uyarra and Flanagan, 2010). Thus, awareness of e-procurement and of other new and innovative technologies is extremely important for the adoption of e-procurement. Roche (2001) highlighted some of the perceived benefits of e-procurement, which include supply chain integration, real-time information and a seamless procurement process. Improved ties with suppliers, time efficient order fulfilment, better service, good price from suppliers, low inventory cost, and reduced order cycle time, are some other benefits of e-procurement implementation (Panayiotouetal., 2004). Many firms consider e-procurement merely as a use of IT to communicate with suppliers;however, this attitude fails to take into account the strategic and tactical benefits the process offers to the organisation. This lack of knowledge and understanding discourages firms from implementing e-procurement. Attaran (2001) grouped the benefits of e-procurement implementation into three categories: strategic, high leverage and operational advantages.

Perceived Barriers of E-procurement

Gupta and Narain (2012) states that barriers to e-procurement adoption include lack of technical knowledge and skills, lack of capital, lack of technical tools, and lack high skilled people. Similarly, people's resistance to change and a lack of cooperation and commitment from top management are other barriers

to e-procurement adoption. Some key barriers to e-procurement adoption have been identified by Hawking et al. (2004):

i) Lack of procurement on suppliers' side.
ii) Security of transactions.
iii) cost and nature of technology
iv) lack of technical brain and knowledge
v) lack of legislation
vi) lack of business relationship with suppliers
vii) Lack of standards for data exchange.

Liao et al. (2007) investigated and highlighted some infrastructural and behavioural barriers to the adoption of e-procurement. Theyidentified behavioural barriers that included the purchasing party obtaining favours from the supplier, information leaks, and false floor prices, and their infrastructural barriers included a lack of the technology and the expertise required to run such a process.

Critical Success Factors for E-procurement in SMEs

Critical success factors are elements that are considered essential for successful e-procurement adoption in SMEs (Sila, 2013). One key critical factor in SMEs is limitation of resources such as human expertise and monetary resources. (Chan et al., 2012). Chan et al. (2012) further state that in spite of this, most SMEs tend to be innovative and flexible in adopting new technology. Other factors include the nature of the services and products offered by the organisation, its business scope, its role in the supply chain, the product mix, the volume of its business in the industry and its role and influence in the service and product industry (Panda and Sahu, 2012). Similarly, Fu et al. (2004) mention certain critical factors such as promotional incentives, top management commitment, feasibility in terms of money and resources, government support, stepwise transformation and maintenance, as well as other operational procedures. Reddick (2004) states in his e-government growth model that the IT capability of the organisation and competent and knowledgeable management that are familiar with the pros and cons of e-procurement are essential for the successful adoption of e-procurement. Tas and Genis-Gruber (2008) believed that culture is also a key determinant of e-procurement adoption. The role of culture will be very significant in Saudi Arabian SMEs (Baker et al, 2010).

Perceived Organisational Performance

The support of top management and their belief that e-procurement is important is significant for the adoption of e-procurement (Ramdani et al, 2009). E-procurement can provide strategic, operational and tactical advantages for the organisation in the future (Attaran, 2001). However, the belief of top management decides the extent to which the process will positively influence the performance of the organisation. Top management'sin-

depth knowledge and understanding of the process and of the financial, technological and human resources costs involved in the process is a pre-requisite for both the short- and long-term benefits the organisation can obtain by adopting the process. Similarly, they need to know the impact of the process on the organisation's relationship with both suppliers and buyers. Historically,the management and owners of SMEs are focused mostly on short-term goals rather thanon long-term goals, which is something not desirable in this case. They must be aware of the changes in business environments around the globe; the use of new technology, especially the internet and the concept of virtual supply chain; resource planning; and supply chain management. The focus should not be only financial gains, but there are non-financial aspects of the business that are equally important.Wamba et al (2008) found that electronic product code and radio frequency identification technology had a positive impact on an organisation's return on investment and inventory turnover as well as on overall cost and quality.

Saudi Arabia and its SMEs

Saudi Arabia has 25% of global oil reserves and is the biggest economic power in the Middle East (salameh, 2011). The country has recently achieved macroeconomic stability through growth in the consumer market, and the GDP rate is very strong. Global investors are showing greater interest in the country, and many have invested in various business sectors. Recently, the government has taken some important steps, such as the establishment of six modern "economic cities" in different parts of the Kingdom. The country's economy has grown substantially since the country achieved membership of the World Trade Organization (WTO) in 2005. According to the World Bank Annual Economic survey for 2009, the Kingdom of Saudi Arabia was declared the strongest economy in the region. Also, a combined survey conducted by the International Finance Corporation (IFC) and the World Bank identified the country as the most suitable place for business in the Arab region five times in a row. According to the World Bank Annual report for 2010, Saudi Arabia was declared the 13th strongest economy in the whole world (ATEX, 2011).According to Al-Saleh (2012), SMEs make up 97% of total business in Saudi Arabia. He further stated that 86% of these are small enterprises and 11% are medium-sized enterprises. SMEs contribute 28% of the total GDP generated by the private sector of the country. The development of this sector is, therefore, of highest importance for the economic growth of the country, particularly since the country joined the WTO in 2007 (CITC Report, 2012).

Internet Use in Saudi's SMEs

The extent of internet use in Saudi Arabian SMEs is difficult to establish as most of the studies conducted in this regard have focused on larger companies. According to Adaileh (2012), the majority of SMEs have websites and use the internet but only for promoting business and not for business solutions. He further stated that there is a general perception that Saudi Arabia is very advanced in the use of the internet. Nonethless, SMEs use the internet

as a tool to communicate with customers; although most of these SMEs have websites, the website does not play any role in business operation.

Methodology and Research Design

A thorough study of the relevant literature and previous research has allowed a model to be selected that would be suitable for an investigation of the adoption of e-procurement within Saudi Arabia. The selected model appears to provide a strong foundation for the theoretical framework for the research (Cataldo, 2012).

The methodology will comprise the following elements:

- A research design which demonstrates the flow of processes undertaken
- A research strategy which explains the techniques and methods adopted for the research
- The methods used for collection and analysis of data.

This study is to be carried out under an exploratory qualitativeresearch design using the case studies method and interview technique, as these are useful in answering‘why’ and ‘how’ questions that are linked with situations occurring over a period of time. The exploratory technique will allow us to explore a situation where there is no single or clear set of outcomes (Yin, 2009). According to Yin (2009), case studies are the ideal tool for preliminary research where the focus is on collecting evidence (interviews, documentation), which is also the main objective of the present research, but are equally useful for descriptive and exploratory research. Case studies can also be used for a detailed illustration of data collected via other methods of research, such as surveys. The sample for this study will be three Saudi Arabian SMEs. The degree to which a particular phenomenon (in this study, the factors affecting the adoption of e-procurement in selected Saudi Arabian SMEs) can be generalised and compared to other situations is sufficient. The case study approach is especially important for providing an account of existing situations and real life contexts. Case studies can be applied to study single or multiple cases, e.g., this study will focus on three SMEs from Saudi Arabia, comparing and contrasting the three cases in order to arrive at a single robust conclusion (Yin, 2009).

Data Collection and Analysis of the Study

The pilot data was collected from three different companies, namely, Suzuki Saudi, Khatib & Alami (KA) and Al-Maram. 27 interviews in total were conducted taped and transcribed (Table 1). The interviewee responses clarified various questions with detailed reasoning in the context of different e-procurement decisions. In first case study (Suzuki Saudi), the director, the

deputy director, the head of IT and two other employees from the IT department, the head of the accounts department and three of his assistant employees, and the head of marketing and two other marketing department employees were interviewed. Similarly, in the second company (KA), the director of the procurement department and his deputy, the head of the finance department and one of his employees, the director of the HR department and one of his employees, andthe head of the IT departmentand three of his employees were interviewed. Also, from the third company Al-Maram, the company director, the director of procurement and his deputy, IT assistant, and finance officer were interviewed. Suzuki had between 90 to 100 employees, KA had from 60 to 80, and Al-Maram had from 30 to 40, which qualify them as SMEs, by all accepted definition of the term(RCC, 2003). There was a combination of structured and semi-structured questions asked in the interview (9 semi-structured questions) and five structured questions for demographic information as is explained in following charts.

Table 1. *Total Numbers of Respondents from Each Company*

Company	Number of respondents
Suzoki Saudi	12
KA	10
Al-Maram	5
Total	27

Current Status and Readiness of Companies for E-procurement Adoption

The research examines the current status and readiness of selected SMEs in Saudi Arabia. Respondents from the selected companies were asked about whether the company had a website and the type of information published (Table 2). From this it can be concluded that Suzuki Saudi and KA are relatively ready for the adoption of e-procurement as they have websites and, as stated in the demographic question, they have experienced and qualified staff to run and take advantage of e-procurement. In comparison to the case studies in Gunasekra and Ngai(2009), the SMEs in Saudi Arabia are very behind in their current status because none have adopted any e-procurement models while in the case of the southeast coast, 41% of SMEs had a B2B model, 25% had EDI and others had various others. In this case, 66% (2/3) companies had a website while in Gunasekra and Ngai(2009), 72% firms had a website. Similarly, in both cases, the websites mostly had information about the company and products - 75% in case of Gunasekra and Ngai (2009) and 74% in this case. However,this is in contrast to the case in Gunasekra and Ngai where 1.4% of the websites were involved in online buying and selling in Southeast coast,and in this study, none of the three selected SMEs (0%) were involved in online buying and selling. Similarly, in the south east, 6% of total employees were involved in e-procurement while in Saudi Arabia,it was only 3% (3/100) in the case of Suzuki.

Table 2. *Responses on Current Status and Readiness of Companies*

Interview Statement	Saudi Suzuki	KA	Al-Maram
Q1/ No, do not have website	0/12 (0%)	0/10(0%)	5/5(100%)
Q1/ Yes, have website	12/12(100%)	10/10(100%)	0/5(0%)
Q1/Information about company	11/12(91%)	9/10(80%)	0/5(0%)
Q1/Information about products or services	10/12(83%)	8/10(80%)	0/5(0%)
Q1/References materials for potential customers	7/12(58%)	0/10(0%)	0/5(0%)
Q4/Don't have	12/12(100%)	10/10(100%)	5/5(100%)
Q5/ Don't have	12/12(100%)	10/10(100%)	5/5(100%)
Q7/people involved in the procurement process	3	2	1
Q9/Internet	12/12(100%)	10/10(100%)	5/5(100%)
Q9/E-mail	12/12(100%)	10/10(100%)	5/5(100%)
Q9/Fax	2/12(16%)	1/10(10%)	3/5(60%)
Q9/Phone	2/12(16%)	2/10(20%)	4/5(80%)

Perceived Benefits of Adoption to Internet and E-procurement

The responses obtained from people in three selected SMEs show that they considered the use of internet and technology very important and an efficient way to run a business (Table 3). Almost 100% (27/27) of respondents from all three companies considered it very important and believed that it supports the business environment (Q-2). Similarly 9/12 (75%), 8/10 (80%)and 2/5 (24%) respondents from Suzuki, KA and AL-Maramrespectively believed that it would allow their business to operate 24/7 while 24/27 (87%) respondents from Suzuki, KA and Al-Maramthought that it would save companies time and reduce costs (Q-3). From this it is evident that Suzuki and KA who currently have websites (Q-1) and better technological resources (Q-7) have realised the benefits of internet and technology more than Al-Maram, which hasnot realised it to such an extent. In contrast to Gunasekra and Ngai (2009), where 31% of respondents didnot consider the internet and technology important for their business and around 36% people were not certain about it, here, 100% of people in all three companies considered it a very important factor although the three companies were from different industrial sectors and were doing different types of business, which indicates how greata value they gave to the use of internet and technology.

Table 3. *Responses on Perceived Benefits of Companies*

Interview Statement	Saudi Suzuki	KA	Al-Maram
Q2/ It is very important	12/12(100%)	10/10(100%)	5/5(100%)
Q2/ It support the business environment and it is difficult to work without it.	12/12(100%)	10/10(100%)	5/5(100%)
Q2/It allows the company to operate 24/7	9/12(75%)	8/10(80%)	2/5(24%)
Q3/It leads to a reduction in processing time	11/12(91%)	9/10(90%)	4/5(80%)
Q3/It leads to a reduction in transactional cost	11/12(91%)	9/10(90%)	4/5(80%)

Perceived Barriers to E-procurement Adoption

On examining the responses obtained from people in the three selected SMEs (Table 4), it is evident that most of the respondents 27/27 (about 100%) from all three companies mentioned a lack of transparency in the legal system of the country and the business culture, and a weaknesses in the payment and delivery systems and other technological infrastructures as being the main barriers to the adoption of e-procurement. However, on average, about 14/27(50%)of respondents, from the companies mentioned top management support, lack of skills and knowledge and lack of awareness as being some of the barriers to the adoption of e-procurement. (Q-8)From this it can be concluded that there are some barriers that are beyond the control of these SMEs and are in the hands of the government, and it will take some time before these SMEs can adopt e-procurement. In Gunasekra and Ngai's (2009) study, there was no mention of legal, infrastructural or cultural barriers; rather, lack of resources, customer satisfaction with the current system and costsand so onwere seen as the major barriers.Similarly, 19% of respondents believed that they did not have the skills to implement the process asopposed to 50% in this case. This means that the SMEs in Saudi Arabia are behind the SMEs on the southeast coast.

Table 4. *Responses on Perceived Barriers of Companies*

Interview Statement	Saudi Suzuki	KA	Al-Maram
Q8/ Lack of awareness of what can be provided by information technology and e-commerce	6/12 (50%)	6/10(60%)	2/5(40%)
Q8/ Lack of a culture of business to change and transparency	12/12(100%)	10/10(100%)	5/5(100%)
Q8/Infrastructure for internet connections or the high cost of access to the internet	11/12(91%)	8/10(80%)	4/5(80%)
Q8/Lack of legal and regulatory in the country	12/12(100%)	10/10(100%)	5/5(100%)
Q8/Luck of top management support	6/12(50%)	6/10(60%)	2/5(40%)
Q8/Luck of us the local language and local content	3/12(25%)	2/10(20%)	2/5(40%)
Q8/Lack of Skills and Knowledge in E-procurement	6/12(50%)	6/10(60%)	2/5(40%)
Q8/Lack of payment systems and delivery in country	12/12(100%)	10/10(100%)	5/5(100%)
Q8/Culture resistance to use of e-procurement in Saudi Arabia	12/12(100%)	10/10(100%)	5/5(100%)

Critical Success Factors for Implementing E-procurement Systems

The interview results show that respondents mentioned several critical success factors (Table 5) that can be obtained as a result of the adoption of the internet and e-procurement, such as detailed, in-depth and timely information about the products and services; and the distribution of information to millions of customers etc. Similarly, around 10/12 (83%), 9/10 (90%)of respondents from Suzuki and KA mentioned top management support and involvement, and approximately 7/12 (58%),7/12 (70%) of them also mentioned supplier's collaboration. In addition, communication with customers and suppliers, database collaboration with website data, and obtaining industry-related information were some other CSFs mentioned by the respondents. The results of the critical success factors are mostly in line with those from Gunasekra and Ngai's (2009) study except that there was no mention of organisational structure and communication between stakeholders, which might be due to there being less awareness amongst interview participants in the selected Saudi Arabian SMEs.

Table 5. *Responses on Critical Success Factors for Implementing E-procurement Systems*

Interview Statement	Saudi Suzuki	KA	Al-Maram
Q1/ There is industry-related information	8/12 (66%)	3/10(30%)	0/5(0%)
Q2/ It allows the company to collaborate its internal information with information on website	8/12(66%)	7/10(70%)	0/5(0%)
Q2/It is an efficient way to communicate with a large number of suppliers and customers	10/12(83%)	9/10(80%)	4/5(80%)
Q2/It allows the business to provide in depth and timely information about products and services	11/12(91%)	8/10(80%)	3/5(11%)
Q3/It provides an ideal platform for organisation to get and give feedback to suppliers about several of its products	7/12(58%)	7/10(70%)	2/5(40%)
Q3/There is top management involvement and support	10/12(83%)	9/10(90%)	4/5(80%)

Perceived Future Organisational Performance with E-Procurement Adoption

Regarding perceived organisational performance (Table 6), some respondents mentioned that it would definitely affect the organisation positively in the long run. They mentioned issues such as better utilization of resources, reduction of cost, and close networking and communication with other companies and suppliers (Q-3). They also mentioned generating better revenues and maximizing the quality of service (Q-3). However, only a limited number of people mentioned these, and they were not very certain about the perceived benefits as they had not realised the full implementation of e-procurement and other e-technological tools. The data obtained were slightly different from those in Gunasekra and Ngai(2009) as the southeast coast SMEs were slightlyfurther ahead in the use of the internet and e-procurement and were not experiencing the type of barriers that the SMEs in Saudi Arabia experienced.

Table 6. *Responses on perceived Future Organisational Performance*

Interview Statement	Saudi Suzuki	KA	Al-Maram
Q3/ Organisation can benefit from process efficiency in both the long and short term	4/12 (33%)	0/10(0%)	0/5(0%)
Q3/ Better revenue can be generated	4/12(33%)	3/10(30%)	0/5(0%)
Q3/Internet and e-procumbent are instrumental in maximizing the quality of service	0/12(0%)	3/10(30%)	0/5(0%)
Q3/There is better utilization of resources and cost reduction	5/12(41%)	4/10(40%)	0/5(0%)
Q3/There is close networking with other companies	4/12(33%)	2/10(20%)	0/5(0%)

Conclusion

For the next stage of this study, a more extensive data collection phase will enable the evaluation of the Gunasekaran and Ngai (2009) theoretical model (GN Model) in order to determine its efficacy, operational relationship and critical success factors in relation to e-procurement adoption. It is anticipated that this will conceptualize the benefits and barriers to the adoption of e-procurement within the selected SMEs in Saudi Arabia. Research methodology will include both a qualitative case study approach and quantitative consideration via tools such as Analytic Hierarchy Process, which might be used to measure the priority and relationships of the model elements. If appropriate, this research will provide the basis to consider a modification to the Gunasekaran and Ngai (2009) model in terms of the relationships of the model elements.

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