

## “E-Commerce” A study on Kuwait Construction Industry

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**Abstract**— *With its great explosion and the advancement of related technology and services, such as the World-Wide-Web (WWW), the Internet has provided a rich environment for building Internet-based electronic commerce (e-Commerce) applications. Among the different types of e-commerce, business-to-business (B-to-B) is the one most widespread in terms of turnover. A unique aspect of B2B relationships is the buy-side marketplace and the development of efficient procurement processes between these business relationships. In order to enable the suppliers to be part of the electronic B2B trading community, e-markets have to adopt the suppliers as part of their online marketplace. Creating an e-market where both buyers and suppliers feel comfortable is no straightforward task. A common perception of e-Procurement thro' e-markets is that buyers benefit more than suppliers because they drive down suppliers' prices. Many suppliers have felt forced into joining e-markets, with the fear of lost trade hanging over them. In this era of escalated demand for growth, the construction industry across the globe faces issues of constant material price fluctuation and shortage of skilled resources. Today, enterprises are increasingly in need of sustainable, faster and safer methods of construction, innovative project delivery modes and procurement practices, as well as interoperable standards within the construction industry, which is really a big challenge to their existing supply chain to improve the efficiency and effectiveness. The aim of supply is to deliver the correct quantity of a quality product, at the correct time, in the correct place, and at the best price. Kuwait's already buoyant economy is the third largest in the Gulf Cooperation Council (GCC) countries, after Saudi Arabia and the United Arab Emirates has tremendous ongoing construction activity. This study uncovers the e-Procurement / e-commerce practices prevailing in Kuwait among the Construction Supply Chain community and maps the e-Procurement value propositions against the business potential of the suppliers and buyers in Kuwait.*

**Keywords** — *e-Procurement ,Construction Supply Chain, Kuwait.*

### 1. INTRODUCTION

The rise of Internet-based electronic commerce has changed the global business landscape forever. After a few years of explosive growth in the worldwide adoption of Web technology, business leaders have completely changed the way they perceive online technology. Once seen as an unfamiliar and threatening medium, the Internet has proven itself as a superb environment for commerce. In today's fast-paced competitive atmosphere, no B2B supplier that lacks a strategy to conduct sales and operations over the Internet may be considered a leader. Business-to-Business (B2B) electronic commerce is now universally recognized as the e-Commerce segment with the largest potential.

E-marketplaces can be described as virtual online markets where buyers, suppliers, distributors and sellers find and exchange information, conduct trade, and collaborate with each other via an aggregation of information portals, trading exchanges and collaboration tools. The growth of the Internet and commercial web-based applications is offering ever-increasing operational cost savings to large enterprises, extending trading communities and lowering the financial barriers to e-Commerce participation.

Organizations that move decisively and intelligently into Web business can register significant competitive gains. These include increased revenue, lowered costs, new customer relationships, innovative branding opportunities, and the creation of new lines of customer service. Sellers who fail to gear up for the coming B2B e-commerce explosion will not only pass up those opportunities, but in many industries will find their very survival threatened. As their customers and competitors outpace them, they will slide further into irrelevancy

### E-Commerce in Kuwait

Kuwait's already buoyant economy is the third largest in the Gulf Cooperation Council (GCC) countries, after Saudi Arabia and the United Arab Emirates, with its real gross domestic product (GDP) standing at US\$32.92 billion in 2002 (UNESCWA, 2003), which is powered by its 10% of world's oil reserves. Oil production and related industries drive the Kuwaiti economy. Robust oil prices backed by an upbeat investor market are spurring construction activity in Kuwait. In addition, the public sector has revived a string of projects, which have been kept on the back burner for long.

Madar research journal survey indicates that Kuwait ranks third among Arab Middle East Countries in terms of ICT infrastructure with an ICT index of 1.04, behind UAE and Bahrain. The Kuwaiti B2B and B2C e-commerce sector is gaining attraction, registering a total of US\$170 million in 2002 (Madar Research, 2002).

The bulk of the transactions were B2B in nature, valued at \$150 million, taking place between multinational companies and their local distributor and agents through private exchanges. Whereas requests for purchases (RFPs) are now being published in most of the government-owned websites, online procurement of government supply still does not exist in Kuwait.

TABLE 1  
B2B & B2C e-COMMERCE IN KUWAIT

	2002		2005	
	Madar Research	Ernst & Young	Madar Research	Ernst & Young
B2B eCommerce (Million, US\$)	150	not available	496	342
B2C eCommerce (Million, US\$)	20	27	55	54

Source: Madar Research

## 2. LITERATURE REVIEW

A detailed literature survey was conducted on the Procurement process for construction projects, various e-Business models, e-business applications in construction industry. The sources of literature review includes books, management journals, survey reports, research reports and contemporary articles on the e-business applications in supply chain management. Literature Survey broadly covered the following focus areas:

- Construction Supply Chain Management
- Procurement for Construction Projects
- B2B e-Commerce
- B2B e-Procurement Applications for Construction Projects

The available / collected literature (more than 125 Nos.) can be broadly grouped under following categories:

- Research prior to Year 2000 = 6%
- Research between Year 2000 to 2004 = 42%
- Research between Year 2005 to 2010 = 52%

It is evident from the literature survey that research on B2B e-Commerce has begun during late 90's, gained its momentum during year 2000 to 2004 and the trend continues.

### 2.1 E-Procurement Process

E-Procurement can be defined as the “electronic integration and management of all procurement activities including purchase request, authorization, ordering, delivery and payment between a purchaser and a supplier” (Chaffey, 2002). The more general classifications of the procurement process have been created by authors such as Kalakota and Robinson (2000), Lysons (1996), Fogarty et al (1991), and Whitely (2000). These classifications contain three to four stages of procurement and put the “order” or “sale” as the central phase of the process. In a more recent classification, Archer and Yuan (2000) detail a seven-phase procurement process. The phases include (1) information gathering, (2) supplier contact, (3) background review, (4) negotiation (5) fulfilment, (6) consumption, maintenance and disposal, and (7) renewal. Six forms of e-Procurement are described by de Boer et al.(2002); (i) electronic-Maintenance Repair and Operations (e-MRO), (ii) web-based Enterprise Resource

Planning (ERP), (iii) electronic-sourcing (e-sourcing), (iv) electronic-tendering (e-tendering) (v) electronic-reverse auctioning (e-reverse auctioning) and (vi) electronic-informing (e-informing). Both e-MRO and web-based ERP are built on a web-integrated enterprise resource planning system. The difference between the two is that e-MRO focuses on the procurement of MRO items whereas web-based ERP focuses on direct materials (de Boer et al, 2002). B2B relationships have most effect on the sourcing, fulfilment, and consumption phases of the procurement cycle (Nagle T, Finnegan P, Hayes J, 2006).

Research of enterprises’ experiences with Internet-based procurement automation technologies indicates that companies have been able to achieve significant cost and process benefits by automating key procurement activities (Aberdeen, 2001). As a result of their e-procurement initiative, enterprises, on average, displayed a 35% improvement in spend under management, with a 41% reduction in maverick spend. Additionally, enterprises reduced their requisition-to-order cost by approximately 100%, and more than halved their transaction cycle time. In addition to improvement in various performance areas, enterprises reported negotiating, on average, a 4.75% incremental discount with suppliers after implementing their e-procurement solution (Aberdeen, 2007).

In the mid-1990s, a new electronic sourcing tool emerged that has had, and is continuing to have, a profound impact on the way in which firms source goods and services from current and potential external suppliers. This tool, while known by other names (e.g., “online negotiation”) is the electronic reverse auction (e-RA). For a growing number of buying firms, e-RAs have found an appropriate niche in their strategic sourcing toolkit, allowing them to efficiently source goods and services that are highly standardized, have sufficient spend volume, can be replicated by a reasonable number of qualified competitors, and have insignificant switching costs (CAPS Research, 2002). Dimitri P. Bertsekas, David A. Castanon, and Haralampos Tsaknakis (1993) have conducted detailed research and developed reverse auction algorithms for Symmetric Assignment Problems. Auction-based mechanisms are extremely relevant in modern day electronic procurement systems since they enable a promising way of automating negotiations with suppliers and achieve the ideal goals of procurement efficiency and cost minimization (T. S. Chandrashekar, Y. Narahari, Charles H. Rosa, Devadatta M. Kulkarni, Jeffrey D. Tew, and Pankaj Dayama, 2007).

### 2.2 E-Commerce in Relation to Construction

The potentials of e-commerce technologies applications in the construction industry include: E-marketing; E-selling/e-procurement of goods and services; E-collaboration; E-finance; and E-customer services and relations (Veeramani et al., 2002). The necessary technological solutions for e-

supply chain systems are readily available in the current market. Some of the fundamental issues for successful ecommerce in construction, such as signature exchange (Pederson, 1999; Asokan et al., 2000), secure payment (Shamir et al, 1998; Bellare et al., 2000), and fair contracting models (Coscia et al., 2000; Rohm & Pernul 2000; Liu et al., 2001) have already been addressed in broader business-to-business (B2B) projects

A construction project is a complex activity involving several participants; for example, the client, architect, structural engineer, fabricator and the contractor. It is team efforts, involving several, inter organizational activities and dialogue. Traditional communication and document exchange models were often manual and hence slow. The traditional means of communication involves producing numerous paper copies of documents and drawings. Management of these loose documents is often very time-consuming and tedious. Libraries of documents need to be maintained to effectively access data as and when required by the user. 'A lack of a clear audit trail causes delays in communicating with other members of the team' (Needleman, 2000).

E-business provides mechanisms for cross-enterprise coordination in name of construction supply chain integration. In order to optimize the entire supply chain system cross-enterprise coordination and special business relationship must be established among the organizations along the supply chain (Francisco Loforte Ribeiro and Jorge Lopes, 2001). In a number of industry sectors it has been shown that the development of business process models has supported the embedment of the business process within the organisation (Alshawi et al, 2004). The study of these other industries shows the many benefits that construction could potentially harness through e-business savings and efficiencies. The identification of the drivers and barriers to e-procurement in construction is vital to gaining an understanding of how the benefits of e-procurement can be used to increase its uptake and to provide a model to embed e-procurement.

A limited study had been carried out in this field; Eadie et al (2007) carried out a preliminary study into drivers and barriers in construction and ranked these from a Northern Irish Public Sector Contractor's perspective. The study applied drivers and barriers identified from other industries to e-procurement in construction and produced a ranking of the importance of drivers and barriers. The drivers and barriers commented on by Martin (2008) were also analysed to identify those which are applicable to construction; the relevant ones were subsequently added to Eadie's list of drivers and barriers. It was felt a more rigorous verification of the application of general e-procurement drivers and barriers to construction e-procurement may provide a clear outlook for the potential for the advancement of e-procurement in construction. Perera et al (2007) identified a

methodology to produce an e-capability maturity model for construction organisations using drivers and barriers to e-procurement. The drivers and barriers identified and verified in this paper will provide the basis for the further development of the e-capability maturity model proposed in Perera et al (2007).

Despite the benefits of e-commerce technologies to the construction industry, there are many challenges in its applications. In many instances, the potential of e-commerce technologies has yet been fully and properly utilized, as many companies are simply utilizing various technologies to automate existing processes without analysing the company's objectives and realistic needs. In addition, significant people and culture issues need to be addressed to overcome resistance to change and achieve radical revision (Elliman & Orange 2003).

### 3.0 RESEARCH GAPS IDENTIFIED

It has been noted from the above detailed literature survey that, until now, not much evident research has been conducted to pursue successful applications of ecommerce technologies to the construction supply chain. Furthermore, there is very little empirical research available that investigates the implementation of e-Procurement initiative for construction project procurement especially in Middle East countries. Also it has been noted that the available exploratory research does not provide detailed analysis on the various procurement structures and does not propose a hybrid form of procurement organization coupled with e-Procurement application to be implemented for Construction Supply Chain. For this reason, this research will focus on understanding the e-Procurement adoption with reference to the Commodities procured in Construction Projects, Buyers and suppliers readiness to adopt the e-Procurement in Kuwait. This research also proposes a model and develops a methodology for implementation of e-Procurement using e-market platform in construction supply chain. The specific issues which will be investigated include the objectives, reasons/benefits, barriers of using e-commerce technologies.

### 4.0 OBJECTIVES OF RESEARCH

The objective of this research is to conduct a detailed study on the e-procurement practices of construction supply chain in Kuwait and develop a practical e-Procurement model suitable for Construction companies in Kuwait. This study aimed to uncover the e-commerce awareness scenario prevailing in Kuwait among the Supplier community and map the supplier adoption / value propositions offered by the e-Markets against the business potential of the suppliers. According to the existing literature, e-Procurement is likely to increase firm's competitiveness through cost reduction and increased efficiency on the inbound logistics. In such circumstances, we intend to understand what makes a difference on what regards to e-Procurement adoption,

which leads us to the following research questions and more specifically, the areas to be investigated are:

1. What are the factors that foster the intention of Construction companies in Kuwait to adopt e-Procurement? What is their relative relevance?
2. What are the barriers in construction project for the adoption of e-Procurement using B2B e-markets?
3. How to adopt suppliers for construction supply chain e-partnerships?

### 5.0 DATA COLLECTION

#### Collection of Primary Data

For the purpose of this study, a pilot survey has been conducted among the Supplier community in Kuwait using a close-ended questionnaire based on multiple choice questions and 5-point attitude measurement scale.

According to Kuwait online business directory [www.kuwait-toplist.com](http://www.kuwait-toplist.com), there are more than 5000 companies operating in Kuwait dealing in 500 different commodities. For the purpose of this study, 165 active companies have been selected for conducting the survey.

23% of the respondents were from the top management, 40% from middle management, 20% from the lower management and 17% were from the staff category.

43% of the respondents belonged to high turnover category (assumed to be those having US\$ 35 million and above), 29% belonged to, medium turnover category (between USD 3.5 million and 35 million) and 20% belonged to low turnover category ( less than US\$ 3.5 million).

#### Hypothesis

Null Hypothesis (H0): The awareness level of E-commerce is low. Buyers and suppliers do not perceive any tangible benefits on adopting e-business.

Alternate Hypothesis (H1): The awareness level of E-commerce is high. Buyers and suppliers do perceive tangible benefits on adopting e-business.

Factor analysis was carried out to identify the main barrier for adoption of e-marketplace and most important benefits perceived by the suppliers.

#### Collection of Secondary Data

Procurement data based on the following procurement spend of the Major Contracting companies from Kuwait has been collected for conducting high level spend analysis. Every contracting company procures materials and services from various suppliers.

Suppliers spend analysis was conducted and the suppliers were classified in to following categories:

- Vital Suppliers
- Critical Suppliers
- One time Suppliers

### 6.0 ANALYSIS OF PRIMARY DATA

Detailed analysis was conducted on the data collected and the survey data indicated the following:

57% of the respondents (buyers and suppliers) are not aware of e-commerce / e-marketplace and 43% are aware e-commerce as indicated in Figure-1.

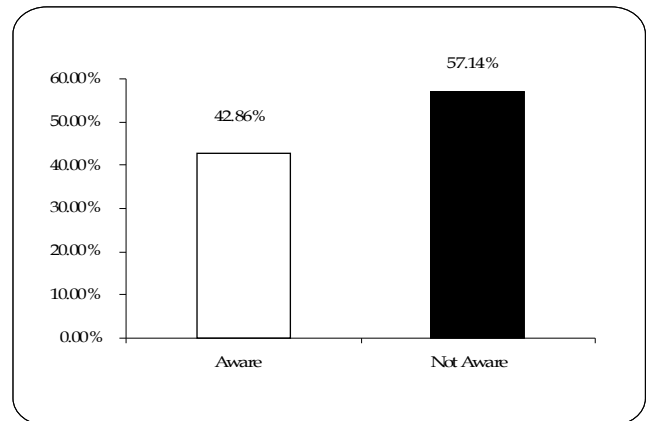


Fig. 1. Awareness Distribution of B2B e-commerce in Kuwait

34% of the respondents use e-commerce/marketplace for conducting their business and the rest do not as indicated in Figure-2.

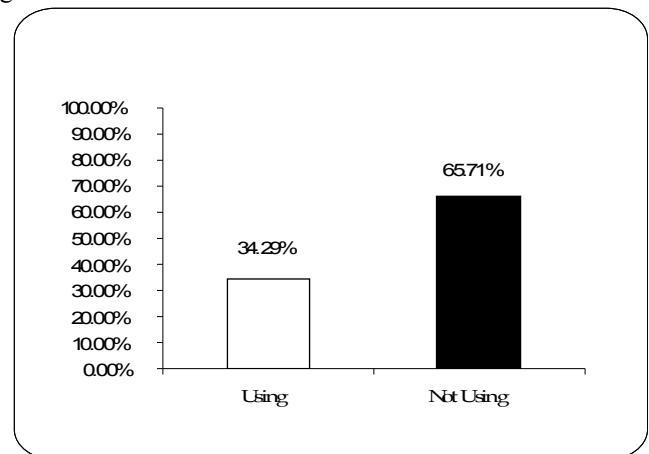


Fig. 2. Usage of E-Commerce for Business in Kuwait

Out of the above 34%, further analysis was carried out and the results are as summarized below:



- Only 25% use the internet for purchasing/selling online and posting request for quotes / proposals.
- 58% use the internet occasionally for purchasing/selling online.
- As much as 58% and 25% use web catalogues to identify products/potential suppliers frequently and occasionally respectively.
- 42% use the internet for posting quotes/proposals frequently and 33% occasionally.

### 6.1. Future e-Commerce Usage Distribution

Further analysis of the 66% of the respondents not using e-commerce currently showed the following for each of the intended use:

- As less as 4% each only said that they will use e-commerce/e-marketplace definitely and very probably in the near future for purchasing/ selling online. 39% may probably use for the same purpose.
- As much as 82% are likely to use the web catalogues to identify products/potential suppliers and 43% is likely to use the internet for posting requests for quotes/proposals.
- A majority of them (83%) are likely to use the internet for posting quotes/proposals and as much as 65% are likely to use the internet for identifying potential buyers.

### 6.2. Benefits Perceived by the Respondents

With regard to the benefits perceived by the respondents who are aware of e-marketplace (43%) the following are the inferences. The percentages represent the level of agreement of the participants for each benefit outlined by the author.

- 60% agreed that there is material cost reduction.
- A whopping 73% affirmed that e-marketplace will result in process cost reduction and 54% expressed their agreement for cycle time reduction.
- 40% of the respondents indicated agreement with increased transparency in purchasing/selling process.
- As much as 53% saw comparability of products, prices and suppliers as an important benefit and 40% agreed that they will benefit from access to new suppliers/buyers.
- 67% considered that it is easy to make analytical and historical reports.
- 80% were in agreement for the benefit" automation leads to more focus on strategic issues".

### 6.3. Barriers perceived by respondents

With regard to the barriers perceived by the respondents who are aware of e-marketplace (43%) the

following are the inferences. The percentages represent the level of agreement of the participants for each barrier outlined by the author.

- 40% agreed that "technical standards not developed" is a barrier.
- 60% of the respondents were in agreement of online crime.
- 67% considered resistance to change as one of the important barriers for e-marketplace adoption.
- Reduction in loyalty toward the suppliers was considered as a barrier by 60% of the respondents. 53% considered the high cost of switching over to online procurement as barrier.

### 6.4 Chi-Square Test

#### 6.4.1. Awareness of e-Marketplace

Null hypothesis (Ho): The awareness level of E-marketplace is low and buyer and sellers do not perceive any tangible benefits on adoption of the same.

TABLE 2  
CHI SQUARE TEST – AWARENESS OF B2B e-COMMERCE


Since calculated chi-square value is less than the table value of 2.706, the null hypothesis is accepted at 10% level of significance. Hence we conclude that the sample represents the population and the awareness of e-marketplace is low among the buyers and sellers.

#### 6.4.2 Relation between awareness and use of B2B e-Commerce among the Suppliers

Null hypothesis: There is no relationship between awareness of e-marketplace and use in Company business

TABLE 3  
CHI SQUARE TEST - B2B COMMERCE USAGE

No	2
	1
Total	

Note: 1. values within bracket refer to Expected Frequency.

Since calculated chi-square value is more than the table value of 2.706, the null hypothesis is rejected at 10% level of significance. Hence we conclude that there is relationship between awareness of e-marketplace and use of the same for business.

6.5 Factor Analysis

6.5.1. Benefits Perceived

Factor analyses are extracted by Principal Components Model, in which variables are assumed to be exact linear combinations of factors. The communality, Eigen values, % of Variance and cumulative % are given below:

TABLE 4  
FACTOR ANALYSIS – BENEFITS PERCEIVED

Variable
Q5_1

The entire variables are grouped into 3 factors. These variables are related items in one factor. Eigen-value of factor 1 indicates the standardized variance associated with a particular factor and factor-1 shows nearly 37.9 % of variance.

VARIMAX rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization.  
VARIMAX converged in 5 iterations.

TABLE 5  
ROTATED FACTOR MATRIX

Q5_4
Q5_5
Q5_6

TABLE 6  
FACTOR TRANSFORMATION MATRIX

Q5\_7 10

Q5\_8 9

Q5\_9 2

The analysis shows that Buyers and suppliers through e-Marketplace utilization perceive the following as significant benefits.

- Process cost reduction
- Comparability of products, prices, suppliers
- By automating daily tasks, the Internet can allow greater focus on strategic issues.

Hence, it can be concluded from the analysis that the Buyers and suppliers look at e-Marketplace as a solution for automation. By automating the procurement of Low strategic and low complex materials, more focus can be given on the high strategic and high complex items, which constitute bulk value of the annual procurement.

6.5.2. Barriers Perceived

All the variables are grouped into two factors. These variables are related items in one factor. Eigen-value of factor 1 and factor 2 indicates the standardized variance associated with a particular factor. Factor-1 and factor-2 show nearly 35.7% and 33.8 % of variance respectively and almost equal to each other. The variables in both the factors are closely related. Factor-1 represents the requirement of Technical Standards and government regulations and Factor-2 represents the resistance to change from the traditional methods.

.37500\*

TABLE 7  
FACTOR ANALYSIS –BARRIERS PERCEIVED

.89727 \* Var

VARIMAX rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization.

.88924 \*

VARIMAX converged in 3 iterations.

TABLE 8  
ROTATED FACTOR MATRIX

.58312 \* Q6\_

.90564 \* Q6\_

0.70722 \* Q6\_

0.82771 \* Q6\_

0.52256 \* Q6\_

TABLE 9  
FACTOR TRANSFORMATION MATRIX

From the analysis the significant barriers can be summarized as follows.

- Lack of technical Standards and government regulations
- Resistance to change from the traditional methods and process.
- An interesting point to be noted that buyers and suppliers feel that e-marketplace will reduce the loyalty and close relationship.
- Considering the market conditions prevailing in Kuwait this is understandable and this is related to the traditional thinking required to be changed by the e-Marketplace service provider.

**6.5.3. Supplier Readiness Assessment**

Suppliers will generally fall into four distinct categories as indicated in Table-10 based on their readiness to adopt e-Procurement:

Performance – Retention of existing suppliers and selection of new suppliers is an important part of gaining compliance and improving procurement. Currently assessment of suppliers, except for the largest contracts, is seldom done on the basis of an objective, auditable and consistently applied set of criteria.

Pre-qualification – accreditation of suppliers is a valuable means to ensure quality or supply and essential for higher value transactions. At present, approved supplier lists are often maintained by departments or a central contacts or procurement function.

TABLE 10  
SUPPLIER B2B E-COMMERCE READINESS MATRIX

<p><b>1. Ready, Willing and able</b></p> <ul style="list-style-type: none"> <li>❖ Not many smaller suppliers in this category yet.</li> <li>❖ Prioritize and ensure that they get a lot of credit and publicity</li> </ul>	<p><b>2. Willing but unable</b></p> <ul style="list-style-type: none"> <li>❖ Work with Business Links etc.</li> <li>❖ To provide training and support.</li> </ul>
<p><b>3. Unwilling but able</b></p> <ul style="list-style-type: none"> <li>❖ This could be down to cultural issues or your lack of influence.</li> <li>❖ Sell benefits and Implement communications programme.</li> </ul>	<p><b>4. Unwilling and unable</b></p> <ul style="list-style-type: none"> <li>❖ May have to make some painful decisions about continued trading.</li> <li>❖ A compliance approach may be needed</li> </ul>

**6.5.4 ‘Practical Steps to Successful Supplier Adoption’**

- Develop a supplier strategy
- Carry out an assessment of supplier value and readiness
- Communicate with suppliers;
- Put in place a supplier development programme
- Carry out an impact assessment of local suppliers;
- Encourage local suppliers where they add real value
- Put in place an e-content strategy
- Collaborate with strategic partners

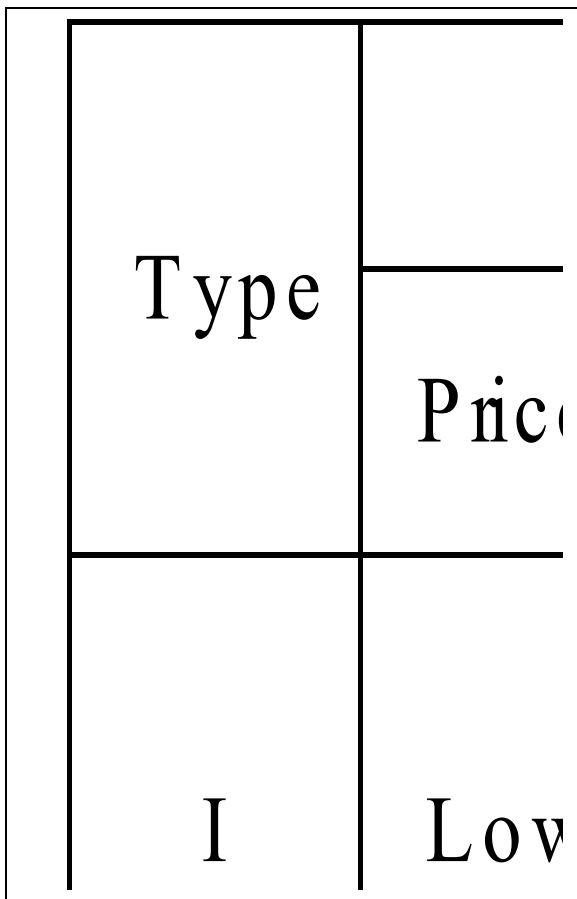
A clearly scoped Supplier Relationship programme is vital to the success of e-procurement project. The suppliers are businesses and they need time to evaluate the impact these changes will have on their own processes, staff skills, training needs and IT. However experience shows that giving them too much time (e.g. more than 6 months) is not particularly beneficial, especially for the smaller companies which do not plan that far ahead.

**6.5.5 ‘e-Procurement Methodology’**

Based on the above supplier & commodity spends analysis, it has been noted that procurement spend of Construction Companies generally covered under the following combinations (Table-11) and the appropriate e-Procurement strategy has been indicated against the each commodity spend criteria. Based on the detailed analysis conducted on the various functionalities of the B2B e-Market online procurement tools, each procurement strategy has been mapped with the most suitable e-Procurement tool.

TABLE – 11  
COMMODITY SPEND CRITERIA & E-PROCUREMENT STRATEGY

Fac  
Fac



7.0 CONCLUSIONS

Based on the above detailed analysis the following conclusions are drawn on the B2B business potential for suppliers in Kuwait and the supplier dynamics which needs to be considered for a successful supplier adoption programme.

- Construction and related Industrial sector is booming in Kuwait with more than USD 13.5 billion worth of construction contracts are awaiting for finalization and B2B e-commerce is having a good business potential for next coming years.
- Kuwait is having a good ICT infrastructure to support the B2B e-Commerce and internet users are increasing in Kuwait.
- The field survey conducted on the Buyers and suppliers indicates that there is no enough awareness in the Kuwait market about online transactions and B2B e-commerce.
- It was also noted from the survey that respondents who aware about B2B e-commerce agree that online transactions will fetch potential savings in terms procurement cost, transaction cost and cycle time reduction.
- One important finding was that buyers do not, on the whole, participate in e-markets to deliberately

squeeze their suppliers and aggressively drive down cost in that way.

- Other respondents suggested that increased transparency in the supply chain was a greater motivation for participation, giving them more options and choice in choosing different suppliers and cutting costs.

Supplier adoption Strategy is inextricably linked to the overall procurement strategy of the buyers when implementing any e-Procurement solution. Each buyer to determine their position with their suppliers as indicated in the Figure-3 procurement portfolio matrix.

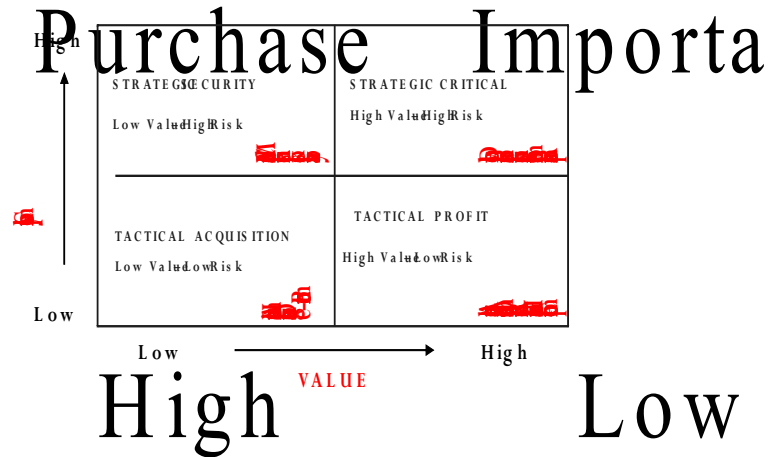


Fig. 3. KRLJIC Procurement Portfolio Matrix

Maximizing supplier participation in the e-procurement process involves more to do with psychology than technology. As indicated in Figure-4, supplier’s psychological perception of a buyer potential for their long term business in Kuwait market can be grouped in the following categories:

- Buyers with Low Value and Low attractiveness are viewed as nuisance, as the suppliers do not perceive benefits of collaborating with them.
- Buyers with High Value and Low attractiveness are viewed as exploitable, as the suppliers dictate their terms on the buyers.
- Buyers with Low Value and High attractiveness are viewed as development for the future business of suppliers.
- Buyers with High Value and High attractiveness are viewed as “core” relationship, as the suppliers strive for such relationship to stay in their business.



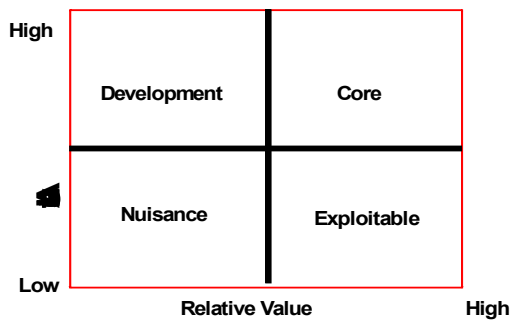


Fig.4. Supplier's Value Proposition Matrix

Considering the above, Supplier adoption programme for e-markets should develop strategies to create “core” relationship between supplier and buyer communities for their success. The strategic benefits to a successful supplier adoption program are significant and will impact several areas with a buying enterprises supply chain. To be effective the supplier adoption program must be structured to maximize supplier participation and minimize supplier disruption.

Unlike any other issues encountered in the implementation of e-Markets Supplier adoption is a fundamental challenge for successful implementation. Every supplier will be different, will require different approaches and will have different issues to resolve.

It takes an effort to convince the selling community that B2B e-commerce is not just another electronic data interchange (EDI). They need to understand the benefits from their perspective, since many suppliers have taken a “once-bitten, twice-shy” attitude.

Rather than pushing your suppliers into e-Markets, present the value proposition and work to involve them in the initiative. The buyer can strategically plan, enhance, expand and maintain a reciprocal relationship that is guaranteed to pay dividends.

In conclusion, if a product can be perfectly defined, competition between suppliers is high and the value is sufficient, the better suited it will be to an online auction for the purchaser. Experience shows that substantial savings can be made and the risk that the purchaser incurs is minimized if the auction is carried out between approved suppliers. Considering the above, Construction Companies in Kuwait should develop strategies for e-Procurement Supplier adoption programme to create “core” relationship between supplier and buyer communities for their success. The strategic benefits to a successful supplier adoption program are significant and will impact several areas with a buying enterprises supply chain. To be effective the supplier adoption program must be structured to maximize supplier

participation and minimize supplier disruption. Unlike any other issues encountered in the implementation of e-Procurement, Supplier adoption is a fundamental challenge for successful implementation. Every supplier will be different, will require different approaches and will have different issues to resolve.

It takes an effort to convince the selling community that B2B e-commerce is not just another electronic data interchange (EDI). Buyers & Suppliers in Kuwait need to understand the benefits from their perspective, since many suppliers have taken a “once-bitten, twice-shy” attitude. Rather than pushing the suppliers in Kuwait into e-Procurement, the Construction Material Buyers to present the value proposition and work to involve their Suppliers in the e-Procurement initiative. The Construction Material buyer can strategically plan, enhance, expand and maintain a reciprocal relationship that is guaranteed to pay dividends for the successful e-Procurement adoption in Kuwait

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