

INTEGRATION AND SYSTEM FAILURES OF ELECTRONIC GOVERNMENTAL PROCUREMENT SYSTEMS IN TURKEY AND PROPOSALS FOR MORE EFFICIENT SYSTEMS IN THE LIGHT OF B2B PORTAL MOVEMENTS

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Abstract

Today's business dynamics are rapidly changing, especially for the private sector in the world and new paradigm which is called as the electronic environment is starting to dominate the business life. Most of the companies trying to adapt these changes with their company structure and most of them were re-engineered their business models with this new wave. In Turkey, government is trying to transform their services in to digital world for gaining more speed, decreasing the costs and satisfying their citizens as well as these efforts are named as e-government transformation. In addition to this, Turkish government trying to adapt procurement process as electronic procurement or e-procurement throughout that transformation process and establish procurement based web pages. At the same time, private sector in the world is using more efficiently the B2B portals and systems for that purpose. In this article, we are going to examine the current situation of e-procurement efforts in Turkey and compare the effective B2B portal based procurement systems for detecting problems and faced difficulties throughout the transformation process and finally, propose new ideas for increasing the transformation success.

Key words: *e-government, e-procurement, B2B portal, web based procurement.*

JEL Classification: O30

Introduction

In the last decade, business dynamics rapidly changed with the information technologies support. Especially, internet accelerated the change with the help of electronic environment tools and e-commerce is dominating the way of transactions in business life. While examining the e-commerce, mostly companies are impressed positively with the decrease in their costs. Also, there are more positive effects of e-commerce for the companies that can be listed as; increased speed throughout the transactions and companies have chance to get improved operational control with automation online systems while accessing increased customer numbers by using web based environments (Yildirim, 2010). For harvesting these positive effects of e-commerce, companies are trying to adapt these changes with their structures and most of them were re-engineered their business models with this new trend.

Evolution of the e-commerce can be examined in three phases which starts with EDI networks between many suppliers and one buyer, then continues with B2C (commerce between customers and companies) e-commerce between one supplier and many buyers, finally many suppliers and many buyers come together at the third phase called B2B (commerce between companies and companies) e-commerce. The market efficiency is low at the first phase, but throughout the evolution of B2B e-commerce market efficiency has reached to the maximum level (Meeker, 2000). The main philosophy of B2B e-commerce is; “many to many” which means that many companies or many customers come together on the portal platform with many customers and money companies. At the same time, B2B market size is 10 times larger than the well-known B2C market (Drucker, 2000).

Governments are realized the benefits of digital change and they began to transform their framework to virtual world while companies and individuals are using the virtual environment or e-commerce frameworks with transferring their process to digital. In Turkey, government is trying to change the nature of government services into digital world for gaining more speed, decreasing the costs and satisfying their citizens as well as these efforts are named as e-government transformation. In this context, procurement also has to transform to new transaction trend which is known as e-procurement with B2B framework.

In Turkey, generally governmental procurement process is based on two methods. First method governmental institutions declare their needs and collect the offerings and they decide the company for procurement and this process is regulated by Turkish Public Procurement Law (PPL) No.4734 and Public Procurement Contracts Law (PPCL) No.4735. The second method covers the procurement process by using State Supply Office (DMO). First method is for inside out other one should be considered as outside in the name of transactions. Governmental institutions primarily prefer this method for preventing inspection problems. According to this method, State Supply Office makes arrangements and contracts with third party companies on specified products and governmental institutions procure from State Supply Office Centers or procure from the third party supply companies which are in the catalogue of State Supply Office.

Throughout the research, it is found out that there are problems in these two methods such as self abuse, bribery, high transaction costs, lack of technological framework, speed weakness and transparency and etc. When we examine the companies and the private sector, we face that most of them were re-engineered their business models with e-commerce. And, electronic commerce with B2B (many to many) portals has already solved the procurement problem.

In this article, we want to explain procurement problems for governmental institutions and then our study covers B2B e-commerce framework and benefits. Final part covers the varieties of solutions for overcoming the governmental institutions’ procurement problems.

B2B E-Commerce Framework and Benefits

B2B e-commerce portals are the platforms which connects companies, customers and suppliers on the digital platform. Companies can publish their business information over the B2B portals such as; their products and catalogues, business history, company size, production capacity, and

transport capabilities. Besides, there are review forms which are evaluated by the companies who established transactions with the related company. Generally, B2B portals are using membership system. According to the system; companies have to be a member of the portal for publishing their business information over the portal. After becoming the member of the portal, other companies discover and encounter the new trading partners which are located in the same B2B portal. Then, negotiation stage begins among the companies, and finally the transaction will occur according to their agreements.

While examining the benefits of B2B portal based electronic commerce, companies face that the most expressive benefit is the reduced costs. Reduced costs can be grouped as transaction costs, procurement costs, and framework costs. Companies have to spend time and money to find the correct supplier and product through the companies' procurement process.

With the help of the B2B or B2C portals, companies can search and establish arrangement with the lower time period and physical visit. Companies can search the products from the online catalogues and send product specifications and order lists digitally to the other companies by using e-commerce platforms such as AliBaba.com or Turkishtradezone.com.

The supplementary important benefit is the reduced procurement cost. By using online auctions and reverse auctions, companies can procure the products with lower costs, because companies can access more number of suppliers through the world on the portals.

An additional cost is the framework costs for the companies. Before the B2B portal based e-commerce, companies usually establish technological framework with the companies to establish connection with their suppliers. And, they have to spend money to integrate their systems to every different supplier which they work with. In spite of this, companies spend less money to procure by using web based system through the portals.

Increased speed, accessing wide range of markets and enhanced administrative facilities are the extra benefits of B2B portal based commerce.

Companies can react faster relative to classical procurement process. First of all, they can search the products and company information through the B2B portals such as E-bay and Alibaba by using online catalogues and the other companies' reviews about the supplier company. Furthermore, some B2B portals share statistical information related to the procurement information of the companies and evaluate them by using the companies' past transactions.

A further important benefit is accessing the wide range of customers through the portals and enhanced administrative facilities. B2B portals supports a platform to access wide range of customers and companies can track their transactions by using the B2B portals. They can track their orders and transaction though portals. At the same time, they can communicate online with their suppliers and customers. B2B e-commerce can create value for the supply chain activities by preventing "bullwhip effect" which is known as a situation that small demand can be perceived as a huge demand for the reason of collecting the information locally without sharing the demand real-time at the different levels of supply chain (Lee et al, 1997).

Procurement Framework and Procurement Process Problems of Governmental Institutions

For understanding the procurement problems we have to understand purchasing methods of government and the governmental institutions. First method can be briefly summarized as collecting demand, evaluating and finalizing. The second method is using State Supply Office for procurement process. Procurement processes are regulated by Turkish Public Procurement Law (PPL) No.4734 and Public Procurement Contracts Law (PPCL) No.4735.

According to 4734 and 4735 numbered Law, there are 5 different procurement types and two methods. The first three procurement types or first method cover collecting demand, evaluating and finalizing processes. The second method is State Supply Offices, and generally second method is used for avoiding inspection problems.

Procurement Types;

- A) Open Bidding
- B) Bidding from the companies (requested)
- C) Bargaining
- D) Direct Procurement
- E) Exceptions (State Supply Office)

The main goal of law for the bidding is supporting transparency, trust, control and audit, competition and using resources effectively on correct time. While the evaluating process, documentation, declaration, commitment, delivering the project processes and mistakes through these processes are very time consuming. Moreover, there are complains about the bidding extend the bidding process time.

Because of there are lots of processes, first method covers risks and waste of time for the government and the governmental institutions during procurement process. So, institutions prefer to supply from State Supply Office.

State Supply Office was built in 1926 for the aim of supplying government office tools for gaining low price and supporting collective procurement (Kartalci, 2010). Institutions procure in two different ways from SSO (State Supply Office).

First procurement strategy of the office is purchasing high amount of the product with the low price advantage from the suppliers because the amount is high and also government has a bargaining power, then storing these product in the office warehouses. Finally, institutions supply the product from these warehouses.

Second way is based on the arrangements between SSO and the suppliers. Office publishes catalogues which have information about products specifications, product price, and the supplier companies. Office gains commission from the sales through the catalogue sales. In this way, product is delivered from the supplier to the institutions without visiting the SSO's warehouse. According to a research in 2008 about the auditing ratios of catalogue supplier, it is examined that just 10 percent of the supplier companies are controlled (DMO, 2011 Access Date).

In some cases, institutions prefer to bargain with the supplier catalogue company and bypass the SSO. In this case the bribery can enter the procurement process.

An extra problem of SSO is the profit ratio. According to SSO profit tables, SSO could not afford the labor cost with their operating revenues (DMO, 2011 Access Date).

All at once, SSO platform prevents the competition for entering the catalogue supplier companies because there is no bidding or competition during the selection process of catalogue Supplier Company.

Offers for Overcoming the Governmental Institutions' Procurement Problems

Real solution of the procurement for the government and governmental institutions is transforming or carrying the classical method or e-catalogue based procurement of SSO to B2B portal based e-commerce. For effective the transformation, government should overcome the barriers of technological capabilities of their employees and prevent bribery risk and give full support top to bottom for success.

In Turkey, existing e-procurement structure in SSO e-procurement system is based on simple e-commerce system as "publishing product information and price with no online payment support nor B2B portal based services". Digital marketing and procurement efforts were ended with B2B portal based framework for the private sector in the last decade where the e-commerce evolutions' last stop. Maybe, there are not too much numbered full integrated government which is using the B2B portal based procurement but, the last stop is defined with the e-commerce evolution. Also, we should consider that how many of the governments in the world were fully integrated or transformed to digital world with their services.

Following offers are based on the popular successive B2B e-commerce portal platforms such as Alibaba.com and Ebay. As an example, Chinese Alibaba.com announced an additional domain name, 1688.com in 2010 for its China marketplace and a strategic upgrade of the site to support wholesale transactions (http://www.alibaba.com/about/en/AboutOurCompany/history_milestone.html retrieved 3/27/2011).

B2B portals should support membership system for supplier companies and governmental institutions. By applying the membership, records about past procurement processes, reviews related to the suppliers, statistical analysis will support transparency need which is the main aim of

the procurement law. Plus, proposed system should be similar to the well working B2B portal such as Alibaba.com.

All the procurement methods covering open bidding, bidding from the companies (requested), bargaining, direct procurement, exceptions (State Supply Office; e –catalogue) should be served through the same portal or platform. These kinds of platforms bring similar conditions leads to the formation of free-market economy.

Usage of SSO e-catalogue system should be adapted to same platform and governmental institutions should not know the supplier company during the procurement and the platform should support online auctions and online reverse auction through the portal.

While examining the SSO, the selection process of catalogue supplier, there is no competition. The platform should support for new entrants to the portal for creating competitiveness like the system in classical B2B e-commerce portal.

Online pay methods are highly developed in these days but SSO e-catalogue system still using the money order system. Institutions transfer the money by using bank, and then SSO employees track the money movement and finally establish the procurement. But, this classical system takes time. New online payment system should be used for gaining speed.

The B2B platform should support documentation exchange and publishing product or bid qualifications on the portal for gaining speed. Also, transactions should be tracked by the controller of the government or by 3rd part authorities.

Moreover, there should be communication channels for supplier companies and the governmental institutions but the system should be monitor for preventing the bypass efforts of the suppliers.

In addition, the statistical record should be analyzed by the portals through the transaction for gaining transparency and providing information about the supplier companies.

Another important issue is the procurement law infrastructure; existing procurement law should cover the virtual platform and should be tuned according to the new procurement system.

According to 2006 Annual report of the Public Procurement Authority, there have been efforts continued to perform electronic infrastructure transformation for e-procurement since 2003. Public Procurement Authority created and opened for use "Public e-Procurement platform" on the end of 2005. From the date of 01.09.2010 Electronic Public Procurement Platform (ECAP) of the Act No. 4734 with the commissioning of all items covered by 13/b/1 been published in the Public Procurement Bulletin. However, IKN taken over the old platform is still owned tenders notices published through the Public Procurement Platform continue (KIK, 2010). However there are still some obstacles for a successful e-procurement system for Turkey.

Conclusion

Today many of the classical style long time-consuming operations and transactions have realized through the electronic media much easier way. For example, ranging from 20 to 25 of the document must be submitted separately for each tender in classical tender processes according to Public Procurement Authority. This kind of processes would gain more speed, decreasing the costs and satisfying the citizens with e-government applications from the state's point of view. Therefore, there needs to be new systems and procedures for e-procurement.

E-procurement is not well-established in emerging countries (Yamamoto & Karaman, 2007). There needs to be some solutions to cope with these barriers such as lack of legal regulations for this kind of operations. Generally, decisions are not taken by a systematic approach for applications. Another problem is the emergence of individual barriers against this type of applications. Companies and state enterprises in Turkey are not ready to share data over the internet. There needs to be a large scale implementation of a network of companies.

However, we are watching B2B success stories all around the world like e-bay & alibaba.com. Governments should attempt to follow the B2B experiences of the private sector. Government procurement procedures should be handled in a new procedural structure and re-converted to close these business models.

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