# E-COMMERCE METHODS UTILIZED BY SMALL AND MEDIUM SIZED ENTERPRISES DURING THEIR EXPANSION INTO EXTERNAL MARKETS

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#### -Abstract -

A fundamental component of every economy, small and medium sized enterprises (SMEs) have significant contribution in employment rate, new investments, and tax revenues. For such enterprises, expansion into external markets is a viable option to increase their capital and therefore their contribution to their local economy. In external markets, digital marketing applications have an increasing potential for accessing the target customer base. In this study, digital marketing methods such as e-CRM, e-Procurement and e-Marketplace, and their benefits during an expansion into external markets are analyzed and presented.

**Key Words:** *e-Commerce*, *e-CRM*, *e-Procurement*, *e-Marketplace* 

JEL Classification: O31, M15

## 1. INTRODUCTION

The advancement of e-commerce technologies and expansion into external markets has changed the world and whole businesses. In the first trend, e-commerce technologies have led to entirely new possibilities for exporters to access new markets and improve their efficiency in terms of receiving customer orders and handling inquiries (Bennett,1997:325; Hamill,1997:302; Prasad, Ramamurthy and Naidu 2001:85; Samiee,1998:416). In the recent years, commerce has come to the foreground of electronic commerce. E-commerce activities can be classified into three group as business-to-business e-commerce

(B2B), business-to-customer e-commerce (B2C) and business-to-government e-commerce (B2G) (Shaw *et al.*, 1997:153). Today, especially B2B trade takes up more than 80% of the total trade done in e-commerce. The establishment of this concept requires attention to three main factors (Griffith *et al.*, 1999:5; Kaplan *et al.*,2000:100; Porter , 2001:66):

- Reducing transaction costs and enhancing goods/services quality,
- Competing with rivals while cooperating with them,
- Navigating suppliers to the online environment, especially for large businesses.

With the increase of internet access, e-commerce will reinforce its indispensability for SMEs (Kaynak, 2005:625). The main reason for using e-commerce in B2B trade is that it decreases business costs while increasing efficiency. Since many applications are easily realized in the digital domain, e-commerce already has a broad acceptance and utilization in global markets (Karadvic and Gregory, 2007:30) Also, significant saving can be realized in the cost of inventories while entering foreign markets. E-commerce will offer significant opportunities to SMEs by increasing speed and efficiency which enables them to expand globally. Coding sufficient and necessary information into the web, with global standards like XML, intensive improvements and savings can be achieved during processing of the transactions (Abualsamid, 2001:144). SMEs can compete on the internet only via creating a web site home page.

E-commerce offers more directly relevant important advantages for SMEs via e-procurement, e-marketplaces and e-CRM applications which enables them to global exporting (Shaw *et al.*,1997:150; Stockdale and Standing, 2004:301).

## 2. E-PROCUREMENT

The aim of any business is to sell products and/or services to other businesses or to customers. In creating these end products, other products and services are needed to be sold and purchased in a supply chain. In procurement activities, two

types of costs can be mentioned. First item is the cost of buying a product or service, and the second one is the process cost. Internet technology provides a much cheaper alternative in procurement costs for businesses, which are called e-procurement techniques (McAfee, 2000:18-19).

For the purposes of this study, we are only interested in the e-procurement functions of SMEs. Therefore, we can simply define e-procurement as corporate purchasing and selling via Internet (Schulze and Baumgartner,2001). In recent years, B2B e-commerce has become a substantial trend due to high development potential and number of benefits. In order for this trend to be robust and successful for buyers and suppliers, the technological platform that provides the link must be faster and more effective. The most important factor in the association between the buyers and suppliers is e-procurement systems.

## 2.1. E-Procurement Solutions

- *Buyer-side Solutions:* Buyer side solutions can enable accelerated procurement process solutions to corporate enterprises.
- Supplier-side Solutions: Supplier side solutions can enable more efficient and easier transactions with the help of online cataloging for product and service information.
- Exchange and Auction Solutions: Exchange and auction solutions provide buyers and suppliers an environment to carry out their commercial activities on the Internet.
- Supply Chain Optimization Solutions: E-procurement provides real-time integrated scheduling, shipping, warehouse management, demand management and planning across both buyers and suppliers. fulfillment, inventory management and payment by Internet tools and mobile terminals cross both buyers and suppliers. (Dai and Kauffman, 2001:62-65)

## 2.2. Benefits of E-Procurement

The benefits of e-procurement for SMEs can be listed as follows (Slywotzky,2000; Wise,2000; Neef,2001):

- E-procurement provides access to great number of suppliers with the
  advantage of gaining access to different markets in a much short period of
  time. Lower costs in switching, selling and transaction, access to wider
  markets, and creation of strong and robust networks will provide
  competitive advantages and higher profitability.
- Benefits of e-procurement to buyers include low transaction costs, easier access to price and product information, convenient purchase of associated services and the ability to pool volume.
- Buyers and suppliers can make online demand forecasting, fulfillment, inventory management and payment by Internet tools and mobile terminals.

It is being much easier to achieve real-time and strategic data by automated searching and tracking capabilities of e-procurement systems. With the analysis of this data, one can extrapolate in many cases such as from suppliers' pricing model to distribution channel structures. E-procurement systems allow carrying out supply chain processes and supplier performance evaluation from anywhere in the world. When critical procurement activities in a supply chain are interrupted, these systems can also provide an alternative of multiple suppliers. E-procurement systems provide an authorization system to the employees within the enterprises that can be used to manage demands for the required amounts in real time. E-procurement helps reduce the prices of products and services by these benefits mentioned above. So, SMEs should focus more on their procurement process than

differentiating their products to take competitive advantage and get ahead of their rivals (Porter, 2001).

#### **3. E-CRM**

Electronic customer management (e-CRM) systems are management models which provide businesses interactive electronic channels to communicate with customers. These systems can be used to effectively manage the customer relations, while reducing the costs of such activities, which is made possible by the ever-improving internet technology (Abualsamid, 2001).

## 3.1. Key Features of E-CRM

Some of the important features of e-CRM systems are listed below (Amit, 2001, Porter, 2001):

- Custom tailored marketing by customer profiling
- Online customer supporting by e-mail management, billing integration cobrowse, chat, call-me-now options, voice-over-IP and other uses of video streaming.
- Providing access to customer for schematic review, account review, workorder update, parts availability and ordering, and service parts management.
- Real time customer feedback through Web surveys and promotion response tracking.

## 3.2. Benefits of E-CRM

E-CRM solutions, thanks to their customer-based analytic software, are able to predict customer behavior, and provide means to measure and assess the whole customer management process. With a fully-integrated system, the e-CRM process can be easily accessed by its operators to fully utilize the system benefits.

E-CRM provides data collection tools to predict models of customer behavior, which is an extremely important element in any business. The output models can be easily integrated to a "Campaign Management Software" for an even more effective system. Other benefits that can be a part of e-CRM solutions are including but not limited to, personalized e-mail service, distribution of text and HTML pages, personalized messages with active links to direct customers to target web pages.

#### 4. E-MARKETPLACES

E-marketplaces are the electronic medium through which buyers and sellers meet and perform mutual commercial activities. SMEs make the vast majority of suppliers in most of the markets, which makes it increasingly difficult to obtain a larger market share on their own. As a result, e-marketplaces can be very important for SMEs in establishment of more effective relations with their customers. Some websites like orderzone.com, alibaba.com are good examples of e-marketplaces. In a general sense, a market can be divided into two types: vertical and horizontal markets (Turban *et al.*, 2009; Eng, 2004).

## 4.1. Vertical E-Marketplaces

Vertical e-marketplaces, as their name implies, aims to automate transactions between buyers and suppliers online in a vertical industry. These marketplaces usually focus on a specific industry, employing a strategy to bring together the buyer and the supplier. Vertical marketplaces create new distribution channels for raw materials and secondary stock to support industry specific supply chains. With faster processes, more effective knowledge sharing, and reduced cost of inventory and sales, the added value of the markets increase. There are hundreds of examples for vertical markets. But an interesting phenomenon has occurred in this area that has surprised many industry watchers and analysts. As testaments to the radical changes that the Internet can bring about, many of these vertical e-market trading communities are now being sponsored jointly and collaboratively by large and powerful industry leaders with SMEs. Often long time rivals, these market creators, as they have become known, by virtue of their industry experience, extensive business connections, and financial clout, have

quickly risen to critical mass to become the dominant leaders within the vertical industry electronic marketplace (Neef, 2001).

# 4.2. Horizontal E-Marketplaces

Horizontal e-marketplaces enable reliable online transaction between specific group of buyers and suppliers that is being held by a third party institution. By providing automation of work flows and business processes, significant cost and cycle time advantages can be observed by enterprises. These third parties synchronize different enterprises that are engaged in different areas like financial institutions, telecommunication companies, information technologies providers, etc. Combination of all these factors offers many added-value services to businesses.

# 4.3. Benefits of E-Marketplaces

If SMEs get involved in some sort of e-marketplace, they will have the chance to get advantages that they cannot have otherwise. These advantages are examined under the following points (Susarla *et al.*, 2000:33-39; Turban *et al.*, 2009):

- Transparency and high reliability: Open environments and sufficient market knowledge will allow buyers to make accurate decisions about the product, the price and the real-time market information. It gives ability for unrelated buyers and sellers to communicate because of the reduced search costs and greater visibility across borders. The end result is reduced industry inventories, increased liquidity, more interactions between an expanded universe of buyers and sellers and even the creation of whole new market opportunities
- Control over purchases: Businesses often prefer to make large-scale purchases to take price advantages by making agreements. Due to these agreements, SMEs can have a greater control over purchases.
- Buying consortia and price pressure: Creating a union by large-scale trading companies to gain bargaining power is a common practice in market. Some factors that cannot be traced numerically or concretely such

as cooperation between buyers and suppliers, instant access to new suppliers, identifying different suppliers for risk mitigation of critical products should be concerned by companies.

- Suitable environment for SMEs: Suppliers don't take kindly to small-scale orders because of high fixed costs and low profit. E-marketplaces have brought down order costs and gives way to profitable procurement.
- Reduction in customer acquisition costs: Obtaining new customers is a
  challenging and costly process in classic marketing methods. Emarketplace presents a central structure, in which suppliers can establish a
  relation and gain customers through a much easier process with lower
  costs.
- Low selling costs: Online sales transactions give much lower error rate compared to the classic processes.
- *High reliability:* Availability of detailed information about businesses and the insurances provided by the management of the e-marketplace, allows suppliers to move more freely within the market.
- The development of buyer-supplier relationships: Perhaps the most important advantage for a supplier is to establish a healthy and friendly relation with the buyers. Stable relations are an important aspect for SMEs, which may lead to profitable cooperation in the future.

SMEs, which provide input for large-scale enterprises, can access a larger market through e-marketplaces. E-marketplaces can be formed through the partnerships of major players in the fields, such as software, hardware and network companies. An already developed technical infrastructure, business model, and the readiness of the buyers, provide a great advantage for SMEs who want to open up to e-marketplaces. With just a PC and internet connection, SMEs can reach a whole new market with a wide range of investment opportunities and new customers, which would not have been possible by the conventional markets.

#### 5. CONCLUSION

SMEs that are the manufacturers of a supply chain have the possibility to reach more profitable opportunities through global e-procurement processes. As a consumer of the supply chains, they can benefit from a range of services, products and half-finished products with reasonable prices. All over the world, large corporations are trying to strengthen SMEs, which in turn compliment them in the market. The basic idea behind this is to get a supply chain where all members trust each other with high quality and efficiency, resulting in a competitive price to all over the world. Most of the SMEs, base their work only on low prices, regardless of the product quality, which makes them unable to compete in a larger market. It is becoming exceedingly difficult to compete with the world market; and therefore, SMEs should change their business model of lower-quality/lowerpriced goods and services as soon as possible. Only 8% of SMEs are exporting in Europe. As a result SMEs need to develop e-procurement chains, e-marketplaces and e-CRM applications need to be focused on SMEs. To make the SMEs' ability of relationships with customers more effective, products and services, and customer relations should be moved to the electronic media.

## **BIBLIOGRAPHY**

Abualsamid, A. (2001) "The Basics E-CRM", *Network Computing*, Volume:12, Issue:10, pp.143-146.

Amit, R. and C. Zott (2001), "Value Creation in E-Business," *Strategic Management Journal*, Vol. 22, No. 6–7, pp. 493–520.

Bennett, R. (1997), "Export Marketing and the Internet: Experiences of Web Site Use and Perceptions of Export Barriers Among UK Businesses," *International Marketing Review*, Vol.14, No.5, pp.324–44.

Dai,Q., Kaufmann, R.J.(2002), "Business Models for Internet-Based B2B Electronic Markets", *International Journal of Electronic Commerce*, Vol. 6, No.4 pp.41 – 72.

Eng, T.Y., (2004), "The Role of E-Marketplaces in Supply Chain Management", *Industrial Marketing Management*, Vol. 33, No. 2, pp. 97–105.

Griffith, D., Palmer, J.(1999) "Leveraging the Web for Corporate Success", Business Horizons, January/February, pp. 3-10.

Hamill, J. (1997), "The Internet and International Marketing," *International Marketing Review*, Vol.14, No.5, pp.300–323.

Kaplan, S., Sawhney, M. (2000), "E-Hubs:The New B2B Marketplaces", *Harvard Business Review*, Volume:78, Issue:3, pp. 97-103.

Karadvic ,M. And Gary, G. (2005), "Integrating E-Commerce Into Existing Export Marketing Theories: a Contingency Model", *Marketing Theory*, Vol.5, No.1,pp.30-57.

Kaynak, E., Tatoğlu, E., Kula, V. (2005), "An Analysis of the Factors Effecting the Adoptation Electronic Commerce by SMEs", *International Marketing Review*, Vol. 22, No. 6, pp. 623-640.

Mcafee, A .(2000) "The Napsterization of B2B", *Harvard Business Review*, Volume:78, Issue:6, pp. 18-19.

Neef, D. (2001), E-procurement: From Strategy to Implementation, Prentice Hall, USA.

Porter, M. (2001) "Strategy and the Internet", *Harvard Business Review*, Volume:79, Issue:2, pp. 63-78.

Prasad, V.K., Ramamurthy, K. and G.M. Naidu (2001), "The Influence of Internet-Marketing Integration on Marketing Competencies and Export Performance," *Journal of International Marketing*, Vol.9, No.4, pp.82–110.

Samiee, S. (1998), "Exporting and the Internet: A Conceptual Perspective," *International Marketing Review*, Vol.15, No.5, pp.413–26.

Schulze, C. and Baumgartner, J. (2001), "Don't Panic, Do E-Commerce, A Beginner's Guide to European Law Affecting E-Commerce", European Commission's Electronic Commerce Team.

Shaw, M.J., Gardner, D.M. and Thomas, H. (1997), "Research opportunities in electronic commerce", *Decision Support Systems*, Vol. 21, pp. 149-56.

Slywotzky, A. (2000) "The Future of Commerce" *Harvard Business Review*, Volume:78, Issue:1, pp. 39-47.

Stockdale, R. and Craig, S. (2004), "Benefits and barriers of electronic marketplace participation: an SME perspective", Journal of Enterprise Information Management, Vol. 17 No. 4, p.301.

Susarla, A., Parameswaran, M. and Whinston, A.(2000) "Emerging Market Structure in the Digital Supply Chain", *Internet Services*, September/October, pp.33-39.

Wise, R., Morrison, D. (2000) "Beyond the Exchange: The Future of B2B", *Harvard Business Review*, Volume: 78, Issue: 6, pp.86-97.

Turban, E., Lee, J., King, D., Liang, T., Turban, D. (2009), Electronic Commerce 2010, Prentice-Hall, Englewood Cliffs, NJ.