

B2B or Not B2B? - The future of B2B and the role of Small and Medium-sized Enterprises from SEE

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ABSTRACT

The struggle of SMEs to enter the B2B marketplace is of a huge importance. Standardized communication should be seen as an asset rather than as a barrier. B2B Frameworks as standards for communication cannot be fully implemented by SMES due to the cost, organizational or managerial decisions and other factors. The power of e-marketplaces can be an option for SMEs to participate in the biggest money making electronic market in the world. How SMEs will participate and if they will participate is discussed in this paper.

Keywords

the future, e-commerce, b2b, SME, framework, cloud, e-marketplace, developing countries

1. INTRODUCTION

The problems that Small and Medium-Sized Enterprises are facing when aiming for the opportunities that of Business-to-Business marketplaces in the world are offering, is being evaluated in this paper followed up with a discussion on the role of SMEs in the future of B2B as integrated part of the global world commerce.

Many problems that SMEs are facing when accessing this huge pool of business deals were investigated, analyzed, and discussed by various scholars [1] [4] [7].

Our intention is to further discuss the future of B2B and the prediction on B2B applications and their movements toward "Cloud"-based solutions.

2. THE PROBLEM OF SMES ON B2B

Finding the root of the problem is really difficult, but some scholars, such as MacGregor and Vrazilac claim that the main reasons why SMEs have been slow to use e-commerce are related to security, lack of resources, and incompatibility [7]. The implementation of standards in B2B communication and probably the cost to do so remain the main factor in SMEs participation in B2B marketplaces.

The "standardization" for B2B frameworks [9] [10] [2] both in the forms of terminology and/or B2B Frameworks relies on the importance of having unique standards when communicating B2B messages, easily understandable XML documents.

Other scholars covers the issues linked to the usage and implementation of B2B by Small and Medium Enterprise [1] [4], where the major problems are discussed and the accent is, again, on the compatibility and standards during the communication of B2B messages.

Having a public, free of charge, "e-marketplace" that will comply with standards and can be used by SMEs in developing countries can assist these SMEs to at least participate in the global B2B marketplace without any investment and knowledge on B2B standards in communication.

2.1 The case of F.Y.R. of Macedonia

Having a small, release economy makes Macedonia (F.Y.R.O.M) susceptible to economic developments in Europe and reliant on local integration and development in the direction of EU association for sustained economic expansion.

Therefore Macedonia's tendency should be to move towards the implementation of e-services, including the e-payment and e-commerce as well as many e-governmental projects because as seen from other European countries experiences, this is a good road to follow, which can only bring success.

The law for e-commerce, voted very late, in 2007, was supposed to offer improved legislative support for Macedonian citizens as possible buyers online. Besides the law is hypothetical to support potential businesses that would like to sell their goods and services via the web.

One can argue that the B2B model, as one of the most used models, can also reduce costs for small and mid-size companies, including Macedonia as a developing country. For instance, in the case of Canada, where Canadian SMEs deliver 60% of Canada's economic output and generate 80% of national employment and 85% of new jobs, a survey conducted by Canadian e-Business Initiative (CeBI) [11], shows that SMEs "were able to increase revenues by 7 per cent, and decrease costs by 9.5 per cent (costs of goods sold) and 7.5 per cent (sales and administrative costs)" [11]. This supports the argument that B2B can reduce costs for SMEs

Another factor that may trigger the use of B2B for SMEs is the fact of the International competition that will in a way unconditionally “ask” companies to move to B2B e-commerce due to the globalization [12].

Macedonia and Macedonian companies can be found in some of the known B2B portals, but limited with the offerings of their or services. It is important to mention that only larger enterprises are present online, while the SMEs are still uncertain about their electronic transactions and that could be a reason why they do not appear on these B2B portals.

A quantitative research method was conducted at South East European University, through survey to collect data about the importance of B2B e-commerce for SMEs in Macedonia, whether companies (SMEs) in Macedonia are ready, if they have enough knowledge or at the end if they need B2B e-commerce.

Even though developing countries including Macedonia have suffered severe economic problems, they have managed to catch up to their European neighbors. Clearly in these countries there is an unused potential for e-commerce implementation.

The study applied a quantitative research approach that tried to support the assumptions for B2B e-commerce for SMEs, by collecting data from SMEs from Republic of Macedonia. According to Small Business Act (SBA) Factsheet by European Commission [13], nearly 99% (99,8%) of companies registered in Republic of Macedonia are SMEs, which makes it clear that the SMEs sector in Macedonia has an important impact on the overall economy as well as on the employability.

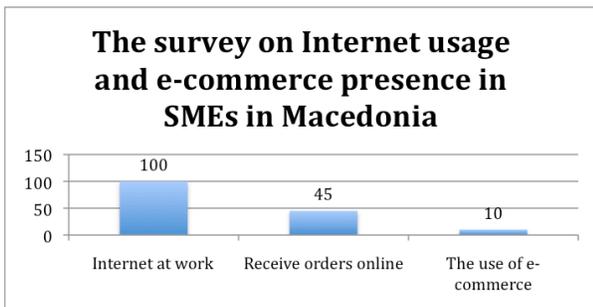


Figure 1 - The Internet usage and e-commerce presence in SMEs in Macedonia

From the data collected from the survey (Figure 1) (Figure 2), it can be concluded the following:

1. the SMEs in Macedonia use Internet and E-mail at work in all of the cases that where interviewed, which is a good starting point;
2. Another extreme shown in the figure is the extent of e-commerce usage by companies, which in this case is very low or close to none, with an exception of two cases (outliers) which in this case prove the results that the extent of e-commerce usage by SMEs in Macedonia is very low;
3. Majority of managers use e-mail all the time in their organizations but only few of them access information via networks or have some form of online order receiving, which seems promising;

4. The online presence of companies is set to be somewhere in the middle, or, about 50% of the companies have some sort of online presence, which would mean that some companies have online presence through their websites, which is a good basis to move towards e-commerce;
5. The e-commerce concept is known but the use of e-commerce inside the company is still a myth! Small and Medium Enterprises in developing countries (the case of Macedonia) lack on e-commerce implementation, specifically B2B e-commerce.
6. As seen in Table 1, the correlation between the manager’s age and the percentage of investments in IT is **-0.3231** that indicates negative correlation; as lower the value of age (younger manager) is, the higher the value of investments planned for IT will be. Senior managers don’t really believe in IT investments;
7. In general the responses on the technology impact on the performance of the organization and the ICT becoming a part of the organization are resulting in positive opinion by managers for the importance of ICT in business.

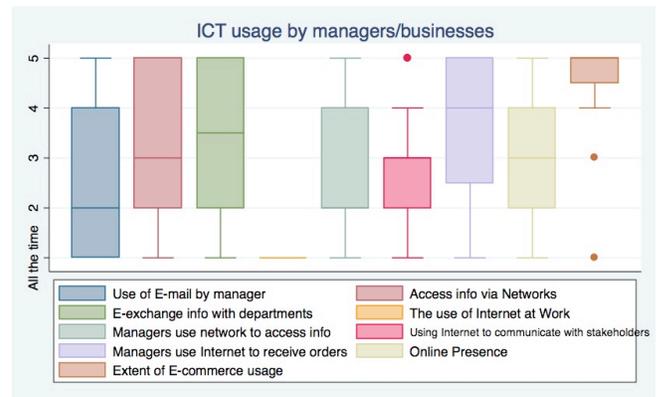


Figure 2 – ICT usage by managers/business represented as box plot results

Table 1 Correlation matrix between manager’s age and percentage of investments in IT

(obs=20)

	age	percent_IT~d
age	1.0000	
percent_IT~d	-0.3231	1.0000

The roots of the problems seem not to be the technology, but mainly managerial decisions and the cost of implementation.

More than 65% of the managers, no matter of the age and the education level of the manager, agree that ICT has huge impact on organizations performance (Figure 3). There are always tough

managers that like to work “the old school” way, but in the case of the survey they are also known outliers.

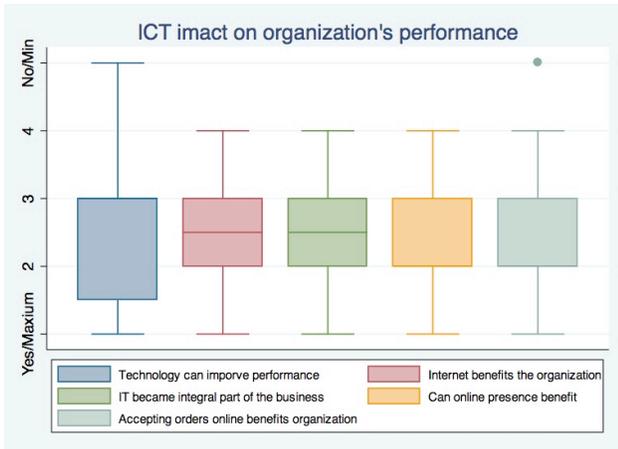


Figure 3 ICT impact on organization's overall performance

The case of Macedonia is same for most of the Balkan or SEE countries, therefore maybe an regional “e-marketplace” is the way to go.

3. B2B OR NOT B2B?

Considering the fact that SMEs from SEE try to penetrate the B2B global market by offering their products rather than by trading online, there is a huge possibility that by including only the process of “selling” as the main process as a part of “e-marketplace” for these SMEs. This way, the SMEs will offer their products and Large Enterprises will seek for those products seems to be enough to increase the visibility and allow B2B transactions even for the micro and small companies.

The B2B Marketplaces in the near future will continue to grow and have all the means of communication included in one place. Most likely they will offer B2C alike environment where business will act as clients and buy over the web. But, additionally it will include the business processes of B2B negotiation and ordering. I also support the fact that B2B framework standards must be respected and implemented fully.

The tendency will most likely be to move from traditional electronic data interchange or ebXML to Web-based Product catalogs, as in the case of alibaba.com but still include the standards of traditional and modern electronic data interchange.

Another opinion we have is that the discovery phase of companies will no longer depend on the company product categories, but rather it should move towards ontology based product listing where based on a keyword the company and products can be found. This approach is also supported in the paper “An Ontology-Based Product Recommender System for B2B Marketplaces” [6] where authors propose the Bayesian belief network combined with the ranking algorithm to utilize with a purpose to deliver the right answer to the requester based on the weight calculated.

Agent-based systems are also very much investigated and their application in B2B e-commerce is inevitable. Intelligent agents that have specific roles and tasks will tend to find appropriate product and/or alternatives, negotiate the prices and why not close

the deal. The paper “Agent-Based System Design for B2B Electronic Commerce” [5] introduces the Role-Algebraic Multi-Agent System Design (RAMASD) approach where they propose the use of agents and pre-defined roles in the process of B2B.

B2B Marketplaces and product finding will become easier and smarter by not just using keywords for searching but adding Data Mining algorithms, intelligent agents and roles to provide the right products to the businesses based on their requirements.

3.1 Products vs. Services

Will the products keep their epithet in the B2B e-commerce trade or they will be replaced by services is a discussable question that has no right answer. There will always be products that will be sold and there will always be some companies that will buy these products, which is a fact. So majority of B2B transactions will include real products rather than services.

But, what is considered to be trend in B2B trading is the actual increased rate of services, specifically IT and telecom services in B2B e-commerce. A recent article [3] shows that the B2B trading in IT services and telecom is expected to grow at attractive rates. This is because telecoms and IT companies will tend to offer their services online, to all stakeholders, thus offering Software-as-a-service or Platform-as-a-service will play a huge role in the future of B2B

4. THE LAND BEFORE THE CLOUD?

The question of deployment and scalability of B2B systems remains to be discussed. Here is the question: Is it the land before the Cloud, or what?

In the era of Service Oriented Architectures, SOA has moved from “the land” to “the cloud”. It is not SOA anymore, but Cloud computing; now Cloud Services; Software as a Service; etc., are becoming pre-dominant when developing web based solutions for the crowd. We assume if a system is developed for many users and not for one Enterprise, the Cloud is the way to go.

Cloud offers reliability, scalability “on-the-go”, security measures and low prices per usage or per transaction. Many Small and Medium Sized Enterprises see the future of their applications on the cloud, because it is cheaper and they do not need to hire any IT experts. This is working for Small Accounting, Finances, B2C E-commerce, why not B2B as well. If ERP solutions tend to move to the Cloud, I assume all applications for businesses in the near future will be “On the Cloud”.

A very good blog-article [8] recently published by Mark Morley Director of Industry Marketing for Manufacturing at GXS¹ explains that the future B2B platform could be assembled as set of blocks that could be easily added to satisfy the requirements at a given period. These blocks, as he refers to “Lego blocks” could one day be so simple that any B2B requirements and or platforms could be built as if it were a Lego. Just as kids build Lego cities, companies can easily build B2B platforms.

¹ GXS is a global B2B e-commerce and integration services company. <http://www.gxs.com/>

5. CONCLUSION

The future of B2B starts with standardization, with simplification and inclusiveness of all parties, no matter of the size and capacity of the company involved. Everyone should get the chance to be a part of the global B2B marketplace where the money is.

Emerging markets and the companies from these markets, especially SMEs must try to get out of the box, must try to compete outside of the borders of one country if they want to succeed. The developing countries rely on SMEs to drive their economies. Any success they have is the countries' success as well.

Many countries comply with the European commission's "Digital Agenda" where the future of commerce is heavily dependent on the "digital" component rather than the traditional approach of commerce.

Companies will offer "anything" that can be sold, online. If it is a product or a service, it can be bought online. Centralizing SMEs into "e-marketplaces" is a tendency to follow, now with the help of Cloud-as-a-Service it is going to be a reality in the near future.

There will be B2B for micro, small and medium enterprises.

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