

## TRUST IN B2B E-MARKETPLACES

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**ABSTRACT:** *The paper presents background of B2B exchanges and review of their forms and functionalities. The benefits and fails reasons are noticed. European enterprises interest in B2B trade is next aspect of consideration. Finally, the trust barriers of B2B exchanges are presented.*

**KEY WORDS:** *business-to-business; e-marketplace; online purchasing.*

**JEL CLASSIFICATION:** *D85, L14.*

### 1. INTRODUCTION

It is in the business-to-business (B2B) domain that the real e-commerce revolution is happening – in contrast with the business-to-consumer (B2C) domain that may follow a more evolutionary path. B2B is the core of the e-market – the most important in economic terms, with more than 80% of total ecommerce activities. It is the fastest growing and most rapidly evolving area of e-commerce.

Business-to-Business (B2B) exchanges are electronic marketplaces in the Internet where suppliers and buyers interact to conduct transactions. B2B marketplaces can be defined as a World Wide Web site where goods and services can be bought from a wide range of suppliers<sup>1</sup>.

Stockdale and Standing defined an e-marketplace as a neutral web-based location where businesses can conduct buying and selling transactions for goods or services. Buyers looked to e-marketplaces for more favorable pricing, improved

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<sup>1</sup> Ramsdell G.: *The real business of B2B*, The McKinsey Quarterly, No. 3, 2000, pp.175-6.

efficiencies in the purchasing process, improved supply market knowledge and visibility, and improved aggregation and control of spend across the firm. Suppliers looked to e-marketplaces to discover new markets and customers for their products. The rapid expansion in the number of e-marketplaces with overlapping service offerings created a clouded picture of the e-marketplace landscape (Grieger, 2003, p.280).

Generally, there are three types of e-marketplaces (Dawei & Jiju, 2003, pp.173-179): marketplaces based around a specific industry sectors; marketplaces based around products and services; marketplaces focused on the functions.

Marketplaces based around a specific industry sectors are called vertical marketplaces. Petroleum industry is an example. We can point on the Chevron's Petrocosm with Texaco participation and BP Amoco marketplaces as the examples those help buyers source goods and services that are largely specific to industries.

The type of marketplace which is formed around a wider supply market that cuts across several industries is called horizontal marketplace. Examples include the marketplaces for maintenance, repair and operating (MRO) goods such as safety and office supplies. The value of the horizontal marketplaces is that they efficiently match the needs of the one with the offerings of the other.

The marketplaces focusing on functions gain value from concentrating functional capabilities and quality services. For example they help HR departments manage employee benefits; help companies dispose of excess inventory and so on.

There are many benefits to be gained by companies trading across the Internet through the e-marketplaces. The three main ways of creating value through B2B marketplaces:

- B2B marketplaces expand everyone's market reach. Without B2B marketplaces, buyers can have great difficulty finding suppliers with the right equally encounter difficulties in finding motivated buyers.
- B2B marketplaces generate lower prices for buyers. The price improvements for the buyers result from ability of buyers to reach more suppliers or the most efficient supplier as well as from increased price competition and in some cases, access to excess inventory stocks.
- B2B marketplaces cut the costs of buyers' operations. Most B2B companies now provide services that cut the costs of B2B procurement processes, which traditionally consume much staff time and effort.

However application of B2B trade does not give the foreseen profits in every case, the reasons of marketplace fails can be as follows:

- A B2B exchange cannot wring huge efficiencies out of all elements of supply chain. B2B exchanges can have no impact on certain supply in its physical goods flow. There is still need for organizations to keep surplus inventory to meet any unanticipated demand until more components arrive from the suppliers.
- B2B exchanges have perceptual certain inefficiencies by failing to realize that the same supply chain segment in the different industries and different supply chain in the same industry, may require different improvement levels.
- Organizations fears of sharing information freely, seriously inhibits adding value. Although the information can benefit the other members of supply chain, the fear

of losing crucial competitive advantage leads companies owning the information refusing to share information (of forecast, products life cycle and bills of material) freely.

## 2. B2B E-MARKETPLACES DEVELOPMENT

Since the beginning, B2B exchanges have had a tremendous growth, Goldman, Sachs and Co. had projected that US B2B sales on the Internet would reached \$1.5 trillion by 2004 compared with \$114 billion in 1999. The growing interest in B2B e-business is also reflected by the fact that in 1999, venture capitalists poured \$17 billion into B2B endeavors, compared with \$11 billion in Business-to-Customer (B2C) ventures<sup>2</sup>.

Real growth of B2B sales has met above mentioned forecasting. In 2003 US B2B exchanges was estimated on \$1,33 trillion. The largest participation in this amount had B2B platform trading computing and electronics, motor vehicles, petrochemicals and utilities.

Despite of rising trade value reached via B2B platform we can observe that since 2000, a consolidation process has started which seems not yet fully completed. It is estimated there were around one thousand B2B e-marketplaces world-wide, with about 300-500 active in Europe in 2002 and about six hundred and three hundred in 2010 (Table 1).

**Table 1. Estimated numbers of active B2B marketplaces by region of activity**

Active in	Berlecon Research		eMarketServices	
	4/2002	2/2003	4/2002	6/2010
World	1060	889	1189	615
North America	669	556	619	274
Europe	381	324	540	307

Sources: B2B marketplace databases from Berlecon Research ([www.berlecon.de](http://www.berlecon.de)) and eMarketServices ([www.emarketservices.com](http://www.emarketservices.com))

\*Note: The regional information denotes activity within the respective region, not necessarily the headquarters.

Concerning the usage of B2B Internet trading platforms by enterprises, the *e-Business Watch* reports for the 4 largest EU Member States (Germany, France, UK and Italy) that around 5% of European enterprises used e-marketplaces in mid-2002 and early 2003 and that a further 3-4% are planning to do so in the near future. These figures suggest that the overall impact of B2B e-marketplaces is still relatively low, but considerable differences exist between different industry sectors.

In the Information and Communication Technologies (ICT) services sector, for example, 7-12% is regularly trading via e-marketplaces, while a further 6-9% has reported that they are planning to do so. Also the tourism industry shows an above-average use of e-marketplaces. It is also interesting to note that the plans to use e-

<sup>2</sup> "To B2B or not to B2B" U.S. News & World Report (2000, February 7)

markets seem to be more developed in those industries that already use them to a larger extent, such as in ICT services, tourism or business services<sup>3</sup>. This suggests that e-marketplaces are more suited to the Internet trading demands for some sectors than for others.

Some industries show considerable differences between the e-marketplace use of small and large companies. Generally, large enterprises are more likely to use e-marketplaces than SMEs. While almost 10% of the large enterprises confirm that they use e-marketplaces for selling or purchasing products and services, only about 5 % of the SMEs do so. This picture prevails in the data available for early 2003. The respective ratio is 7% to 5% for a subset of the industries studied in 2002. Among current non-users, the percentage of enterprises that plan to start using marketplaces is higher among large enterprises (5%) than among SMEs (about 4%), but not as significant as in terms of active participation. Also this picture is the same in 2003.

Less interest in on line and B2B trading platforms usage is noticed when comprising B2B purchasing in Poland to situation in other EU countries. 12% of all enterprises (with 19% employees) in Poland make purchases on line. But 2% of enterprises do it via B2B trading platforms. This share is relatively higher in other presented countries (Table 2). Comparable or even higher share of enterprises in Poland to other EU countries exchange their documents online with suppliers but there is a few enterprises in Poland using supply chain management systems.

**Table 2. Online purchasing, B2B connectivity in 2009/10**

	Online procurement / sourcing					
	Make online purchases		Online purchases >5%		Buy on B2B trading platforms	
	% firms	% empl.	% firms	% empl.	% firms	% empl.
Germany	39	56	27	30	12	20
Spain	20	28	11	15	8	9
France	27	37	14	16	6	7
Italy	27	30	17	15	4	6
United Kingdom	48	58	25	29	5	8
Estonia	28	35	6	11	2	3
Poland	12	19	5	9	2	4

Source: Author's elaboration based on: *The European e-Business Report 2010 edition*. Office for Official Publications of the European Communities, Luxembourg, September 2010

The reasons of such a low interest in online purchases and B2B trading platforms usage can be lower share of enterprises with the computer and the internet access. The percentage of enterprises using computers in Poland amounts to 77% (86% of employees) while in Germany 93%, in UK 80% but with staff of 94% of total employees number in both countries. The Internet access has 66% of total enterprises

<sup>3</sup> *The European e-Business Report 2004 edition*. Office for Official Publications of the European Communities, Luxembourg, September 2004

in Poland while in Germany 80% and in UK 75% almost 90% employees in both countries. Moreover the internet access in Poland is realized applying technologically less advanced analogue modem. Considering lack of ICT infrastructure one should remember important assertion made by Carr that it was no longer possible to gain strategic advantages from ICT, since their use has become a commonplace (Carr, 2003).

### **3. TRUST IN B2B INTERNET TRANSACTIONS**

Development of the B2B e-marketplaces has showed also some barriers. Lack of trust is one of the most important. Survey led by the Directorate General Enterprise in European Commission points on the following trust barriers<sup>4</sup>:

- Uncertainties related to the protection of confidentiality of sensitive data (59.4%);
- Uncertainties related to the security of information and communication systems (57.8%);
- Lack of clear information on the terms and conditions of the contract (e.g. applicable law; jurisdiction, etc) (56.3%);
- Uncertainties related to the settlement of disputes (50%);
- Uncertainties related to on-line payments (48.4%);
- Lack of sufficient information on the different steps for the conclusion of the contract (42.2%);
- Lack of sufficient information on the identity of the companies (name, address, telephone number, VAT number, etc) (37.5%);
- Lack of sufficient information on the right of withdrawal from the contract (35.9%);
- Lack of sufficient information on product return and recovery of amounts paid (34.4%);
- Lack of sufficient information on the characteristics of the goods/services (31.3%);
- Lack of sufficient information on availability of products and delivery time (29.7%);
- Lack of sufficient information on payment methods (25%);
- Lack of sufficient information on certification of products/services (23.4%);
- Other (23.4%);
- Lack of sufficient information on the prices of goods/services including additional charges (e.g. taxes) (20.3%);
- Lack of sufficient information on insurance of goods/services (18.8%);
- Lack of sufficient information on the costs of delivery goods/services (15.6%);
- Lack of sufficient information on the language of the transaction (14.1%).

The majority of the responses to the survey were from companies (48.4%) and from associations (40.6%). Only a small percentage was from Chambers of Commerce (10.9%). Most of the respondents were from the following Member States: Germany

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<sup>4</sup> *Open consultation on "Trust barriers for B2B e-marketplaces"* European Commission, DG Enterprise, Unit D.4 E-Business, ICT industries and services, Brussels 2002

(23.4%), Belgium (17.2%), France (14.1%), Italy (14.1%), Spain (12.5%), United Kingdom (10.9%) and The Netherlands (9.4%).

#### 4. CONCLUSION

The advance made in the information technology over last years has been tremendous and many transaction systems have emerged as a result, in which the B2B marketplaces stand prominent and attracts a great deal of attention across industrial sectors. If today's bricks and mortar companies are to survive, they must reinvent themselves to integrate the Internet into everything they do and connect with one or more B2B exchanges. The first marks of the change could be noticed - the incredible increase of purchasing value made using B2B in last few years, in computing, motor vehicles and petrochemicals industries, mainly.

Trust is an important issue for B2B e-marketplaces. The most important trust issues for participation in B2B e-marketplaces are the following: security, confidentiality, transparency, in particular of the terms and conditions of the contract and the transaction procedure, alternative dispute resolution. According to e-marketplace operators, a lot of the information related to those issues, is being made available on their web sites, with the exception of online auctions where the information seems to be rather limited. This different perception of the situation may suggest a "trust gap", either resulting from a lack of awareness or from different views about the effectiveness of the measures taken in addressing trust issues in B2B e-marketplaces.

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