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# Electronic Commerce and Business in the Polish Textile and Clothing Sector

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## Abstract

The aim of this article is to present the results of the author's own research on electronic commerce and electronic business utilisation, carried out amongst Polish enterprises from the textile and clothing sector. The most important statistical data obtained from the research and overall conclusions based on them are presented.

**Key words:** electronic commerce, electronic business, Polish textile & clothing sector.

## Introduction

It is a known fact that companies use the internet to reduce costs, increase sales and get new customers. Thanks to the low cost of online advertising, it is now possible for micro, small and medium size enterprises (SMEs) to access the mass consumer market, which was not possible earlier (before the emergence of the New Economy). Previously it was necessary to put out expensive TV/radio/magazine or newspaper ads to achieve the same goal that is now possible thanks to company web pages and much cheaper online advertising methods.

In the world, research in specific sectors of the economy are already being conducted to observe and compare how ICT (information and communication technologies) and the internet influence those sectors. That is why it was decided to conduct similar research in the Polish textile and clothing sector and check if the influence of such technologies is positive.

## Research methodology

The research was conducted on selected companies from the Polish textile and clothing sector, and a selection of research samples was taken from a database of companies on the online portal of the Panorama Firm [1]. As a research in-

strument, a questionnaire prepared by the author was used, which was sent to the selected companies by e-mail in July and August 2008. The questions concerned data for the year 2007. In order to obtain objective data, there were about 20 randomly selected companies from each of the categories of the catalogue 'Clothes and textiles', available on the web pages of Panorama's portal, which allowed to state that the sample was representative. It gave a total number of 393 companies, to which the questionnaire was sent. Seven of the questionnaires were collected personally due to the fact that the companies were located in the Łódź region (the city where the author of the research lives).

As can be seen from **Table 1**, of the 400 companies to which the questionnaires were sent, 41 valid (correctly filled) questionnaires were gathered, giving a 10.25% survey realisation index, which is acceptable in the case of such research. It should also be mentioned that for some questions a filter was used, which is a method commonly used in surveys. The filter was based on the fact that the questions referring directly to electronic commerce were answered only by companies which used that way of selling.

The questionnaire used in the research was divided into 3 parts: In the first one general questions concerning the companies' overall utilisation of ICT (information and communication technologies) were placed. The second part concerned electronic commerce and its utilisation in the companies, and the third part con-

cerned other forms of electronic business used in the companies.

## Research results and their discussion

The size of the companies was determined only on the basis of their level of employment due to the fact that Polish enterprises are extremely reluctant to give any of their financial data, even for research purposes. The distribution of the companies is given in **Figure 1**.

The development of electronic commerce and electronic business, as with any other type of development, is connected with constant investment in order to achieve the best results. **Figure 2** presents the percentage distribution of the amount of money invested in ICT infrastructure and software by the companies surveyed in the year 2007.

As could be predicted, the great majority of answers were placed in small value ranges due to the fact that most of the companies surveyed are small and micro firms. It is worth mentioning that the companies were not asked about the exact amount of the invested money, but only to mark the range in which their investments are made, the reason for which being that before conducting the survey, several of the companies stated that they did not want to give exact financial data.

Despite low investments in ICT (more than 70% of the companies declared that their investments were lower than 10.000 PLN in the year 2007, and 22% said that theirs were in the range of

**Table 1.** Realization of the survey research.

Valid questionnaires	Valid questionnaires gathered, calculated as a percentage of the overall number of companies to which the questionnaire was sent (N = 400)
1. Questionnaires gathered by e-mail (34)	8.50
2. Questionnaires gathered personally (7)	1.75
Total (41)	10.25

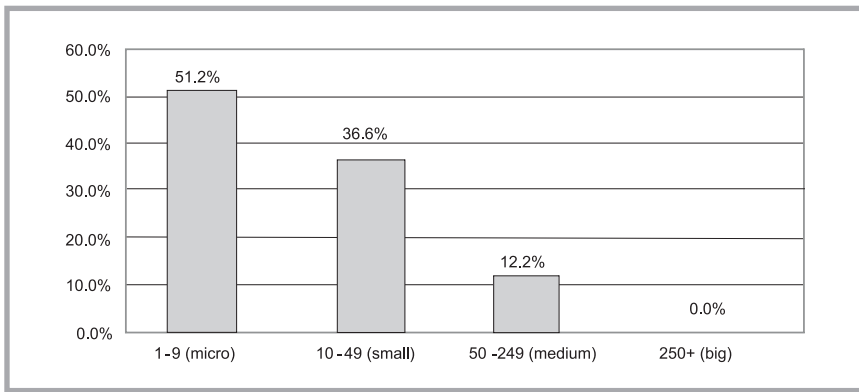


Figure 1. Distribution of the companies surveyed according to the level of employment.

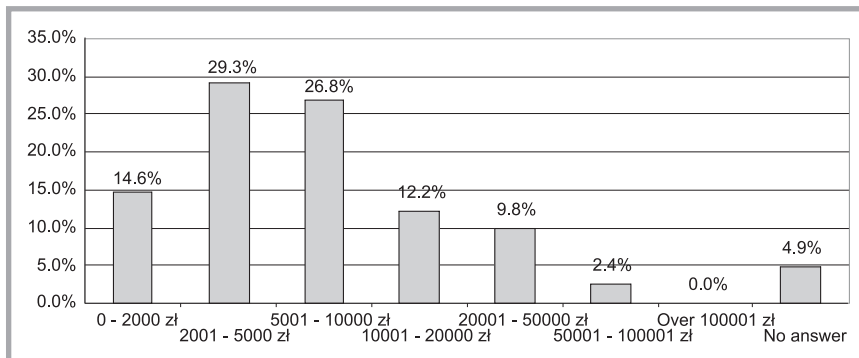


Figure 2. Investments in ICT infrastructure and software in 2007 by the companies surveyed.

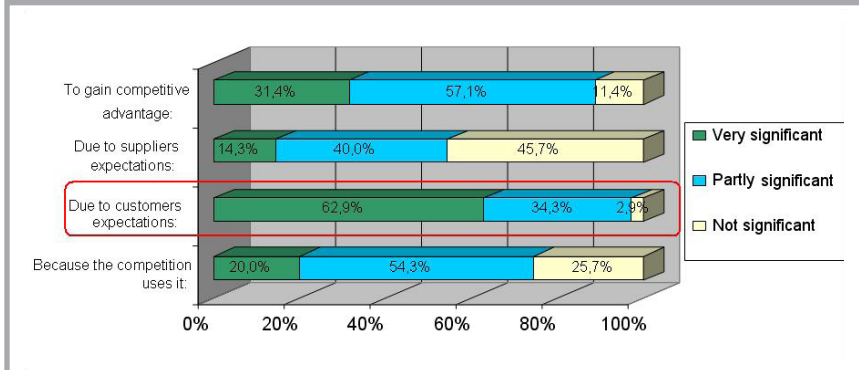


Figure 3. Reasons why the companies use e-commerce and e-business solutions.

10.000 and 50.000 PLN ), in 76.3% of the companies, after introducing electronic commerce, sales increased. 86.8% of the companies gained new customers, and 82.4% gained access not only to local customers but also to national and international ones. These data reflect the very positive influence of electronic commerce on companies from the textile and clothing sector. For comparison it can be stated that in the year 2004 in 7 countries of the European Union investigated by the eBusiness W@tch organization, investment in ICT infrastructure and software in the textile and clothing sector per company was equal to 12309 Euro [2].

However, more than 88% of the companies declared that those who purchase most goods from them using electronic commerce are mainly national customers, the rest being international. The results shown in this and previous paragraphs allow to conclude that electronic commerce enable the companies to reach new clients, both national and international, without investing lots of money in advertising and marketing.

Companies were also asked about estimated future values of their investments. As regards the development of electronic commerce in the textile and clothing in-

dustry in Poland, the fact that only less than 5% of the companies surveyed planned to decrease their investments in ICT infrastructure and software in the year 2008 was very positive. Over 34% of the companies declared that their investment would increase, whereas the rest of the companies planned to keep it at the same level.

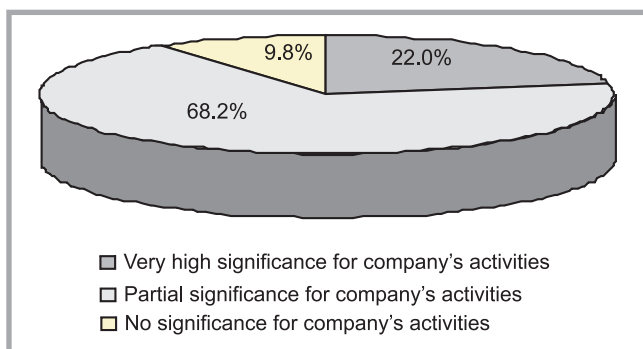
The next two questions were related to the utilisation of internet shops and auction services present on the Polish market. About 30% of the companies currently use these ways of selling; 12.2% declare that they want to introduce an internet shop in the future, and 17.1% want to sell their products with the use of auction services in the future.

It is also very important to mention that more than 70% of the companies were very satisfied or rather satisfied with the results of sales from electronic commerce. Connecting this result with the fact that almost 75% of the respondents expected an increase in sales in the following year through this distribution channel, a very positive image of electronic commerce in the textile and clothing industry in Poland is presented once again.

None of the companies researched lowered the level of employment after introducing electronic commerce; on the contrary 23.7% of them increased the number of employees, and 76.3% kept it at the same level. This illustrates the positive influence of electronic commerce on the overall level of employment in the textile and clothing sector.

What is also very important with respect to employment, all the companies that hire their own ICT employees (14.6% of those interviewed ) also send them on different courses connected with this field. This shows that the companies are aware of the fact that to be able to meet current market requirements, in which those technologies are changing very rapidly, it is necessary to invest in workers, which are one of the most important elements of enterprises.

From the point of view of modern enterprises, the most important are the needs and expectations of customers and their effective fulfilling in order to generate profits, which is one of the most commonly known features of modern marketing, mentioned for example by Philip Kotler [3]. This feature is very well vis-



**Figure 4.** Subjective evaluation of the companies with respect to the significance of e-commerce and e-business for their activities.

ible in the electronic commerce and business of the companies from Polish textile and clothing sector surveyed, which declare that customers' expectations are the most significant reason for implementing e-commerce and e-business solutions. Almost 63% of the respondents regard this factor as very significant, and over 34% as partly significant. This can be seen in *Figure 3*.

Another very important factor is the importance of ICT technologies for enterprises. As can be seen from *Figure 4*, only 9.8% of the respondents stated that e-commerce and e-business do not have any influence on the functioning of their company. 22% of them think that it has a great effect, and 68.3% - only partial.

All the previously mentioned positive aspects of electronic commerce and e-business ascertained during the research can be noticed in Polish textile and clothing companies despite the fact that specialist ICT solutions are not widespread and rarely used. For example, over 50% of the companies declared that they do not use any ICT solutions for their internal processes or for internal or external cooperation, and over 73% of them do not use any standards for data exchange. However, it can be expected that in the future this trend will change, and the electronic commerce advertising business will have even wider utilisation and a higher influence on the activities of companies from the textile and clothing sector.

Finally, according to almost 50% of respondents, in electronic commerce in the textile and clothing industry, specialised, niche shops dealing with certain groups of products will be predominant in the future. This trend can be especially important from the point of view of small and medium size enterprises (SME's), which are definitely most common in this sector.

## Conclusions

The conclusions from this research allow to state that the companies surveyed show good utilisation of electronic commerce in their activities. It can also be stated that e-commerce and e-business have a definitely positive influence on the enterprises surveyed, and in the future it is expected that both of them should have even higher impact on companies in Polish textile and clothing sector.

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3. Kotler P., et al., „Marketing – podręcznik europejski”, PWE Warszawa 2002, p. 38.
4. All figures and data presented in the article are based on the own research, based on the sample of companies described in the article, performed for the needs of the PhD thesis entitled: "Handel elektroniczny w przemyśle tekstylno-odzieżowym na świecie i w Polsce", that was written by the author of this article, under the supervision of prof. Zofia Wysokińska, and defended at the Faculty of Material Technologies and Textile Design in Łódź on 10 November 2009.

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