MARKETING ACTIVITIES OF POLISH INTERNET RETAILERS

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ABSTRACT

While we witness rapid global development of electronic commerce, regional trends may vary considerably and thus it is important to analyze evolution of local e-trade. Here, we use survey data to analyze marketing activities of Polish entrepreneurs in retail e-commerce (B2C). We cover topics such as price comparison, customer loyalty analysis, forms of communication, personalization attempts, information management and profitability. Furthermore, a comparison between the situation in Polish e-commerce in 2001 and in 2004 is used to illustrate its evolution.

KEYWORDS

e-commerce, e-business, Polish electronic marketplace, comparative study, e-trade, B2C

1. INTRODUCTION

There are many ways that development of Internet based enterprise can be assessed [10]. In our work, we are interested in approaching such an assessment form the perspective of marketing practices utilized in Polish e-commerce. More precisely, we are interested in competitive strategies utilized by Polish business-to-consumer (B2C) e-enterprises. It is a well known fact that the Internet is envisioned by many companies as the main source of cost reduction, however not every company is acting, or willing to act, according to rules derived from these low-cost strategies. A classic example of analysis of competitive strategies (ideas of M. E. Porter [1]) enumerates three general strategies that lead to a competitive advantage:

- *leading position in terms of total costs* – this strategy, popularized in 1970s due to a notion of an experience curve, rests on gaining a leading position in a sector in terms of total costs using a set of a functional rules of action;
- *differential* – requires differentiation of a commodity or a service offered by the enterprise, creating something which is considered unique in the whole industry and utilizing this uniqueness as a source of advantage over competitors;
- *concentration* – requires focusing enterprise actions on a given group of buyers, given subset of goods and/or or a given geographical area.

In this context a study of marketing activities of Polish Internet retailers has been conducted. In order to capture not only a one-time-snapshot of the situation, but also to be able to observe longer term trends, the study was repeated twice. First, in December of 2002 and then in March of 2004. This paper summarizes its main findings.

2. THE STUDY

2.1. Survey creation and administration

Out of possible ways of collecting data about marketing activities utilized in Polish e-commerce, we have decided to utilize an invitation-based web-survey. In the first stage of the project we have created a database of 250 Polish e-stores, selected according to the following criteria:

- companies that announced their offer(s) within the Wirtualna Polska[1] "shopping area,"
- companies that announced their offer within the Onet[2] "shopping area,"
- companies found within the first 10 pages of Wirtualna Polska and Onet web catalogues (excluding those companies fulfilling the two previous criteria).

This selection method allowed us to capture not only some of the largest Polish Internet-stores, but also assure that representatives of smaller e-businesses were included. Let us note that, according to the data provided by the research company I-Metria, at the time of the first survey, there were 800 e-stores in Poland [11] and thus we have selected a representative subset of 32% of stores. We have repeated a modified version of the same selection procedure in 2004. This was due to the fact that by the time of the second survey approximately 40% of companies that were selected in the first one no longer existed. We have thus proceeded as follows. We have removed the non-existent companies form the database and augmented it with the same number of companies selected according to the same set of three criteria. Interestingly enough, in the meantime a number of e-stores in Poland shrunk. On March 18th, 2003 (the last available data point), according to I-Metria, there existed only 660 e-stores [11]. Obviously, the reason for this can be attributed to the same ".dot-bomb" effect that has been observed in e-commerce around the world. It can be expected that by the time of the second survey (March, 2004), the overall market has recovered, but it is highly unlikely that it has surpassed the 880 stores reported in existence in 2001. Thus we remain confident, that our data is representative of the overall situation in Polish e-commerce.

After creating and verifying the database in terms of its formal and technical properties, a survey questionnaire was constructed and installed (and thoroughly tested) as a password protected "form" on the web server at the Poznań University of Economics. In the next step invitations to take part in the survey were e-mailed and postal mailed to all 250 e-companies in the database. Out of 250 invited candidates, in the first survey we have received answers from 102 companies, while in the second survey 61 companies responded to our invitation. Thus 40.8% e-companies responded to our first invitation, while 24,4% responded to the second invitation. Again, we believe that the population consisting of 102/61 respondents is sufficient to make our results valid and representative of actual situation in Poland. Note that since the survey web site was password protected and passwords were distributed as a part of the actual invitation, only representatives of invited e-stores were able to access our survey and fill it out. This being the case we expect that no frivolous data has been introduced to the survey.

Obviously, one may question the validity of the results presented here; on the basis of the fact that we trust e-businesses report truthfully about their prices or customer loyalty and about other features of their e-business. In response to this we can state that since the survey was anonymous and this fact was stated in the invitation to participate and in the way that the survey-form was constructed, there was no particular reason for representatives of e-stores to falsify their responses. Furthermore, we have performed a random checking of aspects such as the prices or communication methods appearing in context of Polish e-business and the results match these obtained in the survey.

Let us now present and discuss the most important findings of our surveys.

2.2. Price comparison

In a number of papers devoted to marketing, studied in context of electronic commerce, particular types of enterprises or specific enterprises are specified as these that follow at least one of Porter's competitive strategies. Assuming that the *differential* and *concentration* strategies involve very close relations between

[1] One of the biggest Polish general purpose portals, http://www.wp.pl/
[2] Another of the biggest Polish general purpose portals, http://www.onet.pl/

customers and enterprises, it is easy to see the importance of customer behavior, and in particular, their inclination to being loyal to the enterprise. While there exist a number of possible ways to promote customer loyalty, price management is clearly one of fundamental marketing strategies [5, 7]. Price comparison was therefore the starting point of our investigations and Figure 1 depicts the results.

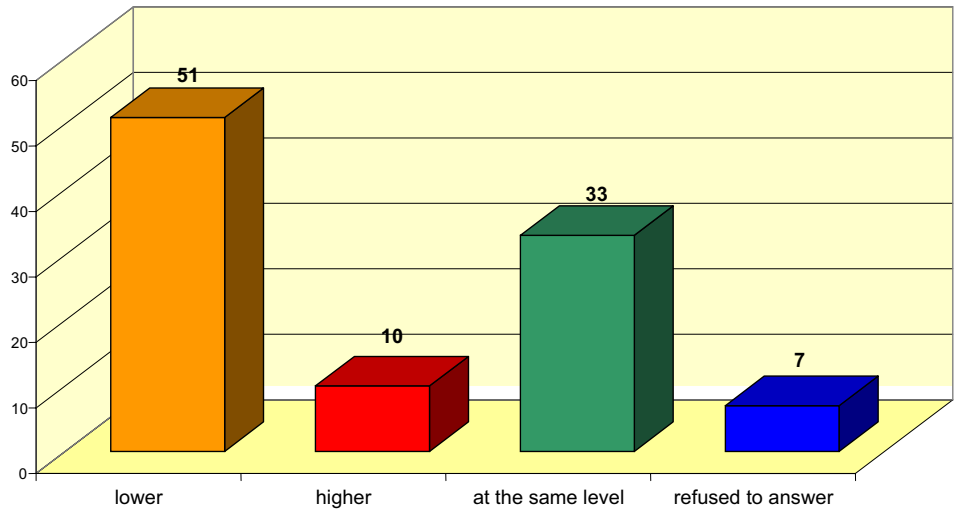

Figure 1. Prices in stores vs. prices in e-stores.

It can be observed that half of e-stores reported to have prices lower than these found in traditional enterprises. While this result is what was to be expected, one should notice, that 33% of e-shops declared prices at the same level and 10% of them prices higher than these available "on the street." This means that a total of at least 43% of Polish e-stores (note that 7% declined to answer this question) do not utilize the Internet as an effective mean of price reduction. We believe, that this situation, while rather surprising, can be explained as follows (see also [8]):

- in the case of equal prices: responses could be associated with retailers that use multiple channels of distribution and thus do not differentiate prices between Internet-based transactions and traditional points of sale,
- in the case of higher prices: some enterprises use the Internet to create their own group of loyal customers, who are not particularly concerned about prices but rather focus on other factors (e.g. the quality of service or convenience and/or time savings); providing high quality of service may **result in** cost increase and thus force price increases, while the fact that some customers do not care this much about the price as they do about convenience may **allow** to raise prices.

2.3. Customer loyalty

Since only some Polish e-stores offer cheaper products, while others offer more expensive ones it is vital to address the question: what is the degree of customer loyalty in Polish e-commerce. Obviously, due to our overall methodology we were able only to addressed this question **form the perspective of** Polish e-shops by asking about their perception of this factor (obviously, a actual data illustrating actual level of customer loyalty would have been more valuable; however access to it was – for obvious reasons – practically impossible). Detailed distribution of answers is shown in Figure 2.

According to 41% of Polish e-tailers, between 26% and 40% of their customers are expected to be loyal. At the same time, 17% of e-stores expect only up to 10% of their customers to be loyal, while 7% reports that from their perspective more than 75% of their customers are loyal. Overall, one can see that Polish e-tailers do not expect customer loyalty; 78% of them expect that at most 40% (only 2 out of 5) of their customers will remain loyal, while 17% do not expect any customer loyalty (we do not believe that in the case of 1 out

of 10 customers being loyal we can talk about customer loyalty as such). These results are somewhat discomforting and rather unexpected; especially when matched with 43% of Polish e-stores that do not utilize any form of price incentives to attract and retain customers.

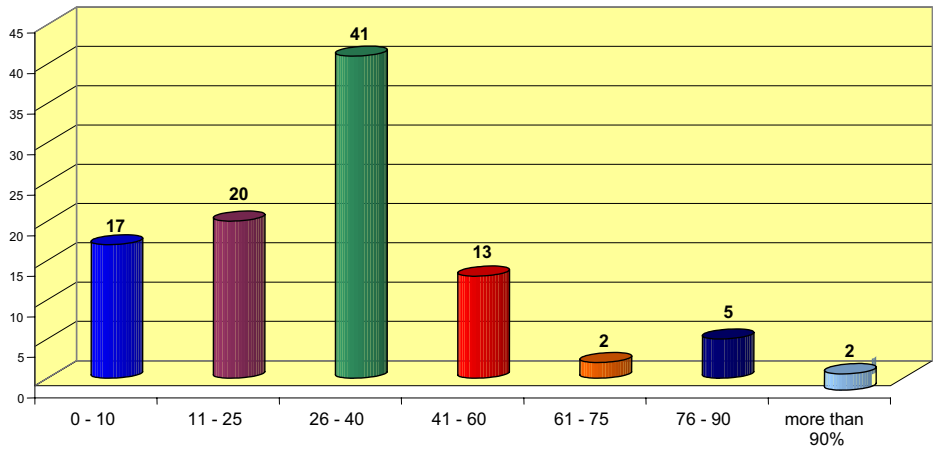

Figure 2. Customer loyalty assessment; customer loyalty on the *X* axis; percent of stores that subscribe to this assessment on the *Y* axis.

2.4. Customer-retailer communication

While price is often considered to be the leading factor in establishing customer loyalty, one should not underestimate the role of client-merchant communication. This is especially the case when e-commerce is considered. Here, in addition to all the well known reasons of important of customer-seller communication we have also to consider the following facts:

- the customer has no direct access to the product and has to rely on the information that is *provided* by the seller
- contact with the seller is impeded and the effects of lack of *immediate* direct contact have to be reduced by other forms of *indirect* contact,
- when participating in a transaction, customer is obliged to disclose a substantial amount of her/his personal data and has to be *assured* that doing this is safe.

This being the case, e-enterprises should pay special attention to their communication with customers. We believe that the starting point should be a comprehensive and frank notification about current offerings. According to the results of the survey from 2001, only 33% of Polish e-enterprises informed their customers if products offered through the WWW site were actually available at any given moment. Research conducted in March 2004, showed that this information was already provided by 67% of e-tailers – more than doubling the original results [2]. This can be considered as a very positive development. However, the fact that 33% or retailers admit that they have incorrect and useless information provided on their WWW sites is quite disheartening.

In addition to a *one-way communication* consisting of providing potential customers with information "what is currently available in the e-store" a substantial part of commerce (and e-commerce in particular) involves *two-way communication*. In this context, it is exactly the Internet that provides new ways of facilitating communication between retailers and customers. Therefore, we have decided to assess means of communication used by Polish e-enterprises. We have divided means of communication into 6+1 groups (fax, phone, e-mail, chat, discussion forum, white board + other) and collected data both in 2001 and 2004. Detailed results are summarized in Figure 3.

Overall, we have found that:

- *traditional business means of communication* – phone and fax – were used as the main form of communication by 57% of e-tailers in 2001 and by 46% in 2004

- *Internet-based means of communication* – were used by 33% of e-businesses in 2001 and 49% of them in 2004 (one should also notice that in 2001 about 5% of Polish Internet shops did not even publish their email addresses on their Web pages [2])

Furthermore we have found that the other traditional form of contact – personal contact – was used by 10% of e-shops in 2004,

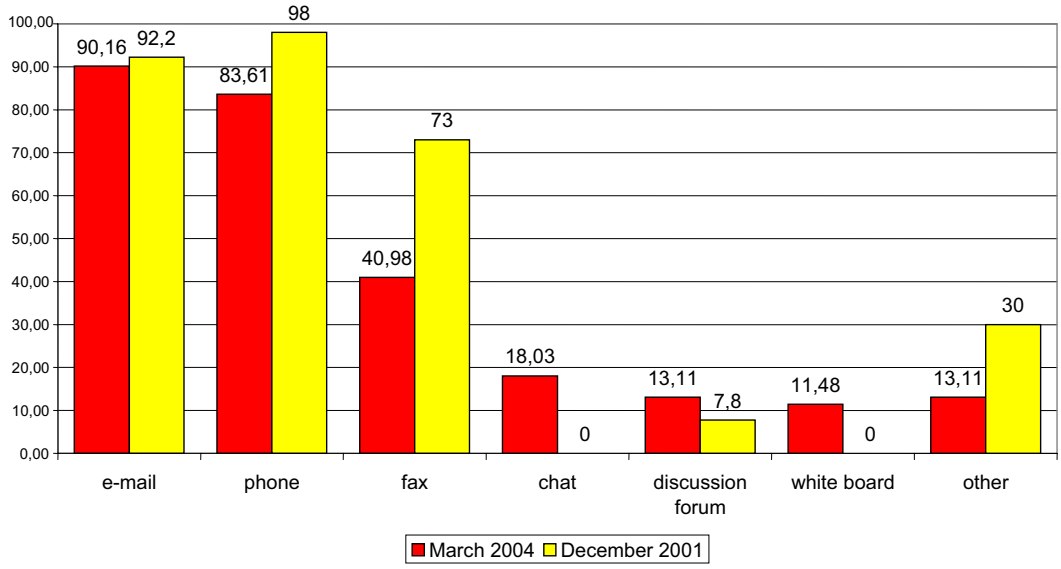

Figure 3. Detailed structure of means of retailer-client communication.

Overall, a general trend that was expected is clearly visible in our data. E-merchants move their consumer communication from traditional to Internet-based forms (with a particularly strong drop in FAX usage). Interestingly, the shift occurred not only from the traditional means of communication to the electronic ones, but also in the overall structure of the Internet based communication. Here, we can observe:

- an introduction of new communication methods such as chat and white board (which did not exist in 2001),
- slight increase in the role of discussion forums,
- a somewhat surprising decrease in the overall reliance on e-mail.

Thus Polish e-merchants rapidly move to supplement one-to-one with multiple forms of one-to-many communication.

2.5. Content personalization

Utilizing technological opportunities supplied by the Internet is often referred to as one of the fundamental ways of building competitive advantage [2]. In this context, form and content personalization is often considered one of the crucial steps in this direction. Fundamental tools of personalization include client's ability to personalize product he is about to purchase (e.g. I would like my computer to have a blue box) and/or Web-service she is using to communicate with the e-tailer (e.g. I would like to have the web site with pink background and green text). Our research indicates that, for all practical purposes, Polish e-enterprises do not use this form of building competitive advantage and customer loyalty. According to the 2004 survey, 64% of enterprises do not provide any means of personalization within their web sites, while only 26% allow that.

Lack of personalization within the web site can be a result of fairly high cost, which an enterprise would incur when implementing any form of such a system. It is worth noting, that 44% of surveyed e-enterprises, which do not currently provide service personalization, plan to implement it in the near future. At the same time 36% responded that they do not plan to introduce personalization. Further analysis of available data

allowed us to draw a conclusion, that these 36% of e-shops are mostly represented by the smallest entities whose e-existence is based on e-shop functionalities implemented by larger shopping services. Figure 4 summarizes the results of our surveying availability and implementing plans of personalization within the e-seller web site.

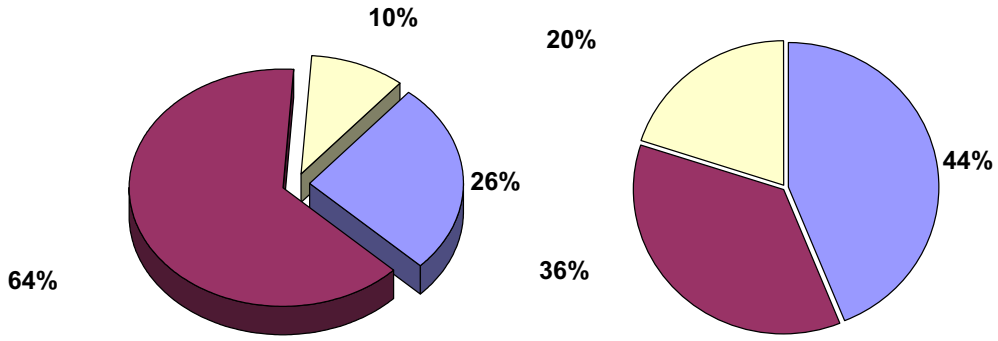

Figure 4. Left panel: availability of personalization within the web-site; right panel: plans for implementing web service personalization in the future; in both cases blue represents "yes," purple represents "no," and ivory represents "I don't know"

While these two scenarios assume that this is the user who is active in personalization, it is also possible for the e-merchants to use certain techniques to personalize content delivery. For instance, it is possible to amass and then mine customer data and use the obtained information to personalize marketing content delivered to clients. This facility could be strongly tied with the overall store policy of targeting their products to a well established group of potential customers. In other words, if the e-store does not target any particular group of customers then it may believe that it has no need for sophisticated analytical tools. On the other hand if the e-business targets a particular customer-group then it should at least attempt at finding out if they are doing it successfully. The most advanced case would be if the e-store would try to match their offerings to customers depending on the section of the market they belong to. We have attempted at assessing the situation and the results are depicted in Figure 5.

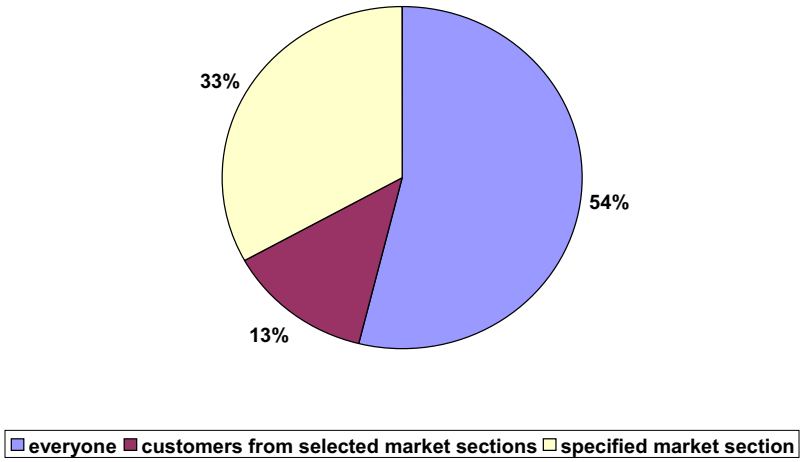

Figure 5. Customer targeting.

As it can be seen, the majority of Polish e-stores (54%) do not attempt at targeting any particular segment of the market. They believe that the best policy is to make an offer "to everyone" and serve whoever happens to drop by their web sites (note the disparaging effects of such a policy on the marketing capabilities of these e-enterprises). On the other hand there exist specialized enterprises, which target their offer only to a

well-defined selected group of customers – there are approximately 33% of shops that view themselves in this way. Unfortunately, we have no means of assessing if these e-enterprises utilize any analytical tools to find out if their attempts at addressing needs of a particular segment of the market have been successful. Finally, the remaining enterprises use segmentation rules and attempt at grouping their customers according to the market segments. These few (approximately 13%) of e-stores seem to have reached, at least from the general policy and perception the highest sophistication in e-commerce development. As noted, we do not have means of matching enterprises with utilization of analytical tools, but we have collected data representing the overall picture of utilization of such tools in e-business. In Figure 6 we summarize these responses.

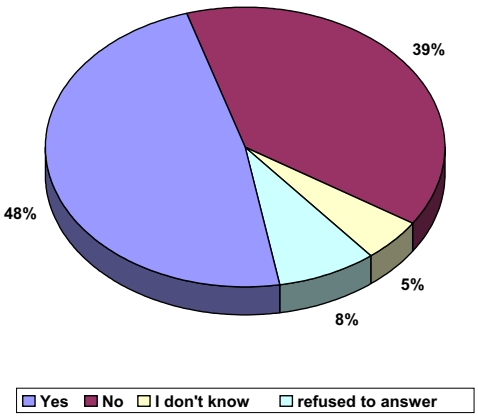

Figure 6. Utilization of customer data.

Before proceeding further let us note that we have found out that 92% of Polish e-shops declare that they collect information about their customers. This would mean that almost **all such** stores should be able to utilize at least of some data mining techniques to analyze information about their customers. Unfortunately, this is not the case. Only 48% of Polish e-retailers utilize data about their customers in their enterprise activities. This indicates, that while the entrance to the e-commerce is relatively easy to achieve – one needs just some money to put together a web site and to run an e-business, the level of sophistication of e-merchants and their willingness to go beyond the most rudimentary forms of e-commerce to take advantage of modern analytical tools is relatively low.

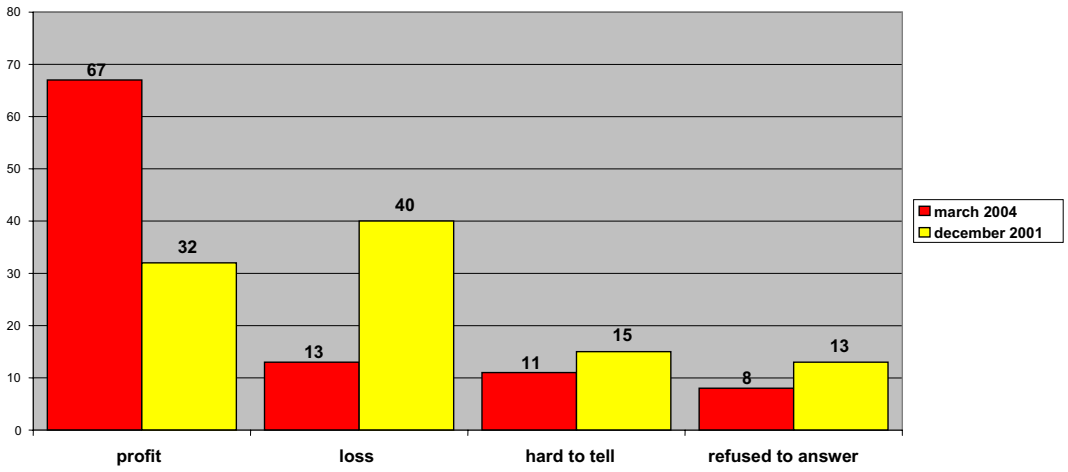

Figure 7. Profitability of e-commerce in Poland in 2001 and 2004.

2.6. Profitability

So far we have focused our factors that define Polish e-commerce. However, regardless of what our assessment of each of them is, the most important factor defining any e-business is its profitability. We have learned this during the .do-bomb period of 2001-02, when a large number of unprofitable e-commerce endeavors was wiped out by market-forces. In order to address this most fundamental aspect of e-business we have asked a question about profitability of e-business. The results, of repeated questioning (in 2001 and 2004) are summarized in Figure 7.

The results are encouraging. The most important one is that the number of e-stores that self-reported losses dropped from 40% to 13%. This can be partially explained by the disappearance of a number of stores that forced us to amend our original database of 250 stores. However, regardless of the reason, 13% of unprofitable endeavors is a relatively small number; especially when 67% of e-stores report profitability.

3. CONCLUDING REMARKS

In this paper we have summarized most important findings of our studies of e-commerce in Poland between 2001 and 2004. We have found that between our two surveys the nature of e-commerce in Poland has changed considerably. First, sellers are became more aware of methods and tools of gaining customer loyalty, (such as personalizing their services and introducing new ones). This resulted in their higher profitability. However, the situation could further improve, since many of "best-practices" are still not used by most of the e-entrepreneurs. As an example, while the sellers are more aware of importance of personalization, still most of them do not utilize it. Customer satisfaction could also be improved by avoiding some of the popular mistakes. Saving time is one of the main reasons given by the customers as a reason of making purchases online. Therefore, lack of information about product availability raises the level of uncertainty when making purchases. Increase of this level is equivalent to the level of product "virtualization." In this context, risk related to the delivery time should also be added. When taking those two "time" factors into account, the increase of the aggregated "time-risk" may cause abandoning e-purchases by customers [3, 9].

The research, thanks to its two-stage nature, was capable of illustrating the dynamics of Polish Internet trade market. The results are an important addition to the theoretical considerations, and are a justification for pursuing the next round of the study in the near future.

REFERENCES

[1] M. Porter, 1996, *Strategia konkurencji*, PWE, Warszawa, Poland, pp. 50 – 55.

[2]P. Drygas, G. Leszczyński, 2002, *Polski e-Commerce*, Świat Marketingu, http://www.swiatmarketingu.pl/pages/i/1/7021.php

[3] P. Drygas, 2001, *Lojalność klienta w wirtualnym biznesie*,- Electronic Commerce - gospodarka XXI wieku, Gdańsk, Poland, http://www.webmedia.pl/justsz/artyk/artyk29.html

[4] P. Drygas, G. Leszczyński, 2002, *Szanse i zagrożenia rozwoju handlu elektronicznego w Polsce*, Konsumpcja i rynek w warunkach zmian systemowych, PWE, Warszawa, Poland, 240-245

[5] P. Drygas, 2002, *Zarządzanie marketingowe przedsiębiorstwem handlu internetowego*, Electronic Commerce - Teoria i zastosowanie, Gdańsk, Poland, 29-36

[6] P. Drygas, 2003, *Polski handel elektroniczny - determinanty rozwoju i stan obecny*, Funkcjonowanie małych i średnich przedsiębiorstw w Polsce, Z. Warzocha (ed.), Olsztyn, Poland, 137-147.

[7] P. Drygas, 2003, *Strategiczne aspekty zarządzania w handlu elektronicznym*, Electronic Commerce - Badania i Rozwój, Gdańsk, Poland, 31-38.

[8] P. Drygas, 2004, *Marketingowe ujęcie modeli handlu elektronicznego na rynku B2C*, w: Marketing - Handel - Konsument w globalnym społeczeństwie informacyjnym, Tom II, B. Gregor (ed.), Wydawnictwo Uniwersytetu Łódzkiego, Łódź, Poland, 91-97 and http://gazeta-it.pl/internet/git28/marketingowe_ujecie.html

[9] P. Drygas, 2004, *Zarządzanie sprzedażą w handlu internetowym – koncepcja „wirtualnego" produktu*, w: Zarządzanie produktem w warunkach globalizacji gospodarki, J. Kall i B. Sojkin (eds.), Wydawnictwo AE w Poznaniu, Poznań, Poland, 271-278.

[10] A. Aufah, C. L. Tucci, 2003, Internet Business Models and Strategies (second edition), McGraw-Hill

[11] I-Metria, *Handel B2C w Polsce,* http://www.e-biznes.pl/download/, 02-06-2004