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POTENTIALS AND PROBLEMS OF INTERNET AS A SOURCE OF PURCHASING INFORMATION – EXPERIENCES AND ATTITUDES OF UNIVERSITY STUDENTS IN CROATIA

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Abstract. Gathering information online prior to offline purchase became the common way of using Internet within student population. On the other hand, there are more and more Internet users and online shoppers at all Central European Countries. In the CEE region companies are searching the way how to approach students as a target group via their web sites. The purpose of this research was to explain (1) how student population in Croatia use Internet as a tool for gathering information on products and services and (2) to assess perceived problems and potential of Internet as a retail information source. The paper is based on a primary research – a survey on attitudes of Croatian students towards Internet and online shopping. Results are analyzed by using descriptive and inferential statistical method. Discussion of the results brings us to conclusions that there are statistically different attitudes among groups according to gender and according previous experience with the on-line shopping. For illustration: (a) males and females differ in assortment that they are choosing and buying online, (b) male students have a more positive attitude towards online shopping benefits than female students, and (c) online shoppers have more positive attitudes towards security issues than non-online shoppers.

Keywords: e-commerce, e-tailing, B2C, online shopping, customer behavior, students.

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JEL Classification: L81, L86, M31.

1. Introduction

In South-Eastern-European (SEE) region, the average annual growth rate of Internet usage was higher than 100% in last 20 years. Up till now, three SEE countries exceeded the level of 60% Internet users in population (see Fig. 1), those are: Slovenia, Croatia, Bosnia and Herzegovina. Moreover, in a large number of SEE countries there is more

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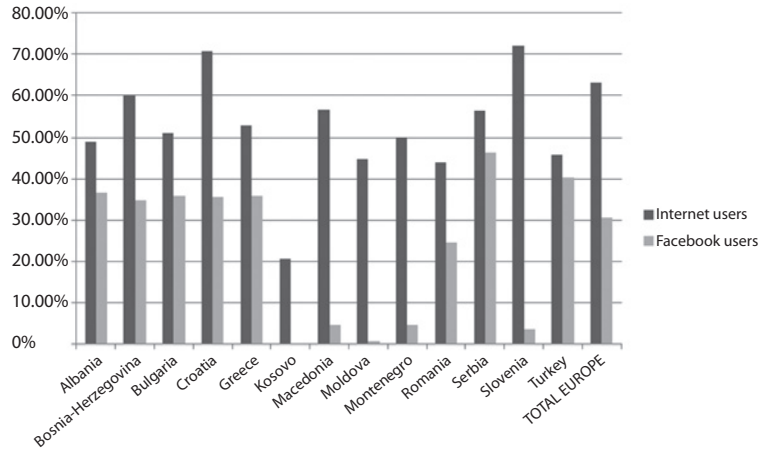

Fig 1. Percentage of Internet and Facebook users in total population in SEE countries (Source: Internet World Stats 2014)

than 30% of population using social networks (dominantly Facebook). Therefore, traditional companies in the SEE region consider Internet and social networks as a communication channel with a huge potential for direct commercial communication with customers (for illustration see studies: Pejic Bach *et al*. 2010; Knezevic *et al.* 2011).

In the literature student population is referred to as a large part of consumer generation "Y". This generation is technologically highly aware and willing to use digital tools in all spheres of life (Archana, Heejin 2008; Lazarevic 2012; Rahman, Azar 2011), thus it is worthwhile to research how students, as a waste part of generation Y, are using the Internet in their everyday life and to investigate their behavior as shoppers that research online and buy offline, but also as online shoppers, i.e. it is important to investigate how students use the Internet as a source of information on companies and products, what are opinions on online risks and security of information gathering process as well.

The aim of the primary research (survey) is to answer several research questions such as: what motivates students to use the Internet, how often do they shop online, what are their attitudes towards the online purchasing risks.

Students' attitudes towards online information gathering are scrutinized according the behavioral and gender perspectives. In behavioral perspective, attitudes are compared between groups of the students that are already bought products online and those who had not purchased online. It was expected that this two groups have different attitudes towards online risks and security issues connected with online information gathering.

On the other hand, in the gender perspective, male and female students were compared because it was assumed that they have different attitude towards benefits and obstacles of online shopping, but also towards Internet as an information source.

Gathering information online prior to the offline retail purchase became common customer behavior. Therefore, not only the research was oriented towards pure online shopping behavior, but it also included several questions regarding ROBO purchasing principle. Moreover, students were asked to compare benefits and problems of online stores to the traditional stores.

More than 550 students of the University of Zagreb (Croatia) participated at the research taken online in controlled environment. For data analysis statistical methods were used. Descriptive statistical methods were applied to describe the structure of the sample and attitudes on the sample level, while inferential statistical methods were applied to compare sub-groups within the sample.

2. Methodology and sample

In this research the survey was taken on student population. An online questionnaire was formed and it included 16 questions of different types: 7 one choice questions; 9 Likert scale ranking questions and 3 questions had an open-ended option. Questions were divided into several groups:

- Demographic characteristics;
- Modalities and motives for Internet usage;
- Online shopping behavior;
- Attitudes towards online shopping issues.

Questionnaire was structured on the basis of previous research studies. Table 1 shows a list of research studies used in the questionnaire design process.

Table 1. Literature used for questionaire structuring (Source: own compilation)

Part of the questionaire	References
modalities and motives of Internet usage	Moon (2004); Reibstein (2002); Rodgers (2002)
online shopping behavior	Bei *et al.* (2004); Li *et al.* (1999); Verhagen, Van Dolen (2009); Kukar-Kinney *et al.* (2009); Heijden *et al.* (2003)
attitudes online shop structure and contents at online shops	Chiang, Dholakia (2003); Levin *et al.* (2003); Verhagen, Van Dolen (2009)
attitudes towards online shopping problems, obstacles and risks	Nemati, Van Dyke (2009); Kim *et al.* (2007); Gabarino, Strahilevitz (2004); Thaw *et al.* (2009)

The gathered poll consisted of 564 answered questionnaires and 550 of them were fully valid. Table 2 shows relative frequencies of sample characteristics. The gender structure of the sample was in the accordance to the student population within faculties of economics and business in Croatia. There were 71.8% of female and 27.8% of male students at the sample.

Table 2. Characteristics of the sample (Source: own research)

Characteristic	Options	Relative frequency (%)
gender	male	27.8
	female	71.8
monthly income	less than 67,5 EUR	27.7
	67.6–135 EUR	30.5
	135.1–270 EUR	22.5
	more than 270.1 EUR	19.3
Internet experience	less than 3 years	0.7
	3–6 years	26.2
	7–9 years	43.8
	10 years and more	29.3

The largest proportion of students (58.2%) have monthly income (in terms of allowances, scholarships, wages and/or part time job fees) less than 1000 kunas (i.e. less than 135 EUR), while there is a certain proportion of working students that have a larger amounts of money available for monthly spending (i.e.19.3% more than 270.1 EUR).

According to findings, the majority of students use Internet for more than 7 years (70%). There are only a few new Internet users at the sample (0.7%). So we can conclude that this student generation has been growing up with digital technology since their later childhood.

Almost every student in the sample use Internet on a daily basis (95.7%). There are only a few users that use Internet at weekly basis or rarely (0.6%). In the most cases they spend more than one and less than 3 hours per day online. But, there is a significant group of students using Internet for more than 4 hours per day. Moreover, 5% of students stated that they spend more than 7 hours per day online.

Nonetheless there are some statistically significant differences between male and female students. Based on t-test results ($\alpha = 0.05$) we observed that male students have (1) higher monthly income and (2) male students are using Internet for a slightly longer time and (3) male students are spending much more time on the Internet than female students.

As stated before, in our sample there is a high proportion of female students. Therefore, in advance the results will be interpreted on the basis of the whole sample, but for attributes in which there is a significant difference between gender groups, the results are going to be discussed in accordance to gender perspective in order to avoid biased conclusions regarding online shopping attitudes.

3. Motives of Internet usage within student population

According to Chaffey (2007: 17–18) Internet usage drivers can be classified into 7 Cs: (1) content, (2) customization, (4) convenience, (5) community, (6) choice, and (7) cost

reduction. Similarly, Turban *et al.* (2008: 25) gives a list of benefits of e-commerce for consumers and he emphasizes benefits such as: ubiquity, more choices, finding unique items, information availability, electronic socialization, etc.

Students are asked to evaluate the importance of ten motives of Internet usage. In most cases, students are, driven to the Internet by their personal interests and they clearly states that the most important motive of the Internet usage is "to find general information on my personal interest", see Table 3. Also, available information on their academic life is a key driver for Internet usage. Following motives are free contents in form of newspapers, music and videos. While social networking, surprisingly, is not at top 5 at the list. Online games in general and online fortune games are not recognized as important motives for Internet usage. Finding information on products and services is at fifth position on the motivation list, i.e. at the middle of the list, while online shopping is at the bottom, i.e. not considered as important motive to use Internet.

Table 3. Motives of Internet usage according to gender (Source: own research)

Answer option	Average FEMALE	Average MALES	difference	P-value
I can find information of my personal interest	4.55	4.57	–0.02	0.4874
I can find information on study and students' rights	4.38	4.21	0.17	0.0026
I can read about social events on public media (such as. monitor, dnevnik, vecernji...)	3.98	3.97	0.02	0.8672
I can watch and listen free media contents (music, video)	3.97	3.97	0.00	0.9072
I can get information on products and services	3.89	4.07	–0.18	0.0072
I can download free multimedia contents	3.88	3.97	–0.09	0.1854
I can hang out with friends on social networks	3.45	3.12	0.33	0.0002
I can shop without leaving my home	2.21	2.29	–0.09	0.2396
I can play online games	1.98	2.18	–0.20	0.0033
I can play fortune games online	1.49	1.75	–0.26	0.0000

Note: 1 – not important, 5 – very important.

4. Online activities within student population

When reconsidering Internet as a communication channel with a targeted market, it is important to know what the common online activities are. Laundon and Traver (2007) analyze how consumers (regardless their ages) behave online. Firstly, they points out

the most popular internet activities and top three are (Laundon, Traver 2007: 359): e-mailing and messaging (90% of total users); surfing and browsing (77.2% of total users) and reading news (52.0% of total users). While online shopping is at sixth place (44.2% of total users). Moreover, they (Laundon, Traver 2007: 365–366) point out that Internet impacts a lifestyle because it changes the way in which people spend their working and free time and they present the list of common activities of Internet users such as: getting maps and directions, communication with friends, get news, send cards, listen to music and read for fun.

Figure 2 shows that students the most frequently use Internet for active information searching and e-mailing (over 90% of cases). In addition, 70% of students use social network and online news portals on a regular basis. But it is necessary to point out that 17% of students do not use social networks at all. Online gaming is an online activity that is not regularly used at given sample, it is either used rarely (48%) or it is not used at all (41%).

Gabarino, Strahilevitz (2004); Akman, Mishra (2010) and Hu *et al.* (2012) suggest that, in some aspects, there is a significant difference in Internet usage according to gender of the user. Therefore, the analysis is performed in order to examine the gender based differences of students' online behavior in Croatia.

At Figure 3 we can observe differences between male and female student according to activities that they perform online once or more per a day. In addition, t-test was performed and we confirmed following differences according to gender ($\alpha = 0.05$):

− females use social networks more often than males;
− males use searching tools more often than females;
− males read online news portals more often than females;
− males play online games more often than females.

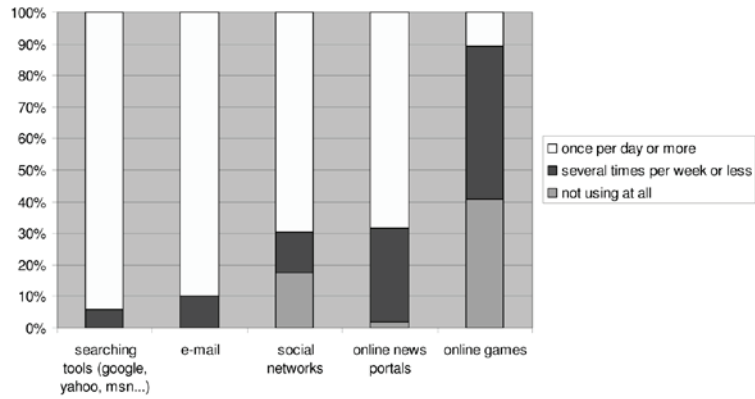

Fig. 2. Students' online activities according their frequency (Source: own research)

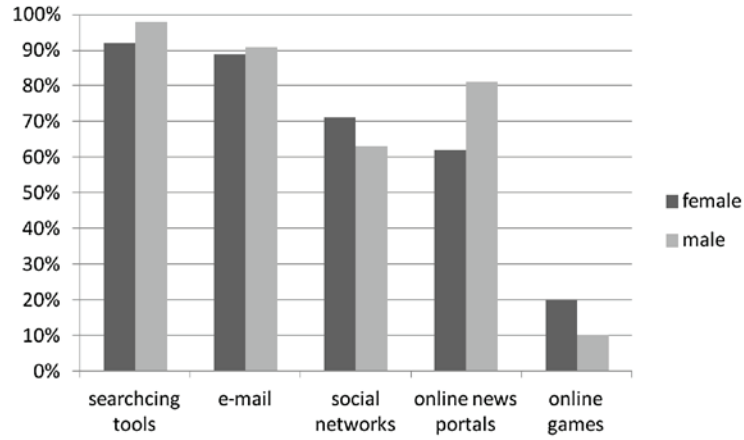

Fig. 3. Online activities performed on a daily basis according the the gender (Source: own research)

5. Internet as a source of commercial information for student population

Companies can use web in two basic ways (Knezevic 2002): (1) to present them to the wider audience and/or targeted market groups, and (2) to sell their product and services online. Majority of companies use Internet for promotional purposes, they have web sites and provide information, but don't sell online. It is necessary to get knowledge on the students' willingness to use Internet to find, to compare and to purchase products and services.

Firstly, we will explain how students use Internet as a source of purchasing information and/or a channel to buy products and services. Secondly, distinction in attitudes according gender and between those who had already made online purchase and those who had not will be examined.

5.1. ROBO model as a common behavior within student population

An acronym ROBO stands for: "research online, buy offline" and it is used to describe a way of behavior in which customers are searching for product information online prior to purchasing product in traditional (offline) store. Some authors refer to this model as ROPO "research online, purchase offline".

In the questionnaire there was a question: "Have you ever sought information on products/services on the Internet before buying at the classic store?" The aim of the question was to establish are students behaving according ROBO principle of retail purchasing. As 95% of students answered positively to the question, we can conclude that ROBO behavior is common within student population.

As shown in Table 3, finding information on products and services is at the top five motives for Internet usage within student population. Furthermore, if we make a detailed insight into frequency of answers, we will see that more than 47% of male and 40% of female students consider that availability of product information is a very important driver of Internet usage.

Therefore we can conclude that companies should adopt Internet as an opportunity not only to sell products, but also to present their products and services to this population.

5.2. Online shopping behavior and general attitudes towards benefits of online shops

According to results of the survey, majority of students do not purchase online (54%), 37.44% of them are purchasing up to 6 times per year, while only 11.47% are online shoppers on a regular basis. In Table 4 we can observe that 48.08% of male students is not buying online, while there 56.47% of female students are not buying online. Also, there is a great difference between males that shop online on a regular basis (2 times or more per year) than female students. Therefore, we can conclude that male students are using Internet more often to do their shopping than female students.

Table 4. Online purchasing frequency within student population (Source: own research)

	Males	Females	Population
not buying online	48.08%	56.47%	54.12%
once per year	14.10%	13.93%	13.98%
2-6 times per year	24.36%	18.91%	23.46%
more than 6 times per year	13.46%	10.70%	11.47%
Total	100%	100%	100%

In Table 5 product groups are ranked according to the relative frequency of online shoppers within student population. Online shoppers within student population usually buy tickets (there is 49% online shoppers within population). Next product group is “clothing, footwear and fashion accessories” (24% online shoppers within population). While in the group “Food and Beverages” and “Consumer Electronics” there are less than 10% online shoppers within student population. Our findings are slightly different comparing to US census bureau research (see in Permuto 2010) and research study by Forrester (2010) which showed that three most important categories in e-commerce are: consumer electronics, clothing and footwear and computers.

Table 5. Product groups in students' online shopping ranked by importance and gender (Source: own research)

Males		Females	
Product group	% online buyers (M)	Product group	% online buyers (F)
Tickets for cinema, theater, concerts and sport events	49%	Tickets for cinema, theater, concerts and sport events	49%
Computer equipment and programs	24%	Clothing, footwear and fashion accessories	25%
CDs, DVDs, digital multimedia (music and movies)	21%	Travel	18%
Clothing, footwear and fashion accessories	21%	Products/services for health and beauty	16%
Travel	20%	Books	15%
Consumer electronics	19%	Jewelry and watches	13%
Books	17%	CDs, DVDs, digital multimedia (music and movies)	8%
Food and beverages	12%	Food and beverages	7%
Jewelry and watches	9%	Computer equipment and programs	6%
Products/services for health and beauty	8%	Consumer electronics	5%

In the near future, student population will play a key role at a retail market and attitudes towards near future are valuable as strategic information for retailers. Therefore, for students who are not online shoppers yet, question on their future intention is asked. In Graph 4, for students who are not yet made an online purchasing, data on their future intention is shown. We can notice that there is a very similar distribution comparing to Figure 4. In near future, students plan to buy: tickets, books, travel and fashion products. Only a few of them have intent to buy food and beverages via Internet.

This finding can be an indication for the process of product assortment planning at virtual stores. According to this finding, companies should focus more to products perceived as suitable for online purchasing by their targeted market. If targeted online market are students, than to various tickets and fashion products should be given more attention than to food and beverages.

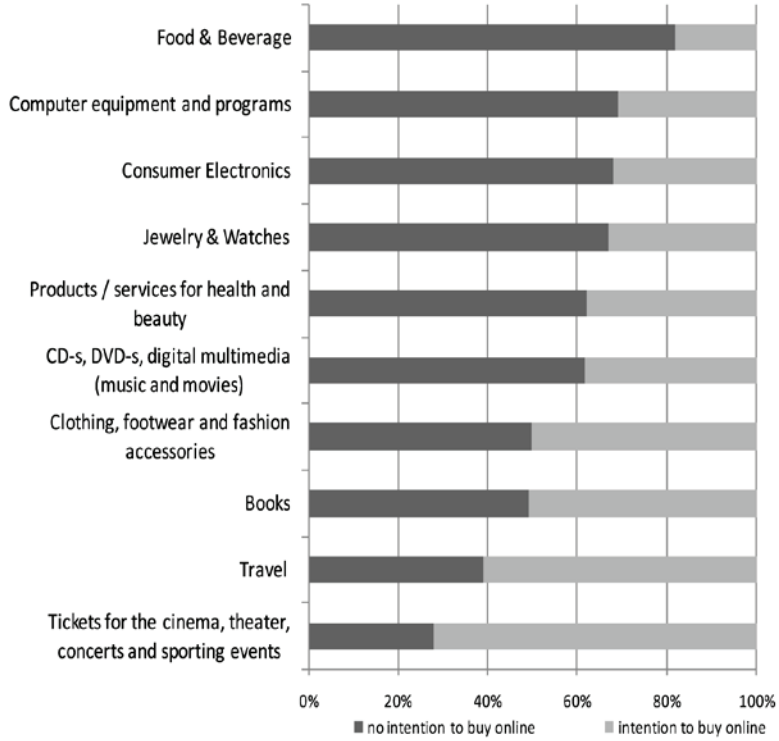

Fig. 4. An intention to buy online in future (only those students who are not online shoppers) (Source: own research)

Study by eMarketer (2004) ranks factors influencing the choice of online channels into: save time by not going to store, can shop when stores are close, avoid crowds on holydays, get better prices, easy product search, products that are not available in stores, easy price comparison, gifts packaging and delivery, loyalty points, purchasing from wish list.

Croatian students are asked to compare benefits of online stores to traditional stores. Ranking of benefits of online shopping is given in Table 6. In the table, the most frequent attitude towards each benefit is shown, too (see column "mod"). The most important benefit observed within student population is the possibility to shop for products that are not available in local market, while the ease of an online purchasing process is evaluated as a moderate benefit of online shopping. It is important to point out that absence of salesman and his pressure is the most often evaluated with "very important" grade (see column MOD).

Table 6. Benefits of online shopping in comparison to traditional stores ranked by rating averages (Source: own research)

Online shopping benefits	rating average	mod	mod /TOTAL
I can purchase products which are not available at my city/country	3.9	important	37.43%
It is easier to compare prices and product information	3.74	important	39.17%
I can shop abroad without traveling costs	3.69	important	38.88%
It is easier to find interesting products/services	3.69	important	40.79%
There is no pressure by salesmen like in traditional stores	3.66	very important	33.21%
I save my time	3.57	important	35.44%
I have more time to choose and evaluate products/ services than in traditional stores	3.55	important	35.33%
I can shop 24/7	3.51	important	33.51%
I can find products/services which are not available at traditional stores	3.47	important	32.97%
Offers are more favorable than in traditional stores	3.47	moderate	31.46%
I can focus to buy only necessary products/ services more easily (there is less impulse buying)	3.37	important	32.37%
Process of purchasing is more simple and takes less effort than in traditional stores	3.27	moderate	31.76%

Note: 1 – not important; 5 – very important.

5.3. General attitudes towards online shopping problems and risks

There are numerous problems and risks observed in electronic commerce. For instance, Turban *et al.* (2008:169–172) specifies three levels of trust building in e-commerce activities, those are: (1) trust in internet merchant, (2) trust in Internet as a shopping channel, and (3) trust in business and regulatory environments.

On the other hand, there are several concerns about online purchasing listed in the literature (Laundon, Traver 2007: 377): security of card information; privacy of personal information, shipping costs; product quality, return policy, delivery delays and other issues.

Examinees were asked to specify their opinions towards online shopping issues in comparison to traditional stores. For each sentence regarding problem, they were asked to choose a level of agreement starting from 1 to 5, where 1 was “I don’t agree” and 5 was “I totally agree”.

In Table 7 we can observe statements on problems of online shops ranked by the rating average. Three main problems of online shopping in comparison to traditional shopping are as follows: (1) complicated return policy, (2) lack of physical contact with the product and (3) problematic validity of online shops (a lack of trust in virtual shopping places). The possibility of inventory scarcity is not evaluated as the important obstacle in online shopping environment (see the last row of the Table 7).

Table 7. Obstacles of online shops in comparison to traditional stores
(Source: own research)

Answer Options	Rating Average	mod	mod/ TOTAL
Return of a product is more complicated than in traditional stores	3.87	agree	35.39%
I prefer shopping in traditional store because I can touch product	3.85	agree	33.94%
It is difficult to check out validity of offer and online shop	3.73	agree	45.65%
Someone can intercept data on credit card during a purchase process	3.53	agree	33.94%
Shipping costs are too high	3.39	neutral	35.70%
There is a threat that online shop will take money and forget to deliver a product	3.37	agree	30.98%
I prefer traditional store due to overall shopping experience	3.33	agree	29.80%
Delivery takes too long	3.28	neutral	35.82%
Offered products/services are of questionable quality in comparison to their price	3.25	neutral	35.82%
It is difficult to obtain information on product usage after purchasing	3.24	neutral	36.41%
Product warranties are missing or they are too short	3.19	neutral	43.66%
Online shops do not give enough information on process and conditions of purchasing	3.02	neutral	35.09%
Online shops offer more products/services than they can deliver	2.97	neutral	48.28%

Note: 1 – "I don't agree" and 5 – "I totally agree".

Students are asked for opinion on 7 statements regarding security and privacy in online shopping. In Table 8 customer privacy and security issues are ranked according the rating average. On the basis of presented results, we can conclude that students are highly aware of security issues regarding online purchasing. They tend to ask questions on security before they make purchasing decision. See data on the first statement in Table 8 where a level of agreement is extremely strong. This corresponds to findings presented in Saprikis, Choularia, Vlachopoulou (2010).

Also, students are highly aware that existing legal framework in area of online privacy and security is not sufficient (only 19.74% students agree with the statement on legal framework security). In Croatia several laws regulate e-commerce issues and customer protection issues and they are fully harmonized with EU acquis communautaire. But problem is application of laws in everyday ecommerce practice and/or lack of communication of legal possibility to students and other interest groups.

Table 8. Perception of customer privacy issues within student population ranked by rating averages (Source: own research)

Answer Options	Rating Average	mod	mod/ TOTAL
Security and privacy are important issues that have to be considered before online purchase	4.55	totally agree	63.28%
Before online purchase, data on online shop should be checked at forums and social networks	4.17	agree	41.62%
Majority of online shops require customer statement for e-mail offer and other information delivery	3.77	agree	46.48%
Online shops store customer data for statistical purposes without customer approval	3.53	agree	38.31%
Online shops use sufficient mechanisms to ensure customer data privacy	3.50	neutral	42.78%
Online shops transfer customer data to marketing and research agencies without customer approval	3.40	neutral	46.95%
Existing legal framework of customer protection regarding privacy and security is sufficient	2.73	neutral	42.44%

Note: 1 – "I don't agree" and 5 – "I totally agree".

At the end, students are asked to specify their agreement with eight online risk reduction methods (see Table 9). Research showed that students strongly agree with all risk reduction methods. For six out of eight offered statements level of agreement is higher than 4. Moreover, for top two on the list the majority of students choose "totally agree" as answer option (see column "mod", Table 9). But we have to point out that the highest level of agreement was with the statement regarding the return policy. Thus, based on the data in Table 7 and Table 9, we can conclude that well organized and well described return policy can be a key success factor of an online shop.

Table 9. Method of risk reduction ranked by rating averages (Source: own research)

"Risk is reduced if…"	Rating Average	mod	mod/ TOTAL
...customer can return product and get his money back	4.25	totally agree	43.93%
...there are security mechanisms for protection of stored data and data in network transfer	4.22	totally agree	42.73%
...there are product warranties	4.20	agree	48.71%
...online shop offer various payment possibilities (various credit cards, cash on delivery, PayPal...)	4.14	agree	47.79%
...company, besides online shop, has one or more traditional stores	4.10	agree	41.51%
...online shop use reliable certification service (for instance VeriSign)	4.09	agree	41.80%
...online shop has positive reviews at social networks and forums	3.9	agree	39.44%
...frequently use same online store to purchase product/ service of the certain category	3.85	agree	41.88%

Note: 1 – "I don't agree" and 5 – "I totally agree".

5.4. Differences in attitudes according to gender

Table 10 shows the statistically significant differences in attitudes between females and males. For several statements regarding the benefits of online shopping female students expressed lower grade level than males. The mean difference between grades of females and grades of males is negative, with statistically significant P-values (see Table 10, last two columns). Therefore, we can conclude that male students have a more positive attitude towards online shopping benefits than female students. In further research the reason for such situation have to be examined.

In addition, female students are more concerned about risks and problems in online purchasing. For several statements regarding the obstacles of online stores they expressed higher grade level than males. The mean difference between grades of females and grades of males is positive, with statistically significant P-values (see Table 10, last two columns). Therefore, we can state that female students are more oriented towards shopping experience in traditional stores and have a greater need to touch and fully examine product before purchasing than male students.

This information is important to online marketers that are targeting females because, according to this finding, they have to develop online stores on much higher level, ensuring pleasant shopping environment that is appreciated within a female population.

Table 10. Attitudes towards online shopping – gender differences (α = 0.05) (Source: own research)

	Statements	Mean Females	Mean Males	Mean Difference F–M	P-value
Benefits	I can purchase products which are not available at my city/country	3.90	4.07	–0.17	0.0180
	I can shop abroad without traveling costs	3.69	3.90	–0.21	0.0032
	It is easier to find interesting products/services*	3.68	3.80	–0.12	0.0957
	I save my time	3.56	3.73	–0.17	0.0201
	I can shop 24/7	3.50	3.67	–0.17	0.0189
Obstacles	Return of a product is more complicated than in traditional stores	3.87	3.72	0.16	0.0413
	I prefer shopping in traditional store because I can touch product	3.85	3.51	0.35	0.0000
	Someone can intercept data on credit card during a purchase process	3.53	3.20	0.33	0.0000
	Shipping costs are too high	3.39	3.14	0.24	0.0010
	There is a threat that online shop will take money and forget to deliver a product	3.37	2.99	0.39	0.0000
	I prefer traditional store due to overall shopping experience	3.33	2.79	0.54	0.0000
	Delivery takes too long	3.28	3.05	0.23	0.0010
	It is difficult to obtain information on product usage after purchasing	3.25	2.92	0.33	0.0000
	Offered products/services are of questionable quality in comparison to their price	3.24	3.05	0.20	0.0102
	Product warranties are missing or they are too short	3.20	2.95	0.25	0.0004
	Online shops do not give enough information on process and conditions of purchasing	3.02	2.82	0.20	0.0040

Note: scale for benefits is from 1 – "not important" to 5 – "very important" scale for obstacles from 1 – "I don't agree" to 5 – "I totally agree"; * significant at α = 0.1.

5.5. Differences in attitudes between online shoppers and non-shoppers

In order to scrutinize differences in student population, collected data was additionally cross tabulated into two different groups of students. In the first group were students that have never made online purchase and group was named "non online shoppers". In the second group were students that made online purchase, regardless the frequency of online purchasing within a year. That group was named "online shoppers". Sample consists of There were 54% of "non online shoppers" and 46% of "online shoppers" in the sample.

In order to examine differences between given groups chi-square tests and independent t-tests were performed. In advance we are presenting P values of t-tests.

In more cases, male students are online shoppers than female students (acceptable at significance level $\alpha = 0.1$; $P = 0.0667$). Online shoppers have higher monthly income than non online shoppers ($\alpha = 0.05$; $P = 0.0000$). Online shoppers are Internet users for a longer period than non online shoppers ($\alpha = 0.05$; $P = 0.0064$). Online shoppers use Internet more often than non online shoppers ($\alpha = 0.05$; $P = 0.0287$). On a daily basis, online shoppers spend more time online ($\alpha = 0.05$; $P = 0.0002$).

Online shoppers perceive Internet motives to be more important than non online shoppers. For six out of ten motivations to use Internet (see Table 11), there is a statistically significant ($\alpha = 0{,}05$) difference between those two groups. Groups especially differ in two motives: (1) can shop without leaving home (mean difference is 0.97) and (2) can get information about products and services (mean difference is 0.53).

Table 11. Statistically significant difference between online shoppers and non online shoppers regarding Internet usage motives perception (Source: own research)

Internet usage motivation	MEAN non online shoppers	MEAN online shoppers	difference	P value
can shop without leaving home	1.773333	2.741036	0.967703	0.0000
can get information about products and services	3.656766	4.187251	0.530485	0.0000
can read news on public media	3.781457	4.125	0.343543	0.0002
can download free multimedia contents	3.729373	4.056225	0.326852	0.0002
can watch and listen free multimedia contents	3.870861	4.087302	0.216441	0.0060
can find general information of my personal interest	4.506623	4.613546	0.106923	0.0285

When comparing traditional and online stores, online shoppers are more favorable to online shopping benefits than non online shoppers. For each answer option shown in Table 6 differences in means between groups are from 0.51 to 0.75 in favor of online shoppers and all P values are 0.0000.

On the other hand, non online shoppers are more critical to problems in online shopping. For each answer option shown in Table 7, mean differences varies from 0.15 to 0.99 in favor of non online shoppers, all P values are lower than 0.0003, except for option "Online shops offer more products/services than they can deliver" where P value is 0.0771 (significant at $\alpha = 0.1$).

Online shoppers have more positive attitudes towards security of online shops than non online shoppers. Differences in attitudes towards privacy and security issues are shown in Table 12. For only one answer regarding privacy and security policy: "Security and privacy are important issues that have to be considered before online purchase" there is no statistically significant difference between groups (P value is higher than 0.1).

Table 12. Statistically significant difference between online shoppers and non online shoppers regarding privacy and security issues (Source: own research)

Answer Options	MEAN non online shoppers	MEAN online shoppers	difference	P value
Online shops use sufficient mechanisms to ensure customer data privacy.	3.303754	3.73029	0.426536	0.0000
Majority of online shops require customer statement for e-mail offer and other information delivery.	3.619048	3.975	0.355952	0.0000
Existing legal framework of customer protection regarding privacy and security is sufficient.	2.654237	2.825726	0.171489	0.0420
Before online purchase, data on online shop should be checked at forums and social networks.	4.111864	4.235537	0.123673	0.0992*
Online shops transfer customer data to marketing and research agencies without customer approval.	3.494915	3291667	–0.20325	0.0108
Online shops store customer data for statistical purposes without customer approval.	3.59661	3.442149	–0.15446	0.0539*

Note: significant at $\alpha = 0.1$.

Online shoppers have more positive attitude towards possibilities of online risk reductions. For majority of risk reduction methods (refer to Table 9) there is a higher mean for the group of online shoppers and P values are lower than 0.05. For only one answer option in this segment there is no statistically significant difference in between groups. That answer option is: "Risk is reduced if company, besides online shop, has one or more traditional stores".

6. Conclusions

Several facts such as: a high proportion of Internet users within population, a high proportion of those who use Internet on a daily basis for more than three hours a day, a high proportion of those who use Internet for more than seven years and extremely high proportion of users seeking purchasing information online in order to buy product offline, brings us to conclusion that retailers are facing experienced, well informed and digitally oriented customers within student population.

Moreover, findings show that more experienced Internet users are; they are more lightly to be online shoppers. That is confirmed by fact that online shoppers use Internet for a longer time period and much more frequent on a daily basis compared to non-online shoppers. Also, a comparison of monthly income between online and non-online shoppers, leads us to conclusion: as their monthly income is higher, they are lightly to shop online.

Altogether, we can expect that in the very near future this population will have a major impact in online retail revenue generation. In addition, online information will have an impact on retail generation in traditional stores because this generation is very actively using Internet to get informed prior to traditional purchases.

Within ten motives of Internet usage, personal interests are placed at the top position. Therefore, retailers (both online and traditional) should develop web places rich in contents and information on merchandize adjusted directly to student population taking into account gender differences as well.

Willingness to shop online varies according to product groups. Within product groups such as tickets and clothing, there are already a high proportion of online shoppers within student population. Also, within a group of non-online shoppers there is a strong agreement on intention to buy tickets, travel arrangements and books in the near future.

Student population tends to intensively search for relevant information on product and purchasing process prior to purchasing decision. Within student population a return policy is perceived as a main issue of online shopping. Thus, online retailers should pay more attention to make it as clear as possible and available at all parts of their online shops, not only at the end of purchasing process (i.e. at check out).

Given analysis shows that male students are more positive towards online shopping benefits and have a better attitude towards online shopping problems and obstacles than female students. Female students differ are in the quest for overall shopping experience similar to one at traditional stores.

Further analysis shows that online shoppers, compared to non-online shoppers tend to be:

− more positive towards online shopping benefits;

− more positive towards security and privacy issues;

− more positive towards online risk reduction methods.

Non-online shoppers are much more critical towards problems in online shopping. Therefore, online retailers should take some effort to communicate risk reduction methods applied to their online stores more intensively to a wider audience.

Nevertheless, buying products that are not available at some geographic area is perceived as a main online shopping benefit. Thus, online retailers should adjust their merchandize in accordance to that fact and add up geographically specific products into their online assortments.

This research provides online marketers with valuable data that can be used in order to improve online shopping environments and make communication more suitable to targeted audience regarding gender. On the other hand, these research findings suggest that in emerging economy online shopping is an area that has to be taken into account when we discuss future aspects of retail development and, therefore it is a contribution to retail as a discipline within management and marketing science. Moreover, as the research is conducted at a specific geographic market these results can be used as a basis for future comparisons with other countries.

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