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E-consumer in the virtual space

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E-CONSUMER IN THE VIRTUAL SPACE

Summary

A dynamic growth of the internet and the information society has also caused a change to activity of e-consumers in the virtual space. The paper aims at presenting results of the quantitative research on purchasing activity of e-consumers on the internet carried out in 2012.

Key words: internet, virtual space, e-consumer, internet shopping.

E-consumer on the internet

The notion of the e-consumer is not equivalent to the internet user. An internet user (according IAB Polska) is a person who at least once a month uses the internet.² They can use the internet for various purposes (e.g. communication, entertainment, information) not necessarily for the purposes of buying products. An e-consumer is defined as a person purchasing products on the internet at least once within the last year. According to M. Bartosik-Purgat an e-consumer denotes each individual who under internal and external circumstances decides to buy goods or services by means of the internet and then makes a purchase online.³

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² *Raport strategiczny IAB Polska Internet 2010. Polska – Europa – Świat*, <http://www.iabpolska.pl/index.php?mnu=91&id=68> (20.04.2011), s. 18.

³ M. Bartosik-Purgat, *Kulturowe uwarunkowania zachowań konsumentów na przykładzie młodych Europejczyków*, Wyd. Uniwersytetu Ekonomicznego, Poznań 2011; M. Jaciow, R. Wolny, *Polski e-konsument. Typologia, zachowania*, Helion, Gliwice 2011.

According to the Eurostat in 2011 almost 8.64 m Poles which corresponds to 30 percent of the population decided to do e-shopping.⁴ According to the report of E-commerce 2012 Internet Standard the number of e-consumers has been constantly growing.⁵ At present, in accordance with the report of the Main Statistical Office, about 29.7% of the Polish population do shopping on the internet (over 8.6 m inhabitants of Poland age 16–74 within a year since the research). The percentage of Poles ordering and purchasing online increased by 14 percentage points⁶ (15.7%) as compared to 2007. The highest percentage grew among people aged 35–44 (growth by 22.4 percentage points) and 25–34 (growth by 20.3 percent). In 2011 the greatest share of online buyers was noted among people with higher education (56.3%), the self-employed (54.4%) and those aged between 25–34 lat (50.4%). Among people aged between 16 and 24 lat as well as people studying almost a half used e-commerce– table 1.

Table 1

Shopping online (in %)

	2007	2008	2009	2010	2011
Total	15.7	18.0	23.2	28.9	29.7
Gender					
Men	18.2	20.2	25.9	31.7	32.6
Women	13.3	16.0	20.7	26.4	27.1
Age					
16–24	29.7	33.8	40.2	49.2	48.0
25–34	30.1	34.2	40.9	49.7	50.4
35–44	15.1	19.7	28.6	36.7	37.5
45–54	8.1	9.9	14.2	18.5	20.9
55–64	4.4	4.8	6.9	9.3	11.1
65–74	1.7	1.6	2.2	2.8	3.6
Education					
Primary/ lower-secondary	8.8	9.2	11.5	15.6	15.7
Secondary	12.9	14.7	18.7	24.5	25.8
Higher	38.8	43.0	51.9	57.3	56.3
Residence					
Cities	23.3	24.7	33.0	39.7	38.8
Towns	17.3	20.1	22.9	28.6	31.2
Rural areas	8.0	10.5	15.8	28.6	21.3

Source: *Spoleczeństwo informacyjne w Polsce. Wyniki badań statystycznych z lat 2008–2012*, GUS, p. 117, http://www.stat.gov.pl/gus/5840_4293_PLK_HTML.htm (20.10.2012).

⁴ http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society/data/database (12.05.2012).

⁵ *Raport „E-commerce 2012”*, Internet Standard, p. 4.

⁶ *Spoleczeństwo informacyjne w Polsce*, GUS, Warszawa 2012, p. 116.

Huge discrepancies were observed in the percentage of people using e-commerce in various age groups. A higher percentage of internet buyers was noticed among white collar workers rather than among blue collar workers. IT and telecommunication employees more often did shopping on the internet as compared to the group of people not involved in the ICT industry ICT.⁷

According to a report of E-commerce 2012 internet users aged between 25 and 34 are active in terms of shopping (27%), mainly women (52%).⁸ The research shows that an average value of goods and services ordered by the internet per one person age 16–74 amounted to over 360 PLN and per one person using e-commerce –1200 PLN. There are significant differences among European countries when it comes to popularity of purchases made on the internet. Inhabitants of Norway most often used this form (in 2010 – 71%) where Poles are 42 percentage points away.⁹ According to a report of the Main Statistical Office internet users most often bought clothes and sports equipment, in 2011 over a half of buyers purchased these products online.¹⁰ The percentage of internet buyers purchasing all above products among people age 16–74 grew in the entire researched period.¹¹ About 4 out of 10 e-consumers bought the remaining products online.

Purchases made by an e-consumer – in view of results of the quantitative research

The quantitative research was carried out in 2012 among 1430 respondents constituted by internet users. The process of selecting the research sample was purposeful – people living in Poland and actively using the internet were chosen. Criteria taken into account while selecting the sample were as follows: gender, age, education, territorial differentiation: a town/a village, a place of residing – voivodeship. A standardized survey was made in the period of April–June 2012 in the area of Poland. It was carried out by contacting respondents directly as well as by means of CATI method.

Within recent 12 months internet users bought various products both in a traditional way as well as on the internet. Certainly the majority of products are purchased in the traditional way however greater activity is visible in the

⁷ *Spoleczeństwo informacyjne w Polsce. Wyniki badań statystycznych z lat 2008–2012*, GUS, p. 118, http://www.stat.gov.pl/gus/5840_4293_PLK_HTML.htm (20.10.2012).

⁸ *Raport „E-commerce 2012”*..., p. 5–6.

⁹ <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/> (11.08.2012).

¹⁰ *Spoleczeństwo informacyjne w Polsce. Wyniki...*, p. 119.

¹¹ *Ibidem*, p. 120.

internet sales. When we look at particular groups of products bought through the internet (tab. 2) one may notice that e-consumers most often bought clothes/shoes (34% indications), radio and television/ home appliances (34%) and books (34%).

Table 2

Purchasing products online

Categories of products	Σ	%
Clothes/shoes	520	36
Food	44	3
Radio and TV equipment/home appliances	488	34
Cosmetics	336	23
Books	480	34
CDs	358	25
Products for children	202	14
Furniture/ house equipment	220	15
Photographic equipment	332	23
Computer equipment	376	26
Accessories – glasses, watches etc.	388	27
Cars/car parts	192	13
Tourist equipment	254	18
Insurance	96	7
Air tickets	236	17
Holidays	234	16
Hobby equipment	216	15

Source: own elaboration on the basis of research surveys.

The above figures show that insurance was the least frequently bought product (7%) as well as food (only 3%). When comparing purchasing activity of e-consumers in the traditional and internet market we may say that 99.3% of internet users made traditional shopping within last 12 months and 83.9% internet shopping. It is interesting to analyse the above purchasing forms used by age groups of e-consumers (tab. 3).

According to the above table the most active group doing shopping online is constituted by people aged between 15 and 19 lat (95.7%), then those between 30 and 34 lat (91.3%) and 35–39 year olds (89%). 60–64 year olds did e-shopping least frequently (25%) as well as people aged 55–59 lat (74.3%).

Table 3

Ways of doing shopping by internet users over the last 12 months

Method of doing shopping			
Age group		Traditional	Internet
Total	Σ	1420	1200
	%	99.3	83.9
15–19	Σ	180	172
	%	100.0	95.6
20–24	Σ	212	172
	%	100.0	81.1
25–29	Σ	218	186
	%	99.1	84.5
30–34	Σ	204	188
	%	99.0	91.3
35–39	Σ	148	136
	%	97.4	89.5
40–44	Σ	132	112
	%	100.0	84.8
45–49	Σ	92	80
	%	100.0	87.0
50–54	Σ	108	88
	%	98.2	80.0
55–59	Σ	70	52
	%	100.0	74.3
60–64	Σ	56	14
	%	100.0	25.0

Source: own elaboration on the basis of research surveys.

The number of people buying products on the internet in particular age groups does not translate to the amount of purchased goods. Elder groups – from 35 to 59 do shopping in smaller numbers (calculated per person) however they buy more quantities of products. It means that elder people using the internet and being convinced of this form of sales – bought products online in larger quantities as compared to younger groups being convinced of this form but not having large shopping funds.

All products bought by internet users within last 12 months have been analysed. Internet users do shopping both in the traditional as well as internet market. That is why it is important to define various product groups by internet users. Products have been divided into three categories in terms of the place of the purchase:

Subsequent specification concern products bought by internet users divided into products:

- a) bought mainly in a traditional way (RT),
- b) bought both in the traditional and internet market (RTI),
- c) bought mainly on the internet (RI).

RT category comprised products whose indicator of dependency between traditional purchases and internet purchases was greater than 0.7 (tab. 4).

Table 4

RT product category

Name of a product	Traditional shopping (%)	Online shopping (%)	Indicator
Food	96.1	4.1	0.97
Insurance	48.3	7.8	0.84
Cosmetics	85.7	19.3	0.77

Source: elaboration of one's own on the basis of research surveys.

The values received indicate that food e-consumers mainly buy in a traditional way (96.1%), only 4.1% decided to purchase online within the last year. It is probably connected to concerns about freshness of products and the delivery process. A similar case is visible in insurance – respectively 48.3% bought insurance in a traditional way, only 7.8% on the internet. Also the purchase of cosmetics is made through traditional sales channels- last year 85.7% internet users purchased products that way. 31.9% bought cosmetics online.

Smaller disproportions between the amounts of products purchased in the traditional way and online can be noticed in products like equipment, house equipment, products for children and accessories. RTI product category comprised products whose indicators of dependency between purchasing in the traditional way and online was within the range of 0.41 to 0.7 (tab. 5).

Based on the above results we may say that e-consumers buy the presented products both on the internet as well as through traditional distribution channels. The indications lead to a statement that in comparison to RTI product category these are products where the range of assortment as well as the offered price are important. The selection of the purchase place is probably connected

to factors like an attractive price, possibility of waiting for the product and a smaller risk of making a mistake when purchasing a product.

Table 5

RTI product category

Name of a product	Traditional shopping (%)	Online shopping (%)	Indicator
Furniture/house equipment	55.1	20.3	0.63
Products for children	49.0	19.3	0.61
Air tickets	28.4	11.3	0.60
Cars/ car parts	46.0	19.4	0.58
Holidays	39.6	17.9	0.55
Equipment for hobby	48.7	24.6	0.49
Tourist equipment	66.9	34.3	0.49
Accessories	40.6	21.8	0.46
Clothing/shoes	89.4	49.9	0.44

Source: elaboration of one's own on the basis of research surveys.

The third product category is constituted by products purchased in the traditional ways and on the internet (RI products) and the value of the indicator of dependency between traditional and online shopping was lower than 0.3. This group comprised photographic equipment and air tickets (tab. 6).

Table 6

RI product category

Name of a product	Traditional shopping (%)	Online shopping (%)	Indicator
Books	59.2	42.5	0.28
Computer equipment	45.7	33.0	0.28
Radio and TV equipment/home appliances	59.2	43.1	0.27
CDs	45.2	33.6	0.26

Source: elaboration of one's own on the basis of direct research surveys.

The above results indicate that products like books, computer equipment, CDs and radio and TV equipment/home appliances belong to products that are most often compared by the internet user in terms of benefits/risk related to traditional shopping and shopping online in order to choose the most favourable option. It is worthwhile noting that in case of radio and TV equipment/ home appliances 59.2% respondents selected a traditional shop as a place of purchase whereas 43.1% chose the internet. It means that in case of this category an electronic market is an area of increased consumer activity. Similarly to books –

59.2% buy in a traditional store, 42.5% on the internet. It is probably related to price attractiveness of products bought on the internet and the accessibility of products in internet stores.

Products bought online and through traditional channels

Within recent 12 months 83.9% of internet users purchased online. According to the analysis they buy through internet stores mainly and auctions (tab. 7). One has to notice that some people buy products both through internet stores as well through auctions.

Table 7

Internet sales channels- internet stores and auctions

Groups of products	Purchase through an internet store		Purchase through an auction	
	Σ	%	Σ	%
Clothing/shoes	520	36	442	31
Food	44	3	16	1
Radio and TV equipment/home appliances	488	34	302	21
Cosmetics	336	23	224	16
Books	480	34	238	17
CDs	358	25	156	11
Products for children	202	14	134	9
Furniture/ house equipment	220	15	132	9
Photographic equipment	332	23	202	14
Computer equipment	376	26	238	17
Accessories – glasses, watches etc.	388	27	324	23
Cars/ car parts	192	13	100	7
Tourist equipment	254	18	156	11
Insurance	96	7	8	1
Air tickets	236	17	22	2
Holidays	234	16	32	2
Hobby equipment	216	15	192	13

Source: elaboration of one's own on the basis of direct research surveys.

Based on the above results we may say that clothing and shoes are bought in internet stores and (36%) in auctions (31%). Only accessories are also purchased in internet stores and auctions (27% – internet store, 23% – auctions),

tourist equipment (18% – internet store, 11% – auctions) and hobby equipment (15% – internet stores, 13% – auctions).

The obtained information indicates that about 71.7% of internet users make purchases in internet stores, 60.3% in auctions and 10.1% pointed different places (tab. 8).

Table 8

Places of purchasing product on the internet (%)

Age groups	Online purchase						
	Internet store	Auctions	Other form	Group purchasing service	Gift purchasing	Helping someone else to buy	Purchase through a mobile equipment
Total	71.7	60.3	10.8	18.9	57.1	31.7	10.1
15–19	81.1	75.6	37.8	40.0	72.2	44.4	24.4
20–24	67.9	39.6	14.2	24.5	63.2	55.7	12.3
25–29	77.3	60.0	6.4	29.1	77.3	53.6	13.6
30–34	80.6	71.8	5.8	9.7	48.5	16.5	5.8
35–39	71.1	69.7	3.9	15.8	60.5	25.0	5.3
40–44	75.8	66.7	1.5	13.6	51.5	13.6	4.5
45–49	78.3	54.3	4.3	10.9	41.3	28.3	0.0
50–54	67.3	67.3	5.5	1.8	43.6	10.9	7.3
55–59	57.1	51.4	8.6	8.6	45.7	11.4	14.3
60–64	10.7	14.3	10.7	3.6	7.1	3.6	0.0

Source: elaboration of one's own on the basis of direct research surveys.

In terms of age we may say that the most active groups in purchasing in internet stores are people aged between 15 to 19 (81.1%) and 30–34 (80.6%) and then 45–49 year olds (78.3%). 15–19 year olds most often buy in auctions (75.6%) as well as 30–34 year olds (71.8%). Group purchases are made by younger groups: 15–19 (40%), 20–24 (24.5%) and 25–29 (29.1%). Mobile equipment is used by the youngest group aged between 15–19 (24.4%). The eldest internet users aged between 60–64 are the least active groups on the internet. About 57% of internet users declare that within recent 12 months they bought presents and these were: books, perfumes, jewellery and cosmetics. Among people aged 50–54 toys appeared whereas in the group 55–64 flowers bought through the Flower Mail and books.

The analysis shows that group purchases were made by 19% of internet users. The group of 15–19 year olds was the most visible one (40%). This form of purchasing is seldom used by 50–54 year olds (2%) and 60–64 year olds (4%). Internet users also indicated cosmetic services, books, holidays, spa and gym

passes, coupons for a pizza (15–18 year olds), clothing and accessories as products bought by means of group purchasing. 65% of respondents made purchases in auctions. Products bought in action comprised toys, shoes, clothing, jewellery, books and CDs. The group of 25–29 year olds showed a highest differentiation of purchased products.

42% of internet users helped someone else to buy online. The group aged 15–29 often indicated parents or close family members as persons being helped in purchasing online. Products of small value were bought (cosmetics, perfumes) as well as products of higher value per unit (radio and TV equipment). In elder groups helping with online purchasing can be seen – assisting a wife or friends. Internet users from this group also help younger people e.g. children to make decisions about buying. However the activity related to helping others is not intense. 12% made purchases online by means of telephones or other mobile devices and then mainly telephones and telephone applications were chosen.

Summing up

A dynamic growth of the internet and the information society has triggered a change to a view on activity of e-consumers in the virtual space. In the contemporary world taking into account actions of e-consumers we observe hybridization of online and off-line areas. An e-consumer chooses a place of shopping after analysing profits and losses that may be occurred in the result of their actions. The final decision depends on the specificity of the products as well as the age of the e-consumer.

E-KONSUMENT W WIRTUALNEJ PRZESTRZENI

Streszczenie

Dynamiczny rozwój internetu oraz społeczeństwa informacyjnego spowodował zmianę spojrzenia także na aktywność e-konsumentów w wirtualnej przestrzeni. Celem artykułu jest zaprezentowanie wyników badań ilościowych przeprowadzonych w 2012 roku na temat aktywności zakupowej e-konsumentów w internecie.

Słowa kluczowe: internet, wirtualna przestrzeń, e-konsument, zakupy internetowe

Tłumaczenie: Agnieszka Dejnaka