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ANALYTICAL VIEW OF THE CONSUMER BEHAVIOR OF MILLENNIALS

ANALYTICKÝ POHĽAD NA SPOTREBITEĽSKÉ SPRÁVANIE MILENIÁLOV

Abstract

E-commerce plays an important role in today's world of commerce. Many customers shop online. The e-commerce is booming mainly because today's consumers use the Internet on a daily basis, they like to try new things, brands and products, but they are also modern, demanding and like convenience. The aim of this paper is to identify Generation Y consumer behavior when purchasing goods and services. Based on the above analyzes, it can be stated that Millennials buy goods and services online several times in six months. Based on the average value/ median, it can be stated that the least frequently purchased items are lottery, auto-moto, music, PC and insurance. On the other hand, the most frequently bought clothes and jewellery, services such as cinema tickets, holidays or tickets for cultural events, travel tickets or cosmetics and perfumes

Keywords

e-commerce, purchase, consumer behavior, millennials

JEL classification

M30; M31

1. Introduction

E-commerce is a subset of e-business. Electronic commerce can be described as the use of any information and communication technology in order to carry out mutually beneficial transactions between the seller and the buyer (Bystrická 2013). The implementation of an information system into business processes, or the creation of an information infrastructure does not mean that we talk about electronic commerce. A company conducts e-business only if it conducts communication with customers mainly through information and communication technologies (these can also be used by the implemented information system) (Laudon and Traver 2016). According to Dorčák (2012), all business activities and services implemented through electronic data transfer tools, and directly related to the implementation of business, can currently be perceived as electronic trading. As for the software or other information, these

can also be transmitted to the end consumer electronically. At present, e-commerce can be carried out not only using personal computers but also mobile communication platforms (Xanthidis and Nicholas 2004). Suchánek (2012) states that one of the first examples of electronic trading of physical goods between a large number of sellers and buyers was the Boston Computer Exchange established in 1982. E-commerce is a purchase, sale and distribution of goods or services where the contact between the seller and the buyer takes place through electronic systems. E-commerce is essentially a business between people in which information and communication technologies are used (Thongpapanl and Ashraf 2011; Štefko a kol. 2018). Manzoor (2010) states that the main elements of e-commerce are online stores and related issues. However, most activities falling under online marketing are also well represented here, e.g. e-mail marketing, various affiliate programs, online advertising and all activities related to the promotion of Internet commerce (Leong and Ibrahim 2015). In a broader sense, e-commerce can also include any websites that offer specific products or services which can be ordered, e.g. via e-mail. The first e-shops in the world began to emerge around 1994 (Amazon, eBay,...). According to Tiaga and Tiaga (2012), online commerce is currently the fastest growing segment in increasing business performance and productivity. E-commerce is included in the field of direct sales, as customers can choose the goods without having to physically visit the brick-and-mortar shop or shopping center (Gerrickagoitia 2015). E-commerce is a fast-growing segment that is a common part of today's businesses (Shim et al. 2001). Its essence is based on the use of information and communication technologies. Today, online stores make it easier and faster to do business. As e-commerce is a form of direct sales to customers, it is easier to buy goods directly from the comfort of home. E-commerce covers a range of technologies, the use of which leads to increased efficiency of business relationships (Vanhoose 2011). By consumer behavior we mean primarily obvious and observable acts, such as purchase and consumption, which are fundamental aspects of the consumer's decision-making process. This concept is much broader than the mental and social processes that take place (Kita 2005): before purchasing - awareness of need, formation of attitude, evaluation of alternatives, choice of product and place of purchase; during the purchase - the shopping behavior itself; after purchase - after purchase evaluation of usefulness, comparison of expected reality, satisfaction or dissatisfaction, consumption process (post-purchase dissonance). According to Petr and Olson (2008), consumer behavior can be defined as a dynamic interaction of affect, knowledge, behavior and environmental influences, on the basis of which people manage exchange relationships in their lives. Consumer behavior also represents the dynamic interactions of people and environments that contain emotions, knowledge and actions people carry out to meet their needs (Jiang and Benbast 2004). In other words, consumer behavior has an affective, cognitive, and conative component, that is, it involves the feelings, thinking, and actions people perform in connection with the process of consumption (Richter et al. 2005; Jenčová and Vašaničová 2019). With regard to consumer behavior, great emphasis is placed on examining how and why consumers decide on a given product or service, what response a purchase may trigger, how satisfied consumers are with the product, whether they are willing to make further purchases, in which way the product did not meet their expectations, etc. (Ďad'o et al. 2006).

2. Methodology

Based on the analysis of the current state of consumer behavior of the new generation of customers, the main goal of the paper is to identify the behavior of Millennials when buying goods and services. This goal will be met using descriptive and frequency analysis of the findings from the questionnaire survey.

In relation to the main objective, the following sub-objectives have been formulated:

- identify the frequency of Millennials making purchases in general,
- identify the frequency of Millennials making purchases in relation to selected items.

Primary data was obtained using a questionnaire. The link to the electronic questionnaire was placed on the relevant Facebook pages, it was also distributed evenly within the regions of the Slovak Republic by e-mail (the author's private database). A total of 962 respondents filled in the questionnaire. However, the research focused only on the Millennials/ Generation Y (born 1984 - 2000), i.e. respondents 21 to 37 years old (Young 2017). After removing unfit observations, a total sample of 824 respondents was used for the purposes of this paper. The obtained data were processed using Microsoft Excel. The individual analyzes were processed in Gretl and Statistica 13. Furthermore, the results are presented in figures and tables below. Inputs to the analysis were obtained by implementing the CAWI (Computer Assisted Web Interview) method. To obtain the necessary primary sources of information and data for the purposes of this paper, we used the exploratory method: the questionnaire. The aim of the questionnaire is to obtain data based on subjective answers of respondents, which in this case is Generation Y/ Millennials who shop online. The questionnaire consisted of closed questions. Data was collected in October 2020.

3. Results

The results in Table 1 show, based on the median value, that respondents aged 21 to 37 shop online only rarely (several times every six months).

Table 1. Descriptive statistics for the question "How often do you shop online?"

Variable	Mean	Median	Modus	Standard Deviation	Minimum	Maximum
Purchase frequency	2,75	3	3	0,674	1	4

Source: own elaboration

Respondents were also asked about the frequency of purchase of selected items. The following Table 2 shows the absolute and relative numbers of answers to the question concerning the purchase of these items.

Table 2. Frequency of responses for the frequency of purchase of selected items

Variable	Frequently		Rarely		Very rarely		Never	
Auto-moto	3	0.36%	31	3.76%	151	18.33%	639	77.55%
Travel tickets	162	19.66%	239	29.00%	231	28.03%	192	23.30%
Electronics	19	2.31%	249	30.22%	394	47.82%	162	19.66%
Music (CD / DVD)	25	3.03%	71	8.62%	171	20.75%	557	67.60%
Food/ groceries	64	7.77%	101	12.26%	144	17.48%	515	62.50%
Cosmetics / perfumes	78	9.47%	309	37.50%	252	30.58%	185	22.45%
Books	57	6.92%	295	35.80%	277	33.62%	195	23.67%
Medicines	23	2.79%	150	18.20%	165	20.02%	486	58.98%
Lottery / betting	17	2.06%	32	3.88%	90	10.92%	685	83.13%
Clothing / jewelry	155	18.81%	372	45.15%	200	24.27%	97	11.77%
PC (hardware / software)	15	1.82%	76	9.22%	223	27.06%	510	61.89%
Insurance	7	0.85%	76	9.22%	257	31.19%	484	58.74%
Services (cinema, vacation, ...)	118	14.32%	330	40.05%	274	33.25%	102	12.38%
Sports equipment	39	4.73%	187	22.69%	282	34.22%	316	38.35%
Furnishings of an apartment / house	45	5.46%	223	27.06%	345	41.87%	211	25.61%

Source: own elaboration

For this question/ for its individual items, descriptive statistics are also given in Table 3. It was found that none of the listed items is bought by respondents at least once every 2 days (very often). Based on the average value/ median, it can be stated that the least frequently purchased items are lottery, auto-moto, music, PC and insurance. On the other hand, the most frequently bought items are clothes and jewellery, services such as cinema tickets, holidays or tickets for cultural events, travel tickets or cosmetics and perfumes. The lowest variability, i.e. the difference within the partial answers, was found for the items auto-moto, lottery and betting. On the contrary, the highest variability was recorded in the purchase of travel tickets, food and groceries, cosmetics and perfumes.

Table 3. Descriptive statistics for the frequency of purchase of selected items

Variable	Mean	Median	Modus	Standard Deviation	Minimum	Maximum
Auto-moto	4,73	5	5	0,542	2	5
Travel tickets	3,55	4	3	1,050	2	5
Electronics	3,85	4	4	0,754	2	5
Music (CD / DVD)	4,53	5	5	0,777	2	5
Food/ groceries	4,35	5	5	0,969	2	5
Cosmetics / perfumes	3,66	4	3	0,929	2	5
Books	3,74	4	3	0,897	2	5
Medicines	4,35	5	5	0,872	2	5
Lottery / betting	4,75	5	5	0,624	2	5
Clothing / jewelry	3,29	3	3	0,905	2	5
PC (hardware / software)	4,49	5	5	0,738	2	5
Insurance	4,48	5	5	0,697	2	5
Services (cinema, vacation, ...)	3,44	3	3	0,884	2	5
Sports equipment	4,06	4	5	0,893	2	5
Furnishings of an apartment / house	3,88	4	4	0,855	2	5

Source: own elaboration

With regard to the frequency of purchase of selected items, the mutual relations in their purchase are also calculated. Spearman's coefficient was used for the performed calculation. The values in Table 4 marked in red were statistically insignificant at the significance level $\alpha = 0.05$. On the other hand, the darker the color of the cell, the more significant the relationship. It can be seen that the respondents' designations for "electronics" and "PC (hardware / software)" matched the most ($r_s = 0.42$) followed by "sports equipment" and "apartment and house furnishings" ($r_s = 0.33$); "cosmetics / perfumes" and "clothing / jewellery" ($r_s = 0.31$); "PC (hardware / software)" and "insurance" ($r_s = 0.31$).

Table 4. Contexts within the frequency of purchase of selected items

	Aut o	TT	EI	CD	Foo d	Cos m	Boo k	Med s	Lot o	Cloth	PC	Ins	Serv	Spor t	Apar
Aut	1,00	-0,02	0,19	0,15	0,03	0,01	0,05	0,07	0,19	-0,04	0,28	0,19	0,01	0,16	0,15
TT		1,00	0,14	0,05	0,04	0,00	0,03	0,02	0,07	0,08	0,11	0,13	0,19	0,10	-0,01
EI			1,00	0,28	0,05	0,10	0,19	0,16	0,04	0,04	0,42	0,20	0,22	0,25	0,26
CD				1,00	0,09	0,12	0,20	0,17	0,11	0,07	0,27	0,23	0,15	0,20	0,15
Aut					1,00	0,15	0,09	0,13	-0,01	0,09	0,04	0,11	0,08	0,11	0,13
Cos m						1,00	0,19	0,30	0,10	0,31	0,00	0,09	0,16	0,18	0,26
Book							1,00	0,23	0,02	0,10	0,14	0,11	0,19	0,20	0,27
Med								1,00	0,20	0,13	0,17	0,21	0,09	0,20	0,22
Lot									1,00	-0,01	0,18	0,20	0,03	0,10	0,01
Clo										1,00	-0,04	-0,01	0,17	0,21	0,19
PC											1,00	0,31	0,11	0,21	0,15
Ins												1,00	0,15	0,22	0,16
Serv													1,00	0,30	0,20
Spor														1,00	0,33
Apar															1,00

Source: own elaboration

4. Discussion

Our findings complement or expand the research of several authors, such as Nguyen and Khoa (2019) dealing the issue of trust in online shopping, Frieze and Pegden (2018) dealing the issue of online purchasing under uncertainty, Dsouza and Sharma (2021) dealing the issue of changing consumer behavior and expectation during COVID-19 times and Chen, Yuan and Zhu (2020) dealing the issue of the motivational factors that have significant positive impacts on browsing behavior.

The results of the paper correspond to the results of the above studies in the following key areas. Our results compare to findings of authors Frieze and Pegden (2018) confirm that millennials most often buy several purchases at intervals of six months. Our findings confirm what authors Nguyen and Khoa (2019) claims, that by increasing the amount of information about products and services on the part of sellers, or by greater involvement of customers in purchasing, the frequency of shopping can increase.

Our findings do not correspond with findings of authors Dsouza and Sharma (2021) in area of changing of consumer behaviour because our study was conducted before the COVID-19 pandemic broke out. Another difference in our findings and the results of the study by Chen,

Yuan and Zhu (2020) is the fact that the motivation factors of millennials to shop online differ from the motivation factors of the general population of all generations.

This paper has several limitations that create interesting opportunities for future research.

The sample of respondents to the research was probably not interested in all the products that were offered to them in the questionnaire and thus did not have to be highly motivated to answer. However, most respondents certainly purchased the products in question during the data collection for the research, or in the months following the research, so it can be stated that their level of motivation may have been appropriate.

Nevertheless, future research could try to collect data from consumers who are more likely to buy the products in question on a regular basis in order to achieve a higher level of motivation. In addition, respondents were not familiar with the research context when asked questions about purchasing the products in question.

6. Conclusion

Life before the Internet is unimaginable for many Millennials. Generation Y uses the Internet in almost every aspect of their lives. Whether it's looking for trusted resources to write seminar papers, order food, watch online TV, or meet new people through cyberspace, the Internet has become an integral part of their lives. While widespread use of the Internet may not necessarily be negative, it has lasting effects on the lives of Millennials. All these actions implemented in the process of e-commerce are necessarily related to uncertainty, especially at the level of its perception and subsequent reduction. This dissertation thesis examined uncertainty in the context of the quality of sellers and their products and services.

Based on the above analyses, it can be stated that Millennials buy goods and services online several times in six months. Based on the average value/ median, it can be stated that the least frequently purchased items are lottery, auto-moto, music, PC and insurance. On the other hand, the most frequently bought items are clothes and jewellery, services such as cinema tickets, holidays or tickets for cultural events, travel tickets or cosmetics and perfumes. The lowest variability, i.e. the difference in the partial answers, was found for the items auto-moto, lottery and betting. On the contrary, we recorded the highest variability with regard to travel tickets, food and groceries, cosmetics and perfumes.

The added value of the implemented research lies in the fact that this is the first research carried out in the given issue in the conditions of electronic trading in Slovakia. While other studies focus on consumer behavior within the general population, the research carried out in this paper focuses on a new generation of customers (Generation Y), e.g. millennials, such research is unparalleled in the world at the level of this sample.

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References

1. BYSTRICKÁ, K., 2013. Internetový obchod. Bratislava: Iura Edition. ISBN 978-80-8078-555-0.
2. DORČÁK, P., 2012. eMarketing. Ako oslovit' zákazníka na internete. 1st ed. Prešov: EZO. ISBN 978-80-970564-4-5.
3. DSOUZA, D. and D. SHARMA, 2021. Online food delivery portals during COVID-19 times: an analysis of changing consumer behavior and expectations. In: International Journal of Innovation Science. Vol. 13, n. 2, p. 218-232. ISSN 2319-9369.
4. ĎAĎO, J., PETROVIČOVÁ, J. and M. KOSTKOVÁ, 2006. Marketing služieb. Bratislava: EPOS. ISBN 80-8057-662-9.
5. FRIEZE, A. and W. PEGDEN, 2018. Online purchasing under uncertainty. In: Random Structures & Algorithms. Vol. 53, n. 2, p. 327-351. ISSN 1098-2418.
6. GERRIKAGOITIA, J. K. et al., 2015. New Trends of Intelligent E-marketing Based on Web Mining for E-shops. In: Procedia - Social and Behavioral Sciences. Vol. 175, p. 75-83. ISSN 1877-0428.
7. CHEN, L. YUAN, L. and Z. ZHU, 2020. Empirical study of consumer participation motivation in value cocreation within cultural and creative virtual brand communities. In: Asia Pacific Journal of Marketing and Logistics. Vol. 32, n. 8, p. ISSN 1355-5855.
8. JENČOVÁ, S., LUKÁČOVÁ, M. and M. JUSKOVÁ, 2020. Fraud Intra-Community Transactions Vat and Negative Impact on the State Budget. In: Journal of Management and Business: Research and Practice. Vol 12, no. 1, p. 37-42. ISSN 1338-0494.
9. JENČOVÁ S. and P. VAŠANIČOVÁ, 2019. Profitability of the Slovak SPA Industry. In: Journal of Management and Business: Research and Practice. Vol 11, no. 2, p. 30-35. ISSN 1338-0494.
10. JIANG, Z. and I. BENBASAT, 2004. Virtual Product Experience: Effects of Visual and Functional Control of Products on Perceived Diagnosticity in Electronic Shopping. In: Journal of Management Information Systems. Vol. 21, n. 3, p. 111-147. ISSN 0742-1222.
11. KITA, J. et al., 2005. Marketing. Bratislava: IURA Edition. ISBN 80-8078-049-8.
12. LAUDON, K. C. and C. TRAVER, 2016. E-Commerce 2014: Business, Technology and Society. 11th edition. London: Pearson. ISBN 978-0-1335-0716-4.
13. LEONG, L. W. and O. IBRAHIM, 2015. Role of Information System (IS), Social Networking Technology (SNT) and WEB 2.0 for Improving Learning Outcomes: A Case of Malaysian Universities, In: Procedia - Social and Behavioral Sciences. Vol. 211, p. 111-118. ISSN 1877-0428.
14. MANZOOR, A., 2010. E-Commerce: An Introduction. Saarbrücken: LAP LAMBERT Academic publishing. ISBN 978-3-8433-7030-1.
15. NGUYEN, H. M. and B. T. KHOA, The Relationship between the Perceived Mental Benefits, Online Trust, and Personal Information Disclosure in Online Shopping. In: Journal of Asian finance economics and business. Vol. 6, n. 4, p. 261-270. ISSN 2288-4637.
16. PETER, P. and J. OLSON, 2008. Consumer Behavior and Marketing Strategy. New York: McGraw Hill International. ISBN 978-007-125935-4.
17. RICHTEROVÁ, K., KULČÁKOVÁ, M. and D. KLEPOCHOVÁ, 2005. Spotrebiteľské správanie. Bratislava: Ekonóm. ISBN 80-225-2036-5.

18. SHIM, S., EASTLICK, M., LOTZ, S. and P. WARRINGTON, 2001. An online prepurchase intentions model: the role of intention to search. In: Journal of retail. Vol. 77, p. 397-416. ISSN 0022-4359.
19. SUCHÁNEK, P., 2012. E-commerce: Elektronické podnikání a koncepce elektronického obchodování. 1st ed. Praha: Ekopress. ISBN 978-80-86929-84-2.
20. ŠTEFKO, R. KOVAĽOVÁ, E., RIGELSKÝ, M and L. DANČIŠINOVÁ, 2018. Descriptive study of the perception of effectiveness of marketing tools in the context of dental-hygienic health services. In: Journal of Management and Business: Research and Practice. Vol 10, no. 2, p. 5-17. ISSN 1338-0494.
21. THONGPAPANL, N. and A. R. ASHRAF, 2011. Enhancing online performance through website content and personalization. In: Journal of Computer Information Systems. Vol. 52, n. 1, p. 3-13. ISSN 0887-4417.
22. TIAGO, M. T. and F. TIAGO, 2012. Revisiting the Impact of Integrated Internet Marketing on Firms' Online Performance: European Evidences. In: Procedia Technology, Vol. 5, p. 418-426. ISSN 2212-0173.
23. VANHOOSE, D., 2011. E-Commerce Economics. 2nd edition. London: Routledge. ISBN 978-0-415-77897-8.
24. XANTHIDIS, D. and D. NICHOLAS, 2004. Evaluating internet usage and ecommerce growth in Greece. In: Aslib Proceedings. Vol. 56, n. 6, p. 356-366. ISSN 0001-253X.
25. YOUNG, M., 2017. Ogilvy o reklamě v digitálním věku. Bratislava: Svojtka&Co. ISBN 9788025621592.

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