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Analysis of the Use of Smartphones During Purchasing Process for a Selected Group
of Customers within Slovak Market Conditions

ANALYSIS OF THE USE OF SMARTPHONES DURING PURCHASING PROCESS FOR A SELECTED GROUP OF CUSTOMERS WITHIN SLOVAK MARKET CONDITIONS

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Abstract: This study presents partial results of the research of the use of smartphones within the purchasing process for a select belong to the Generation Y (i.e., those born between 1980-1995), carrying out their shopping activities mainly within the Slovak market. In the first part of the study, based on the relevant literature, the current status of the issue of the use of mobile platforms within business is mapped and presented. The second part of the study provides results of our empirical analysis of primary data collected on the basis of an extensive questionnaire survey. By analysing these data links and findings regarding the frequency of the use of smartphones within one of the phases of the purchasing process, as well as the purpose of their use in the purchasing process within the select group of customers were identified. Last but not least, the study points out the need for constant innovation of the traditional marketing mix of businesses, with the aim of bringing closer their products to potential customers using smartphones for their purchases.

Keywords: purchasing process, internet, smartphone, mobile optimization

JEL Classification: M3, O33

1. INTRODUCTION

The phenomenon of using interactive technology in marketing can be observed for several decades. The rate of modern technology usage within an effective marketing mix shows a growing trend. The phenomenon can be observed in entities active in almost every field related to the development of new products, cost optimization, efficient distribution policy, or communication of messages to the target market. Mobile marketing is currently considered to be one of the fastest growing forms of marketing communication within the B2C model, i.e. organization-customer model of communication. This is one of the main reasons why many organizations try to incorporate mobile platforms into their portfolios of marketing activities and get the most out of them [1]. Mobile commerce is a concept in which products are sold and purchased via mobile devices [2] and constitutes mobile devices usage within a business operation [3]. Samuelsson and Dholakia [4] further argue that mobile business provides opportunities to reach customers on more locations for the purpose of personalization of services offered in a new way. The rate of growth of mobile commerce on developed markets reached 71% in the last year compared to 2012, when the turnover of 30.5 billion USD was reached [4]. Based on the information in academic literature, as well as business practices we can say that mobile marketing is a certain degree of mobile commerce [5, 6, 7.]. However, in spite of the growing number of academic research, the overall summary on mobile marketing is not as consistent and somewhat fragmented. In geographical conditions of the Central European market this is a relatively new phenomenon. Available data come largely from research conducted mainly in Anglo-Saxon countries. The Salesforce survey [8] was carried out on a sample of 470 users, of which 265 used smartphones only, and the remaining 205 used smartphones and tablets. The data were collected between 15 December 2013 and 15 January 2014. 85% of respondents of this survey replied that mobile devices are a central part of their daily lives. It is up to 90% within the age group 18-24. 76% of smartphone users search for information using a mobile web browser. The survey found that 80% of mobile users subscribe to a newsletter in order to get coupons. 63% of respondents can get such coupons following company profiles on social networks. In January 2014 Inmar Organization [9] conducted a survey of 1,091 respondents aged 18 to 69 years. According to the survey 66% of users, who expressed an interest in digital coupon, use smartphones. 44% of respondents would like to be able to submit a coupon when buying using a mobile phone, 39% of respondents would like to receive coupons for goods which they purchase regularly, directly on their mobile phones. The Ashraf and Kamal survey [10] was conducted on a sample of 164 respondents from universities in Islamabad and Karachi. The data were collected between December 2009 and January 2010. The results of this survey say that innovativeness of consumers positively influences their attitude toward mobile marketing. Mobile devices are therefore accepted as a promotional medium. Google Shopper Marketing Council [11] conducted a survey between October and December 2012 on a sample of 1,507 smartphone owners. 62% of standard customers using smartphones indicated that they use their smartphones as an assistant when buying at least once a month, 17% of customers using smartphones indicated that they use their smartphones for purchasing at least once a week, while agree that use their smartphones for products research, 90% of respondents said they used their mobile phones for pre-purchase activities. The survey further claims that comparing prices during purchase is the most common activity across all categories.

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2. SCIENTIFIC AIM AND METHODS

Through the analysis of primary data the study aims to identify the level and extent the use of smartphones within the purchasing process for a select group of customers. For empirical analysis requirements the customer group is represented by customers who, based on their age, belong to the Generation Y (i.e., those born between 1980-1995), carrying out their shopping activities mainly within the Slovak market. Namely, the aim is to collect findings regarding the frequency of the use of smartphones within one of the phases of the purchasing process, as well as the purpose of their use in the purchasing process within the select group of customers. A questionnaire survey was carried out in order to collect empirical material. The questionnaire was designed using Google's online platform and included a total of 9 questions, seven of which were closed questions, one was an open and one a semi-open question. Distribution of the questionnaire was conducted via Facebook. The basic group consisted of all Internet users on the researched market. The sample was extracted from the core set nonrandomly. Based on the information in academic literature [12], the collection of primary data was aimed at the most active group of potential customers - generation Y customers. For purposes of the analysis the sample consisted of full-time and part-time students of the Faculty of Management of the University of Prešov, Faculty of Economics and Faculty of Electrical Engineering and Computer Science of the Technical University in Košice who by the time of the survey owned a Facebook profile, and at the same time were members of at least one of several dozens of visible groups connected with a given faculty on Facebook. The participants formed a selected sample of potential, as well as existing customers actively using the Internet and social networks, localized on the target market. For further processing, the chosen respondents were classified, based on their age, as being part of the Generation Y group (i.e. born between 1980-1995). The selection of respondents was a prerequisite for accurate unification of subsequent recommendations with the respect to a specific customer group. The survey was conducted during January 2015. Microsoft Excel 2010, and StatSoft STATISTICA 12 were used for processing and evaluation of the questionnaire survey. Total of 413 respondents participated on the survey, and 331 respondents were selected for further processing (members of the Generation Y group based on age), 214 women and 117 men took part. The age of respondents ranged between 20 and 28 years, while the average age was 23.21 years. The median was at 23 years and the resulting standard deviation was 1.96.

3. FINDINGS AND DISCUSSION

First of all, we were considered important to identify the share of usage of desktop and mobile devices among the respondents. Based on the findings, we can state that only 1.81% of respondents used exclusively desktop or mobile devices / platforms during the actual purchase decisions in any of the steps of the purchasing process. On the other hand, mobile and desktop devices use up to 54.69% of the respondents. Regardless of the share of usage, 98.19% of respondents use mobile devices. In practice, this means that if a target group of business entities corresponds with the identified research sample, those business entities, when conducting online marketing and business activities, should provide an equal experience for customers (existing or potential) using desktop computers and customers using mobile devices. This finding is, moreover, supports the fact that following customers' purchase paths using digital analysis is more difficult due to the fact that customers often accesses a website on different devices. As the Chart 1 shows, the chosen sample uses their smartphones to carry out several activities during the purchasing process.
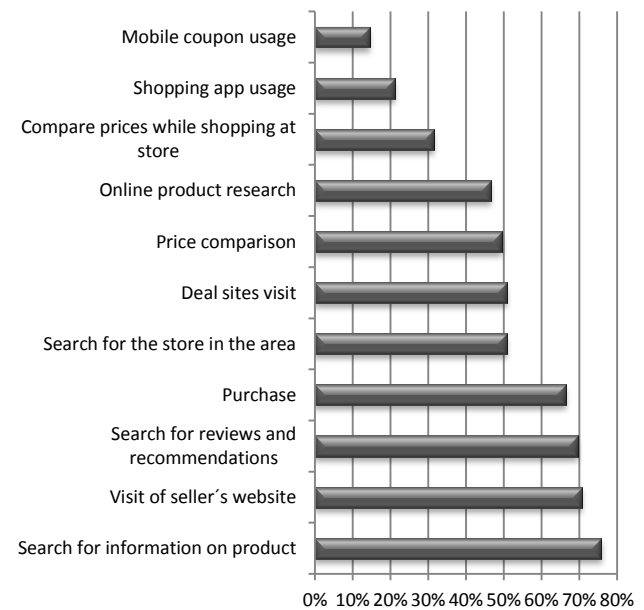

Chart 1 Actions carried out by smartphone users while shopping (Source: Our own processing)

As many as 75.83% of respondents use their smartphones to search information on products. For organizations this means that information about their products and services should be presented in a format that is supported by mobile devices without losing the visual or content quality. We also find location of reviews and recommendations on vendors' websites important, because as many as 69.49% of the surveyed respondents search for them directly. We consider the fact that up to 50.76% of respondents search for a store in their area a significant finding. This only confirms the established trend that in spite of the availability of goods through an e-shop customers prefer to visit a brick and mortar shop, where they can view, try or buy a product. Up to 31.42% of respondents compare prices online while shopping in a store. It is therefore clear that, even if respondents are likely to visit stores in their area in order to get familiar with a product, they are still interested in buying at the best price. More than 66% of respondents have made a purchase using a mobile phone. This means that, in spite of the availability of the Internet on mobile devices, nearly a third of customers within our geographical and age range consider purchasing using a desktop device or by visiting a brick and mortar shop more comfortable. Using the confidence interval for population proportion, it was found that at the level of $\alpha = 0.05$ the proportion of customers bearing the features of our survey sample, who purchase using mobile phones, is within the range of the interval from 61.10% to 71.53%.

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Table 1 Interval estimate of respondents shopping using mobile phones

The proportion of the p sample	N	The confidence interval	Confidence limits π	
			Bottom limit of the interval	Upper limit of the interval
0.6647	331	0.95	0.6110	0.7153

Source: Our own processing

4. CONCLUSION

Through the analysis of primary data the study aimed to identify the level and extent the use of smartphones within the purchasing process for a select group of customers. Surveys [8, 9, 10, 11.] also deal with the presented issue. It was found that up to 98.19% of respondents use mobile devices. This finding should appeal to organizations, target group of which are customers who belong to the younger generation, to make their online content optimized for mobile devices. It was found that 66.47% of respondents made a purchase using their mobile phone, while the actual percentage for the group with the characteristics of our research sample can range from 61.10% to 71.53%. Compared with the results of GoogleShopper Marketing Council [11] the value found by our research is higher by almost 250%. More than 75% of respondents search for information on products and services which, compared with the results of GoogleShopper Marketing Council [11], is difference of about 45%. On the other hand only 14.50% of respondents use mobile coupons, which is over 50% less than indicated by the survey of Inmar [9]. Overall, it can be concluded that a large proportion of respondents interacts with organizations using mobile phones. We therefore recommend organizations, whose target audience is the same with our survey sample, to adapt their campaigns to the characteristics of mobile devices. The conducted questionnaire survey has its limitations. These include small size of the survey sample, narrow geographic targeting of the survey, as well as the age structure of the selected group of respondents. Based on these facts, differences compared to the survey GoogleShopper Marketing Council [9], and Inmar [11] may have demonstrated. Among other factors, which could have affected the results of the survey, is the proportion between men and women, and the proportion among respondents living in regional capitals, towns, and municipalities.

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