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There has been the seventeenth year of the Acta Scientiarum Polonorum Oeconomia publishing. The Acta is the periodical including several thematic series with uniform graphics and similar format. The publication was set up by group of enthusiasts – employees of life sciences universities and has been published under the patronage of rectors of these universities. Constant involvement of academic society in increasing substantive and editorial level of the series, with efforts of the authors, the Programming Board and the Scientific Boards, has contributed to placing the Acta Scientiarum Polonorum (and our Oeconomia series) on the noticeable position in academic research society. Articles can be prepared in English with Polish title, abstract and keywords. Moreover, we publish latest issues in English only. The Scientific Board of the Oeconomia series, concerning the publication range, focuses its attention both on substantive content and precision of the form. The articles are revised in “double-blind review” process. Whole content of the Acta Scientiarum Polonorum Oeconomia is available in electronic version on the following websites acta_oecnomia.sggw.pl and www.oeconomia.actapol.net. We are glad to inform that Acta Scientiarum Polonorum Oeconomia are indexed within the AGRIS-FAO, EBSCO, SIGZ, Copernicus Index, Central and Eastern European Online Library, AGRO, BazEkon, POL-index. Since 2015 each article published in Acta Sci. Pol. Oeconomia has 15 points at the Ministry of Science and Higher Education ranking list.

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Yours sincerely

Janina Sawicka
Chairperson of the Scientific Board of the Acta Sci. Pol. Oeconomia series
INTRODUCTION

The majority of consumers search for information about products before making a buying decision [Jarvis 1998, Woo et al. 2015]. Some consumers want to see, others to touch them, read information on the Internet or ask other consumers for information. The type of information and the way it is searched for depend on the type of a product. Searching for information about durable products that can be bought with a substantial sum of money is more frequent and takes more time [Punj 1987, Huotari et al. 2015].

The evolution in information and communication technology (ICT) makes access to information easier and faster [Woo et al. 2015]. Along with the development of social networking sites (SNSs) the nature of communication [Weisfeld-Spolter et al. 2014] and conveying the information has changed. Face to face conversation has turned into communication through Facebook, Twitter, Instagram, Qzone or Sina Weibo. Computer mediated communication (CMC), the new approach in communication theory, has developed due to communication using Internet tools [Walther 1996, Haythornthwaite et al. 1998].

Social networking sites have also contributed to changing the way of gathering and conveying information about products amongst consumers at various stages of making purchase decisions [Chu and Kim 2011, Coussement and Teague 2013, Erkan and Evans 2016]. Through SNSs consumers gather information about particular products before making a purchase decision (pre-purchasing) and share their experiences...

with other consumers after the purchase (post-purchasing) [Jarvis 1998, Woo et al. 2015]. In marketing theory it is called electronic word of mouth [Cheung and Thadani 2012, Barreto 2014, Lin et al. 2014, Gvili and Levy 2016]. Social networking sites are also an important instrument used by enterprises in marketing communication [Kaplan and Haenlein 2010, Weisfeld-Spolter et al. 2014]. It is also influenced by changing the moment of making the final decision about buying a product which often happens whilst checking information on the Internet, between the point when the buying need appears and actually going shopping [Lecinski 2014].

The main objective of the article is to identify the interdependencies between types of products (durable products) and the nature of information on SNSs which influence purchase decisions. The research problem is presented in the light of the CMC theory and the zero moment of truth (ZMOT) concept. An attempt has been made to answer the research question: to what extent types of products are influenced when using the varied information on SNSs when making purchase decisions (pre-purchasing stage). The literary studies have been complemented with empirical research done in three countries: China, Poland and the United States. The importance of the study and analyses stems from the fact that there are not many papers on the subject in international literature.

The paper proceeds as follows: the literature review presents the theoretical background for the main objective and research questions concerning using SNSs in the context of the CMC theory and the process of making decisions (ZMOT concept). The next part describes the data used in the analysis and the results. Finally the author discusses the implications of the analysis and offers concluding remarks and limitations.

LITERATURE OVERVIEW

Theoretical background of communication in the context of computer mediated communication theory

Communication is the process of exchanging information between the sender and receiver through a specific channel [Davies et al. 2016]. In individual communication both sender and receiver are individual units exchanging a message via a communication channel (verbal, non-verbal, written, etc.) and medium. But in marketing communication the sender is usually an enterprise and the receiver is the potential customer [Clow and Baack 2015]. Based on the CMC theory the internet and its devices take a role of a medium in the communication process [Walther 1996]. Social networking sites are internet tools used for communication amongst participants (both individuals and enterprises). They are able not only to text the messages (e.g. Facebook, Qzone) but also to listen to or record (e.g. YouTube, WhatsApp, Youku Tudou). The communication level and type differs according to the chosen medium. Computer mediated communication participants transfer the message quickly without cost possibly to many receivers (recipients) at the same time [Smith and Zook 2011]. In the computer mediated communication concept the use of SNSs reduces the personal influences and their effects in the communication process [Walther 1996].

Social networking sites – tools in marketing communication

The use of SNSs by enterprises enhances the processes of affecting marketing activities, helps them to conduct more efficient research for an identification of customer needs and gain their opinions on already existing products. It also speeds up the identification of changes which take place in the market, helps in creating new product and bargain offers [Chandler and Chen 2015]. Applying these instruments in international activity significantly reduces operating costs, speeds up the enterprise’s reaction to changes in markets as well as helping to adjust the offer to different tastes and preferences of consumers [Illia and Balmer 2012]. Current research on the significance of SNSs in enterprises’ activities focuses on several aspects: analysis of the influence of posts and commentaries in the media on a company’s image [Muntinga et al. 2011, Smith et al. 2012], the SNSs’ significance in e-WOM [Chen Fay and Wang 2011], the role of SNSs in advertising [Okazaki and Taylor 2013]. In this paper the author focuses on different types of information given by enterprises through SNSs which can help the potential consumer to make purchasing decision in the context of the ZMOT concept.
Zero moment of true concept in the context of making a purchase decision

The growth of the Internet, which is a source of information about products, its frequent use as well as the development of SNSs influence the changes taking place during the process of making a decision [Coussement and Teague 2013, Barska and Wojciech 2014]. In traditional concepts a decision was often made at a shop under the influence of an advertisement, seller, etc. (first moment of truth) and the post-purchase experience was called the second moment of truth. Because of the frequency of using the Internet and SNSs the preliminary purchase decision is often made when checking information on the Internet (zero moment of truth), between the moment the purchase need appears and actually going shopping [Lecinski 2014]. The results of the research done by Google in 2011 in the United States highlighted the significance of the Internet and SNSs in terms of searching for information about products before buying them, comparing various offers on the Internet, looking for discounts, taking into account the reviews of products placed on the Internet [Lecinski 2011]. In these studies 37% of the respondents emphasized that the reviews about a particular product that can be found on the Internet significantly influence their consumer decisions. What is also important, are the recommendations of friends, the marketing message on the Fanpage of a given producer or brand and the reading of consumer blogs with reviews which have the greatest influence. The nature of the information obtained via SNSs which influences purchase decisions depends on the types of products. However, there are not many studies that are conducted in this area. In some of the projects the Internet turned out to be the most helpful source of information in making decisions about buying clothes, shoes and accessories [Hansen and Jensen 2009, Geissinger and Laurell 2016, Shephard et al. 2016]. When comparing the categories of products from the B2C market the studies highlight the fact that consumers most often search for information and spend more time making purchase decisions about durable products rather than fast moving consumer goods – FMCGs [Punj 1987, Huotari et al. 2015].

MATERIAL AND METHODS

Measurement development and data collection

In the exploratory empirical study the author used two research methods: PAPI (paper and pen personal interview) and CAWI (computer assisted web interview). The measurement instrument was a standardized questionnaire prepared for the purpose of this research. The element differentiating the research questionnaire in particular markets was the language. In Poland the Polish language was used, in China Chinese and in the American market English. In the preparation of the different version of the questionnaire a back translation procedure was used in order to eliminate mistakes stemming from linguistic, lexical or contextual differences.

The empirical data was gathered in 2016 and the total number of respondents surveyed in the three countries was 851, including 295 respondents from China, 296 from Poland and 260 from the United States. The data was collected by one of the non-probability methods (snow ball sampling). The sampling method that was applied influenced the consequences related to the interpretation of the results obtained which, in this case, should not be fully generalized for the whole population. The aim in choosing the countries was to compare countries from different regions and cultures.

Respondent profile

The respondents surveyed in each country were people who agreed to participate and were willing to express themselves as to what kind of information obtained through SNSs is useful in making purchasing decisions and what kind of products. The study was made amongst people of all ages and three age groups were distinguished, i.e. 15–20, 21–30, 31 or over. In China and Poland the respondents within the 21–30 age group predominated. In the United States most participants belonged to the age group 15–20. Taking into account the diversity in terms of gender it should be underlined that in the American group gender parity was nearly achieved (almost equal proportions of both genders). The larger number of women was observed in the Chinese and Polish groups, where the structure in terms of gender is very similar.
Variables' operationalization

To identify the relationships between product categories and types of information gathered through SNSs the statistical Spearman indicators were used (this measure is used for describing the strength of correlation between quantitative traits in the case of a small number of observations, which took place in this research). Firstly, the respondents were asked how often they look for information on SNSs about particular products (very often, often, from time to time, rarely, very rarely, never). In the reliability analysis the level of Cronbach alpha equals 0.73 – confirms that the proposed scale is a reliable tool for measuring. The following categories of products were assessed: mobile phones ($P_1$), computers – laptops, tablets, iPads ($P_2$), radio and TV ($P_3$), household goods ($P_4$), cars ($P_5$) cosmetics ($P_6$) and fashion – clothes and shoes ($P_7$). The product categories were identified on the basis of literature and preliminary research. Secondly, in order to identify the character of information gathered through SNSs which influence purchasing decisions the respondents were asked about the frequency of them taking into account particular information in so doing (very often, often, from time to time, rarely, very rarely, never). In the reliability analysis the level of Cronbach alpha equals 0.79 – confirms that the proposed scale is a reliable tool for measuring. The following types of information were identified in the preliminary research as dominant: information about new products ($I_1$); information about sales ($I_2$); information in advertisement form ($I_3$), link to the website of a producer ($I_4$); information about the fact that a product is worth recommending ($I_5$); and information about the fact that a product is not worth recommending ($I_6$).

RESULTS

The measurement of interdependencies between types of products $P_1, ..., P_7$ and the nature of information obtained on SNSs ($I_1, ..., I_6$) using the Spearman correlation coefficients showed the existence of statistically significant ($P < 0.001$) relationships (existence of positive correlations) between all the variables researched (the table). In other words the type of prod-

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* Correlation is significant at the $P < 0.001$ level.
Source: Own research.
uct influences the nature of the information on SNSs which is helpful in terms of making purchase decisions. The level of these indexes denotes the strength of the relationship, the higher the Spearman coefficient the stronger the relationship \( r_s = [-1; 1] \).

Taking into account the groups studied it needs to be noted that the strongest relationships \((\geq 0.4)\) were observed in the Polish group in relation to \([P_1, I_1], [P_6, I_1], [P_3, I_2], [P_5, I_2], [P_2, I_3], [P_7, I_3]\) and \([P_4, I_4]\) in the Polish and American groups. Slightly less strong relationships were observed in the American group, e.g. \([P_1, I_1], [P_3, I_1], [P_2, I_1]\). In the Chinese group no strong relationship was noted, all the obtained relationships equaled \( r_s < 0.3 \). In other words, in the Chinese group types of products do not differentiate the nature of information influencing purchase decisions to such a degree as in the Polish and American groups.

In relation to the categories of products the strongest relationships were obtained in the case of fashion – clothes and shoes \((P_1)\), household goods \((P_4)\) and cosmetics \((P_3)\) in the Polish and American groups. The more often the respondents make purchase decisions regarding these products the more often they use the information obtained from SNSs \((I_1, \ldots, I_6)\).

Taking into account the nature of information obtained through SNSs and the influence on purchase decisions it is worth highlighting that the biggest number of the strongest relationships, regardless of a type of product \((r_s > 0.3)\), was obtained in the case of advertisements placed on SNSs \((I_1)\) and information about new products \((I_2)\). This information is placed by enterprises as a part of marketing communication. In the case of communication with individual SNSs users positive recommendations \((I_3)\) influence the making of purchase decisions more often.

**DISCUSSION AND CONCLUSIONS**

The analysis of the literature and the results of the exploratory research confirmed the importance of SNSs and the information obtained there in making purchase decisions. It is also a confirmation of changes in communication and consumer behaviour in relation to the development of information and communications technology (ICT) [Woo et al. 2015]. Information obtained from SNSs influences the moment of making a decision [Lecinski 2014], which, especially amongst young consumers, has changed from the first moment of truth to the zero moment of truth. The exploratory research also confirms the importance of information in influencing purchase decision in relationship to durable products, which was also observed in the results of studies done by other authors [Punj 1987, Huotari et al. 2015]. However the differences in the strength of the relationships between the types of durable products and the nature of information influencing purchase decisions have been demonstrated. Social networking sites are the most significant in relation to clothes and shoes as well as cosmetics. The results obtained provide an input to literature on the ways of making purchase decisions, the significance of types of information at the stage of the pre-purchasing of durable products. They have also theoretical and application value. They confirm theories on communication [Walther 1996, Haythornthwaite et al. 1998] and consumer behaviour [Jarvis 1998, Barreto 2014, Woo et al. 2015, Gvili and Levy 2016]. Moreover they have great significance for enterprises willing to use SNSs in marketing communication, thus provide information about their products through SNSs [Chen et al. 2011, Muntinga et al. 2011, Smith et al. 2012, Okazaki and Taylor 2013]. For example producers of clothes in particular should place information about sales and monitor forums and comments about their products on SNSs. Moreover enterprises operating in diversified foreign markets should pay attention to differences in the behaviour of SNSs users who are at the same time consumers [Fong and Burton 2008]. Social networking sites are the least significant when making purchase decisions in the Chinese group and the most significant in the Polish and American groups. It might be related to cultural differences regarding the significance of a relationship, group and trust in direct communication.

**Limitations of the study**

The empirical method of the study belongs to methods based on the declarations of the respondents. However, it may happen that the real behaviour deviates slightly from that declared. Other issues are the method of gathering respondents (non-random) and the sample size. The consequence of which is the lack of possibilities to apply the results to the whole of the popu-
loration researched. Future research should respond to these limitations. They can expand the utility of SNSs in random and bigger samples. Besides types of information can be related to different types of products (non-durables) or services.

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REFERENCES


SERWISY SPOŁECZNOŚCIOWE JAKO KANAŁ PRZEKAZYWANIA INFORMACJI O PRODUKTACH TRWAŁYCH I ICH WPŁYW NA DECyzje ZAKUPOWE

STRESZCZENIE

Głównym celem artykułu jest identyfikacja zależności między rodzajem produktów (produkty trwałe) a charakterem informacji w serwisach społecznościowych, wpływających na podejmowanie decyzji zakupowych. Dokonano próby odpowiedzi na pytanie badawcze: w jakim stopniu rodzaje produktów wpływają na wykorzystanie różnych informacji w serwisach społecznościowych w podejmowaniu decyzji zakupowych. Studia literaturowe zostały uzupełnione badaniami empirycznymi w trzech krajach – Chinach, Polsce oraz Stanach Zjednoczonych. Wyniki potwierdzają ważność serwisów społecznościowych oraz pozyskiwanych w nich informacji w podejmowaniu decyzji zakupowych. W odniesieniu do kategorii produktów najsiśniejsze związki uzyskano w przypadku produktów modowych, produktów AGD i kosmetyków. W przypadku typu informacji uzyskanych za pośrednictwem serwisów społecznościowych, wpływających na podejmowanie decyzji zakupowych największe znaczenie mają reklamy umieszczane w serwisach społecznościowych oraz informacje o nowych produktach.

Słowa kluczowe: media społecznościowe, produkty trwałe, decyzje konsumentów