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BARBARA GOŁĘBIEWSKA, JOANNA STEFAŃCZYK, EWA JASKA

Warsaw University of Life Sciences – SGGW, Poland

SOCIAL MEDIA ADOPTION BY RURAL RESIDENTS¹

Key words: social media, Internet access, rural areas, households, Lublin county

ABSTRACT. The study assesses the use of social media by rural residents. The study was conducted in Lublin county in 2016. Residents of rural areas (especially farmers) are a social group perceived to be the least technologically developed, the latest in adopting innovations and least advanced in using electronic devices. However, in recent years, differences between city dwellers and rural area inhabitants have been decreasing. Until today, in Poland, not all residents of rural areas have telephones or internet access. The explanation could be that their work does not involve using a computer as in the case of, for example, an insurance agent, architect or journalist. It was found that differences in the category of household equipment involving the possession of a computer and access to the Internet are diminishing – the largest increase has been recorded in recent years in the scope of access to broadband Internet. In the study, a visible relationship between the use of social media and the education of respondents was observed.

INTRODUCTION

Inhabitants of rural areas in Poland are still a large social group, although developed countries tend to reduce employment in agricultural and industrial sectors for the service sector. This trend is dictated by the development of countries, by their modernization and technology, whereas productive farmers are essential for society's survival. Poland, in terms of population in the country, is located in thirty-eighth place in the world [UNDESA 2019] and 39.9% of the Polish population lives in rural areas [CSO 2019a]. Poland ranks forty-nine out of one hundred and seventy-six countries in the ICT Development Index in 2017. The ICT Development Index (IDI), which has been published annually since 2009, is a composite index that combines 11 indicators into one benchmark measure. It is used to monitor and compare developments in information and communication technology (ICT) between countries and over time [ITU 2018]. Although Poland's place is relatively high in the world ranking, the position in Europe is very poor – thirty two out of forty countries. The percentage of households with Internet access is 80.5 and the percentage of individuals using the Internet is 73.3 [ITU 2018]. According to CSO [2019b] data, the share of households with Internet access in rural areas was definitely lower than in cities, particularly large differences compared to large cities. The advantage of large cities over rural areas, in 2019, in this

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feature was just over 5 percentage points. A year earlier, in 2018, it was almost 6 percentage points. So, the narrowing of differences between the city and the village can be observed.

RESEARCH MATERIAL AND METHODS

The study assesses the adoption of social media by residents of rural areas. The analyses used CSO statistical studies, data of the United Nations Department of Economic and Social Affairs and presented the results of pilot studies carried out in Lublin county. The study was conducted using a questionnaire. Due to difficulties in reaching respondents directly, the study was conducted with the help of organizations and associations operating in rural areas in Lublin county. Based on available online data about rural organizations and associations occurring in Lubelskie county, 35 of them were randomly selected to participate in the research. Among the organizations 35 were selected: Country Wives Clubs, Headquarters of the Volunteer Fire Departments, Rural Community Centres and libraries. A letter containing 5 questionnaires were sent to each organization, thus giving a total of 175 questionnaires. The study was conducted in 2016. The respondents were people over 20 years old.

The Lublin county was deliberately chosen due to the fact that it is located in the voivodship belonging to the poorest in Poland and is one of the poorest in the European Union, which results from data from the European Statistical Office, Eurostat. It is also a province, according to CSO [2019c], with the lowest percentage of computer use at home. The respondents were people who were members of organizations and associations in this area and living in the countryside.

The aim of the study was to determine the level of social media use in rural areas, in this case in the poorer region of the country. Research results cannot be generalized to all rural areas in Poland. In contrast, the research is an introduction to further studies. The analysis was made depending on the age of the respondents, their education and number of people living in the household. The hypotheses that young people with a higher education, from among families with more members, are more likely to use social media was verified.

SOCIAL MEDIA AND ITS MEANING

Since the sixties of the twentieth century, the term new media functions, but there is still no clear definition, just like social media. According to Lev Manovich, new media is a catalogue of analogue media converted to digital form [Manovich 2006]. In turn, Olgierd Witczak draws attention to the digital process of creating, disseminating and processing content mainly using the Internet and mobile telephones for this purpose [Witczak 2013]. Difficulties in precisely defining new and social media also result from the dynamics of technological changes. Currently, some researchers believe that Facebook, Twitter and YouTube are social media, and Paul Levinson calls it “new new media”. He claims that the notion of new media and social media cannot be used interchangeably because they cover more than one media type [Levinson 2010]. Małgorzata Laskowska presents a similar position, including the Internet, e-mail, internet forums, Internet telephony and mobile telephones, e-books, digital libraries, television and digital photography. However,

among social media (“new new media”), he mentions Facebook, YouTube, Google+, Twitter, blogs, podcasts, and online and network games [Laskowska 2012]. Social media is characterized by a high degree of interactivity and the use of available and extensive communication techniques, thus changing the dimension of communication, including business [Kaznowski 2008]. In business, social media is often referred to as consumer-generated media. What is common to individual definitions of this phenomenon is the co-existence of technology and interactivity [Mazurek 2008].

In social media, the boundary between the creator and the media user is blurred. Companies can therefore run bi-directional and free communication with consumers. It should also be added that due to the continuous presence of the company in the Internet user community, you can react in a current manner to possible crisis situations, while having control over information that is published by Internet users [Nowakowska 2010].

Social networking sites are, nowadays, an important tool for the promotion of the company due to the fact that their users use them more and more often during the day. It is an instrument that allows varied contact with customers in the form of text entries, photos, audio and video files, commenting and rating. Thus, there is a possibility of promoting products and services as well as observing recipients’ behavior and preferences [Treadway, Smith 2010]. The importance of social media is also growing in the process of personalizing the brand, creating the personality of the brand, or associations that are shaped among the recipients of the brand. These associations should be connected with the values, attitudes and behavior important for the brand, the aim of which is to distinguish the company on the market and build its credibility, and consequently, increase recognition on various information platforms.

An enterprise using new media in the process of image creation should continuously analyze resources in order to be able to verify adverse information and counteract negative effects. Threats on the part of new media result from the fact that they constitute a large data set, in particular social media, which increases reach in an uncontrolled manner and enables them to become monopolists limiting the possibilities of introducing new products [Krawiec, Wyrwisz 2013].

Some companies are not yet able to effectively use new or social media, and often their activity in this environment is most often associated with image crises. One of the main reasons is a lack of competence and knowledge in the use of this means of communication. You cannot also treat social media as an additional marketing channel, but as a tool that allows you to create new operating systems. At the same time, the risk related to the strategic, operational, and, above all, image sphere increased. They can quickly and irreversibly reveal the secrets of the company or negative and threatening gossip for the company [Evans 2011]. Ewa Głuszek also includes the following threats to reputation management in social media [Głuszek 2013]:

- the loss of control over what is written about the company and the image;
- shortening the reaction time in crisis situations. In traditional media it was time counted in days, in new and social media it is time counted in hours;
- posting negative information and opinions about the company by former employees, dissatisfied customers or competition. There is, therefore, a need for the constant monitoring of interactions in order to possibly react more quickly;

- difficulty in accepting equality between the sender and the recipient of the content and its serious treatment:
 - the existence of differences between the image on the web, and the real one (what the company says differently, and what else it does), results in a loss of credibility and trust on part of the recipients.

Despite the above-mentioned difficulties, social media are more and more willingly used by Polish entrepreneurs in terms of promotion, recruitment or internal communication. As Joanna Paliszekiewicz [2016, 2018] emphasizes, their popularity is increasing from year to year.

USE OF SOCIAL MEDIA IN HOUSEHOLDS IN RURAL AREAS

– RESEARCH RESULTS

The availability and use of the possibilities of sending, storing and processing information is becoming an important determinant of the development of individual regions, including rural areas. The competitive position of these areas can be built, *inter alia*, through the use of new information and communication technologies, including social media. In rural areas there are many entities that should use such communication solutions, as they can be both households and enterprises, as well as local government units. For such a system to function, there must be a constant flow of information in these communities as well as in their environment.

According to Janusz Czapiński and Tomasz Panek, farmer households are the most threatened by structural exclusion (lower level of education, place of residence, low social capital and less positive attitude towards democracy), and within this category, digital and information exclusion [Czapiński, Panek 2011]. In the framework of counteracting structural exclusion, the process of digitization becomes important, although in the opinion of Karol Jakubowicz, on the one hand, it is a determinant of the development of an information society, and on the other, digital exclusion and the digital gap together with their social consequences [Jakubowicz 2007]. Therefore, it is difficult to treat social exclusion as one common phenomenon and its individual dimensions, such as digital and information exclusion, should be considered. The problem of information exclusion is not only the level of access to new communication and information technologies, but also the differences resulting from the use of skills and goals. Therefore, information exclusion should be defined more broadly and take into account the needs of the individual when it comes to access to new means of communication. The needs of knowledge and information can make the correlation between digital and informational exclusion not directly proportional [Jaska 2010].

In recent years, the continuous increase in access to the Internet, including rural areas, has been observed in Poland. In 2018, more than 82% of households had access to a computer, and 79% in rural areas (Table 1). The computer was regularly used by 22.0 million people constituting 10.4 percentage points more, compared to 2013. In this group, 71.2% regularly used a computer, and 64.8% in rural areas.

Analyzing, in turn, access to the Internet, in 2019, 84.6% of households in rural areas could use the Internet network and 86.7% of households in the country. In comparison to

Table 1. Household access to a computer and the Internet in 2013-2019

Years	Households possessing a computer [%]		Households with Internet access [%]	
	total	rural areas	total	rural areas
2013	74.7	71.7	71.9	67.8
2014	77.1	73.6	74.8	71.5
2015	77.9	75.0	75.8	72.0
2016	80.1	77.0	80.4	77.8
2017	81.8	78.8	81.9	78.6
2018	82.7	81.0	84.2	82.0
2019	83.1	81.1	86.7	84.6

Source: own elaboration based on [CSO 2017, 2019c]

2013, the largest increase in the Internet access rate was recorded in rural areas by more than 24%.

This is general information about social media absorption. However, there are no detailed results for their use in rural areas while studies have shown the increasingly important role of them in many areas. According to Digital Report [2019], in 2019, there was 5.11 billion mobile users worldwide, which means an increase of 100 million (2%) compared to 2018. In 2019, there were 4.39 billion Internet users, an increase of 366 million (9%) compared to January 2018. Enterprises use them especially in marketing [Mazurek 2016] and communication with potential or current customers [Szamrowski, Pawlewicz 2015, Leoński 2016]. It can also be used in education [Paliszkiewicz 2016] or many other aspects. Is it possible to also take advantage of social media in rural area businesses? The adoption and appropriate use of popular social media in agricultural operations is an opportunity that may help in running a business. For example, if farmers want to run additional activities such as agritourism, sell regional products, sell organic food or conduct cultural workshops then the use of social media may not only be a very useful advertisement, but also a channel of communication with customers, as well as a way of building with a long-lasting relationship with them.

The research attempted to determine the use of social media in a selected area of Lublin county in rural areas. Comparing the results with general data referring to the use of social media in Poland, it can be stated that a small percentage of respondents in Lublin county used social media (54%). It is not a high result, which is consistent with the statement of

Figure 1. Households with internet access in 2018 and 2019 (% of total households)

Source: [CSO 2019b]

Figure 2. Use of social media by gender

Source: own study

Figure 3. Use of social media by age

Source: own study

Reuters Institute for the Study of Journalism in which it was said that, in Poland, still the most popular medium is a television. However, the social media position as a news resource is still gaining higher ground [Wirtualne media 2016]. Social media slowly becoming the basic information/news resource, especially among young people. As Jeffrey Gottfried and Elisa Shearer found [2016], 62% of adults in the United States treat social media as a primary source of information. Among the respondents in Lubelskie county, social media is mainly used for talking with friends (32%), mainly women (24%), sharing interesting information (24%) and picture publication (23%). The lowest (5%) goes to using social media for shopping. 10% of respondents admitted that they look for company reviews and information about their services. As statistics show, the share of computer users varies depending on, among others, gender, age, level of education or place of residence [CSO 2019c]. According to data on the number of generations with available data of users of the largest social platform in Poland, which is Facebook, it can be stated that the youngest generations constitute almost 2/3 of all users of this website [Sadowski 2018].

The majority of respondents who used social media were men (Figure 2), which is in line with overall country-wide results and mainly people aged 30-50 (Figure 3). Such a result may have been related to the selection of the research sample and does not reflect the exact age distribution.

Studies conducted in the Lublin county show that there was no correlation that the greater the number of people in a household, the greater the percentage of social media users. On the other hand, the share of media adoption clearly decreased with a larger

Figure 4. Use of social media by education level

Source: own study

Figure 5. Use of social media by number of people in household

Source: own study

number of people. The test results do not allow to unequivocally state the reasons for this phenomenon. Perhaps it was associated with a greater number of extended families in rural areas and older people's participation in them. However, the results regarding the relationship between the use of social media depending on education level coincided with data for the general public (Figure 5). According to the research, people with a higher education level use social media more.

CONCLUSIONS

In Poland, inhabitants of rural areas, are still mentioned among social groups with less access to modern information sources, although in recent years these differences have been decreasing. As results from previous research:

- differences in the category of household equipment with a computer and access to the Internet are diminishing – the largest increase was recorded in recent years in the scope of access to broadband Internet,
- the number of regular internet users increased among residents of the village,
- in the rural population group, the highest growth rate among people using social networking sites was recorded,
- they continue to use e-government services to a lesser extent, as part of a shared economy or cloud computing services.

The conducted research in Lublin county showed that there is a significant difference in terms of understanding the meaning of social media and potential powers between rural and urban area dwellers.

There was a coincidence of results between the carried out pilot research and general computer use in the country. Share in investigated use was higher among men than women. The largest share of people using a computer was recorded in the group of people between 30 and 40 years old. A high share was also observed among people with a higher education. The obtained results in Lublin county are difficult to compare with data for the whole country because of the deficiency in social media adoption data.

The authors are aware of the limitations resulting from a small research sample and the inability to generalize the conclusions. However, the results show that the phenomenon is different among rural residents. Therefore, there is a need for research in this area to assess the means of social media adoption, e.g. in rural development. This is important because as the International Telecommunication Union indicates, social media absorption and content creation have become common activities (2018).

BIBLIOGRAPHY

- CSO (GUS). 2017. *Information society in Poland. Results of statistical surveys in the years 2013-2017. Statistical analyses*. Warsaw: Central Statistical Office, www.stat.gov.pl, access: 27.12.2019.
- CSO (GUS). 2019a. *Information society in Poland Results of statistical surveys in the years 2015-2019. Statistical analyses*. Warszawa, Szczecin Central Statistical Office.

- CSO (GUS). 2019b. *Demographic Yearbook of Poland*. Warsaw: Central Statistical Office.
- CSO 2019c. *Spółeczeństwo informacyjne w Polsce w 2019 r.* (Information society in Poland in 2019). *Signal information*. Warsaw: Central Statistical Office.
- Czapiński Janusz, Tomasz Panek (ed.). 2015. *Social diagnosis 2015. Objective and subjective quality of life in Poland*. Report. 9.4. Contemporary Economics, <http://www.diagnoza.com>, access: 25.05.2019.
- Digital. 2019. Digital Report 2019. <https://wearesocial.com/global-digital-report-2019>, access 12.12.2019.
- Evans Liana. 2011. *Social media marketing. Odkryj potencjał Facebooka, Twittera i innych portali społecznościowych* (Discover the potential of Facebook, Twitter and other social networks). Gliwice: Wydawnictwo Helion.
- Głuszek Ewa. 2013. Kreowanie reputacji przedsiębiorstwa w mediach społecznościowych – szanse i zagrożenia (Reputation management in social media – opportunities and threats). *Zarządzanie i Finanse* 4 (1): 61-76.
- Gottfried Jeffrey, Elisa Shearer. 2016. *News use across social media platforms 2016*. Pew Research Center: Journalism & Media.
- ITU. 2018. *Measuring the information society report 2018. Vol. 1*, <https://www.itu.int/>, access: 30.12.2019.
- Jakubowicz Karol. 2007. *Media publiczne: początek końca czy nowy początek* (Public media: beginning of the end or new beginning). Warsaw: Wydawnictwa Akademickie i Profesjonalne.
- Jaska Ewa. 2010. Media a problem wykluczenia informacyjnego na obszarach wiejskich. [W] *Polska wieś, bezpieczeństwo żywnościowe a media* (Media and the problem of information exclusion in rural areas. [In] Polish village, food security and the media), ed. E. Jaska, 206-215. Warszawa: Wydawnictwo SGGW.
- Kaznowski Dominik. 2008. *Nowy marketing* (New marketing). Warszawa: Wydawnictwo VFP Communications.
- Krawiec Joanna, Joanna Wyrwisz. 2013. Facebook.com jako efektywne narzędzie komunikacji marketingowej (Facebook.Com as an effective instrument of marketing communication). *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Problemy Zarządzania i Marketingu* 32: 375-388.
- Laskowska Małgorzata. 2012. Nowe media w służbie człowieka. Zarys problematyki w kontekście etyki i aksjologii mediów (New media in the service of man. Outline of issues in the context of media ethics and axiology). *Teologia Praktyczna* 13: 123-137. DOI: 10.14746/tp.2012.13.09.
- Leoński Wojciech. 2016. Wykorzystanie mediów społecznościowych w CSR (Usage of social media in corporate social responsibility). *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach* 300: 109-119.
- Levinson Paul. 2010. *Nowe nowe media* (New new media). Kraków: Wydawnictwo WAM.
- Manovich Lev. 2006. *Język nowych mediów* (The language of new media). Warszawa: Wydawnictwa Akademickie i Profesjonalne.
- Mazurek Grzegorz. 2008. *Blogi i wirtualne społeczności – wykorzystanie w marketingu* (Blogs and virtual communities – use in marketing). Warszawa: Wydawnictwo Wolters Kluwer Polska.
- Mazurek Grzegorz. 2016. *Ewolucja wykorzystania mediów społecznościowych w marketingu* (Evolution of social media marketing). *Nierówności Społeczne a Wzrost Gospodarczy* 45: 23-31.
- Nowakowska Joanna. 2010. Globalne trendy, lokalne pieniądze (Global trends, local money). *Media & Marketing Polska* 20: 69-71.
- Paliszkiewicz Joanna. 2016. The role of social media in innovative education. [In] *Innovation in management and production engineering. Part 2*, ed. R. Knosala, 914-920. Opole: Oficyna Wydawnicza Polskiego Towarzystwa Zarządzania Produkcją.
- Paliszkiewicz Joanna. 2018. Creating a professional image of a job candidate in social media: the example of LinkedIn. *Zarządzanie Zasobami Ludzkimi* 5 (124): 79-91.

- Sadowski Robert. 2018. Pokolenia a korzystanie z social media w Polsce. Raport Newspoint: Pokolenia w Polsce i potrzeba monitorowania ich rosnącej aktywności (Generations and the use of social media in Poland. NewsPoint Report: Generations in Poland and the need to monitor their growing activity.). <https://socialpress.pl>, access: 28.12.2019).
- Szamrowski Piotr, Adam Pawlewicz. 2015. Wykorzystanie mediów społecznościowych w komunikacji z klientem na przykładzie firm sektora piwowarskiego (The use of social media to communicate with stakeholders on the example of the brewing sector companies). *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego. Ekonomika i Organizacja Gospodarki Żywnościowej* 111: 161-176.
- Treadway Chris, Mari Smith. 2010. *Godzina dziennie z Facebook marketingiem* (An hour a day with Facebook marketing). Gliwice: Wydawnictwo Helion.
- UNDESA. 2019. World population prospects, the 2019 revision. United Nations Department of Economic and Social Affairs, Population Division, Population Estimates and Projections Section. <https://population.un.org/>, access: 28.12.2019
- Wirtualne media. 2016. *W Polsce telewizja najpopularniejszym medium, zyskują media społecznościowe, prasa w odwrocie* (In Poland, television is the most popular medium, social media is gaining, the press is on the reverse), <https://www.wirtualnemedial.pl/artykul/w-polsce-telewizja-najpopularniejszym-medium-zyskują-media-społecznościowe-prasa-w-odwrocie>, access: 28.12.2019.
- Witczak Olgierd. 2013. *Nowe media w budowaniu marki i wizerunku przedsiębiorstwa* (New media in building the brand and image of the company). Katowice: Wydawnictwo Uniwersytet Ekonomiczny w Katowicach.

KORZYSTANIE Z MEDIÓW SPOŁECZNOŚCIOWYCH PRZEZ MIESZKAŃCÓW TERENÓW WIEJSKICH

Słowa kluczowe: media społecznościowe, dostęp do internetu, obszary wiejskie, gospodarstwa domowe, powiat lubelski

ABSTRAKT

Celem artykułu jest ocena korzystania z mediów społecznościowych przez mieszkańców wsi. Mieszkańcy obszarów wiejskich (zwłaszcza rolnicy) to grupa społeczna postrzegana jako najmniej rozwinięta technologicznie, najpóźniej wprowadzająca innowacje, najmniej zaawansowana w korzystaniu z urządzeń elektronicznych, choć w ostatnich latach w porównaniu z mieszkańcami miast różnice te maleją. Do dziś w Polsce nie wszyscy mieszkańcy wsi mają telefony lub dostęp do Internetu. Można przypuszczać, że tak się dzieje, ponieważ ich praca nie polega na korzystaniu z komputera, tak jak na przykład w przypadku agenta ubezpieczeniowego, architekta lub dziennikarza. Badanie przeprowadzono w powiecie lubelskim w 2016 roku. Stwierdzono, że różnice w kategorii sprzętu gospodarstwa domowego i dostępu do Internetu zmniejszają się w porównaniu do mieszkańców miast – największy wzrost odnotowano w ostatnich latach w zakresie dostępu do Internetu szerokopasmowego. Widoczny był również związek między korzystaniem z mediów społecznościowych a wykształceniem respondentów.

AUTHORS

BARBARA GOŁĘBIEWSKA, DR HAB. PROF. WULS
ORCID: 0000-0003-4073-5274
Warsaw University of Life Science (WULS)
Department of Economics and Enterprise Organization
166 Nowoursynowska St., 02-787 Warszawa, Poland

JOANNA STEFAŃCZYK, MSC
ORCID: 0000-0001-5258-4894
Warsaw University of Life Science (WULS)

EWA JASKA, PHD
ORCID: 0000-0002-3874-1985
Warsaw University of Life Science (WULS)