

Technological Tools in Businesses' Communication with Generation Z

KOROMBEL Anna^{1,a*} and ŁAWIŃSKA Olga^{1,b}

¹Czestochowa University of Technology, ul. Dąbrowskiego 69, 42-201 Częstochowa, Poland

^aanna.korombel@pcz.pl, ^bolga.lawinska@pcz.pl

Keywords: Social Media, Technology, Enterprise, Management, Generation Z

Abstract. The aim of the paper is to assess the effect of businesses' activities involving the use of technological communication tools on Gen Zers' purchasing decisions. The study of Gen Zers' behaviours as a response to businesses' social media activities is part of broader research conducted by the authors among students in Poland and Great Britain in 2020 and 2021. The study used the method of a survey, and, as part of it, the CAWI technique. Descriptive statistics measures were used to analyse the research material. The findings demonstrate that businesses' activities involving the use of technological communication tools have a positive impact on Gen Zers' purchasing decisions. The study also examined the relationship between the analysed activities undertaken by businesses and the respondent's gender.

Introduction

Generation Z, i.e. people born in 1995 (and later) [1] up to 2009, is currently entering the job market [2]. Accounting for around 25% of the world population [3], Gen Zers have the purchasing power that makes them important partners for businesses today. This is also confirmed by economic forecasts – it is estimated that the share of Gen Zers in the workforce will increase fast: from 10% in 2019 to 30% in 2030, while their income will grow almost sevenfold: from around USD 460 billion in 2019 to USD 3.2 trillion in 2030. What is more, Generation Z consumption spending is estimated to increase more than sixfold, from USD 467 billion in 2019 to USD 3.0 trillion in 2030, which accounts for 11% of total spending in the economy [4]. These figures mean that businesses should strive to gain understanding of Gen Zers' behaviours and, subsequently, build and tighten connections with them, as this can bring them measurable benefits such as sustained improvement in business performance [5], increased profitability [6], increased sales revenue [7] and, consequently, maintenance of competitive edge [8]. Businesses have to include Generation Z as part of their business strategy by building lasting relationships with its members if they want to avoid losing market share [9]. If they ignore the current and future impact and power of this Generation, they will face failure [10]. This is because one of the most important goals of a manufacturing company, one that determines its market success, is satisfaction of customer needs and expectations [11].

As Gen Zers are the first generation born into the digital world, which they often perceive as equally important as the real world, businesses should seek and develop contacts with this Generation on social media, defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content” [12]. Technological tools enable customers to express their opinions and participate in discussions or various events organised by businesses. The content published on social media not only generates needs in young consumers, it also induces them to make unplanned purchases and constitutes an important source of inspiration at the stage of searching for options of need satisfaction. Moreover, social media constitutes a valuable source of information about products and venues where people can express their opinions and share purchasing experiences [13]. Identification of specific customer segments on social media allows businesses to provide

personalised content to specific customers based on demographic patterns and shared interests [14]. Meanwhile, generated content, designed to create engagement with brand community on social media, impacts the amount of spending on purchases [15]. In order to build effective relationships with customers on social media, businesses have to engage in constant interaction with potential customers [16] leading to the development of new products. Business success is determined not only by the speed of decision-making, but a solid information support for that process [18].

The aim of the paper is to assess the effect of businesses' activities involving the use of technological communication tools on Gen Zers' purchasing decisions. The authors have noted the need to intensify research in this domain. In order to fill this gap, the authors indicated the research problem by formulating the following research questions:

- Q1. Do social media activities undertaken by businesses impact Gen Zers' purchasing decisions?
- Q2. Is there a relationship between the gender of Gen Z member and the impact of businesses' social media activities on Generation Z purchasing decisions?
- Q3. How do the research findings differ between the respondents from Poland and those from Great Britain?

Methods

The research examining Gen Z attitudes towards brands on social media is part of wider research carried out by the authors among students in Poland and Great Britain in 2020 and 2021. It contained both qualitative and quantitative aspects, and in both cases, the authors employed a method of indirect measurement - survey research - the technique of a survey, and the research tool of a survey questionnaire. The set of variables used in the research was selected based on critical analysis of the literature [19, 20]. There is no consensus in the literature about the starting birth year of Generation Z. The authors adopted the year 1995, which is most often found in the literature, as the cut-off year for the generation under study. In the research, the independent variable was the studied group of respondents, not the entire Generation Z population. Treating the latter as an independent variable would be problematic due to the difficulty with specifying the exact age range for Generation Z. Using Gen Z as a heuristic is useful, according to the authors, as generational profiling is now used as description in popular media and culture. The main research was preceded by a pilot study conducted in 2018 with the aim of identifying and eliminating any potential errors in the survey questionnaire. A total of 157 students participated in the research carried out in Poland, with responses of 151 students (126 females and 25 males) qualified for the analysis. A total of 150 students participated in the research carried out in Great Britain, with responses of 150 people (80 females and 70 males) qualified for further research. In Poland, the data was collected via an online survey questionnaire available on the Webankieta.pl platform, while in Great Britain this process was commissioned to an external entity specialising in surveys. In the research conducted in Poland and in Great Britain, the sampling was non-probabilistic. Using non-probabilistic selection, the authors also applied statistical inference to identify relationships in the groups under study, which is not possible using descriptive statistics. It should be noted that the group of the Polish students qualified for the research was overrepresented by females, impacting the gender structure of the respondents. Based on the results of the research, the number and frequency of the responses provided by respondents to the survey questions were calculated. The authors realise that the sampling technique employed in the research does not enable estimation of an error that occurs when the regularities observed in the sample are generalised to the whole population. In order to identify relationships existing in the groups under study, statistical inference was used, for which a certain significance level was adopted – which is not possible in the case of descriptive statistics. Statistical inference was conducted with ex ante significance level at $\alpha = 0.05$, with p value calculated for each test. By comparing the p value with the level of statistical significance, the authors determined whether

there was sufficient proof to reject H_0 against H_1 ($p < \alpha$) or not ($p \geq \alpha$). Statistica v.13 was used to conduct the analyses. The authors are aware of the limitations of survey research, which include superficial understanding of the phenomena in question and the possibility of inaccurate answers provided by respondents. Another critique of the presented research findings may concern the fact that the research was conducted on a small group. Small samples may raise methodological issues (e.g., generalisation is difficult), however, when proper statistical tests are applied, they can be useful in inference [21].

Results

The authors endeavoured to determine whether the activities undertaken by businesses on social media, and if so, which ones, impacted purchasing decisions of Generation Z respondents in the period 2020 to 2021. Figure 1 presents the indicators of structure for the individual activities.

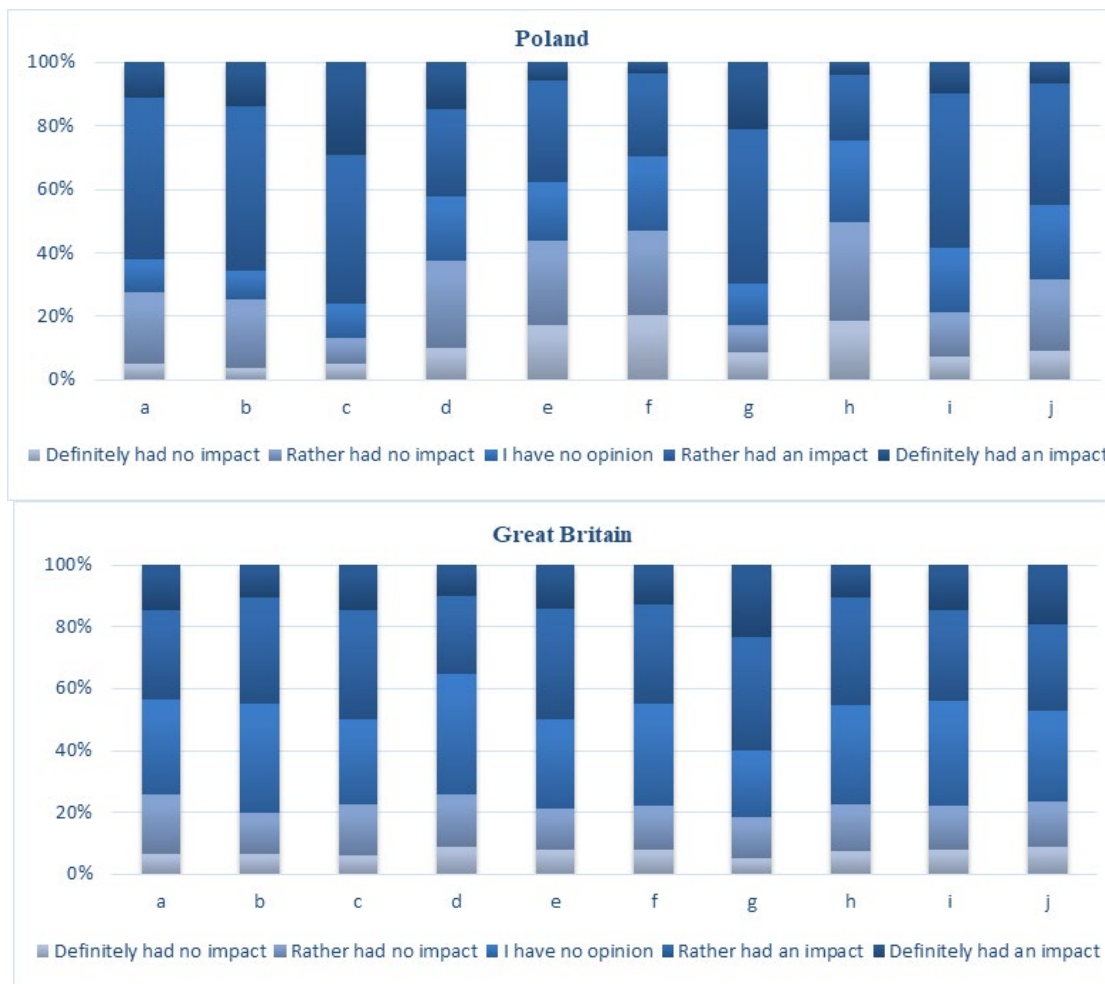


Fig. 1. Assessment of businesses' social media activities impacting purchasing decisions of Generation Z respondents – research findings in Poland and Great Britain in 2020/2021. (a. Publishing information about what is new in the offer, b. Presenting an application of a specific product/service, c. Publishing information about promotion, d. Presenting a test carried out by an expert, e. Recommendation from a known person, f. Participation in a competition, g. Receipt of a discount coupon, h. Making the wall available for asking questions, i. Positive actions by a brand/company that you have liked in particular, j. Social responsibility, social campaigns)

Analysis of the data presented in Fig. 1 shows that the activities undertaken by businesses on social media have had an impact on purchasing decisions of Generation Z respondents. The activities that had a strong impact on purchasing decisions of the respondents both in Poland and Great Britain were: *publishing information about special offers and offering discount coupons*.

Next, the authors conducted statistical analysis and determined the impact of businesses' social media activities on respondents' purchasing decisions depending on the gender (Tables 1 and 2).

Table 1. Results of Mann-Whitney U test (adjusted for continuity) with respect to the relationship between the effect of businesses' social media activities impacting purchasing decisions and the gender of a Gen Z respondent – results of the research conducted in Poland in 2020/2021

Variables	Sum of Ranks Female	Sum of Ranks Male	U	Z	p
Publishing information about what is new in the offer & Gender	988750	1588.50	1263.50	1.69	0.0919
Presenting an application of a specific product/service & Gender	9787.00	1689.00	1364.00	1.14	0.2528
Publishing information about promotion & Gender	10009.00	1467.00	1142.00	2.32	0.0202
Presenting a test carried out by an expert & Gender	9685.50	1790.50	1465.50	0.56	0.5746
Recommendation from a known person & Gender	9628.00	1848.00	1523.00	0.27	0.7900
Participation in a competition & Gender	9715.00	1761.00	1436.00	0.72	0.4749
Receipt of a discount coupon & Gender	9982.50	1493.50	1168.50	2.17	0.0297
Making the wall available for asking questions & Gender	9850.00	1626.00	1301.00	1.41	0.1573
Positive actions by a brand/company that you have liked in particular & Gender	9930.00	1546.00	1221.00	1.89	0.0584
Social responsibility, social campaigns & Gender	10140.00	1336.00	1011.00	2.94	0.0032

Mann-Whitney U test (adjusted for continuity) (Vector) for the variable: Gender. Marked results are significant with $p < 0.05000$.

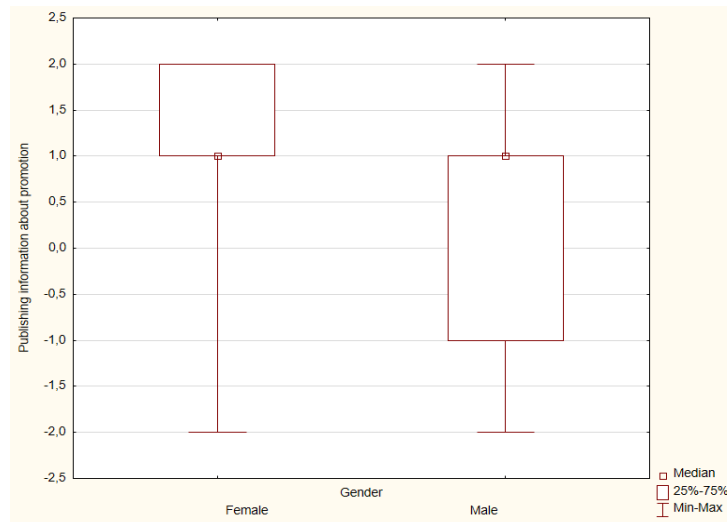


Fig. 2. The impact of businesses publishing information about special offers on social media on Generation Z respondents' purchasing decisions by gender, in Poland in 2020/2021.

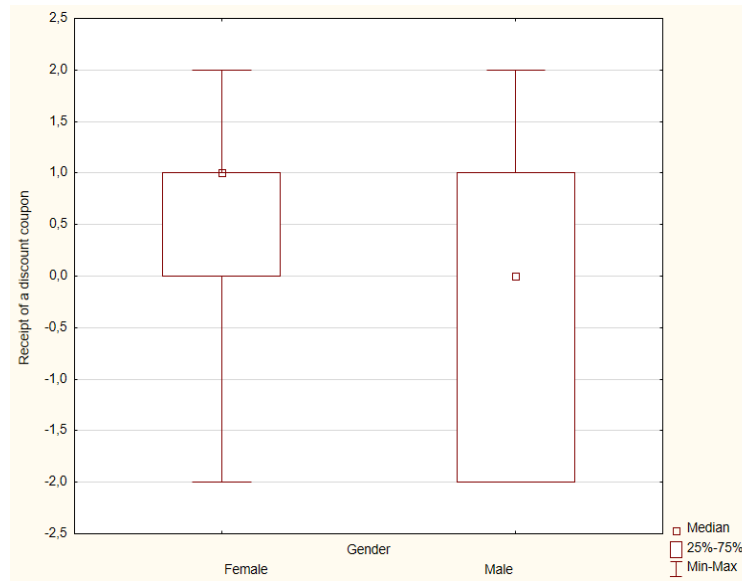


Fig. 3. The impact of businesses offering discount coupons on social media on Generation Z respondents' purchasing decisions by gender, in Poland in 2020/2021.

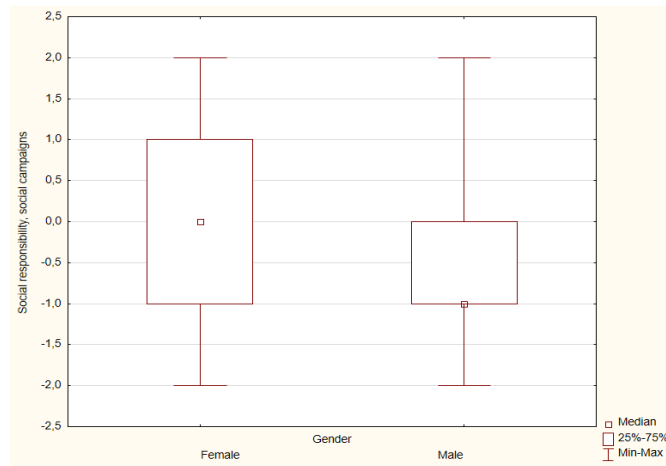


Fig. 4. *The impact of businesses' social responsibility, social campaigns run on social media on Generation Z respondents' purchasing decisions by gender, in Poland in 2020/2021.*

Analysis of the data collected in Poland revealed that gender had a significant impact on the differences between the analysed variables in the following cases:

- a) publishing information about special offers ($p = 0.02$),
- b) offering discount coupons ($p = 0.03$),
- c) social responsibility, social campaigns ($p = 0.003$).

In the case of the aforementioned variables, these activities had a significantly stronger impact on purchasing decisions of females compared to males, which is also confirmed by graphical interpretations (Figures 2, 3 and 4).

Three of the analysed social media activities undertaken by businesses had a different impact on Generation Z respondents' purchasing decisions depending on the respondent's gender.

In the case of the research conducted in Great Britain, no statistically significant correlations were found between the analysed variables ($p > 0.05$). The respondent's gender was not significantly correlated with the dependent variables – social media activities undertaken by businesses to impact Gen Zers' decisions to make a purchase.

Table 2. Results of Mann-Whitney U test (adjusted for continuity) with respect to the relationship between the effect of businesses' social media activities impacting purchasing decisions and the gender of a Generation Z respondent – results of the research conducted in Great Britain in 2020/2021

Variables	Sum of Ranks Female	Sum of Ranks Male	U	Z	p
Publishing information about what is new in the offer & Gender	6061.0 0	5264.0 0	2779.0 0	- 0.08	0.936 4
Presenting an application of a specific product/service & Gender	6236.0 0	5089.0 0	2604.0 0	- 0.77	0.440 8
Publishing information about promotion & Gender	6124.5 0	5200.5 0	2715.5 0	- 0.33	0.742 5
Presenting a test carried out by an expert & Gender	5617.0 0	5708.0 0	2377.0 0	1.66	0.096 9
Recommendation from a known person & Gender	5724.5 0	5600.5 0	2484.5 0	1.23	0.217 1
Participation in a competition & Gender	6223.5 0	5101.5 0	2616.5 0	- 0.72	0.473 5
Receipt of a discount coupon & Gender	6130.5 0	5194.5 0	2709.5 0	- 0.35	0.724 6
Making the wall available for asking questions & Gender	6112.0 0	5213.0 0	2728.0 0	- 0.28	0.778 9
Positive actions by a brand/company that you have liked in particular & Gender	6177.0 0	5148.0 0	2663.0 0	- 0.53	0.593 7
Social responsibility, social campaigns & Gender	6115.5 0	5209.5 0	2724.5 0	- 0.29	0.771 0

Mann-Whitney U test (adjusted for continuity) (Vector) for the variable: Gender. Marked results are significant with $p < 0.05000$.

Summary

Social media activities undertaken by businesses have an impact on Gen Zers' decisions to make purchases. Both in Poland and Great Britain, publishing information about special offers and offering discount coupons were found to have the biggest impact on Gen Zers' purchasing decisions. With respect to the relationship between the respondent's gender and the effect of businesses' activities, statistically significant correlations between the analysed variables were only found in the research conducted in Poland. Three activities in this group had a significantly stronger impact on purchasing decisions of females compared to males: publishing information about special offers, offering discount coupons, and social responsibility, social campaigns. Among respondents residing in Great Britain, no statistically significant correlations were found between the analysed variables.

The answers found to the research questions will allow entrepreneurs to expand their knowledge of Generation Z behaviours. This knowledge can be used not just for building connections with members of this generation, but for undertaking effective social media activities that will impact their purchasing decisions. Activities that are more tailored to Generation Z expectations will translate into increased turnover for businesses and, consequently, a stronger market position.

The present research has many limitations, which can be seen as directions of future studies. The first limitation is related to the sample size and female over-representation in the the survey conducted in Poland, which excludes the possibility of generalising the findings to the whole Generation Z. Another limitation arises from the research tool applied, in particular from the fact that it entails superficial understanding of the phenomena in question and the possibility of

inaccurate answers provided by respondents. Also, not including all potential benefits of building customer-business relationship is definitely a limitation of the research.

Despite the aforementioned limitations, the research can be considered as valuable, as it provides information on Gen Z social media behaviours and expectations regarding customer-business relationships. Future research could be undertaken in other countries to find out whether the same patterns exist among Generation Z customers. Further research should concentrate on identifying the reasons for low engagement in the customer-business relationship on social media among Gen Zers in Poland.

References

- [1] I.C. Kamenidou et al. Segmenting the Generation Z cohort university students based on sustainable food consumption behavior: A preliminary study, *Sustainability* 11 (2019) art.837. <https://doi.org/10.3390/su11030837>
- [2] M. McCrindle. *The ABC of XYZ: Understanding the global generations*, McCrindle Research Pty Ltd., Sydney, 2014. ISBN 978-0992483906
- [3] H. Patel, E. Morrison. *Generation Z: Step aside Millennials*, Barclays Research Highlights: Sustainable & Thematic Investing. [online] 2019 [Viewed: 31-01-2023] Available from: https://www.cib.barclays/content/dam/barclaysmicrosites/ibpublic/documents/our-insights/gen-z/Leaflet%20Generation_Z.pdf
- [4] Oxford Economics. *Gen Z's role in shaping the digital economy*. [online] 2021 [Viewed: 31-01-2023] Available from: <https://www.oxfordeconomics.com/resource/gen-z-role-in-shaping-the-digital-economy>
- [5] J.C. Narver, S.F. Slater. The effect of a market orientation on business profitability, *J. Market.* [54](#) (1990) 20-35. <https://doi.org/10.1177/002224299005400403>
- [6] S.-H. Chuang, H.-N. Lin. The roles of infrastructure capability and customer orientation in enhancing customer-information quality in CRM systems: Empirical evidence from Taiwan, *Int. J. Inf. Manag.* 33 (2013) 271-281. <https://doi.org/10.1016/j.ijinfomgt.2012.12.003>
- [7] Z. Soltani et al. The impact of the customer relationship management on the organization performance, *J. High Technol. Manag. Res.* 29 (2018) 237-246. <https://doi.org/10.1016/j.hitech.2018.10.001>
- [8] W. Reinartz, M. Krafft, W. D. Hoyer. The Customer Relationship Management Process: Its Measurement and Impact on Performance, *J. Market. Res.* 41 (2004) 293-305. <https://doi.org/10.1509/jmkr.41.3.293.35991>
- [9] H. Schroth. Are you ready for gen Z in the workplace? *California Manag. Rev.* 61 (2019) 5-18. <https://doi.org/10.1177/0008125619841006>
- [10] S. Sladek, A. Grabinger. *Gen Z. The first generation of the 21st Century has arrived!* XYZ University [online] 2014 [Viewed: 31-01-2023] Available from: https://www.xyzuniversity.com/wp-content/uploads/2018/08/GenZ_Final-dl1.pdf
- [11] K. Knop, R. Ulewicz. Solving Critical Quality Problems by Detecting and Eliminating Their Root Causes – Case-Study from the Automotive Industry, *Mater. Res. Proc.* 24 (2022) 181-188. <https://doi.org/10.21741/9781644902059-27>
- [12] A. Kaplan, M. Haenlein. Users of the world, unite! The challenges and opportunities of social media, *Bus. Horiz.* 53 (2010) 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>

- [13] M. Stachowiak-Krzyżan. The Use of Social Media by Young Consumers in Purchasing Processes, *Marketing of Scientific and Research Organizations* 31 (2019) 83-108.
<http://doi.org/10.2478/minib-2019-0005>
- [14] K. K. Kapoor et al. Advances in Social Media Research: Past, Present and Future, *Inf. Sys. Front.* 20 (2018) 531-558. <https://doi.org/10.1007/s10796-017-9810-y>
- [15] K. Y. Goh, C. S. Heng, Z. Lin. Social media brand community and consumer behavior: Quantifying the relative impact of user-and marketer-generated content, *Inf. Sys. Res.* 24 (2013) 88–107. <https://doi.org/10.1287/isre.1120.0469>
- [16] A. Susarla, J. H. Oh, Y. Tan. Influentials, Imitables, or Susceptibles? Virality and word-of-mouth conversations in online social networks, *J. Manag. Inf. Sys.* 33 (2016) 139-170.
<https://doi.org/10.1080/07421222.2016.1172454>
- [17] Á. García-Crespo et al. SEMO: A framework for customer social networks analysis based on semantics, *J. Inf. Technol.* 25 (2010) 178-188. <https://doi.org/10.1057/jit.2010.1>
- [18] M. Krynke, D. Klimecka-Tatar. The use of Computer Simulation Techniques in Production Management, *Mater. Res. Proc.* 24 (2022) 126-133. <https://doi.org/10.21741/9781644902059-19>
- [19] J. Gummerus et al. Customer engagement in a Facebook brand community, *Manag. Res. Rev.* 35 (2012) 857-877. <https://doi.org/10.1108/01409171211256578>
- [20] B. Gregor, T. Kubiak. The assessment of activities conducted by companies in social media in light of research concerning their users, *Market. Sci. Res. Org.* 4(14) (2014) 36-50.
<https://doi.org/10.14611/minib.14.04.2014.03>
- [21] N. Nachar. The Mann-Whitney U: A test for assessing whether two independent samples come from the same distribution, *Tutor. Quant. Methods Psychol.* 4 (2008) 13-20.
<https://doi.org/10.20982/tqmp.04.1.p013>