ORGANIZATION AND MANAGEMENT SERIES NO. 165

# THE IMPORTANCE OF FACEBOOK PROFILE MANAGEMENT IN COMMUNICATION ACTIVITIES OF LOCAL GOVERNMENT. CASE STUDY IN POLAND

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**Purpose:** The aim of the study was to determine the social coverage of local government profiles in social media.

**Design/methodology/approach:** To verify the hypotheses, from September 1 to September 3, 2021, a study of all local government profiles in communes with the status of a city with district rights in the Silesian voivodeship was carried out. The number of people following the profiles of the mayors of 19 cities surveyed was added up in a similar way.

**Findings:** A study conducted in 2021 in cities with district rights in the Silesia n voivodeship showed that the average social reach of the local government's Facebook profile was of approx. 19%, and that of an individual mayor of approx. 8%.

**Originality/value:** To obtain the results, the number of users watching a given profile was compared. This reflects a significant development potential, as in provincial capitals these results in 2019 were respectively at the level of approx. 40% and 11%. Managing the dissemination of information in social media can be an important part of the local government's communication strategy. The results of the research serve to deepen scientific reflection on the importance of social media in public life.

**Keywords:** local government, social media, promotion, media relations, information policy.

**Category of the paper:** Research paper.

## 1. Introduction

According to the law, local government units deal with all public issues of local importance that are not within the competences of other entities. The Act of March 8, 1990 on local government provides that communes – on their own behalf and on their own responsibility – perform public tasks aimed at satisfying the collective needs of a self-government community. For this purpose they also conduct communication activities. Some of them are obligatory as they ensure access to public information. The remaining ones can be performed optionally,

as part of the distribution of messages to, among others: stakeholders of the commune (district), selected groups of recipients, or as an activity in the field of promotion, which is the commune's (district) own task, etc.

According to the data of the Central Statistical Office, the administrative division of Poland included - as of January 1, 2021 - 16 voivodeships, 314 districts, 2477 communes (including 302 urban communes, 652 urban-rural communes and 1523 rural communes), as well as 66 cities with district rights. A city with district rights is a commune performing district tasks on the terms specified in the Act of June 5, 1998 on district self-government. Cities with this status are distinguished by the largest number of inhabitants and the highest development potential. As many as 19 Polish cities with district rights are located in the Silesian voivodeship, which is the research field for the following analysis of the use of social media by local government units.

The topic of the use of social platforms by public administration is often taken up both in terms of information policy, as well as advertising and territorial marketing. Social media opens up new opportunities to initiate and maintain relationships. In this context, referring to the terms used, "the following terms deserve special attention: social network sites and social networking sites. The first one indicates that these web-sites serve the already functioning communities (maintaining contacts), while the second emphasizes the active participation of websites in creating the community (making contacts)" (Cyrek, 2020, p. 121). Recalling specific functional geotargeting, taking into account local government units, it can be said that social networking services are used both to conduct communication interactions within the local community and to initiate activities aimed at the creation of new integration areas within and outside this community. Social networking services, available on a global scale, thus contribute to regional, local or sub-local activation. This also applies to profiles and websites of an institutional nature (e.g. profiles and websites of local authorities, institutions, companies and entities dependent on local government) and administered by specific persons (e.g. politicians, officials, activists), as well as profiles of monocratic executive bodies. Managers of city profiles and people who are commune heads, mayors or presidents can present on their own selected topics virtually in any way and shape the tone of narration.

Local government officials having personal Facebook profiles usually "refer to positive emotions. They inform about the ways in which the local government functions and about the decisions taken. The message created by local politicians has a more positive tone than the message shaped by journalists in traditional media" (Szmigiel-Rawska, Tavares, 2019, p. 36) and personalization of message's author favours the provision of information about details regarding the decisions made or projects implemented. At the same time "social media – and especially Facebook – are one of the best, if not the best available, substitute for time-consuming form of communication, which is "door to door" or "face to face" contact with the voter" (Dudek, 2019, p. 277) which is of great importance not only during formally announced election campaigns. Facebook as the leading service in this segment "with a result of

21.5 million users and 73.9% reach among Internet users" (Raport..., 2021, p. 17) is actually one of the communication tools willingly used by politicians and local government units in Poland.

On the other hand, taking into account the data of the Central Statistical Office, over 90% (90.4%) of households in Poland have access to the Internet. Such data are included in the report "The use of information-and-communication technologies in public administration units, enterprises and households in 2020" published on May 25, 2021. Answering the question about the purpose of using the computer network, Polish Internet users most often mentioned: "communication" (76.8%). Among this category of inhabitants, the third most popular answer was the use of social networking services - 54.8% (as it was possible to choose more than one answer). Therefore, conducting the research study on the use of Facebook in the context of communication activities of local government units and monocratic executive bodies of municipalities seems advisable.

### 2. Materials and Methods

When justifying the choice of the Silesian voivodeship as a research field for the analysis of Facebook profiles operating in cities with district rights, it is worth noting that this voivodeship has one of the lowest levels of digital exclusion in Poland. Ac-cording to the results published by the Central Statistical Office in 2021, 10.3% of the respondents aged 16 to 74 in the region never used the Internet – with the national average of 13.2% (Central Statistical Office, 2021, p. 5). Taking into account the subject of the paper, it should be noted that in the group of inhabitants of the Silesian voivode-ship, declaring the use of cyberspace resources for communication purposes, 54% of the respondents were defined as users of social media (Wykorzystanie technologii..., 2021). Taking into account the statistical conditions and the dynamic development of communication tools available in cyberspace, a hypothesis (H1) that both local government units and persons playing the function of monocratic commune authorities use social media in informational and persuasive activities was made. On the other hand, due to the disproportion between the inputs (e.g. economic and logistic) that an organization that is a local government unit can involve and a natural person – even a person managing this organization – a hypothesis (H2) that city profiles would have a greater social reach than the profiles of presidents was assumed, although due to the nature of the study, only the quantitative and not qualitative aspect was subject to evaluation.

To verify the hypotheses, from September 1 to September 3, 2021, a study of all local government profiles in communes with the status of a city with district rights in the Silesian voivodeship was carried out. It turned out that the total number of people following the city profiles is: 479 643 users. Meanwhile, the population of 19 cities forming the research field,

according to the Central Statistical Office, amounted to 2 498 095 inhabitants. After compiling these data, the average social reach of the surveyed profiles of local government units was of approx. 19% (19.27%) (see table 1).

**Table 1.**Social coverage of FB profiles administrated by the cities with district rights in the Silesian voivodeship – as of September 1, 2021

City with district rights	FB profile – number of followers	Number of residents	Social coverage (%)
Bielsko-Biała	32 007	169 756	18.8
Bytom	31 083	163 255	19
Chorzów	21 533	106 846	20.1
Częstochowa	18 831	217 530	8.6
Dąbrowa Górnicza	25 683	118 285	21.7
Gliwice	38 098	177 049	21.5
Jastrzębie-Zdrój	14 853	88 038	16.8
Jaworzno	11 536	90 368	12.7
Katowice	118 662	290 553	40.8
Mysłowice	12 555	74 559	16.8
Piekary Śląskie	15 779	54 702	28.8
Ruda Śląska	19 845	136 423	14.5
Rybnik	24 758	137 128	18
Siemianowice Śląskie	12 096	66 270	18.2
Sosnowiec	30 860	197 586	15.6
Świętochłowice	7047	49 108	14.3
Tychy	20 339	126 871	16
Zabrze	17 815	170 924	10.4
Żory	21 116	62 844	33.6

on average: 19,27%. Source: own study.

The number of people following the profiles of the mayors of 19 cities surveyed was added up in a similar way. There were 198 899 of them in total. Taking into ac-count the number of inhabitants, the average social coverage of the profiles of mayors of cities with district status amounted to approx. 8% (7.53%) (see table 2).

**Table 2.**Social coverage of FB profiles managed by the mayors of the cities with district rights in the Silesian voivodeship – as of September 1, 2021

City with district rights	Mayor's profile –	Number of residents	Social coverage
	number of followers		(%)
Bielsko-Biała	12 801	169756	7.5
Bytom	11 262	163255	6.8
Chorzów	2331	106846	2.1
Częstochowa	23 794	217530	10.9
Dąbrowa Górnicza	18 135	118285	15.3
Gliwice	2913	177049	1.6
Jastrzębie-Zdrój	9372	88038	10.6
Jaworzno	4600	90368	5
Katowice	14 809	290553	5
Mysłowice	4331	74559	5.8

Cont. table 2.

Piekary Śląskie	2383	54702	4.3
Ruda Śląska	8647	136423	6.3
Rybnik	5854	137128	4.2
Siemianowice Śląskie	5048	66270	7.6
Sosnowiec	42 535	197586	21.5
Świętochłowice	4893	49108	9.9
Tychy	14 418	126871	11.3
Zabrze	9489	170924	5.5
Żory	1284	62844	2

on average: 7,53%.

Source: Own study.

Of course, in the methodological reservations it should be assumed that some of the followers are Internet users interested in a given city, but not its inhabitants. Similarly, in the case of Facebook profiles of mayors – they may be supporters or opponents coming from other places, members of political party from which the person managing the city comes from, who live in other parts of the country, or administrators of pro-files of organizations, associations, clubs, companies, etc. The analysis also revealed the total number of observers in the entire research field, but did not reveal the sources of differences in the communication effectiveness of individual cities and mayors. The reason for the discrepancy in the results obtained is probably different level of use of paid promotions offered by Facebook, the use of other forms of promoting the profile (or abandoning such activities), as well as the implementation of a consistent communication strategy in terms of frequency of publication of messages, their quality, the use of multimedia elements and maintaining feedback with users.

However, the study showed the scale of the impact of social media in contacts between local government units and their monocratic bodies, and the local community to which — to a large extent — the messages are addressed. After the study, the hypothesis (H1) was confirmed that both the local administration and its leaders should use social media to maintain interaction with residents. The hypothesis (H2) was also con-firmed that the profiles of local government achieve a greater social reach than individual mayors' profiles.

### 3. Results

Tables, figures and formulas - continuous numbering in the text. The obtained results were compared with the results of nationwide research published in 2020, which referred to Facebook profiles of voivodeship capital cities (Krawczyk, 2020). Although the analysis was carried out in the autumn of 2019, in the case of the capitals of individual voivodeships "the social reach of local government profiles covered as much as nearly 40% (39.2%) of the total population of the cities studied. On the other hand, the number of recipients of messages distributed through individual mayors' accounts was close to approx. 11% (10.6%). Of course, these values should

not be added together to achieve an impressive level of reaching over half of the population, because among Internet users who use the personal profiles of the mayors there are probably people who also visit city profiles in social media" (Krawczyk, 2020, p. 426). This may mean that the re-sources (including financial and organizational ones) of the largest communes with district rights, such as voivodeship capital cities, that can be involved in information policy and promotion, most likely exceed the potential of smaller towns, and at the same time affect the efficiency of the communication process.

It also seems that the use of digital tools by local administration is a necessity deter-mined by applicable law and logistic requirements, but the use of Facebook in communication activities – while still remaining discretionary – is a "necessary choice" (Popiołek, 2018). Therefore, a further increase in the use of social media in the relations of local administration with residents and other groups within the reach of its communication strategy should be forecasted. The recipients of the content disseminated by local government units via social media platforms may include, among others: potential investors, tourists, pilgrims, people interested in residential buildings or taking up employment in a given commune, as well as taking advantage of the educational, recreational, sports or medical offer, etc. Thus, the social ranges of the profiles of cities with district status (and also of other communes and districts) identified for September 2021 will probably be systematically increased.

On the other hand, when comparing the ranges of individual accounts of single-person executive bodies of communes, it should be pointed out that in large cities more and more interactions between the mayors and residents are in cyberspace. In smaller towns these relations can often be direct or take place through local mass media focused on the events in a given commune, rather than the entire agglomeration. Certainly, in the case of personal profiles, there is also considerable development potential.

By making a comparative analysis with the results of Agata Olszanecka-Marmola's study published in 2016, carried out on an identical research field, i.e. in cities with district rights in the Silesian voivodeship, an increase in the number of Facebook pro-files of mayors from 73.6% up to 100% is visible. Research studies on the profiles of mayors of cities with district rights in 2016 showed "a tendency to start and intensify communication activities in the Internet during the election campaign, and after its completion a gradual phasing out the activity in virtual reality" (Olszanecka-Marmola, 2016, p. 139). After five years, it is noticeable that information relations with the electorate are maintained, based on a systematic dialogue via social media. Of course, "it is worth noting the fact that a long presence on Facebook does not have to automatically mean a large number of fans" (Romanowski, Szymkowiak, 2018, p. 457) but a form of running a profile that is attractive for users, consistent publication of interesting content in time sequences that do not take the signs of spamming the recipients may result in a significant increase in the number of people observing and reacting to the disseminated messages. This solution supports the traditional local government press or even constitutes an alternative medium for information and promotion.

Increasing the involvement of local governments as institutions and of mayors man-aging the administration in the sphere of social media can also be perceived as an adaptive activity in the face of the transformation of the electorate's communication habits, as well as the acquisition of electoral rights by successive generations. Young people enter the space of interaction of public debate with their own habits in the field of obtaining data on events and phenomena that interest them, as well as on political life in the local dimension. In order to reach this group with a message, techniques corresponding to the expectations of the recipients must be used. The research studies conducted among students published in 2020 show that they perceive cyberspace "as a social community focused around social media, which is their primary source of knowledge about the world, culture and society. They live in a hermetic media environment, convinced that they have control over their actions, opinions and views. For them, compulsive use of social media is not a symptom of addiction, but only a kind of habit" (Konieczna, 2020, p. 261). The statement clearly indicates the need for the use of social media by the local administration, which intends to establish and maintain relationships with young residents who are not and probably will not be recipients of the traditional local government press. Meanwhile, "the role of administrative communication is growing, both in the centre and out in the field. This is due to the direct "perceptibility" of administrative decisions by the citizens. In the administrative system there are press spokespersons at all levels, usually professionally prepared to perform their functions. In addition to informing, their main task is to explain to the local and regional public opinion specific decisions and problems that have an impact on the lives of citizens (Michalczyk, 2020, p. 238). Therefore, social media will be an increasingly important tool for people responsible for planning and implementing communication activities of local governments. Just like it is for heads or rural communes, mayors and presidents.

It is also worth making a comparative analysis of the social reach of Facebook profiles managed by local administration with the traditional local government press. In 2018 the author's own research study was carried out in 41 communes forming a separate statutory research field in the form of the Metropolis GZM. It has turned out that 88% of the communes forming the union conducted publishing activities. In this group 61% of periodicals were edited directly by communal authorities or offices, while other periodicals were prepared by institutions or subsidiaries (e.g. cultural centres or libraries) or communal companies. Most of the local government newspapers were available free of charge to readers, and only 14% were offered in the paid distribution system. Taking into account the periodicity – monthly magazines (66%) prevailed among the local government press, and weeklies and quarterlies were next (approx. 11% each), followed by bimonthly magazines, which received about 8% and biweekly magazines with 3% market share. It is worth noting that in the case of quarterlies and bimonthly magazines, the publishing schedule was adapted to significant – according to the owners of the local government press – events in the commune, and not solely de-pendent on the printing calendar (Krawczyk, 2019). On the other hand, taking into account the

controversial, especially for publishers of commercial press, possibility of disseminating advertisements – slightly more than half of the editorial offices (55%) did not publish such content. An analysis of the amount of copies of local government press printed in individual communes showed that most often up to 3000 copies of newspapers were printed (41%), although 10% of newspapers were printed in "30 thousand up to 50 thousand" and "over 50 thousand" copies (including the capital of the metropolis – Katowice, which printed its monthly in 140 thousand copies). This allowed local governments in the area of the Metropolis GZM to achieve a one-time total circulation of 492 000 copies, which with the total population of the metropolis (including municipalities that did not conduct publishing activities) amounting to 2 266 308 people at that time meant a social reach of nearly 22% (21.7%). On the other hand, when analyzing the social reach only in communes publishing local government press, the result was slightly higher – almost 24% (23.6%).

### 4. Discussion and Conclusions

When implementing the assumptions of the information and promotion policy of local government units and managing this process, it must be assumed that the pre-pared messages "must be planned, technologically individualized and disseminated as possible, taking into account the requirement to evaluate the effects contributing to optimize the entire process" (Krawczyk, 2020b, p. 115). Communication tools available in cyber-space seem to be the optimal carrier for this type of activity, especially due to the fact that "social media has become one of the key elements on the communication map of a modern city user, especially a young person. It is natural to expect the city to be avail-able through this communication channel, since the private sector has already accustomed its clients to this form of dialogue" (Sędkowski, 2020, p. 122). Therefore, further development of techniques for establishing and maintaining interactions of local government with the social environment via social media, and importantly – their application in the provision of public services, should be forecasted. For this reason, however, while pointing to the legitimacy of the use of social media by local administration, one should remember about people who are digitally excluded for various reasons. The Polish average at the level of about 13% of people who have never used a computer network may be very unevenly spread due to the size and location of a town or the age and education of its inhabitants. Hence, redirecting all communication activities of the local government to social media (with the simultaneous resignation from other forms of maintaining the relations) seems unjustified at the moment. Information enabling civic participation in exercising power, data on acts of local law or news about events important for the local community should be provided to residents in a manner ensuring access to all interested parties.

The statement that "the authorities, in order to achieve their goals and implement their interests, create a network of communication and dialogue in social structures, using available communication channels - local media. Bidirectional character of communication, i.e. dialogue; attractiveness of the sender, i.e. degree of sympathy that the sender evokes in the recipient, e.g. by media or direct image of authorities' representative; communication channels that are used; features of the message, i.e. the form of the message due to its relevance and emotionality, which are to have a specific social impact on the recipient's decision-making process, are the conditions for effective communication" (Batorowska, 2020, p. 248) also refers to social media. The results are attempts to influence the audience. Recipients may accept the arguments presented, succumb to persuasive techniques or – in extreme cases – be a victim to disinformation activities. It is difficult to assume bad intentions in the case of broadcasters who are public ad-ministration units, but it seems advisable to create a code of good practices for local government units active in cyberspace. This could facilitate the regulation of, among others, advertising policy (especially with regard to native advertising), feedback or relations with political opponents of the current authorities, etc. It should also be assumed that the commune's profile in social media - just like the traditional local government press is not a carrier able to fulfil control function for the local authority.

When analyzing the use of digital solutions in the information and promotion policy of communes, it should be remembered that "local government units have a number of sensitive data, the use of which by criminals may lead to damages with serious economic and social consequences" (Mroczka, 2020, p. 91). Therefore in practice it must be of great importance to ensure an appropriate level of cyber security. It is connected with undertaking both investment as well as logistic and educational activities.

Summing up, it should be noted that social media are an important tool not only in terms of news distribution, but also activities in the sphere of feedback (Cho et al., 2021; Aleksander et al., 2020) (e.g. providing data on how to conduct official procedures), social consultations (e.g. obtaining opinions and comments on the development of a commune) or reporting interventions (e.g. notifying about breakdowns, illegal landfills or road damages). They can also be used to shape a positive (Mikhnevych et al., 2020; Kuzior, Lobanova, 2020; Kuzior et al., 2019).

However, in the future social media – after developing and implementing appropriate safeguards – may also become a channel for providing public services. Much depends not only on the will to adopt legal amendments enabling the use of such techniques, but above all on the level of interest in using innovative solutions by the government and local government administration, residents and economic entities man-aging the social media. Of course in this case it will be important to introduce procedures that guarantee the confidentiality of data provided by users, also in relation to the companies providing the carriers.

At the same time, it seems developmental to "use mechanisms and algorithms that automatically collect data on users' activity, such as location and its change at a specific time and place. These data – used on a daily basis to generate profits by social media platforms – can be implemented by emergency services and humanitarian organizations during crisis situations in order to ensure the most effective disposition and management of forces and resources on the spot" (Kosowski, Luzar, 2020, pp. 134-135, Kuzior et al., 2022). Thus, the communication solutions available in cyberspace can be used in many ways (Mańka-Szulik, Krawczyk, 2022; Kuzior et al., 2021; Kuzior, Sobotka, 2021). Cognitive technologies also have great potential (Kwilinski et al., 2019).

The enormous potential of social media also implies the need to set new directions and methods for further research studies on the use and impact of social media on the functioning of local communities.

### References

- 1. Aleksander, A., Krawczyk, D., Kuzior, A., Kwilinski, A. (2020). The conditions affecting the functioning of the mass media and social media based on empirical research conducted in Ukraine. In: Khalid S. Soliman (ed.), *Sustainable economic development and advancing education excellence in the era of global pandemic* (pp. 10330-10342). Proceedings of the 36th International Business Information Management Association Conference (IBIMA), Granada, Spain. International Business Information Management Association.
- 2. Batorowska, K. (2020). Media lokalne w komunikacji politycznej (kształtowanie wizerunku lidera lokalnego) (Local media in political communication (shaping the image of a local leader)). Annales Universitatis Paedagogicae Cracoviensis. Studia ad Bibliothecarum Scientiam Pertinentia, 18, 277-287.
- 3. Cho, Wonhyuk, Melisa, Winda, D. (2021). Citizen Coproduction and Social Media Communication: Delivering a Municipal Government's Urban Services through Digital Participation. *Administrative Sciences*, 11, no. 2, 59. https://doi.org/10.3390/admsci11020059.
- 4. Cyrek, B. (2020). YouTube jako serwis społecznościowy w stronę klasyfikacji witryny (YouTube as a social networking site towards classification of the website). *Zarządzanie Mediami*, 8, 119-152.
- 5. Dudek, K. (2019). Zarządzanie wizerunkiem polityków na Facebooku, a aktywność wyborcza obywateli (Managing the image of politicians on Facebook and the electoral activity of citizens). Zeszyty Naukowe WSH. Zarządzanie, 1, 273-291.
- 6. Konieczna, E. (2020). Media społecznościowe w rękach młodych ludzi (Social media in the hands of young people). *Studia Edukacyjne*, *58*, 247-262.

- 7. Kosowski, B., Luzar, A. (2020). Potencjał wykorzystania mediów społecznościowych w sytuacjach kryzysowych zarys problemu (The potential of using social media in crisis situations outline of the problem). In: A. Gołębiowska, P.B. Zientarski (eds.), *Prasa lokalna i samorządowa: propozycje zmian legislacyjnych (Local and self-government press: proposals of legislative changes)* (pp. 125-136). Warsaw: The Main School of Fire Service.
- 8. Krawczyk, D. (2019). Prasa samorządowa jako narzędzie polityki informacyjnej na przykładzie gmin Górnośląsko-zagłębiowskiej metropolii (Local government press as an information policy tool on the example of the communes of the Upper Silesian-Zagłębie Metropolis). Katowice: "Śląsk" Publishing House, p. 209.
- 9. Krawczyk, D. (2020a). Profil w serwisie Facebook jako narzędzie komunikacji perswazyjnej osób pełniących funkcje publiczne (Facebook profile as a persuasive communication tool for people performing public functions). In: M. Sokołowski (ed.), Przekonać, pozyskać, skłonić. Re-wizje. Teoretyczne i praktyczne aspekty propagandy (Convince, win, persuade. Re-visions. Theoretical and practical aspects of propaganda) (pp. 423-437). Toruń: Adam Marszałek Publishing House.
- 10. Krawczyk, D. (2020b). Reklama w działaniach komunikacyjnych jednostki samorządu terytorialnego (Advertising in communication activities of a local government unit). *Studia Politicae Universitatis Silesiensis*, 28, 103-118.
- 11. Kuzior, A., Lobanova, A. (2020). Tools of information and communication technologies in ecological marketing under conditions of sustainable development in industrial regions (through examples of Poland and Ukraine). *Journal of Risk and Financial Management*, 13(10), 238, https://doi.org/10.3390/jrfm13100238.
- 12. Kuzior, A., Mańka-Szulik, M., Krawczyk, D. Changes in the Management of Electronic Public Services in the Metropolis During the Covid-19 Pandemic. *Polish Journal of Management Studies*, 24(2), 261-275.
- 13. Kuzior, A., Sobotka, B. (2021). *New ICT solutions in public administration*. Proceedings of the 37th International Business Information Management Association (IBIMA), Khalid S. Soliman (Ed.), pp. 6743-6750.
- 14. Kuzior, A., Sobotka, B., Filipenko, A. Kuzior, P. (2019), Marketing communications of administrative organs of local governance and local community. *Marketing and Management of Innovations*, 2, 314-325, http://doi.org/10.21272/mmi.2019.2-26.
- 15. Kuzior, A., Zhuchenko, S., Samoilikova, A., Vasylieva, T., Brożek, P. (2022). Changes in the system of country's population health care depending on the level of providing affordable housing. *Problems and Perspectives in Management*, 20(3), 215-232. doi:10.21511/ppm.20(3).2022.18.
- 16. Kwilinski, A., Tkachenko, V., Kuzior, A. (2019). Transparent cognitive technologies to ensure sustainable society development. *Journal of Security and Sustainability Issues*, *9*(2), 561-570, http://doi.org/10.9770/jssi.2019.9.2(15).

17. Mańka-Szulik, M., Krawczyk, D. (2022). Optimizing the Provision of Public Services By Local Administration as a Component of the Smart City Concept on the Example of Zabrze. *Management Systems in Production Engineering*, 30(2), 192-199. https://doi.org/10.2478/mspe-2022-0024.

- 18. Michalczyk, S. (2020). Aktorzy i instytucje komunikowania politycznego: systematyka problematyki (Actors and institutions of political communication: systematics of the problem). In: A. Cieślikowa, P. Płaneta (eds.), *Od modernizacji do mediosfery. Meandry transformacji w komunikowaniu. Prace ofiarowane dr. hab. Ryszardowi Filasowi (From modernization to the media sphere. Meanders of transformation in communication. Works dedicated to Dr. Ryszard Filas)* (pp. 229-252). Kraków: Institute of Journalism, Media and Social Communication of the Jagiellonian University.
- 19. Mikhnevych, L., Marchenko, V., Hristov, P., Kuzior, A. (2020). Conceptual relationships between country image and economic security. *Marketing and Management of Innovations*, 1, 285-293, http://doi.org/10.21272/mmi.2020.1-24.
- 20. Mroczka, K. (2020). Uwarunkowania i kierunki zmian w procesach decydowania publicznego na szczeblu samorządowym w związku z pandemią koronawirusa (Conditions and directions of changes in public decision-making processes at the local government level in connection with the coronavirus pandemic). *Polityka i Społeczeństwo*, *4*(18), 73-94.
- 21. Olszanecka-Marmola, A. (2016). Efektywność wykorzystania narzędzi komunikowania politycznego w Internecie przez prezydentów miast na prawach powiatu województwa śląskiego (Effectiveness of use of political communication tools on the Internet by the mayors of cities with district rights in the Silesian voivodeship). In: K. Doktorowicz (ed.), *Media społecznościowe: dialog w cyberprzestrzeni (Social Media: dialogue in cyberspace), Vol. 1* (pp. 111-140). Katowice: Publishing House of the University of Silesia.
- 22. Popiołek, M. (2018). Czy można żyć bez Facebooka? Rola serwisów społecznościowych w sieciowym społeczeństwie informacyjnym (Is it possible to live without Facebook? The role of social networking sites in the online information society). Cracow: Publishing House of the Jagiellonian University, pp. 238.
- 23. Raport Strategiczny Internet 2020/2021 (2021). Warsaw: Związek Pracodawców Branży Internetowej IAB Polska, p. 82.
- 24. Romanowski, R., Szymkowiak, A. (2018). Obecność samorządów lokalnych w mediach społecznościowych w Polsce (Presence of local governments in social media in Poland). *Zeszyty Naukowe Politechniki Śląskiej*, 129, 447-459.
- 25. Sędkowski, M. (2020). Media społecznościowe jako element procesu budowania marki miasta korzyści i zagrożenia (Social media as an element of the city brand building process benefits and threats). In: T. Domański (ed.), *Strategie budowania marki i rozwoju handlu. Nowe trendy i wyzwania dla marketingu (Brand building and trade development*

- strategies. New trends and challenges for marketing) (pp. 111-125). Lodz-Warsaw: University of Lodz, PWE.
- 26. Szmigiel-Rawska, K.F., Tavares, A. (2019). Rozważni czy romantyczni? Polscy wójtowie, burmistrzowie i prezydenci w mediach społecznościowych (Sense or Romantic? Polish leaders of rural communes, mayors and presidents in social media). *Studia Regionalne i Lokalne*, *3*, 27-38.
- 27. Wykorzystanie technologii informacyjno-komunikacyjnych w jednostkach administracji publicznej, przedsiębiorstwach i gospodarstwach domowych w 2020 roku (The use of information-and-communication technologies in public administration units, enterprises and households in 2020). The report of the Central Statistical Office published on May 25, 2021 in the official information service at https://stat.gov.pl, September 20, 2021.