

# SOCIAL MEDIA PLATFORMS IN SUSTAINABILITY COMMUNICATION OF POLISH SOCIAL ENTERPRISES FROM THE IT INDUSTRY AND BEYOND

pages: 34-45

© 2023 M. Baran

 This work is published under the Creative  
 Commons BY-NC-ND 4.0 License.

 MICHAŁ BARAN 

## ABSTRACT

The article aims to identify and compare behaviour patterns of Polish social enterprises, especially those operating in the IT branch and using social media to communicate with their clients. The research consisted of a multidimensional qualitative and quantitative content analysis, including Cramér's V correlation coefficient based on chi-squared statistic, also suitable for nominal data types. The article focused on client communication content created and placed on social media by Polish social enterprises from the IT and other branches. The research sample comprised 301 entities. According to the adopted assumption, the statistical research (correlation analysis) results showed certain behaviour patterns within the scope of the analysed area and revealed significant circumstances that affect communication. Due to the profile of professional competencies, the IT industry prefers communicating via social media, which aims to formulate a concise and precise message. Social enterprises in the group of the most economically effective entities have a unique way of using social media. They choose the most popular social media and, at the same time, to some extent, expand their communication to more specialised platforms. The applied approach is a new way to analyse social enterprise activities in social media. The analysis findings contribute to a greater understanding of connections between the discussed phenomena. The presented research procedure can be applied to determine the impact of other competencies of the analysed entities on sustainability communication in social media. According to research, IT entities enrich the current trends in social media use by social enterprises. The research results may be useful for banks, investors and public institutions forecasting the success of social enterprises and making support-related decisions. The scale and scope of the use of social media platforms for communication with the market may be a criterion in measuring the chances to commercialise goods and services offered by social enterprises.

## KEY WORDS

social entrepreneurship, sustainability, communication

10.2478/emj-2023-0010

Corresponding author

Michał Baran

Jagiellonian University, Poland  
 ORCID 0000-0002-8536-9987  
 e-mail: [michal.baran@uj.edu.pl](mailto:michal.baran@uj.edu.pl)

## INTRODUCTION

Social enterprises are entities with unique characteristics which operate effectively in an environment adapted to commercial activities. Although social goals are the primary pursuit of these organisa-

tions, they may remain unnoticed in the general environment and result in treating social entities equally to their profit-driven competitors. In such situations, effective communication is a crucial competence for a social enterprise connected to the use of modern tools offered by the Internet (Choi & Scott, 2013). Such communication allows to effectively pre-

Baran, M. (2023). Social media platforms in sustainability communication of Polish social enterprises from the IT industry and beyond. *Engineering Management in Production and Services*, 15(2), 35-45. doi: 10.2478/emj-2023-0010

sent the essential values and mission of the organisation to the environment and offers an opportunity to change the competitive position of a social enterprise in relation to its commercial competitors (Budzanowska-Drzewiecka, Jedynek & Lipińska, 2016). Thus, the communication method becomes a catalyst for gaining allies for the organisation and facilitates its sustainable development (Stańczyk, Stuss & Wziątek-Staśko, 2020). Therefore, sustainability-conforming marketing communication means communication aligned with the sustainable development strategy created by the entity's management. This type of communication can completely change the environment's assessment of the organisation and their relationship. In the modern world, social media is one of the most popular solutions for disseminating a message that allows for building a community around common values (Gupta et al., 2021). It can be expected that social enterprises operating in the IT industry are best at using social media to run sustainability communication as they provide information management services. Social enterprises from the IT industry are characterised by digital competencies and the synergy of technical and social skills. However, the question arises whether this potential is actually fully utilised in their day-to-day operations. This issue has not yet been investigated by the scientific community. Therefore, the article aims to identify the behaviour patterns of Polish social enterprises, especially those operating in the IT branch and using social media to communicate with their clients. The first part of the article discusses considerations and the use of social media in the context related to sustainability communication. Next is explained the method for data collection and search for correlations in the context of the adopted research hypotheses. The following part presents the analysis results. Finally, the conclusions, study limitations and future research directions are described.

## 1. LITERATURE REVIEW

---

Sustainability communication is an idea derived from the concept of sustainability. To understand it properly, the more basic term must first be explained. The term "sustainability" is extremely popular in the modern world and is strongly dependent on technological development (Lorenz, 2008). As many perspectives on the topic can be adopted and descriptions can be quite distant from each other, the topic is associated with some interpretation difficulties (Zink,

2008). However, in the organisational context, the most popular approach refers to the relationship of an organisation with other entities in its environment (Landrum & Ohsowski, 2017). Today's world has shifted towards the paradigm of sustainable development (D'Humieres, 2018), and this idea covers practically every aspect of an organisation's operations (Schaltegger, Lüdeke-Freund & Hansen, 2016). So, how can the sustainability idea be explained?

In the context of challenges faced while creating a sustainable organisation, the following six challenges can be underlined (Evans et al., 2017): (1) the triple bottom line, which relates to the balance between profits, social benefits and environmental benefits; (2) mindset, referring to the need to eliminate mental restrictions imposed by rules, guidelines, behavioural norms and performance metrics; (3) resources, focusing on elimination inertia and internal resistance to innovative organisational changes; (4) technology innovation, referring to a challenge underlining the need for multidimensional integration of complex technological innovations to achieve a synergic effect; (5) external relationships, focusing on creative engagement with stakeholders and the environment; and (6) business modelling methods and tools, promoting the creative use and development of existing business modelling methods and tools.

Sustainability communication is aligned with the sustainable goals of the organisation and is used to achieve them. In the case of the six challenges described above, sustainability communication is charged with the task of making the environment understand and accept the actions taken by the social enterprise. Furthermore, the aim is to actively involve the environment in supporting socially important undertakings around which the organisation's activities are focused. It is, therefore, about convincing and creatively engaging the environment to make at least a small effort for the idea that inspires the organisation. There is a fundamental difference in the interpretation of sustainable challenges made by a commercial or social enterprise (Igwe, Icha-Ituma & Madichie, 2018). Society is the main beneficiary of a social enterprise's activities; therefore, it should be involved in supporting the organisation, which can be achieved using sustainability communication. Such engagement positively changes financial indicator values describing the company's situation, although the effects of sustainability communication depend on many factors, such as industry, size, etc. (Baran et al., 2022).

The Natural Step is another conceptual approach to the term sustainability, which is holistic and long-term oriented (Karl-Henrik, 2000). It contains the postulate referring to the role of the organisation in society, indicating that to be sustainable, a social enterprise should contribute to maintaining a sustainable society while eliminating structural obstacles to its health, influence, competence, impartiality and importance. Effective communication is crucial for achieving such a goal. One of the archetypes of a sustainable organisation shows it as an entity existing primarily for society and the environment (Bocken et al., 2014). Such an entity is primarily intended to benefit society and the environment rather than to gain economic profits. An organisation's sustainability could also be understood as moral leadership (Bergman, Bergman & Berger, 2017), which undoubtedly requires appropriate communication with the environment.

The adopted sustainability idea helps a social enterprise define its activity priorities (Jenner, 2016). Research shows that a social enterprise aiming for social activity success should engage beneficiaries in active cooperation (Lorenzo-Afable, Lips-Wiersma & Singh, 2020). The sustainable development of an organisation is conditioned by its use of innovative communication tools, such as social media (Punia, 2016). Appropriately used social media allows a social enterprise to communicate with its environment and build a community of naturally existing organisation partners with different motivations and sensitivities around common ideas supported by everyone and potentially employ their competencies (Toscher, Dahle & Steinert, 2020). In light of the above remarks, social media-based sustainability communication occurs when a social enterprise uses platforms to publish non-commercial content closely related to its mission, and each such event triggers a positive reaction (e.g., likes, comments and sharing) to the message.

In general, social media literacy is the ability of social media users to access, analyse and evaluate the content and communicate effectively (Rahman et al., 2021; Bulger, 2012; Boyd & Ellison, 2007). No accurate procedure has yet been developed to measure social media literacy. Such measurements are usually made depending on the study context (James & Chan, 2016). Social media is a tool that can be used to conduct sustainability communication practically in every ecosystem of social entrepreneurship because such ecosystems favour the network of cooperating entities forming a team with a changing composition

(Hazenberget al., 2016). By its very nature, the social media business model is conducive to supporting the activities of social enterprises (Scillitoe, Poonamallee & Joy, 2018). Commercial projects limit the space for the activity of social enterprises, making them operate within a certain niche (Kachlami, 2016). Sustainability communication using social media certainly helps to overcome this limitation. The commercial sector successfully uses social media to effectively convince the environment of its own goals adopted as part of the corporate sustainable development strategy (El Alfy, Darwish & Weber, 2020). A social enterprise can achieve significant benefits by professionally using social media for sustainability communication (Abedin, Maloney & Watson, 2019). Sustainability communication maintained using various means is a precondition for an organisation's success in the world of intense marketing of competing ideas (Jian, Ţurlea & Guşatu, 2016). Earlier research has shown that social enterprises, usually classified as small and medium, do not have large funds for marketing; therefore, they should actively use the social media potential to build an image of a credible, socially sensitive organisation that conducts activities useful for the environment (Kang, & Park, 2018). Undeniably, this is not sufficient for such entities to achieve global success (Ćwiklicki, 2018); however, the skilful use of social media can certainly facilitate the implementation of the adopted development strategy.

Social media is a communication tool creating a new quality in the implementation of individual or group goals. However, it can also be abused and manipulated, which raises credibility-related questions while communicating important matters of social concern unrelated to commercial offers (Meikle, 2016). Communication — including the use of social networks — should be implemented following the sustainability idea to ensure the achievement of socially equitable goals (Servaes, 2016). Social media is a very effective tool for sustainable social change; therefore, such platforms cannot be ignored by a social enterprise communicating with its environment (Wilkins, Tufte & Obregon, 2014). Social media is a platform connecting partners interested in cooperation; thus, it allows for the creation of innovative organisational solutions and the implementation of projects aimed at niche sustainable social goals. Without it, the partners would have very limited possibilities to communicate. Social enterprises operating in the IT branch have a potentially crucial role in bridging public-private partnerships and setting an

inspiring example for other social enterprises (Batisti, 2019).

Contemporary business models are derived from the “new cooperativism” trend and lead to bottom-up solutions to important social problems at the local level, stimulating sustainable development (Zawiślak, 2016). A key success factor in this process appears to be value creation using digital technologies and social media platforms, where customer actions play a key role in organisational performance, and value has a much broader definition (Mazurek, 2014). In this context, multimedia technological entrepreneurship can become a catalyst for the implementation of the organisation’s sustainable development goals (Badzińska, 2016). Such a strategy may become a tool for effective leadership on the path of sustainable development and the achievement of important social goals (Szczepeńska-Woszczyzna & Kurowska-Pysz, 2016). The specificity of a social enterprise and the variety of its forms result in the necessity to build its competitiveness differently than commercial entities (Żur, 2014). The important factor is the context where such an entity functions, especially in relation to bigger or smaller local communities, and the applied formal and organisational solutions (Starnawska, 2016). Social legitimacy, acceptance and legal validation of activities performed by individual entities comprise the entire social economy system (Marzec, 2021). The adoption of correct solutions in this regard ensures the financial foundations of a functioning social enterprise (Otaru, Adeyeye & Sajuyigbe, 2021).

When it comes to Polish social enterprises, a higher level of economic efficiency is achieved by entities operating in the form of foundations or, possibly, cooperatives and limited liability companies, which are located in larger urban centres (Główny..., 2021a). This refers to situations when these entities undertake an economic activity. Then, economic efficiency is understood as higher average values of their profitability ratios achieved in comparison with other types of social enterprises. This phenomenon results from the fact that foundations and, to some extent, limited liability companies and cooperatives aim to protect capital. Meanwhile, associations take a different approach, as their primary role is to protect the interests of their members. Additionally, in large urban centres, which are usually wealthier than small towns or rural areas, it is easier to access capital resources that can be spent for social purposes. However, to gain capital and attract customers, a social enterprise must effectively communicate with society

(Bogacz-Wojtanowska & Wrona, 2015). In this context, it is necessary to mention the constantly growing importance of the Internet (including social media) from the perspective of the activities of social enterprises (Główny..., 2021b). The research has not yet allowed for determining whether the more economically effective social enterprises show any specificity when it comes to actions taken on social media. If such differences exist, they may concern the frequency of platform selection, i.e., general mass platforms as opposed to less popular ones with specialised functionality. A more frequent selection of one or a set of niche platforms could indicate the strength of the formulated message if it successfully attracts the community. The economies of scale in the use of a mass platform or the segmentation approach (using a set of niche platforms) may be factors that should be considered. The use of social media can also be influenced by techno-competence in ICT. The community of IT specialists is a group of people who prefer remote communication to social contacts. They are among the pioneers of using innovations in this area (Bauer, 2022). Usually, they are also the first to fully appreciate and use the full functionality of such solutions (Astakhov, 2021). As they do not experience mental resistance to exploring the possibilities offered by the latest software, they play an educational role in the market (Singh & Hess, 2020).

The main goal of sustainability communication is to popularise the socially valuable idea among potential stakeholders, directly justifying the offering of goods and services by a social enterprise. Publication of non-commercial content closely related to the enterprise’s mission is expected to trigger a positive reaction (e.g., likes, comments or sharing) among message recipients. It seems that among the most popular communication models (i.e., linear, interactive and transactional (Curtis, Neate & Vazquez Gonzalez, 2022), the interactive model and, especially, the Westley and MacLean model (Luttrell & Wallace, 2021, p. 40), is the closest to sustainability communication through social media platforms. However, as shown above, such communication is affected by certain conditions, i.e., such factors as the need to protect capital, location and type of activity (industry) can potentially modify the scope of emphasis placed on certain message content. Therefore, the publication of non-commercial content by social enterprises on social platforms aimed at a community’s reaction could be considered in the context of identified conditions, potentially modifying the message content.

In the context of the main topic and based on the theoretical analysis, the following research questions were asked:

Q1: Is the ability to use social media for sustainability communication considered important among the most basic features of a social enterprise?

Q2: Do social enterprises operating in the IT industry have a unique behaviour pattern compared to others in the surveyed community in terms of using social media for sustainability communication?

Based on the above research questions, the following research hypotheses were adopted:

H1: The location of the social enterprise's headquarters affects the use of social media for sustainability communication.

H2: The legal form of a social enterprise affects the use of social media for sustainability communication.

H3: Social enterprises operating in the IT industry have a unique behaviour pattern of using social media for sustainability communication.

## 2. RESEARCH METHODS

Sustainability communication is designed to support the organisation's sustainable development. Therefore, such communication should be directed to a wide range of social partners who can get to know the organisation better and provide it with support. Such a dialogue, which is a two-way communication, should be included in the social enterprise's strategy. For such action to be effective and build a faithful community around the organisation, communication must cover a wider range of topics than just promoting the social enterprise's offer. Pilot studies allowed for establishing that social enterprises use four social networks statistically significantly: Facebook, Twitter, Instagram and YouTube. The assessment of a single social enterprise's activity on each of the four platforms included in the study was performed based on the following set of permissible values (data were registered separately for each of the platforms):

0 — no activity on the social media platform,

1 — limited, sporadic use of the social media platform, only basic (commercial) presentation of the enterprise,

2 — active use of the social media platform to conduct sustainability communication and build a community focused on common values.

On the scale, two points were awarded to entities that have placed at least one non-commercial post

related to their social mission on the platform during the last year and received a reaction (likes or responses) from the platform community.

Additionally, three indicators were calculated, the value of which expressed the following observations:

Mix 1 — the total number of different social media platforms used by the social enterprise (a value between 0 and 4, depending on the number of used platforms),

Mix 2 — the number of social media platforms actively used by the social enterprise for sustainability communication and building a community around common values (a value between 0 to 4, depending on the number of used platforms),

Mix 3 — the sum of points obtained by a social enterprise in the assessment of using each of the four social media platforms included in the survey (a value between 0 and 8).

The research was planned considering the data available in the official register of social enterprises. Therefore, the second variable to be used in the developed analysis was the legal form of the social enterprise. This variable took values from the following set:

1 — association,

2 — foundation,

3 — social cooperative,

4 — non-profit limited liability company.

The third variable informed about the location of the social enterprise's headquarters and took values from the following set:

1 — a large city, which is the capital of the region,

2 — a medium-sized city, which is a local administrative centre,

3 — other locality.

The fourth variable described at least partial activity in the IT sector as social enterprises can declare activity in a maximum of three sectors simultaneously. This was expressed as an alternative:

0 — the company does not declare any activity in the IT industry,

1 — the enterprise declares at least partial activity in the IT industry.

The following section of the article uses empirical data expressing the values of the nominal variables described above to calculate the correlation coefficients, i.e., Cramér's *V* correlation coefficient based on chi-squared statistic, also suitable in reference to nominal data types.

According to Polish law, a social enterprise is a legal entity that conducts officially registered economic, educational or cultural activity for public

benefit and employs at least 30 % of staff requiring special support (Godlewska-Bujok, 2018). The study covered only those enterprises that had passed the official verification of their status to use the privileges provided by the law. Such a procedure also requires specifying the industry of operation with the IT sector as one of the nineteen options, keeping in mind that more than one option could be selected. The official register of social enterprises ([ekonomias-poleczna.gov.pl](http://ekonomias-poleczna.gov.pl)) is maintained by the central administration in Poland and contains 1391 entries. The analysis adopted a confidence level of 0.95 with a maximum estimation error of 5 %. With such assumptions, the minimum size of the research sample (random sample) was 301 entities.

### 3. RESEARCH RESULTS

The analysis of the collected data revealed Facebook as the most popular social networking site used by social enterprises. In the case of this platform, two points were obtained by 143 entities and one point was obtained by 36 companies, while 122 organisations received 0 points. Twitter's popularity was much lower compared with Facebook, i.e., ten entities received one point, and only six scored two, while all other organisations showed no evidence of activity on this platform. Instagram was used by five entities at a basic level (one point), and 18 companies were

active users (two points). In the case of YouTube, the results were similar: one point was given nine times, and two points were registered 17 times. The group of 301 surveyed social enterprises included 32 associations, 68 foundations, 126 social cooperatives and 75 non-profit limited liability companies. The examined sample included eleven social enterprises declaring their activity in the IT industry. Regarding the location of the headquarters, 67 entities were situated in a large city, the capital of the region; another 124 enterprises were located in cities that were local administrative centres, and 110 entities came from smaller towns. The results of the research, in the form of a correlation matrix, are presented in Tables 2 and 4, and the results of the chi-square statistics calculations are presented in Tables 1 and 3.

The analysis of the correlation matrices using Guilford's scale allows for identifying statistically significant relationships. Table 2 has 14 such results, nine of which are in the range of weak correlations (between 0.11 and 0.30), two are moderate (between 0.31 and 0.50), and the remaining three are in the range of strong correlations (between 0.51 and 0.70). The strongest relationship exists between the use of YouTube and Instagram, so in the rare cases when an enterprise uses an account on one of these platforms, a significant probability exists that it will also have an account on another. Even more significant is the relationship between the legal form of a social enterprise and the way it uses each of the four social net-

Tab. 1. Results of the chi-squared statistic calculation between the variables included in the research (excluding results for Mix 1, Mix 2 and Mix 3 indicators presented in Table 3)

	FB	TWITTER	INSTAGRAM	YOUTUBE	FORM	LOCALITY
TWITTER	11.6547*					
INSTAGRAM	20.8153***	22.9553***				
YOUTUBE	23.7295***	24.9986***	62.2770***			
FORM	167.4189***	152.0357***	154.7631***	154.9062***		
LOCALITY	2.4755	2.4474	13.7779**	2.9375	17.5935**	
BRANCH	0.2465	15.5892***	0.3770	1.7747	3.3532	2.1241

Source: elaborated by the author [\* result is significant at the 0.05 level; \*\* result is significant at the 0.01 level; \*\*\* result is significant at the 0.001 level].

Tab. 2. Correlations (Cramér's V correlation coefficient based on chi-squared statistic) between the variables included in the research (excluding the correlations for Mix 1, Mix 2 and Mix 3 indicators, presented in Table 4)

	FB	TWITTER	INSTAGRAM	YOUTUBE	FORM	LOCALITY
TWITTER	0.14*					
INSTAGRAM	0.19***	0.20***				
YOUTUBE	0.20***	0.20***	0.32***			
FORM	0.53***	0.50***	0.51***	0.51***		
LOCALITY	0.06	0.06	0.15**	0.07	0.17**	
BRANCH	0.03	0.23***	0.04	0.08	0.11	0.08

Source: elaborated by the author [\* result is significant at the 0.05 level; \*\* result is significant at the 0.01 level; \*\*\* result is significant at the 0.001 level].

Tab. 3. Results of the chi-squared statistic calculation between the values of Mix1, Mix2 and Mix3 indicators and other variables

	Mix 1	Mix 2	Mix 3
FACEBOOK	301.4499***	289.3428***	558.5355***
TWITTER	131.9351***	90.3517***	198.5340***
INSTAGRAM	212.9135***	159.5381***	255.3053***
YOUTUBE	260.3373***	223.4586***	348.5657***
FORM	61.2337***	63.7669***	87.9190***
LOCALITY	11.8381	9.5587	15.2995
BRANCH	7.4376	12.3111*	11.7768

Source: elaborated by the author [\* result is significant at the 0.05 level; \*\* result is significant at the 0.01 level; \*\*\* result is significant at the 0.001 level].

Tab. 4. Correlations (Cramér's V correlation coefficient based on chi-squared statistic) between the values of Mix1, Mix2 and Mix3 indicators and other variables

	Mix 1	Mix 2	Mix 3
FACEBOOK	0.71***	0.69***	0.96***
TWITTER	0.47***	0.39***	0.57***
INSTAGRAM	0.59***	0.51***	0.65***
YOUTUBE	0.66***	0.61***	0.76***
FORM	0.32***	0.33***	0.31***
LOCALITY	0.14	0.13	0.16
BRANCH	0.16	0.20*	0.20

Source: elaborated by the author [\* result is significant at the 0.05 level; \*\* result is significant at the 0.01 level; \*\*\* result is significant at the 0.001 level].

works. A detailed analysis of the collected data allows for concluding that foundations and, to some extent, social cooperatives are responsible for this effect. Enterprises organised in such forms mostly have social media accounts, while they are less frequent among associations and limited liability companies. When it comes to the location of the business, the only weak correlation occurs in the context of Instagram. Careful data analysis shows that the few entities using this social network are usually organisations either from large or medium-sized cities, i.e., social enterprises that belong to the first group usually only register a simple account on this platform, while entities from the second group most often use it actively. Finally, when it comes to social enterprises from the IT industry, they stand out only by the more frequent use of Twitter. This behaviour indicates a certain specificity of the IT industry and results in the widening of the set of social networks popular among social enterprises.

The structure of the Mix type indicators (Mix 1, Mix 2 and Mix 3) naturally means they are strongly related. However, these indicators have a cognitive value when their correlation with other variables is examined. As regards social networks, when assessing the scale of the relationship with each of the three indicators, the order is the same each time: Facebook,

YouTube, Instagram and Twitter. It can, therefore, be concluded that passive and active use of social media is based on the same assessment of the usefulness of individual platforms. Also, the way a social enterprise uses individual platforms is related to its legal form, i.e., moderate correlations in the case of each indicator. Foundations are primarily responsible for this effect. In the group of 301 surveyed enterprises, 46 cases were identified, constituting 15.3 % of the entire sample, of an organisation using more than one social networking site. This behaviour was observed in 21 foundations, nine social cooperatives, eight associations and eight limited companies. Also, a weak correlation exists between the size of the town where a social enterprise is located and the way it uses social networks. Finally, when it comes to the relationship with the Mix group of indicators, the importance of belonging to the IT branch is even slightly higher, although still a weak correlation, compared to the importance of the location.

## 4. DISCUSSION AND CONCLUSIONS

The research results allowed for verifying the formulated hypotheses. First, the social enterprise's business location has a certain effect on using social

media for sustainability communication. Larger cities are conducive to the active use of social networks. Such a relationship is weak yet statistically significant. Mix indicators were particularly helpful in detecting this weak relationship. In the context of localisation, the results also showed practically no preferences for using some platforms over others, and only Instagram had a weak correlation with this variable. The detected correlations may be the result of generational differences in attitudes to social media because the inhabitants of large cities are usually younger, better educated and more active in using portals, considering them a natural part of everyday life (Hysa, Karasek & Zdonek, 2021). It may also be the result of greater openness to new solutions, which is facilitated by functioning in a more complex urban environment (Grajeda & Sheldon, 2015). Thus, the first hypothesis (H1) can be considered confirmed, although to a very limited extent. The second hypothesis (H2) should also be considered true, especially due to moderate correlations, which are the basis of such a judgment. Foundations represent the legal form that is the friendliest to sustainability communication through social media. This is in line with previous research, which has shown that more formally organised social enterprises (requiring professional management) are more successful due to their complex, extensive communication with stakeholders (Wang, 2022). The third hypothesis (H3) was confirmed only to a limited extent. Social enterprises in the IT industry generally behave like all other entities. The only peculiarity is that they are more likely to use Twitter. Apparently, due to the profile of professional competencies and activities in the IT industry, companies prefer social media aimed at formulating a concise and precise message. The dominant personality profile among IT specialists may be a decisive factor (Potter, 2008). This is also in line with previous research into how tech companies communicate (Dziekoński, 2017).

The literature on the subject describes numerous examples of relationship marketing strategies that are based on social media and the affecting conditions (Delu, 2019). The limitations related to the conducted research resulted mainly from the number of included variables. There are several additional features that could help in assessing the behaviour of social enterprises in terms of how they use social media for sustainability communication. For example, the research did not consider the turnover, number of employees, start date of the activity, number of customers served etc. Possibly, widening the set of variables would reveal a greater variety of determinants influencing

the behaviour of social enterprises on social media (Pandey & Kumari, 2019). On theoretical grounds, the conducted analysis contributes to a scientific discussion as it shows the determinants important for predicting the use of social media by social enterprises for sustainability communication (Wong & Lam, 2015). As regards the management practice, social enterprises unaware of the social media usefulness can use the analysis to understand how other similar entities use this tool for sustainability communication. This can be the basis for comparisons and determining the direction of developing useful communication skills (Enke & Borchers, 2019). The principle is that the lack of participation in market competition pushes the enterprise to peripheral positions (Lee, 2017). It can be assumed that social enterprises effectively communicating with the environment via social media gain an additional tool for building social capital (Busch, 2014). This allows them to use the potential represented by the community focused on common ideas, e.g., using “word of mouth” marketing (Wagner, Baccarella & Voigt, 2017). The conducted analysis can be treated as an initial stage in identifying good practices applied by social enterprises in sustainability communication through social media. Moreover, the results of the conducted research may be of particular practical use to banks, investors and public institutions forecasting the success of social enterprises and making support-related decisions (Lambert et al., 2019; Roy et al., 2015). In this context, it should be emphasised that social enterprises that use social media similarly to foundations and especially those located in large cities, imitate the behaviour of the most economically effective entities. Applying such good practices should help them achieve economic success.

Social enterprises belong to the group of organisations that pursue goals important to society (Ottlewski, 2021). Their existence depends on the ability to properly perceive societal needs and inform the environment about their activities (Kim & Lim, 2017). In the modern world, the importance of sustainability communication is growing with the use of social media (Baghdadi, 2013). In the face of the dynamic social media development, promoting cooperation, collectivism and egalitarianism, and limited influence of cultural conditions on the development of social enterprises (Canestrino et al., 2020), the path to success for such entities is the development of sustainability communication. The most economically efficient social enterprises appreciate the economies of scale in sustainability com-



munication and choose mass platforms. The analysis of the research results showed that social enterprises operating in the IT industry, which are entities with potentially the most joint social and technical competencies compared to organisations from other industries, there is still much room for improvement when it comes to using social media in sustainability communication. Entities from the IT sector could act as leaders in using social media for sustainability communication; however, it seems that such enterprises do not use their potential of combined technical and social competencies. As demonstrated, regardless of the sector, the most favourable characteristics related to the active use of social media were found among enterprises registered as foundations and entities located in the largest cities, which are regional administrative centres. This is probably due to the scale of activity and the developed social network that can be built in a big city in the real and not only in the virtual world. Additionally, an important factor may be observing the behaviour of other entities, including commercial, operating in the immediate environment of the organisation (Liu & Ko, 2012). When an enterprise decides to use a social networking site, it first chooses a platform that allows for the most partner-like, extensive dialogue with the environment. Maintaining sustainability communication through social media is, to a large extent, the result of the awareness that such an option is valuable (Oncioiu et al., 2021; Gupta et al., 2021). However, it is important to have knowledge of how to do this effectively.

## LITERATURE

- Abedin, B., Maloney, B., & Watson, J. (2019). Benefits and Challenges Associated with Using Online Communities by Social Enterprises: A Thematic Analysis of Qualitative Interviews. *Journal of Social Entrepreneurship*, 11, 1-22. doi: 10.1080/19420676.2019.1683879
- Astakhov, D. V. (2021). *Professional competence characteristics of information and communication technology specialists*. Publishing House "Baltija Publishing". doi: 10.30525/978-9934-26-114-5-13
- Badzińska, E. (2016). Innovative multimedia project – the exemplification of the concept of technological entrepreneurship. *Engineering Management in Production and Services*, 8(2), 38-46. doi: 10.1515/emj-2016-0015
- Baghdadi, Y. (2013). From E-commerce to Social Commerce: A Framework to Guide Enabling Cloud Computing. *Journal of Theoretical Applied Electronic Commerce Research*, 8(3), 12-38. doi: 10.4067/S0718-18762013000300003
- Baran, M., Kuźniarska, A., Makiela, Z., Sławik, A., & Stuss, M. (2022). Does ESG Reporting Relate to Corporate Financial Performance in the Context of the Energy Sector Transformation? Evidence from Poland. *Energies*, 15(2), 477. doi: 10.3390/en15020477
- Battisti, S. (2019). Digital Social Entrepreneurs as Bridges in Public-Private Partnerships. *Journal of Social Entrepreneurship*, 10(2), 135-158. doi: 10.1080/19420676.2018.1541006
- Bauer, J. A. (2022). *The onboarding process of highly-skilled self-initiated expatriates: an exploratory study in the Austrian information technology sector*. Linz: Johannes Kepler University.
- Bergman, M. M., Bergman, Z., & Berger, L. (2017). An Empirical Exploration, Typology, and Definition of Corporate Sustainability. *Sustainability*, 9(5), 753. doi: 10.3390/su9050753
- Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42-56. doi: 10.1016/j.jclepro.2013.11.039
- Bogacz-Wojtanowska, E., & Wrona, S. (2015). Sposoby i narzędzia komunikacji wybranych przedsiębiorstw społecznych w Polsce [Ways and tools of communication of selected social enterprises in Poland]. *Ekonomia społeczna*, 1, 38-53. doi: 10.15678/ES.2015.1.03
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13, 210-230. doi: 10.1111/j.1083-6101.2007.00393.x
- Budzanowska-Drzewiecka, M., Jedynak, P., & Lipińska, A. (2016). *Challenges related to new segments and market trends*. Kraków: Jagiellonian University Press.
- Bulger, M. (2012). Measuring media literacy in a national context: Challenges of definition, method and implementation. *Media Studies*, 3, 83-104.
- Busch, C. (2014). Substantiating social entrepreneurship research: Exploring the potential of integrating social capital and networks approaches. *International Journal of Entrepreneurial Venturing*, 6(1), 69-84.
- Canestrino, R., Ćwiklicki, M., Magliocac, P., & Pawełek, B. (2020). Understanding social entrepreneurship: A cultural perspective in business research. *Journal of Business Research*, 110, 132-143. doi: 10.1016/j.jbusres.2020.01.006
- Choi, J. H., & Scott, J. E. (2013). Electronic Word of Mouth and Knowledge Sharing on Social Network Sites: A Social Capital Perspective. *Journal of Theoretical Applied Electronic Commerce Research*, 8(1), 69-82. doi: 10.4067/S0718-18762013000100006
- Curtis, H., Neate, T., & Vazquez Gonzalez, C. (2022). State of the Art in AAC: A Systematic Review and Taxonomy. *Proceedings of the 24th International ACM SIGACCESS Conference on Computers and Accessibility*. doi: 10.1145/3517428.3544810
- Ćwiklicki, M. (2018). Requirements of Scaling International Social Enterprises. *Entrepreneurial Business and Economics Review*, 7(1), 45-60. doi: 10.15678/EBER.2019.070103
- Delu, W. (2019). Enterprise network marketing strategy based on SNS social network. *12th International Conference on Intelligent Computation Technology and Automation (ICICTA)*, 295-299. doi: 10.1109/ICICTA49267.2019.00069

- D'Humieres, P. (2018). Towards a sustainable European business model? Foundation Robert Schuman. *European Issues*, 460.
- Dziekoński, K. (2017). Factors affecting communication quality in project teams. *Przegląd Organizacji*, 3, 60-66.
- El Alfy, A., Darwish, K. M., & Weber, O. (2020). Corporations and sustainable development goals communication on social media: Corporate social responsibility or just another buzzword? *Sustainable Development*, 28(5), 1418-1430. doi: 10.1002/sd.2095
- Enke, N., & Borchers, N. S. (2019). Social Media Influencers in Strategic Communication: A Conceptual Frame-work for Strategic Social Media Influencer Communication. *International Journal of Strategic Communication*, 13(4), 261-277. doi: 10.1080/1553118X.2019.1620234
- Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E., & Barlow, C. Y. (2017). Business model innovation for sustainability: Towards a unified perspective for creation of sustainable business models. *Business Strategy Environment*, 26, 597-608. doi: 10.1002/bse.1939
- Główny Urząd Statystyczny [Central Statistical Office]. (2021a). *Organizacje non-profit jako podmioty ekonomii społecznej w 2019 roku [Non-profit organizations as entities of the social economy in 2019]*. Warszawa, Poland.
- Główny Urząd Statystyczny [Central Statistical Office]. (2021b). *Zarządzanie w organizacjach non-profit w 2019 r. [Management in non-profit organizations in 2019]*. Warszawa, Poland.
- Godlewska-Bujok, B. (2018). Przedsiębiorstwo społeczne w polskim systemie prawnym [Social enterprise in the Polish legal system]. In M. Paluszkiwicz & M. Włodarczyk (Eds.), *Polityka społeczna a prawo pracy: Wybrane problemy [Social policy and labor law: Selected problems]*, (pp. 75–84). Łódź, Poland: Wydawnictwo Uniwersytetu Łódzkiego.
- Grajeda, M. R., & Sheldon, I. M. (2015). Trade Openness and City Interaction. In A.A. Batabyal, P. Nijkamp (Eds.), *The Region and Trade: New Analytical Directions*, (pp. 267–318). Singapore: World Scientific.
- Gupta, S., Nawaz, N., Alfalah, A.A., Naveed, R.T., Muneer, S., & Ahmad, N. (2021). The Relationship of CSR Communication on Social Media with Consumer Purchase Intention and Brand Admiration. *Journal of Theoretical Applied Electronic Commerce Research*, 16(5), 1217-1230. doi: 10.3390/jtaer16050068
- Hazenber, R., Bajwa-Patel, M., Mazzei, M., Roy, M.J., & Baglioni, S. (2016). The role of institutional and stakeholder networks in shaping social enterprise ecosystems in Europe. *Social Enterprise Journal*, 12(3), 302-321. doi: 10.1108/SEJ-10-2016-0044
- Hysa, B., Karasek, A., & Zdonek, I. (2021). Social media usage by different generations as a tool for sustainable tourism marketing in society 5.0 idea. *Sustainability*, 13(3), 1018. doi: 10.3390/su13031018
- Igwe, P., Icha-Ituma, A., & Madichie, N. (2018). The Evaluation of CSR and Social Value Practices Among UK Commercial and Social Enterprises. *Entrepreneurial Business and Economics Review*, 6(1), 37-52. doi: 10.15678/EBER.2018.060102
- James, P. W., & Chan, T. (2016). Conceptual challenges in designing measures for media literacy studies. *International Journal of Media and Information Literacy*, 1, 1-16. doi: 10.13187/ijmil.2016.1.27
- Jenner, P. (2016). Social enterprise sustainability revisited: an international perspective. *Social Enterprise Journal*, 12(1), 42-60. doi: 10.1108/SEJ-12-2014-0042
- Jian, I., Turlea, C., & Guşatu, I. (2016). The Reporting and Sustainable Business Marketing. *Sustainability*, 8(1), 23. doi: 10.3390/su8010023
- Kachlami, H. (2016). Social venture creation and the influence of commercial ventures. *Social Enterprise Journal*, 12(3), 347-367. doi: 10.1108/SEJ-02-2016-0006
- Kang, M.Y., & Park, B. (2018). Sustainable Corporate Social Media Marketing Based on Message Structural Features: Firm Size Plays a Significant Role as a Moderator. *Sustainability*, 10(4), 1167. doi: 10.3390/su10041167
- Karl-Henrik, R. (2000). Tools and concepts for sustainable development, how do they relate to a general framework for sustainable development, and to each other? *Journal of Cleaner Production*, 8(3), 243-254. doi: 10.1016/S0959-6526(00)00011-1
- Kim, D., & Lim, U. (2017). Social enterprise as a catalyst for sustainable local and regional development. *Sustainability*, 9(8), 1427. doi: 10.3390/su9081427
- Lambert, L., Dedeurwaerdere, T., Nyssens, M., Severi, E., & Brolis, O. (2019). Unpacking the organisational diversity within the collaborative economy: The contribution of an analytical framework from social enterprise theory. *Ecological Economics*, 164, 106343. doi: 10.1016/j.ecolecon.2019.05.023
- Landrum, N. E., & Ohsowski, B. (2017). Identifying Worldviews on Corporate Sustainability: A Content Analysis of Corporate Sustainability Reports. *Business Strategy and the Environment*, 27(1), 128-151. doi: 10.1002/bse.1989
- Lee, Y. Ch. (2017). Corporate Sustainable Development and Marketing Communications on Social Media: Fortune 500 Enterprises. *Business Strategy and the Environment*, 26(5), 569-583. doi: 10.1002/bse.1936
- Liu, G., & Ko, W. W. (2012). Organizational learning and marketing capability development: A study of the charity retailing operations of British social enterprise. *Nonprofit and Voluntary Sector Quarterly*, 41(4), 580-608. doi: 10.1177/0899764011411722
- Lorenz, M. H. (2008). *Information Technology and Sustainability: Essays on the Relationship Between ICT and Sustainable Development*. Norderstedt, Germany: BoD – Books on Demand.
- Lorenzo-Afable, D., Lips-Wiersma, M., & Singh, S. (2020). 'Social' value creation as care: the perspective of beneficiaries in social entrepreneurship. *Social Enterprise Journal*, 16(3), 339-360. doi: 10.1108/SEJ-11-2019-0082
- Luttrell, R., & Wallace, A. A. (2021). *Social media and society: An introduction to the mass media landscape*. Lanham, USA: Rowman & Littlefield.
- Marzec, M. (2021). Legitimation of Social Economy Entities: Theoretical Framework for Analysis in Polish Conditions. *International Journal of Contemporary Management*, 57(1), 29-42. doi: 10.2478/ijcm-2021-0003

- Mazurek, G. (2014). Network Value Creation through Marketing. *Central European Management Journal*, 22(4), 70-77. doi: 10.7206/mba.ce.2084-3356.120
- Meikle, G. (2016). *Social Media: Communication, Sharing and Visibility*, London, UK: Routledge. doi: 10.4324/9781315884172
- Oncioiu, I., Căpușeanu, S., Topor, D. I., Tamaș, A. S., Solomon, A. G., & Dănescu, T. (2021). Fundamental Power of Social Media Interactions for Building a Brand and Customer Relations. *Journal of Theoretical Applied Electronic Commerce Research*, 16(5), 1702-1717. doi: 10.3390/jtaer16050096
- Otaru, S., Adeyeye, M., & Sajuyigbe, A. (2021). Financial Resource Mobilization Strategies and Sustainability of Non-Governmental Organizations (NGOs): Evidence from Nigeria. *International Journal of Contemporary Management*, 57(2), 1-8. doi: 10.2478/ijcm-2021-0004
- Ottlewski, L. (2021). Building and Strengthening Community at the Margins of Society through Social Enterprise. *Sustainability*, 13(21), 12046. doi: 10.3390/su132112046
- Pandey, R., & Kumari, P. (2019). Information Portals and Their Use in Village Development. *Indian Journal of Extension Education*, 55, 242-245.
- Potter, L. E. (2008). *The Information Technology Gap: exploring the factors that potentially separate and differentiate IT professionals and users*. Nathan, Australia: Griffith University.
- Punia, Y. (2016). Information and communication technology for sustainable development. *Voice of Research*, 5(1), 40-41. doi: 10.1201/9781351045230
- Rahman, A. H. A., Abdullah, A., Selvadurai, S., Zakaria, S. Z. S., Lyndon, N., & Abidin, K. (2021). Social Media Literacy among Oil Palm Smallholders in East Malaysia and Association with Oil Palm Integration Practices. *Sustainability*, 13(24), 13802. doi: 10.3390/su132413802
- Roy, M. J., McHugh, N., Huckfield, L., Kay, A., & Donaldson, C. (2015). "The most supportive environment in the world"? Tracing the development of an institutional 'ecosystem' for social enterprise. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 26(3), 777-800. doi: 10.1007/s11266-014-9459-9
- Schaltegger, S., Lüdeke-Freund, F., & Hansen, E. G. (2016). Business Models for Sustainability – A Co-Evolutionary Analysis of Sustainable Entrepreneurship, Innovation, and Transformation. *Organization & Environment*, 29(3), 264-289. doi: 10.1177/1086026616633272
- Scillitoe, J. L., Poonamallee, L., & Joy, S. (2018). Balancing Market Versus Social Strategic Orientations in Socio-tech Ventures as Part of the Technology Innovation Adoption Process – Examples from the Global Healthcare Sector. *Journal of Social Entrepreneurship*, 9(3), 257-287. doi: 10.1080/19420676.2018.1498378
- Servaes, J. (2016). How 'sustainable' is development communication research?. *International Communication Gazette*, 78(7), 701-710. doi: 10.1177/1748048516655732
- Singh, A., & Hess, T. (2020). How chief digital officers promote the digital transformation of their companies. In R. D. Galliers, D. E. Leidner & B. Simeonova (Eds.), *Strategic Information Management*, (pp. 202-220). London, UK: Routledge. doi: 10.4324/9780429286797-9
- Stańczyk, I., Stuss, M., & Wziątek-Staško, A. (2020). The role of communication in the organizational support of managers in efficient management. *Proceedings of the 11th Business & Management Conference: Dubai, 16-18 January, International Institute of Social and Economic Sciences in Prague*, 184-196. doi: 10.20472/BMC.2020.011.012
- Starnawska, M. (2016). Social Entrepreneurship Research – Challenges, Explanations and Suggestions for the Field Development. *Management Issues*, 14(3), 13-31. doi: 10.7172/1644-9584.61.1
- Szczepańska-Woszczyzna, K., & Kurowska-Pysz, J. (2016). Sustainable Business Development Through Leadership in SMEs. *Engineering Management in Production and Services*, 8(3), 57-69. doi: 10.1515/emj-2016-0024
- Toscher, B., Dahle, Y., & Steinert, M. (2020). Get Give Make Live: An empirical comparative study of motivations for technology, youth and arts entrepreneurship. *Social Enterprise Journal*, 16(2), 179-202. doi: 10.1108/SEJ-03-2019-0016
- Wagner, T. F., Baccarella, Ch. V., & Voigt, K. I. (2017). Framing social media communication: Investigating the effects of brand post appeals on user interaction. *European Management Journal*, 35(5), 606-616. doi: 10.1016/j.emj.2017.05.002
- Wang, R. (2022). Organizational commitment in the non-profit sector and the underlying impact of stakeholders and organizational support. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 33(3), 538-549. doi: 10.1007/s11266-021-00336-8
- Wilkins, K. G., Tuft, T., & Obregon, R. (2014). *The Handbook of Development Communication and Social Change*. Hoboken, USA: John Wiley & Sons. doi: 10.1002/9781118505328
- Wong, A. H. K., & Lam, F. W. T. (2015). An investigation of how networking improves social enterprise performance. *International Journal of Advanced Research in Management and Social Sciences*, 4(11), 25-35.
- Zawiślak, P. (2016). Innovative multimedia project – the exemplification of the concept of technological entrepreneurship. *Central European Management Journal*, 28(3), 168-195. doi: 10.7206/cemj.2658-0845.31
- Zink, K.J. (2008). *Corporate Sustainability as a Challenge for Comprehensive Management*. Berlin, Germany: Springer Science & Business Media.
- Žur, A. (2014). Building competitive advantage through social value creation – a comparative case study approach to social entrepreneurship. *Management Issues*, 12(4), 56-71. doi: 10.7172/1644-9584.49.4