Twitter as an engagement tool: How Public Benefit Organizations are building relationships with their audience[*]

Marian Olinski, Piotr Szamrowski[**]

Abstract

The current study applies content analysis to scrutinize the relationship between Twitter messaging tactics employed by 186 Public Benefit Organizations (PBO) and public reactions in the form of liking, retweeting and commenting behaviour. The results indicate that Twitter plays a marginal role in the Polish PBO, and it seems to be at most complementary to the much more frequently utilized Facebook. Furthermore, the size of the organization does not affect the frequency of the published content on Twitter. Multiple regression analysis indicated that the most important factor influencing audience engagement was the Twitter profile number of followers. It explained the largest percentage of variance in terms of the average number of retweets, the average number of likes, and the percentage of tweets that were then commented on.

Das Ziel der Arbeit ist die Untersuchung der Rolle von Twitter in der Bildung der Beziehungen mit seiner Benutzern. Die benutzte Analyse des Inhaltes ermöglichte die Untersuchung der Relation zwischen den in Twitter zugänglichen Kommuniaktionsstrategien, die durch 186 gemeinnützige Anstalten verwendet wurden, und dem Engagementsniveau von Empfängern, das durch "Gefällt mir"-Zeichen, Retweets und die Zahl der Kommentare gemessen wird. Die Resultate weisen hin, dass Twitter eine beschränkte Rolle für die Aktivitäten der polnischen gemeinnützigen Anstalten spielt. Es ist eher eine zusätzliche Rolle für den populärer in Polen Facebook. Die Größe von Organisation spielt beinflusst nicht die Häufigkeit von den im Twitter publizierten Inhalten. Eine schrittweise Regressionsanalyse beweist, dass der wesentlichste Faktor für das Engagement von Empfängern die Zahl der benutzten Profile bildet. Dieser Faktor erklärt das grösste Prozent der Kovarianzen im Rahmen der Mittelwerte von Retweets, der Mittelwerte von Akzeptanzzeichen und des prozentualen Anteils von Tweets, die folgends kommentiert wurden.

Introduction

The exuberant dissemination of social media services introduced new opportunities for nonprofit organizations to communicate and engage with the audience. The ability for quick implementation of groundbreaking social media applications equally concerns both large, medium and small organizations presenting as it seems considerable possibilities for a more level playing field. It also poten-

tially "changes the game rules" in comparison to more traditional communication channels. These changes include kinds of resources and capacities organizations require and the strategies they could implement in order to successfully profit from their social media presence. Such issues are of vital significance, yet our comprehension still remains inadequate. The research conducted so far mainly refers to the use of Facebook, and there are only a few studies concerning the utilization of Twitter in relationship cultivation. Research has primarily focused on large organizations. Therefore, there are only a handful of studies pertaining to smaller entities and the research area has primarily centred upon American nonprofit organizations. The scholarly literature with respect to the developing countries of Central and Eastern Europe is even more modest, leaving them out of the scientific mainstream. This article is designed to partially fill this gap. The purpose of this study is to examine how nonprofit organizations use Twitter to engage their audience and foster relationship growth by answering the following questions: how selected organizational parameters, available communication tools used in single tweets and basic profile characteristics influence the audience engagement rate and how the size of the organization affects the frequency of Twitter use and the utilization of available communication tools? The specific type of nonprofit entity called the Public Benefit Organization (PBO) was chosen as a research subject due to its special ability described in a later part of the article.

This article brings the following contribution to the scholarship literature. To begin, it builds on the effectiveness of computer-mediated organizational communication. This is the first organizational-level study of the Twitter effectiveness in unique type of nonprofit organizations with the ability to receive 1 % of personal income tax. The Polish case may be a valuable example for the implementation of similar solutions for nonprofit organizations in other countries. The growing importance of social media in the activities of nonprofit organizations requires taking steps to create effective strategies for their use. This is especially important concerning limited resources that usually nonprofit organizations own. We consider "online engagement" as a vital intermediate objective, which should result in a real world activities by organization online audience (e.g. donation, voluntary work, lobbying).

Literature review

Nonprofits and social media use -theoretical models

There are handful of theories that could be applied to the study of social media in nonprofit organizations. The relationship management theory seems to be the most important one. It claims that developing relationships with stakeholders is vital to the well-being of organizations and that communication fulfills the role of a strategic tool in building and maintaining relationships with the public

(Dozier et al.1995; Ledingham 2003). Within the relationship perspective, public relations are seen as "the management function that establishes and maintains mutually beneficial relationships between an organization and the publics on whom its success or failure depends" (Cutlip et al. 1994: 2). Communication between organizations and stakeholders as one of the main facets of relationships seems to be a suitable unit of analysis in this theory. Communication with stakeholders should be dialogic, or two-way engagement, rather than straightforward, one-way information sharing, and should be tailored to specific stakeholder types (Ledingham 2003). Social media are natural services used to foster two-way communication between organizations and the social media audience in ways not available up until now (Guidry et al. 2017; Huang et al. 2016).These are the sites that also provide organizations with opportunities to engage in simultaneous dialogic communication with many different stakeholder groups in a public space. The way communication efforts are managed by nonprofit organizations could influence audience perceptions, attitudes, knowledge and behavior toward organizations, which can result in a different level of audience engagement.

From the organizational perspective, the other theories that make up the theoretical foundations for social media utilization include: resource dependency theory (Pfeffer/Salancik 2003; O'Connor/Netting 2009) and contingency theory. These two theories seem to be the most important in explaining the vast social media adoption in nonprofit organizations. There are also others like: diffusion of innovations theory (e.g., Rogers 1995; Vishwanath/Goldhaber 2003), unified theory of acceptance and use of technology (Curtis et al. 2010; Venkatesh et al. 2003), the technology acceptance model (e.g., Davis 1989; Zhou 2008) and the process framework (Tang/Ang 2002). However, these theories are better suited to clarifying individual inclinations for one technology over another − such as why a particular employees would favor Twitter over Facebook − rather than the organizational choice of a specific communication technology.

Both resource dependency theory (Pfeffer/Salancik 2003; O'Connor/Netting 2009) and contingency theory (Donaldson 2001) are deeply rooted in a system-based approach. According to resource dependence theory, the key to organizational development is the skill to garner resources. It acknowledges the vital role that the environment has for the prosperity of an organization. Resource dependency theory sees organizations as dependent upon their environment for scarce resources that ultimately help the organizations to survive and thrive. A resource is anything with value for the organization such as capital, information, or other materials. The results of studies of the nonprofit sector in Poland (Central Statistical Office of Poland 2016) explicitly confirm the importance of these theories in the functioning of such organizations. The most important barriers reported by PBOs were modest revenues from fundraising activities and an insufficient number of volunteers for daily activities. So, resource dependency theory could

be useful in explaining why nonprofit organizations should harness social media in communication strategies. With the still growing competition of other organizations, social media could be an important tool for organizations to engage with new donors, volunteers, and other parties involved in organizational activities.

The contingency theory is a part of the contingency approach, which posits that the effect of one variable on another depends upon a third variable, which moderates the relationship between the first two variables (Donaldson 2001). Within the contingency perspective, organizational effectiveness stems from fitting attributes to contingencies that express the situation of the organization. For instance, contingencies include the size of the organization, strategy, structure, technology and the environment. The organizational success depends upon achieving a balance between these contingencies. The social media services demonstrate new unpredictable challenges that nonprofit organizations must cope with when considering its implementation, participating online in new digital surroundings, and how this influences their own constituents or community. For some organizations social media presents the possibility to become more open, transparent, decentralized, and interactive with their community (Kanter/Fine 2010; Waters et al. 2009; Saxton et al. 2007). The American Red Cross is one of the first major examples of a nonprofit organization aligning with technology. Starting with blogs and then implementing other social media platforms, the Red Cross catalyzed the internal adoption of social media and shifted its relationship with the world (Kanter/Fine 2010). This organization developed into being more organic as opposed to mechanistic, and utilized social media to engage with their community.

To sum up, the resource dependency theory and contingency theory help one to comprehend the utilization of social media from an organizational perspective. Both recognize the vital role of the external environment with which organizations must operate in order to be successful. The online environment is rapidly becoming a venue where many people interact and organizations run a business. The chosen theories, with relationship management theory taken into consideration, help to recognize that nonprofit organizations exist in a contextual setting that includes the actual and digital communities they serve.

Engagement in social media context

Over the last thirty years, public relations theory has evolved from the functionalist approach to the co-creational approach. The functionalist approach treated the public and communication processes as tools to fulfil organizational and management objectives; and communication was unilateral from organizations to the stakeholders. Managers concentrated on communicating to the audience instead of communicating with the audience. In turn, the co-creational approach emphasizes the relationship between an organization and its audience. The best-

known theories in the co-creation approach are the symmetrical/excellence theory advanced by Grunig (1992), the relational approach proposed by Ledingham (2003) and the dialogic communication theory by Taylor and Kent. In the latter theory, an important role is attributed to the concept of engagement, which authors place within the propinquity dimension. To the authors, "engagement is part of dialogue and through engagement, organizations and publics can make decisions that create social capital" (Kent/Taylor 1998). The role of managers is to properly understand this concept. In the scientific literature it is ambiguous and basically takes the form of an ideograph, which is a set of words that are concrete, vague, and evanescent all at the same time (Taylor/Kent 2014). In order to properly understand this concept, the Dhanesh model of engagement can be used. In this model, engagement is understood as an affective, cognitive, and behavioural state wherein publics and organizations who share mutual interests in salient topics interact along continua that range from passive to active and from control to collaboration, and is aimed at goal attainment, adjustment, and adaptation for both publics and organizations (Dhanesh 2017). This definition raises serious practical implications for managers. According to the model most nonprofit users of Twitter are passive. In the Dhanesh model (2017) this corresponds to the first two levels – affective and cognitive. This is indicated by a small number of likes, retweets and especially comments on the published content. The role of the managers are to make efforts to acquire more followers. Acquiring followers can be done in various ways, for example by redirecting traffic from the Internet to Facebook or Twitter. The greater the number of followers, the greater the chance for the appearance of Social Media Influencers (SMI), because a large number of followers is a large number of passive audience, but also gives a higher probability of the appearance of SMI. Social media influencers are people on the third engagement level of the Dhanesh pyramid (behavioural level). They influence in the most essential way by building relationships based on dialogue between the organization and the audience. This is according to the Pareto Principle, which emphasizes that a small number of active publics can have a much greater impact than a larger group of passive publics. Having a large number of social media influencers brings a number of benefits to the organization, including a higher effectiveness of communication activities and a higher visibility. These benefits are particularly important for nonprofit organizations, because their functioning is most often associated with limited resources (manpower, time and money). There are, however, difficulties in estimating Return on Investment (ROI) from social media utilization, but in the age of the Internet organizations can no longer ignore their audience, because even a single individual has the ability to influence and damage an organization's reputation. The division of the audience into an active and passive segment means that the published content must be adapted to the needs of both groups.

How Nonprofits Use Twitter for Effective Public Relations

The research concerning the nonprofit use of Twitter in the Public Relations context focused mainly on how nonprofits use the various Twitter communication tools and later on evaluation how published content may influence the recipient level of engagement (Messner et al. 2013; Lovejoy et al. 2012; Waters/Jamal 2011). One of the first surveys conducted among the largest American non-profit organizations found that nonprofit organizations are primarily using Twitter to convey one-way messages instead of relationship building based on dialogue (Waters/Jamal 2011). The interactive nature of Twitter was only used to a minimal extent. Research conducted by Messner et al. (2013) among U.S. largest health-focused nonprofit organizations made it possible to formulate similar conclusions. Messner et al. (2013) refers to this broadcast model as "shovelling tweets" – sending out as many tweets as possible without much consideration for if or how followers may respond. Similar results were obtained in studies conducted by Lovejoy et al. (2012).

Research conducted by Guidry (2013) focused on how nonprofits use the various Twitter communication tools and how their use translates into a level of audience engagement. In this case, the largest US nonprofit organizations were also the subject of the research. The obtained results allowed to develop concise list of best practices for the nonprofit organization to increase audience engagement. For example, keep your tweets simple and short if your goal is to engage stakeholders in direct conversations on Twitter or use more complex tweets – tweets that include hashtags, mentions, and hyperlinks, and that contain more, rather than fewer, characters – if your goal is to have other Twitter handles retweet or favourite your tweets. If social media managers wish to start a conversation, ask questions and use direct replies. These types of conversation attempts are likely to be successful or thank your followers for their input, retweets, mentions, and actions – tweets with the word "Thanks" are more likely to be a part of a conversation.

In turn Guidry et al. (2015) analysed how social media managers in 100 largest nonprofit U.S. organizations perceive the use, benefits, and challenges of Twitter utilization. The vast majority of people responsible for managing this channel indicate that its main goal is engagement with the community and fundraising. There seems to be an increasing awareness of the importance of two- way communication on social media platforms, an encouraging shift from the earlier emphasis on asymmetrical communication between nonprofits and their stakeholders (Messner et al. 2013; Lovejoy et al. 2012; Waters/Jamal 2011). For social media managers the Twitter immediacy is considered both a blessing and a curse. It makes it possible to reach both existing and new audiences quickly, at the same time forcing them to be constantly online. Time-related issues were considered to be the most challenging for social media managers. Research con-

ducted by Ott and Theunissen (2015) and Guidry et al. (2017) pointed to the usefulness of Twitter in managing crisis situations. Also in this case, the research was conducted among large American nonprofit organizations. Studies conducted by Tripathi and Verma (2018) were one of the few that concerned nonprofit organizations other than American. They focused on nonprofit organizations operating in India and exploration major determinants of nongovernment organizations (NGOs) engagement and relationship building on social media sites including Twitter. The findings suggest that supporters engage with NGOs largely for personal and organizational reasons. Emotions, trust, and information needs emerge as the primary personal drivers for engagement, whereas organizational accountability, performance, brand image, and transparency emerge as organizational drivers. Behavioural intention mediates the relationship between the drivers of engagement and supporter contributions. The study suggests that as the number of supporters on social media platforms is rapidly increasing, NGOs should recognize the importance of the supporter experience while designing their relation building strategies.

Public Benefit Organization as a specific form of nonprofit organization

Public Benefit Organizations constitute a numerous grouping of nonprofit entities in Poland (over the years 2004–2017, the number of registered PBO has increased 4-fold from 2.2 up to 9.0 thousand, 10 % of nonprofit entities eligible for this status), which, unlike other groups, is characterized by a number of unique features. The most important of these is the privilege of receiving 1 % of personal income tax. With the introduction of this 1 % donation program to the Polish tax system, the income tax payer has obtained the right to transfer 1 % of their income tax to a chosen PBO indicated by the tax payer. A specific market was created, which can be described as the "one percent" market. The entities entitled to receive 1 % of personal income tax compete in that market, and the subject of the exchange is money. Therefore a market has been formed, the uniqueness of which is emphasized by four elements (Czetwertyński 2016). First, the market is the result of legislative decisions. As a result, taxpayers form the supply side that possesses the right to donate 1 % of personal income tax, and entities with a PBO status form the demand side. Secondly, within the market organizations compete for the favour of taxpayers so that they may transfer to them 1 % of their personal income tax. Thirdly, only specific entities can operate in this market; only those with PBO status. The last element is related to the tax, expressed monetarily, as the subject of exchange. The taxpayer transfers their contribution to the State Treasury, but as a result of an individual and autonomous decision by the taxpayer, the contribution is specifically addressed to a selected organization, and the competent tax office is obliged to transfer it. It should be emphasized that the taxpayer cannot keep this part of the tax, but they can choose a goal for it. Therefore, the "one percent" market is an excellent re-

search avenue, especially in the area of public relations. An important element in the daily activities of this type of organization is continuous communication with various organizational stakeholders, which is ultimately associated with the possibility of obtaining funds adequate to the pursued statutory objectives. Such a philosophy of Public Benefit Organization actions is deeply embedded in a system-based approach together with aforementioned resource dependency and contingency theory, which also rests upon a systematic framework.

Hypotheses development

The beginning of the social media era has generated opportunities for the type of engagement with an audience that differs significantly from those available via traditional web sites. The website does not provide direct opportunities to assess the engagement of the content recipients. The social media services have changed this perspective. The inclusion of interactive features such as liking, retweeting and commenting has facilitated the active involvement of network users in the online activities of organizations. There will always be some kind of clearly visible public reaction to organizational publishing that enables the implementation of different relationship cultivation strategies. However, scholars have not focused on these dynamic characteristics of social media services. The research still focuses on static content, such as profile pages and mainly the Facebook wall of nonprofit organizations. As a result, we are still lacking the knowledge of how the audience responds to the messages they are sent. Concentrating on the messages the organization is sending represents a significant, and essential, conceptual step forward. Moreover there are only a handful of studies pertaining to smaller entities and the research area has primarily focused on American nonprofit organizations. The scholarly literature concerning the countries of Central and Eastern Europe is even more meagre, leaving them out of the scientific mainstream.

How an organization decides to communicate is a strategic decision about how to spread information and engage stakeholders (Ledingham 2003). On Twitter the level of audience engagement is measured using the following variables: the number of likes, retweets and comments on a single tweet. Twitter, despite limitations in the number of characters, offers a relatively wide range of communication tools that can be used in a single tweet. It includes hyperlinks, hashtags, and mentions. Posts with hyperlinks include mainly web links to external websites. Additionally it is possible to add media files in the form of photos or video to each tweet. Organizations also can connect to existing topics by including a specific hashtag (#) in its tweets. The final communication tool is mention, by which an organization can connect to particular online individual through the use of user mentions, which appear when the organization includes a user's "@username".

We posit that as tweets become more complex, they will result in more engagement. By complex, we mean that the audience may experience the tweet in many ways. Tweets are read, while multimedia tweets with photos and video, and tweets with external links require more commitment to be fully understood. Tweets with mention and hashtags could also influence audience reaction based on the reciprocity rule. Those tweets that require more commitment are likely to result in greater audience engagement. This relationship is expressed in the following hypothesis:

H1: The more complex the tweet structure, the greater social media audience engagement.

We also posit that the total number of Twitter followers will influence audience engagement with a particular Twitter message. In fact, individual-level research on Twitter has found that network size (informal followers base) has a significant relationship with retweeting and message popularity (Bakshy et al. 2011). Social media practitioners must make efforts to build active and sufficiently large bases of followers. Inadequate total numbers reduces the chances of appearing as one of the so-called social media influencers (SMIs). With increases, the total engagement for an individual tweet will also increase. This relationship is expressed in the following hypothesis:

H2: As the total number of Twitter followers increases, audience engagement for individual tweets will also increase.

The audience engagement may also be influenced by organizational features such as dependence on 1 % of personal income tax and organizational size (measured by the annual revenue amount). Within resource dependence theory perspective (Pfeffer/Salancik 2003), we posit that nonprofit organizations are more dependent on 1 % of personal income tax as a source of revenue and are more likely to focus on posting the tweets that generate audience engagement. Organizations more dependent on individual contributions are more likely to be strategically dedicated to communication efforts to ensure constant audience investment (Ledingham 2003). This relationship is stated in the following hypothesis:

H3: As nonprofit organizations become more dependent on 1 % of personal income tax as a source of revenue, the audience engagement for individual tweets is likely to increase.

Research results also indicate that size of the organization is an important contingency factor improving an organization's general information technology capacity (Finn et al. 2006; Hackler/Saxton 2007). The use of Twitter and other social media sites only seems to be cost-free. It requires both financial and human resources and larger organizations seem to be better equipped to this task. For example, Baird et al. (2012) points out that the limited availability of slack re-

sources, capabilities, and management support in smaller organizations results in differences in information technology adoption between small and large organizations. The organizational size measured by total financial revenues affects the implementation of new technology and the general "IT capacity" of nonprofit organizations (Zorn et al. 2011). Moreover, as an organization grows, it becomes more visible and therefore attracts greater attention and scrutiny by external entities such as the state, the local government, media and the general audience (Nah/Saxton 2013). This in turn may lead organizations to a larger Twitter presence to address these audience concerns. We thus posit the following hypothesis:

H4:   *As nonprofit size measured by the total annual revenue increases, the audience engagement for individual tweets will also increase.*

Research methodology

Sample

Only those nonprofit organizations that, as of January 1, 2016, had the status of PBO (Public Benefit Organization) were selected. The status of PBO means the necessity to conduct thorough and transparent reporting. It gives the possibility to view valuable materials from the researcher's point of view, mainly those of a financial nature. In accordance with article 23 paragraph 6 of the Public Benefit and Voluntary Service Act, every Public Benefit Organization must submit financial statements and a technical report on its activities by the 15th of July of the year following the year when the statements are submitted (for example, data for 2016 are published in 2017, starting from the month of July). The database included over 8.000 Public Benefit Organizations. Next, it was determined which organizations use Twitter in their work. Whether the organization used Twitter was analysed first from its website (almost 70 % of organizations had their own website, N = 5371) and then the google.pl search engine was used (a portion of the organizations did not use websites in their work, but only social networking sites, mainly Facebook). In total, 221 organizations with active Twitter accounts were identified, which represents less than 3 % of all Polish Public Benefit Organizations (the distance between the most widely used social media site Facebook (over 40 %) and Twitter is very large). Then they were divided into four groups depending on the amount of total revenue gained in 2015. The first group included organizations with a revenue of more than 10 million PLN, the second group had revenues ranging from 1 million PLN to 10 million PLN, the third cohort ranged from 100,000 PLN to 1 million PLN and the fourth consisted of organizations with revenues less than 100 thousand PLN (the first group consisted of 17 organizations, the second had 82, the third – 95, and the fourth – 27 organizations). Using the formula for the minimum size of the sample with a finite population (for a confidence level of 0.95, and a maximum error of 0.05), a minimum sample size of 185 subjects was obtained (16 from the first

group, 68 from the second, 76 from the third and 25 from the fourth group). In the case of the first group (the largest entities), the research covered the entire population (a total of 186 entities were examined). The selection of PBO's from the remaining layers was accomplished using the Research Randomizer algorithm (Urbaniak/Plous 2013).

Data collection

The next stage of the research included the construction of a tweet database. To eliminate events that could cause unusually high Twitter organization activity in a short period of time, an analysis covered, respectively, a long time span. At random, between July 15 and October 12, 2017 (90 days) each day of the week was selected twice (with the elimination of situations in which the days selected for testing immediately followed one another). The applied procedure allowed the selection of the following 14 days: 15,21,23,25,27,30 July, 14,21,30 August, 13,15,19, 30 September and 12 October. Twitter from each of the 186 organizations was checked on the selected days, and each published tweet became part of the database, constituting a starting point for further analysis.

Data operationalisation and analytical procedures

The results are described below: First, the publication frequency rate was analysed as well as the utilization of available Twitter communication tools. The analysis was conducted from the level of the entire research sample and used an organizational division into four clusters (the amount of annual revenue as the criterion for the division, as previously described). Data analysis was conducted using univariate descriptive statistics associated with frequency distributions, including percentages, means and standard deviations; as well as statistical tests that included chi-square testing. Subsequently, the impact of selected parameters on the profile user engagement was analysed. With the use of the statistical program SPSS; a multiple regression analysis was carried out. Multiple regression analysis is a statistical technique used to account for the variance of a dependent variable by examining the linear combinations of independent variables that are added and removed from the regression equation. The significance threshold was set at.05.

The dependent variables for all tested hypothesis were the number of likes, comments, and retweets which measure public engagement. Liking suggests the tweet is appreciated by the public; commenting is a way of responding to a tweet and building dialogue with the public; and finally, retweeting enables users to actually diffuse the messages to their networks, which would then boost the exposure of the shared content among a broader public. The analysis was carried out for a total of 981 tweets, which were originally published content by the surveyed organizations (no retweets). These were broken down into tweets that

were classified as belonging to an organization in one of the four above-mentioned revenue based clusters.

Research conducted on American nonprofit organizations (Guidry, 2013) indicates that the content of tweets equipped with communication tools such as mention, hashtag, a photo/video file or links will trigger a greater public reaction. Based on this approach, hypothesis 1 was formulated, which adopted the following independent variables: the share of tweets with hashtags, mentions (%), the average number of hashtags and mentions in a single tweet when used, the average number of hashtags and mentions in all tweets, the share of tweets with hyperlinks (%), the share of tweets with a mention and hashtag (%), the share of tweets with only a mention (%), the share of tweets with only a hashtag (%), the share of tweets without a mention and hashtag (%), the share of tweets with a photo or video file (%), the share of tweets with a photo or video file, hashtag and mention (%), and the share of tweets with a photo or video file, hyperlinks, hashtag and mention (%).

Research conducted by Guidry (2013) indicates that the features of the organization's Twitter profile itself can affect a larger audience engagement in published content. The most important feature of the Twitter profile seems to be the total number of followers. Based on this approach, the research hypothesis 2 was formulated, assuming the significance of this independent variable for a larger audience engagement. For multiple regression analysis, other variables of the organization's Twitter profile were also taken into account, such as: total number of tweets in the analysed 14-day period, the total number of tweets since the setup of the Twitter account, the number of followees, the number of likes of other tweets and the number of days since creating a Twitter profile. However, it seems that the impact of these variables on audience engagement will be small or none, which is why they are not in the hypothesis.

Research conducted by Lee (2018) or Nah and Saxton (2013) indicate that such organizational features as the amount of human resources, the nature of employment, the location of the organization, revenues or dependence on individual donors can affect the organization's greater involvement in the use of Twitter and translate into more audience engagement. In both cases, the research subjects were American non-profit organizations. The first research group was church-related, and the second consisted of 100 of the largest American organizations of this type. The subject of the study was the organizational use of Facebook, although the authors assumed that a similar set of organizational features may translate into a greater or smaller use of Twitter. Based on this approach, two research hypotheses were formulated, one of which has not been tested in the scholarly literature, i.e. the impact of revenues from 1 % of personal income tax for audience engagaement (hypotheses 3). In turn, for hypothesis 4 the impact of total annual revenue was analysed.

Other independent variables describing organizations were also taken into account for regression analysis. These were revenue from gratuitous public benefit activities (free-of-charge services for beneficiaries), revenues from business activities, paid public benefit activities for beneficiaries (although the beneficiary payment service covers only the costs without profit for the organization), number of employees, and the geographic service area. The impact of these variables seems to be marginal, which is why they were not hypothesized.

Results

In total, for the 14 selected testing days, 186 organizations published 1179 tweets, an average of 0.45 tweets per day. The organizational division into four clusters (the amount of annual revenue was assumed as the criterion for the divisions) revealed some differences in issues related to the frequency of publishing content on Twitter. For example, the largest organizations are characterized by a clearly higher average number of published tweets (although the value of the standard deviation indicates a large differentiation in this respect). These differences are particularly visible in organizations with annual income below PLN 1 million. The detailed results are shown in table 1. In the group of organizations with annual income greater than 10 million PLN, the percentage of completely inactive organizations on Twitter in the analysed period of time was much lower. Six organizations were identified from 17 examined (35.3 %), which did not publish any tweets on their profile during the chosen days. The diversity between organizations with the highest revenues and the number of published tweets for the selected 14-day period was substantial. Only 2 organizations (11.8 %) published more than 50 tweets, and in most cases the number of published tweets ranged from 1 to 10 tweets (41.2 %). Only one large organization published content on every day selected for analysis. In the group of organizations with annual income ranging from 1 to 10 million PLN, a similar number of totally inactive organizations were identified (42.7 % in the analysed period of 14 days). As in the case of the largest organizations, the diversity in the number of published tweets was large. Only 1 organization had tweeted more than 50 times, 7 organizations tweeted from 20 to 50 times (10.3 %), 9 organizations from 10 to 20 times (13.2 %), and the most predominant category included 22 organization (32.4 %) that published between 1 and 10 tweets during the selected 14 day period. The use of Twitter by the group of organizations with revenue in the range of 100,000 to 1 million PLN was clearly lower compared to the organizations with revenues higher than 1 million PLN. Almost every second organization in this cluster (48.7 % out of 76) for the selected fourteen days did not publish any tweet. The vast majority of organizations from those who published any content on Twitter were limited to no more than 10 tweets (38.2 %). Only 10 organizations (13.1 %) tweeted more frequently, but none of them more than 50 tweets during the selected 14 -day period. In the organizational group

with the smallest revenue, not exceeding 100 thousand PLN, Twitter was used even less frequently. Only 9 organizations out of the 25 that make up this cluster published at least 1 tweet (36 %) during the selected 14 day period. Despite the noticeable percentage differences in the organizational activity on the Twitter profile (publishing at least one tweet) and the amount of revenue generated, there is no statistical relationship between these two parameters ($\chi2(3$, N=186) =4,429, p=0,219). There is also no statistical relationship between the revenue and the number of organizations that published at least 10 tweets for the selected 14 day period, although assuming a significance level of p <0.1 such a relationship existed ($\chi2$ (3, N = 186) = 7.312, p = 0.063). In the largest organizational cluster, those with high activity on their Twitter profile were identified more frequently. Summarizing all 4 of the analysed clusters, there is a large group of organizations that, despite having a profile on Twitter, did not publish any content during the analysed period.

Further analysis covered 981 tweets, as they were the original contents of the surveyed organizations, and 198 were categorized as retweets, content originally published by other organizations or individuals (the data in table 1 shows descriptive statistics for 1179 tweets, including retweets). In the dataset of 981 tweets, hyperlinks were the most commonly used tool (69.7 %, N = 683). Over 78 % of links redirected the content reader to the organization's own content, in 51 % of cases it was the organization website, in 33.9 % of cases the Facebook profile, in 8.6 % of cases other social media sites, e.g. YouTube, and in 6.4 % of cases content concerning the organization published on the profiles of other entities. At least one hashtag was used in 346 tweets (35.3 %, 611 in total, M = 0.62 per one tweet), almost 42 % of the tweets had an additional multimedia file attached in the form of a photo, and the mention option was the least frequently used, only in 197 tweets (20.1 %, 317 total, M = 0.32 per one tweet). The size of the organization, measured by the level of annual revenue, affected the utilization frequency of communication tools available on Twitter. Organizations with revenues above 1 million PLN were more likely to use hashtags (0.85 on average for entities with more than 10 million PLN revenue, compared to 0.44 hashtags used in a single organizational tweet with less than 1 million PLN annual revenue). Interestingly, the largest organizations out of all four analysed clusters were least likely to use the mention option in tweets (on average, 0.16 per one tweet).

Table 1. Size of the organization and publishing frequency on Twitter (during the 14 day period)

Organizational revenue (PLN)	Number of organizations	Total number of tweets	The average number of tweets per organization	SD for the number of published tweets	Publishing activity for 14 analysed days %			
					Number of inactive organizations on the Twitter profile	Number of organizations active on the profile that published at least 1 tweet	Number of active organizations on the profile that published from 1 to 10 tweets	Number of organizations that published at least 10 tweets
Over 10 million	17	193	11.35	20.34	35.3	64.7	76.5	23.5
From 1 to 10 million	68	538	7.91	12.78	42.7	57.4	75.0	25.0
From 100,000 to 1 million	76	368	4.84	8.15	48.7	51.3	86.8	13.2
Below 100,000	25	80	3.2	10.02	64.0	36.0	96.0	4.0

Source: Own study

Table 2. Size of the organization and the frequency of Twitter communication tool utilization

Organizational revenue (PLN)	Frequency of Twitter communication tool utilization							
	Number of tweets with at least 1 hashtag	Number of tweets with at least 1 mention	The number of tweets with a hyperlink	The number of tweets with at least 1 photo file	The number of tweets with a video file	The number of modified tweets	Average number of hashtags	Average number of mentions
	%							
Total	35,3	20,0	69,7	41,7	7,9	5,7	0,62	0,32
Over 10 million	44,6	12,5	71,2	39,7	8,7	3,1	0,85	0,16
From 1 to 10 million	39,2	28,4	71,4	38,5	8,5	7,4	0,68	0,42
From 100,000 to 1 million	22,0	13,0	68,0	46,7	3,3	1,4	0,44	0,28
Below 100,000	43,8	19,2	63,0	45,2	20,6	6,3	0,45	0,34

Source: Own study

The most commonly used reaction from the audience was to like the tweet (M = 5.58), then share the content in the form of a retweet (M = 2.59), and the rarest form of engagement was to comment on the tweet (M = 0.67). Among the organizations with annual revenue above 1 million PLN, each individual tweet was twice as often retweeted and liked on average in comparison to other organizations (e.g. M = 6.07 for entities with revenue > 10 million PLN, M = 6.95 with revenue in the range from 1 to 10 million PLN, M = 3.93 for organizations with revenue from 100 thousand to 1 million PLN and M = 3.25 for organizations with revenue less than 100 thousand PLN). Over 80 % of tweets did not receive any comments, almost 40 % were not retweeted, and almost 22 % did not receive any likes (liking or favouring the tweet is treated as the weakest form of the message recipient's involvement). 352 tweets were identified which did not trigger any reaction from the audience (35.9 % of the total from the database). Each of these three reactions was also associated with a high standard deviation value. The so-called super tweets were responsible for the SD high value, defined as those that caused a different audience reaction at least 50 times. In the case of comments, only two tweets were commented on at least 50 times (in the case of comments the SD value was the lowest), 6 tweets were retweeted at a high degree and 13 tweets were liked by at least 50 tweet recipients (in the case of liking the tweet the standard deviation value was the highest). In the entire database (N=981), only two tweets were identified, which were commented, retweeted and liked at least 50 times (the record tweet was commented on 379 times, retweeted 491 times, liked 794 times).

To find a factors influencing the audience engagement, a multiple linear regression analysis was performed. Firstly, there were 94 organizations identified, which during the analysed 14-day period tweeted original content at least once (4 organizations only published retweeted content, they were not included in further analysis, 88 organizations in the analysed period did not publish any tweets). Basic descriptive statistics for the so-constructed cluster were as follows:

- The sample cluster consisted of 11 organizations with annual revenue of over 10 million PLN, 39 organizations with annual revenue in the range of 1 to 10 million PLN, 36 organizations with annual revenue in the range of 100,000 to 1 million PLN and 8 organizations with annual revenue less than 100,000 PLN;
- The average size of annual revenue from 1 % of personal income tax in the largest organizations amounted to 1.6 million PLN, in the organizations with annual revenue in the range from 1 to 10 million PLN, it amounted to slightly over 215 thousand PLN, in the organizations with annual revenue in the range from 100 thousand to 1 million PLN it amounted to 25 thousand PLN, and in the smallest entities – almost 51 thousand PLN;

- The average number of employees in the 94 analysed organizations was slightly over 10, the organizations had an average of 1363 followers (in the range of 1 to 22234 followers), and the organizations followed an average of 353 users (in the range from 0 for 5 organizations to 3684 followed users), the average length of having the Twitter profile stood at 1664 days;
- For 12 organizations, all published tweets had been retweeted by other users, and for 33 organizations none of the published tweets were retweeted. For the option of liking the tweet, the proportion was respectively 27 and 29 organizations, and only in the case of one organization all published content on the Twitter profile was commented on. In the case of as many as 60 organizations, none of the published tweets received any comments;
- The average number of retweets ranged from 0 to 45.5 as the highest value for 33 organizations, the average number of likes ranged from 0 to 101.38 (highest value) for 29 organizations, and the average number of comments ranged from 0 to 19 (highest value) for 60 organizations.

For each organization, the average share of tweets with hyperlinks, with mention and hashtag, only with mention, only with hashtag, no mention and hashtags were determined. Also, the average number of mention and hashtags in the single tweet when used was established. At the end, the share of tweets with a photo or video file attached was set down. The explained variables in the multiple regression analysis were the percentage of tweets set individually for each organization, which were liked, retweeted and commented on, as well as the average number of likes, retweets and comments. The adoption of the percentage share as an explained variable results from the fact that, unlike the American nonprofit organizations, where practically every tweet triggers some kind of reaction from the audience in the form of liking, retweeting or commenting, Polish Public Benefit Organizations are characterized not only by low publication frequency, but also by a small reaction from the audience (almost 36 % of tweets did not trigger any reaction). Explanatory variables consisted of communication tools used in a single tweet (e.g. mention, hashtag, link, photo or video file), basic profile characteristics (e.g. the number of followers and followees, the number of likes of others tweets, number of days of having a Twitter profile) and chosen organizational parameters (e.g. total annual revenue, revenues divided into sources -for example revenues from 1 % of personal income tax, number of employees, and geographic service area).

First, the factors influencing the probability that a particular tweet will be retweeted were analysed (Model 1). The first predictor, the percentage share of tweets which did not include such communicative tools like a mention or a hashtag alone explained up to 32.8 % of the variance. The negative value of the B coefficient indicates that with the increasing share of tweets without such communicative tools like mention and hashtags the percentage share of retweeting action is decreasing. Adding a number of followers as a predictor increased the

dependent variable percentage of the explained variance by 13.9 %. The B coefficient in this case is positive, so as the number of followers increases, the increase in the retweet level is also noticeable. In the third step, a share of tweets with photo or video file (%) was added to the model, which improved the model's fit by 2.7 % to 49.4 %. In the next step, the number of followees was attached, thus the 50 % value of the explained variance was exceeded. Although the addition of this variable improved the model fit only by 1.9 %, this change was statistically significant, as indicated by the statistically significant value of the F test. In the last step, the tweets with hyperlinks in the content were included in the model. This predictor improved the model's fit by 2.0 % up to 53.3 %. The presence of hyperlinks in the tweet mobilized the audience to more frequent retweets, which is indicated by the positive B coefficient. Other variables have not been introduced to the model. The summary of the analysis is presented in Table 3.

Three predictors have been introduced to the model that identifies factors affecting the average number of retweets (Model 2). The number of followers predictor, alone, explained up to 33.6 % of the variance. Adding a number of followees as a predictor increased the dependent variable percentage of the explained variance by 6.4 %. The third and last step was the inclusion of the number of likes of others tweets in the regression model. The change in the percentage of explained variability in the average number of retweets was modest (2.1 %), but statistically significant. Interestingly, the B coefficient was positive for the first two predictors, but negative for the number of likes of others tweets. This means that in this model the average number of retweets decreases when the number of likes of other tweets increases. Finally, a regression model with three predictors explained 42.1 % of the variation in the average number of retweets (Table 3).

Also, three predictors were introduced to the model explaining the factors affecting the percentage share of tweets that were liked (Model 3). The percentage share of tweets with hashtags explained almost 30 % of the explained variable. Adding a number of followers predictor increased the percentage of the explained variance by 7.4. The third and final step was the inclusion of the percentage share of tweets with photo or video file in the regression model. This variable increased the model fit by 3 % (to the level of 40.3 %). Other variables have not been introduced to the model. Analysis of the value of the B coefficient indicates that all three introduced variables are positively related to the dependent variable. A summary of the analysis is presented in Table 3.

Table 3. A multiple regression analysis for factors affecting the percentage and average number of retweets, likes and comments.

Elements	Model 1	Model 2	Model 3	Model 4	Model 5
	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)
(Constant)	0,231* (0,11)	-0,057 (0,616)	0,239*** (0,054)	1,313 (1,531)	0,022 (0,019)
Share of tweets without mention and hashtag (%)	-0,372*** (0,075)				
The number of followers	0*** (0)	0,001*** (0)	0* (0)	0,003*** (0)	0*** (0)
Share of tweets with photo or video file (%)	0,241** (0,084)	0,004*** (0,001)	0,227* (0,097)		
The number of followees	0* (0)			0,007** (0,002)	
Share of tweets with hyperlinks (%)	0,221* (0,101)				
The number of likes of others tweets		-0,001* (0,001)			
Share of tweets with hashtag (%)			0,525*** (0,122)		
Total number of tweets in the analysed 14-day period				-0,177* (0,081)	
Revenues from 1% of personal income tax					0** (0)
Share of tweets with mention only (%)					0,202* (0,084)
R^2	0,533	0,421	0,403	0,479	0,418
ΔR^2	0,020	0,021	0,030	0,022	0,032
F of change	4,78*	4,16*	5,44*	4,79*	5,77*

Model 1- The percentage of retweeted content; Model 2 – The average number of retweets; Model 3 – The percentage of content that was liked;
Model 4- The average number of likes; Model 5 – The percentage of content that were commented
* – $p < 0,05$; ** – $p < 0,01$; *** – $p < 0,001$
Source: Own study

A multiple regression analysis was also used to identify factors affecting the average number of likes (Model 4). The number of followers explained up to 42.2 % of the variance. Adding a number of followees as a predictor increased the dependent variable percentage of the explained variance by 3.4 %. In the next and – as it turned out – last step, the total number of tweets in the analysed 14-day period was added to the model. A negative value of the B coefficient indicates that with the increase in the total number of tweets in the analysed 14-day period, the average number of likes decreases. The change in the percentage of explained variability in the average number of likes was small (2.2 %), but statistically significant, as indicated by the F test value. The three predictors explained 47.9 % of the variance in the average number of likes (Table 3).

The last analysed explained variables were the percentage share of tweets that were commented on (Model 5) and the average number of comments (Model 6). Similar to the average number of likes, the number of followers explained 33.7 % of the variance in the percentage share of tweets that were commented on. In the second step, revenues from 1 % were included in the model. Similarly to the first variable, along with the increase in revenues from this source, the % of tweets that were commented on grew. Due to the very small values of non-standardized factor B resulting from the unit measuring the number of observers and revenues from 1 %, incommensurable to the unit of measurement of the percentage share of comments, the value of the β coefficient was taken into account. The model with two predictors explained 38.6 % of variation in total. In the third step, the share of tweets with a mention option only was included in the model. Also, this variable was positively related to the explained variable, as indicated by the positive value of the Beta coefficient. This predictor improved the model's fit by 3.2 %. The three predictors explained 41.8 % of the variance in the percentage share of tweets that were commented on. A summary of the analysis is presented in Table 3.

In turn, for the average number of comments, it was not possible to create a well-fitted model. It was only possible to usher into the model one variable, which was the number of followers. However, this feature explained only 5.5 % variation in the average number of comments.

In conclusion, the number 2 hypothesis has been positively verified. The number of followers has a statistically significant impact on audience engagement. As the total number of Twitter followers increases, audience engagement for individual tweets also increased. Only in the case of an average number of comments, the larger follower base did not translate into greater audience engagement.

The hypotheses number 1 and 3 have been partially confirmed (hypothesis number 3 to a much lesser extent). The complexity level of the single tweet affects audience engagement. For example, the smaller the percentage of tweets without

a mention or hashtag, the lower the likelihood is that a tweet will be retweeted. A similar situation was observed in the case of tweets with attached multimedia files in the form of a photo or video or with an attached hyperlink. A tweet with an attached photo or short video was also associated with a greater likelihood that such a tweet would be liked. Also, the share of tweets with a hashtag increases the likelihood that a given tweet will be liked. In turn, the amount of obtained 1 % of personal income tax in a statistically significant way affected only the probability that the tweet will be commented upon.

Hypothesis number 4 has been rejected. The size of the organization measured by the level of annual income does not translate into audience engagement. The amount of revenue affected only the frequency of published content. The larger the organization is, the higher the frequency.

Discussion

The obtained results indicate that the frequency of published content on Twitter of Polish Public Benefit Organizations in comparison to Anglo-Saxon countries is clearly lower (e.g. Messner et al. 2013). There is also a small audience reaction to the published content both in the form of likes, retweets, and especially comments. Also in this respect, Polish non-profit organizations clearly differ in disadvantage from organizations operating in the most-developed countries. The role of Twitter in building and cultivating relationships with the public seems to be small in Public Benefit Organizations. It seems to be at most complementary to the much more frequently utilized Facebook. This situation should be assessed negatively as building positive relationships with the public should take place via all possible channels, especially in organizations operating on the basis of limited financial and manpower resources and for which funds obtained from individual persons under 1 % income tax form a significant part of the annual budget. It also appears that most PBO users of Twitter are passive, representing the first two levels in the Dhanesh model of engagement (2017) as proven by a small number of likes, retweets and especially comments on a single tweet.

So, firstly managers in Polish Public Benefit Organizations need to increase the frequency of published content. Otherwise, having a profile on Twitter is pointless and even harmful to the organization (the profile user may get the impression that the organization is not functioning). Only a few organizations were identified whose publishing activity was high, two in the group of the largest organizations with revenue higher than 10 million PLN and also two for the other examined organizations (more than 50 tweets in the analysed 14-day period). It is worth emphasizing that the surveyed organizations are characterized by a large diversity in terms of their publishing activity on Twitter. On the one hand, 32 organizations selected for the analysis published at least 10 tweets (17.2 %), and on the other hand there were 88 organizations that did not use Twitter at all

(47.3 %) in the analysed 14-day period. Such a small utilization of Twitter by Polish Public Benefit Organizations may be the result of many reasons. First of all, many nonprofit organizations are struggling with a lack of time and resources needed to properly manage social media channels, which in the case of Twitter could be especially important. The Twitter operation mechanism requires very frequent updates of the published content. The results suggest that the problem related to the lack of qualified staff could play an important role, because the organizations publication activity decreased over the weekend, for example (people with experience in managing online communication channels are aware that there are no opening and closing times on the network). It is worth stressing, however, that the publishing activity of the organization has limits. Research shows that publishing 3 to 5 tweets per day gives the best results in the context of audience engagement (Liang/Fu 2017).

Secondly, managers in Polish PBOs have to make some serious efforts to acquire a larger base of followers. The higher it is, the more likely that the socalled Social Media Influencers (SMI) will appear, or people or organizations that can significantly affect the perception of the organization by its stakeholders. They represent the most influencing level in the Dhanesh model of engagement (third level). They determine the level of engagement of a single tweet to the greatest extent. The multiple regression analysis proved the role of a sufficiently large follower base. It explained the largest percentage of variance in terms of the average number of retweets, the average number of likes, and the percentage of tweets that were then commented on. The significance of this factor, although slightly smaller, was also reflected in the model explaining the percentage share of retweeted content and content that was liked. A sufficiently large database of profile followers seems to be the most important prerequisite for obtaining a higher audience engagement. Not only does a higher follower count indicate more influence in organizational activity, but it also indicates that the audience is interested in the content. In this case, the organization may use a number of available tools to build an appropriate user-base (the number of followers). Available tactics can be divided into two groups; for example, they may be associated with the published content and/or static elements of the profile. As for the first set of tools, an organization can simply publish more. Unlike Facebook or YouTube, Twitter seems to require a more aggressive content strategy, but it cannot mean mindlessly publishing a large amount of content.

Considering the very short lifespan of the tweet, publishing the same content multiple times seems like a reasonable solution as well. The exact time of publishing is also an important feature. The scholarly literature indicates that there are optimal times to post on social media; for example, brands typically see the most engagement during weekdays in the early and late afternoons. Utilization tools such as a hashtag or adding a photo or video to a tweet may also translate into more audience engagement. This is confirmed by the results of our own re-

search, which indicate that tweets that do not contain hashtags or a mention; negatively affected the percentage of tweets that were later retweeted. On the other hand, tweets with a photo/video file or a hyperlink to specific content had a positive effect with regards to retweeting. Tweets containing a photo/video file or hashtags in their content also translated into a greater percentage of tweets that were later liked. Even in the tweet itself, it is possible for the person responsible for the published content to ask for retweets. In turn, the use of the mention tool in the single post translated into a larger percentage of tweets that were later commented on. Thus, the above-mentioned results make up a concise list of the best practices for a nonprofit organization and it seems similar to those proposed by other researchers (e.g. Guidry 2013).

The second set of tactics aimed at building a larger follower database is associated with the static elements of the profile. For example, the person responsible for running the profile should pay special attention to the number of observed users (number of followees). The results of our own research show that the higher the number of followees, the higher the average number of likes and retweets. The so-called principle of reciprocity is responsible for this phenomenon. Reciprocity is the first principle in the concept of stewardship primarily associated with fundraising, according to which another profile user clearly (dedicated to a specific user) express his gratitude for adding him to the list of followees by joining the list of organization followers (Kelly 2001; Waters 2009). At the same time, the research results indicate large differences between the number of followers and the number of followees clearly in favour of the former, which should be assessed negatively.

Another tool that can be used to acquire more followers is related to the use of other platforms to redirect additional traffic to Twitter. The use of such tactics may be particularly useful in the case of Polish Public Benefit Organizations using Facebook, for example which is by far the most popular social media site in Poland. The person responsible for running a profile can also promote Twitter on all organizational marketing materials. This includes business cards, brochures, signs and websites, of course. An organization can promote their Twitter account by using a follow button on their website or blog, embed tweets in their website content or ask email subscribers to follow the organization on Twitter. The optimization of Twitter bio can also contribute to building a sufficiently large follower database, especially when considering that a large number of tweets are suspected to originate from bot accounts. An organization needs to be sure that it is professional, complete and that it does an excellent job of representing activities in their area of expertise.

It is worth noting that attaching a person to the number of Twitter profiles that you follow may also be the result of his own initiative and identification with the ideas and values proclaimed by the organization. Therefore, it can be concluded

that despite the increasing technological advancement and the use of sophisticated information exchange techniques, the organization itself and the ideas it presents are still the most important (this can later be translated into content published in online channels). It is important, therefore, that a given idea and related contents arouse controversy, evoke strong emotions, are up to date, etc. As an example, you can give an action on Twitter "Stop lawlessness" regarding the reform of the Polish judiciary and related EU objections regarding the state of law in Poland. This problem caused a lot of controversy in Poland and "the real world" protests were current, that's why tweets associated with this event attracted a large crowd of followers, and consequently triggered a large audience reaction. The use of sophisticated communication tools in this case, such as hashtag, mention or hyperlinks, was not very important and only fulfilled an auxiliary role. Thus, it can be seen that social media, despite different ways of disseminating information (compared to traditional media), are still grounded in real problems, and the number of followers (observers) does not depend on technological advancement in the way information is provided (e.g. Tweet construction), only from the "real" problem. This principle seems to be universal, i.e. it applies regardless of the country, because human behavior in this respect is rather similar.

The findings from this study indicate that such organizational features like size measured by the level of annual revenue, employment level or geographical range of activity were not associated with greater publishing activity and did not translate into a higher level of audience engagement (the organizations were divided into five groups: operating abroad; throughout the country, province, or several provinces; operating in the county or several counties; operating in communes or several communes; or operating in the neighbourhood- data from annual reporting forms). The results of research conducted by Nah and Saxton (2013) on a sample of the largest 150 US charities have been partially confirmed. They found no evidence of a relationship between size and the adoption of social media technologies. In other words, size may not be as strong of a determinant in the use of social media as it has been for previous technologies. In the case of Polish Public Benefit Organizations, those with lower total annual revenues are clearly lagging behind larger organizations in terms of the utilization of social media sites (Olinski/Szamrowski 2018). However, in the organizations that had harnessed Twitter in their work, there was no statistical relationship between the publishing activity in the analysed 14-day period and the size of the organization measured by the level of annual revenue. Smaller organizations with inadequate financial resources do not have a hopeless position in a competitive struggle to reach a wider audience through Twitter, although this requires long-term commitment and an appropriate set of skills for people responsible for managing the profile. Technical expertise and the ability to navigate in the changing world of social media platforms seems to be especially important in the context of building a sufficiently large follower base, which is the most

important factor affecting audience engagement in Polish Public Benefit Organizations.

A unique feature of a public benefit organization, i.e. the possibility of receiving 1 % of personal income tax, affected the higher level of audience engagement only in the percentage of tweets that were later commented on, although it explained only a small part of the variance. Thus, this important privilege does not translate into a greater interest in this social media site, although Twitter potentially seems to be a perfect tool for easy access to the potential donor for a share of the tax. To sum up, Twitter's interactive potential in relationship cultivation for Polish Public Benefit Organizations has not been fully utilized. Although the average length of running a Twitter profile among Polish Public Benefit Organizations amounted to 1664 days (4 and a half years), they still face a childhood disease associated with a small follower base. The importance of Twitter is at best complementary to Facebook, which is much more popular in Poland. To take full advantage of Twitter, potential managers of the Polish nonprofit organizations still have a lot of catching up to do in this area.

Conclusions

The findings from this study have several important theoretical and practical implications. Its main contribution to the existing literature lies within the area of research. First, whereas most prior studies conducted in the developing countries of Eastern and Central Europe focus almost solely on whether organizations exploit social media, our study pays attention to how they exploit it. This article has employed a trio of behavioural indicators (the number of likes, retweets and comments, on the basis of which the audience engagement rate was evaluated). In this case, the number of likes from the organizational point of view seems to have the least importance, because they do not intentionally amplify the audience reach of a tweet, in contrast to retweets. Also, the Comments are clearly more important as they start conversations that can contribute to building dialogue-based relationships. From a research point of view the use of behavioural indicators in research gives the possibility of testing normative theories and claims. The Public Relations literature (e.g. Masud 2015; Ki/Hon 2009; Hinson et al. 2014; Cutlip et al. 2006; Grunig 1992; Kent/Taylor 1998) is full of normative claims regarding public needs or how the organization should respond to those needs. For example in the above-mentioned literature, you can find suggestions that stakeholders desire more interactive, dialogic content. This supposition before the advent of social media sites has primarily been tested attitudinally e.g. website research and their role in building relationships with the public did not facilitate the collection of behavioural, stakeholder-response data. Therefore, it was necessary to conduct qualitative research. Scholars no longer need to scrutinize only the organizational side of the organization–public relationship.

The utilization of behavioural data from social media studies are a very helpful tool in gauging the effectiveness of online relationship cultivation strategies.

A number of significant limitations in this study need to be weighed up. First, the function of the tweet was not analysed. For example, in research by Lovejoy and Saxton (2012), three main functions of the tweet were distinguished -information, community-building and call to action. One of these functions may translate into a higher audience engagement. For example, tweets in the form of a question may be destined at building relations based on dialogue. The research into American nonprofit organizations indicates that users of social media sites appreciate organizational attempts at dialogue building (Saxton/Waters 2014). Second, the research did not evaluate the emotional overtones of the content being commented on. Only the average number of comments was taken into account, there was no analysis of whether the comments were positive, negative or neutral. Third, at the end of 2017 the character limit for a single tweet increased from 140 to 280 characters. Conducting comparative research seems to be fully justified in this case. Perhaps it will affect other perceptions of Twitter's role in the relationship building process. Further research should also focus on the composition of followers. The proper segmentation process means that the content needs to be adjusted to the recipient's requirements. Finally, qualitative research would be a perfect addition to quantitative research. It could examine the role of Twitter in the relationship building process, and the research should be focused toward those responsible for managing the social media profiles.

References

Baird, A./Furukawa, M. F./Raghu, T. S. (2012): Understanding contingencies associated with the early adoption of customer-facing web portals, in: Journal of Management Information Systems, 29(2), 293–324.

Bakshy, E./Hofman, J. M./Mason, W. A./Watts, D. J. (2011): Everyone's an influencer: Quantifying influence on Twitter, in: Proceedings of the Fourth ACM International Conference on Web Search and Data Mining, New York, NY, 65–74.

Curtis, L./Edwards, C./Fraser, K.L./Gudelsky, S./Holmquist, J./Thornton, K./Sweetser, K.D. (2010): Adoption of social media for public relations by nonprofit organizations, in: Public Relations Review, 36(1), 90–92.

Cutlip, S.M./Center, A.H./Broom, G.M. (1994): Effective public relations. Englewood Cliffs, NJ: Prentice-Hall.

Cutlip, S.M./Center, A.H./Broom, G.M. (2006): Effective public relations (9th ed.). Upper Saddle River, New Jork: Prentice Hall.

Czetwertyński, S. (2016): Konkurencja na rynku jednego procenta, in: Społeczeństwo i Ekonomia, 1 (5), 69–84.

Davis, F.D. (1989): Perceived usefulness, perceived ease of use, and user acceptance of information technology, in: MIS Quarterly, 13(3), 319–339.

Dhanesh, G.S. (2017): Putting engagement in its PRoper place: State of the field, definition and model of engagement in public relations, in: Public Relations Review, 43, 925–933.

Donaldson, L. (2001): The contingency theory of organizations. Thousand Oaks, CA: Sage.

Dozier, D.M./Grunig, L.A./Grunig, J.E. (1995): Manager's guide to excellence in public relations and communication management. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Finn, S./Maher, J. K./Forster, J. (2006): Indicators of information and communication technology adoption in the nonprofit sector: Changes between 2000 and 2004, in: Nonprofit Management and Leadership, 16(3), 277–295.

Grunig, J.E. (1992): What is excellence in management, in: Grunig, J.E. (ed.): Excellence in public relations and communication management, Hillsdale, New Jork: Lawrence Erlbaum Associates, 219–249.

Guidry, J.D. (2013):- A Tale of Many Tweets: How Stakeholders Respond to Nonprofit Organizations' Tweets, Master of Professional Studies thesis, Washington: George Washington University, DC.

Guidry, J.P./Jin, Y./Orr, C.A./Messner, M./Meganck, S. (2017): Ebola on Instagram and Twitter: How health organizations address the health crisis in their social media engagement, in: Public Relations Review, 43(3), 477–486.

Guidry, J.D/ Saxton, G.D./ Messner, M. (2015): Tweeting Charities: Perceptions, Resources, and Effective Twitter Practices for the Nonprofit Sector, in: Waters, R.D (ed.): Public Relations in the Nonprofit Sector. Theory and Practice. New York: Routledge.

Hackler, D./Saxton, G. D. (2007): The strategic use of information technology by nonprofit organizations: Increasing capacity and untapped potential, in: Public Administration Review, 67(3), 474–487.

Hinson, R.E./van Zyl, H./Agbleze, S. (2014): An interrogation of the dialogic potential of insurance firm websites in Ghana, in: Information Development, 30(1), 56–69.

Huang, Y.C./Lin, Y.P./Saxton, G.D. (2016): Give Me a Like: How HIV/AIDS Nonprofit Organizations Can Engage Their Audience on Facebook, in: Aids Education and Prevention, 28(6), 539–556.

Kanter, B./Fine, A. H. (2010): The networked nonprofit: Connecting with social media to drive change. San Francisco, CA: Jossey-Bass.

Kelly, K.S. (2001): Stewardship: The fifth step in the public relations process, in: Heath, R.L. (ed.): Handbook of public relations, Thousand Oaks, CA: Sage, 279–289.

Kent, M.L./Taylor, M. (1998): Building dialogic relationships through the World Wide Web, in: Public Relations Review, 24(3), 321–334.

Ki, E.J./Hon, L.C. (2009): A Measure of Relationship Cultivation Strategies, in: Journal of Public Relations Research, 21(1), 1–24.

Ledingham, J.A. (2003): Explicating Relationship Management as a General Theory of Public Relations, in: Journal of Public Relations Research, 15(2), 181–198.

Lee, Y.J. (2018): Is your church "liked" on Facebook? Social media use of Christian congregations in the United States, in: Nonprofit Management and Leadership, 28(3), 383–398.

Liang, H./Fu, K. (2017): Information Overload, Similarity, and Redundancy: Unsubscribing Information Sources on Twitter, in: Journal of Computer-Mediated Communication, 22, 1–17.

Lovejoy, K./Saxton G.D. (2012): Information, Community, and Action: How Nonprofit Organizations Use Social Media, in: Journal of Computer-Mediated Communication, 17(3), 337–353.

Lovejoy, K./Waters, R.D./Saxton, G. (2012): Engaging stakeholders through Twitter: How nonprofit organizations are getting more out of 140 characters or less, in: Public Relations Review, 38, 313- 318.

Masud, I. (2015): Evaluating hotel websites as a marketing communication channel: A dialogic perspective, in: Information Development, 32(3), 718–727.

Messner, M./Jin, Y./Medina-Messner, V./Meganck, S./Quarforth, S./Norton, S. (2013): 140 characters for better health: An exploration of the Twitter engagement of leading nonprofit organizations, in: Al-Deen, H.N./Hendricks, J.A. (ed.): Social media and strategic communications. Basingstoke. UK: Palgrave Macmillan.

Nah, S./Saxton, G. (2013): Modeling the adoption and use of social media by nonprofit organizations, in: New Media and Society, 15(2), 294–313.

O'Connor, M.K./Netting, F.E. (2009): Organization practice: A social worker's guide to understanding human services, New York: John Wiley & Sons Inc.

Olinski, M./Szamrowski, P. (2018): Znaczenie mediów społecznościowych w funkcjonowaniu organizacji pożytku publicznego, in: Zeszyty Naukowe Politechniki Śląskiej. Organizacja i Zarządzanie, 117, 351–368.

Ott, L./ Theunissen, P. (2015): Reputations at risk: Engagement during social media crises, in: Public Relations Review, 41, 97–102.

Pfeffer, J./Salancik, G.R. (2003): The external control of organizations: A resource dependency perspective, New York: Harper & Row Publishers Inc.

Rogers, E. (1995): Diffusion of Innovations. New York: Free Press.

Saxton, G.D./Guo, C./Brown, W.A. (2007): New dimensions of nonprofit responsiveness: The application and promise of Internet-based technologies, in: Public Performance & Management Review, 31(2), 144–173.

Saxton, G.D./Waters, R.D. (2014): What do stakeholders like on Facebook? Examining public reactions to nonprofit organizations' informational, promotional, and community building messages, in: Journal of Public Relations Research, 26(3), 280–299.

Tang, P.S./Ang, P.H. (2002): The diffusion of information technology in Singapore schools: A process framework, in: New Media & Society, 4(4), 457–478.

Taylor, M./ Kent, M.L. (2014): Dialogic Engagement: Clarifying Foundational Concepts, in: Journal of Public Relations Research, 26: 384–398.

Tripathi, S./Verma, S. (2018): Social media, an emerging platform for relationship building: A study of engagement with nongovernment organizations in India, in:. International Journal of Nonprofit and Voluntary Sector Marketing, 23(1), 1–11.

Urbaniak, G.C./Plous, S. (2013): Research Randomizer, (Version 4.0) [Computer software]. Retrieved on April 22, 2016, from http://www.randomizer.org/

Venkatesh, V./Morris, M.G./Davis, G.B./Davis, F.D. (2003): User acceptance of information technology: Toward a unified view, in: MIS Quarterly, 27(3), 425–478.

Vishwanath, A./Goldhaber, G.M. (2003): An examination of the factors contributing to adoption decisions among late-diffused technology products, in: New Media & Society, 5(4), 547–572.

Waters, R.D. (2009): Measuring stewardship in public relations: A test exploring impact on the fundraising relationship, in: Public Relations Review, 35,113–119.

Waters, R.D./Burnett, E./Lamm, A./Lucas, J. (2009): Engaging stakeholders through social networking: How nonprofit organizations are using Facebook, in: Public Relations Review, 35(2), 102–106.

Waters, R.D./Jamal, J.Y. (2011): Tweet, tweet, tweet: A content analysis of nonprofit organizations' Twitter updates, in: Public Relations Review, 37(3), 321–324.

Zhou, Y. (2008): Voluntary adopters versus forced adopters: Integrating the diffusion of innovation theory and the technology acceptance model to study intra-organizational adoption, in: New Media & Society, 10(3), 475–496.

Zorn, T.E./Flanagin, A.J./Shoham, M.D. (2011): Institutional and noninstitutional influences on information and communication technology adoption and use among nonprofit organizations, in: Human Communication Research 37, 1–33.