World Scientific News

An International Scientific Journal

Determinants of the engagement of customers in social media

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ABSTRACT

The article moves the problem of building customer engagement in social media. Attention is drawn to the fact that in the activities of companies in social media, it's not about building the largest community around them, but above all about making it involved. The aim of the research was to present determinants influencing fans' engagement on the example of analysis of Facebook profiles of the best interactive agencies & PR in Poland. As the main hypothesis, it was assumed that the size of Facebook profile determined by the number of fans does not affect the fans' engagement.

Keywords: social media, customer engagement, social media communication, social media marketing, customer relationship management

1. INTRODUCTION

Engagement of customers is a key parameter determining the effectiveness and efficiency of marketing activities in social media. Recognizing the factors that affect them is very important for companies. Their efforts should not focus on building the largest possible community in social media, but on constantly engaging clients. Such a change in the direction of activities can bring a lot more benefits to the company.

The aim of the article is to present determinants influencing the engagement of customers in social media. One formulated the main hypothesis that the size of Facebook profile (determined by the number of fans) does not affect the fans' engagement. The activity of administrators and content matched to the customers plays a key role in building engagement on Facebook.

2. LITERATURE REVIEW

A lot of research has been done over the past decade about social media and their impact on business. Ten years ago, Winer (2009) mentioned new communications approaches in marketing, while Mangold and Faulds (2009) signaled a revolution in social media communication, which became "the new hybrid element of the promotion mix". Studies like those conducted by Schivinski and Dabrowski (2016) suggest that social media as an area of activity for companies finally - at the advice of Kietzmann, Hermkens, McCarthy and Silvestre (2011) - began to be taken seriously by both theoreticians and practitioners. It turned out that the activity in social media companies has a real economic dimension. Therefore, in 2012, the problem of using social media was more strategic. Attention was drawn to the influence of social media on purchasing decisions of clients, which is treated, among others, in work of Wang, Yu and Wei (2012). The authors of Castronovo and Huang (2012, p. 122) noticed that "a successful social media strategy must begin with an understanding of consumer conversations and characteristics.

Consumers are more likely to respond to a social media strategy when they are able to interact with and help others". At the same time, the study of Macnamara and Zerfass (2012, p. 16) showed that "use of social media for organizational communication is shown to be mostly experimental and ad hoc, rather than strategically planned in organizations across a number of countries. Specifically, organizational social media communication is most often undertaken without clear objectives and it is not integrated with other organizational communication, and not evaluated against objectives and Key Performance Indicators". Thus, it was emphasized how important in the strategic approach to social media is proper communication management in these media and building relationships with clients. Attention was paid to the important role that social media can play in customer relationship management (Heller Baird C. & Parasnis G. 2011). For example, it was developed foundation for a successful social media program that should help in building customer relationships process (Ibidem).

In the process of managing customer relations, building customer commitment in social media plays a key role. This is mentioned by: Berthon, Pitt, Plangger and Shapiro (2012), Dutot (2013), Frick (2013), Kozinets (2014), Malthouse, Haenlein, Skiera, Wege and Zhang (2013), as well as VanAuken (2015). Sashi (2012) drew attention to the possibility of integrating social media with other standard solutions to build engagement, which may prove more effective: "achieving customer engagement requires facilitating customers' transition through several stages in the customer engagement cycle: connection, interaction, satisfaction, retention, commitment, advocacy, and engagement. A mix of digital and non-digital technologies can be employed for the purpose and different mixes are required for each stage of the customer engagement cycle" (Ibidem, p. 267).

When it comes to research on customer engagement factors in social media, one can indicate works of Pronschinske, Groza and Walker (2012). These authors stated that

authenticity and engagement of brands are important in attracting fans on Facebook. In addition, the publication of Ashley and Tuthe (2015) confirmed the importance of frequent updates and incentives for participation in social media communication.

In the context of this article, valuable was research by the authors of De Vries, Gensler and Leeflang (2012). They investigated the impact of specific determinants on the popularity of brand posts. Among the studied factors were: vividness of post, content of brand posts (information and entertainment), position of a brand post on the brand fan page, the share of positive/negative comments on a brand post, etc.

Undoubtedly there are many determinants that affect the popularity of posts and, consequently, the engagement of customers in social media, and it is not a closed catalog. There is a need to learn more about them, so that it would be possible to achieve the company's goals with greater efficiency. It is particularly important to draw attention to the fact that in the activities of companies in social media, it's not about building the largest community around them, but rather about building customer engagement. Having even a small community around, but more involved, one can have a more positive impact on the company's image and on building brand awareness.

3. METHODOLOGY

The aim of the research is to present determinants influencing fans' engagement on Facebook. As the main hypothesis (H), it was assumed that the Facebook profile size, determined by the number of fans, does not affect the fans' engagement. The activity of administrators and content matched to the customers plays a key role in building engagement on Facebook.

The detailed hypotheses are as follows:

H1: Significantly smaller Facebook profiles (up to 5 times smaller than the competition) can be more popular, i.e. more people can talk about them on Facebook compared to competition.

H2: Even a few dozen times smaller Facebook profiles than the competition can have greater interaction strength.

H3: Even a few dozen times smaller Facebook profiles than competitors can have more engaging content than the competition.

H4: Significantly smaller Facebook profiles (even 5 times smaller than the competition) may have more interaction on Facebook than their competition.

H5: Significantly smaller Facebook profiles (up to 5 times smaller than the competition) can have a larger share in user interactions.

H6: Facebook profiles with the most user involvement have the most active administrators.

H7: The engagement of fans depends on the type of published post (graphics, video, link, status).

H8: Fans' engagement depends on the time one post.

H9: The most engaged are posts that are valuable to the customers and are matched to them.
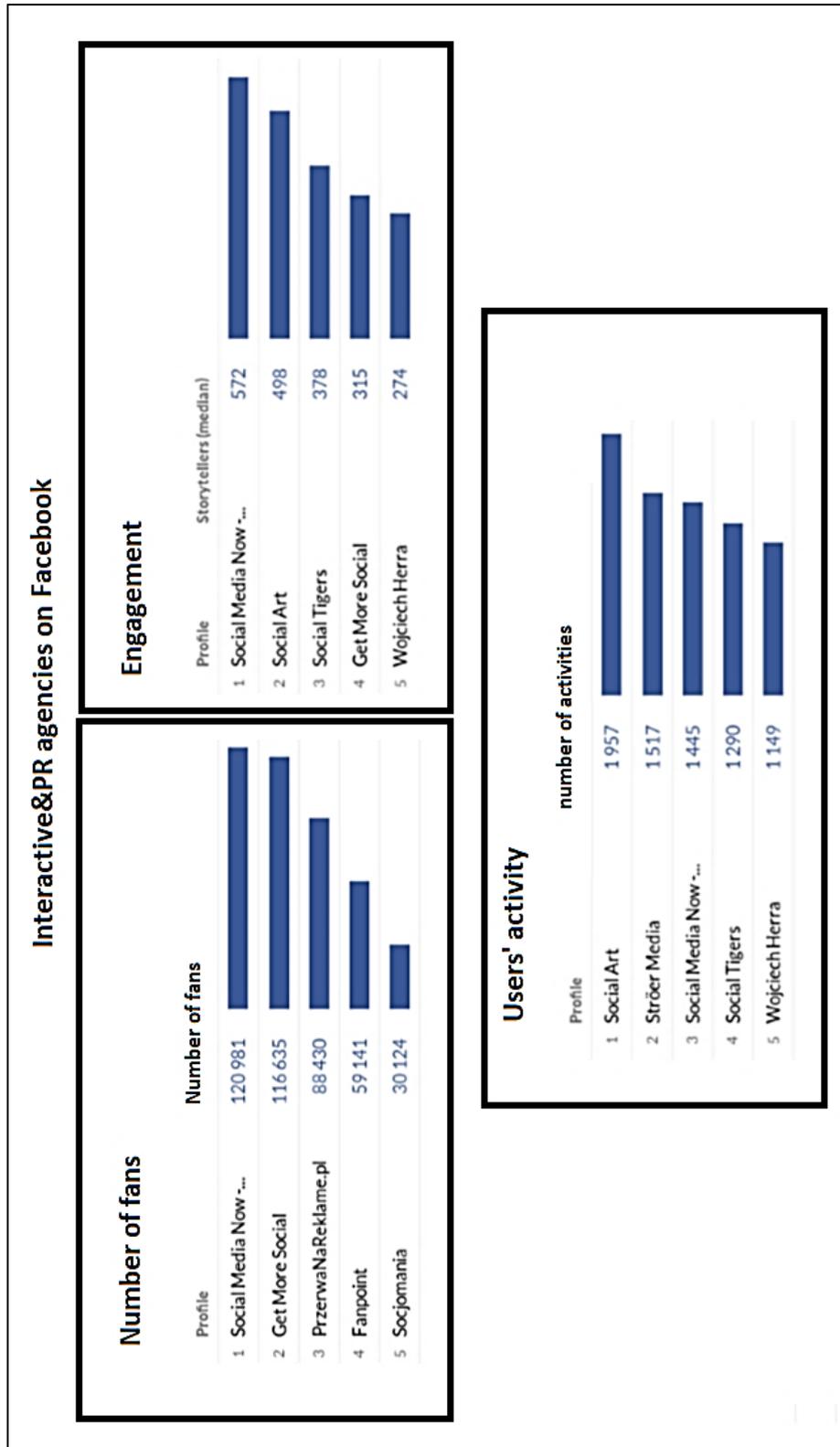
Figure 1. Rankings top 5 of interactive&PR agencies in Poland in terms of the number of fans, their engagement and activity on Facebook (December 2018).
Source: (Sotrender 2018, p. 15-16).

Assuming that specialists-practitioners of social media best know the rules of communication in these media, the rankings of interactive agencies and PR in Poland were reviewed in terms of the number of fans, their engagement and activity on the profiles of these agencies on Facebook (Figure 1).

From these three rankings, a random selection of six interactive agencies was made for the purposes of the research:

- Social Media Now,
- PrzerwaNaReklame.pl,
- Socjomania,
- Social Art,
- Social Tigers,
- Ströer Media.

As the analysis tool was used NapoleonCat. It is a tool used by practitioners to (NapoleonCat 2019, https://napoleoncat.com/):

- analyzing any websites and profiles on Facebook, Instagram, Twitter, YouTube, Google+ and Pinterest, enabling monitoring of the effectiveness of own activities and competition,
- customer service in social media using the Social Media Inbox option,
- simultaneous publication on many pages and profiles on Facebook, Instagram, Twitter and Google+ with the planning option,
- reporting on activities in social media,
- automation of some tasks related to activity in community media.

The agencies that were selected for analysis were analyzed on Facebook in terms of:

- Profile size - the number of fans on Facebook,
- Fan engagement - means entering into various types of interactions with the agency or with other users regarding the agency; to analyze the engagement, one used two of NapoleonCat's original indicators:
- Social Interaction Index (SII) daily – it shows the strength of Facebook users' interaction with the website. This indicator takes into account the posts, comments, reactions, and sharing on studied website, as well as the mentions about it made by other users. SII allows to directly compare profiles of different sizes;
- Engagement Rate (ER) daily – illustrates how engaging the content published on the website is. It is calculated based on the ratio of number of interactions under posts (reactions, comments, sharing) to the number of fans on the day of publication of the content.
- Published content - type of published posts (eg video, photo, link), time of publishing, etc.

The analysis included only Facebook, as it is the largest social network in Poland. As at 18 February 2019, it had 16.9 million registered users in this country (NapoleonCat 2019), which is approximately 44.5% of the population of Poland (Population of 2019, https://www.populationof.net/pl/poland/). The tests covered a period of two months: from 18/12/2018 to 18/02/2019.

4. FINDINGS

Both at the beginning and at the end of the analyzed period, the largest Facebook profile among the studied agencies in terms of the number of fans had the Social Media Now agency (Table 1). As of 18/12/2018, it had approx. 121 thousand fans, and on 18/02/2019 - 122.5 thousand fans. It was 4.5 times above the industry average (calculated on the basis of selected six agencies), which amounted to 26.5 thousand fans at the beginning of the audited period and at the end - 47.2 thousand fans.

Table 1. The total number of fans of the websites of the researched agencies on Facebook in the period 18/12/2018-18/02/2019.

Agency	Number of fans 2018/12/18	Comparison to the average	Number of fans 2019/02/18	Comparison to the average	Change	Relative change
PrzerwaNaReklame.pl	88 511	334.365%	88136	332.949%	-375	-0%
SocialTigersPL	12 375	46.749%	13180	49.79%	805	7%
Social Art	24 730	93.422%	26 096	98.582%	1 366	6%
Social Media Now	120 995	457%	122 460	462.614%	122 460	1%
Socjomania	30125	113.802%	30 371	114.732%	246	1%
Ströer Media	3 087	11.662%	3111	11.752%	24	1%
Avarage	**26 471**	---	**47 226**	---	---	---

Source: own research.

Figure 2 presents data on the number of people who talk about the studied agencies weekly. These data show the number of people who reacted, commented, shared posts, mentioned the website in their posts, or performed a different action related to the agency's profile in the analyzed period. These data show that despite a significant predominance of fans over other agencies, about Social Media Now was talked a lot less on Facebook in the initial period than, for example, about Social Art, which agency has almost 5 times less fans. It was only after 5 January that people started talking more about Social Media Now. Social Art and Social Tigers, however, still remained popular, with a much smaller number of fans (Social Art - 5 times smaller than Social Media Now and Social Tigers - 10 times). Thus, H1 hypothesis was confirmed, that significantly smaller profiles on Facebook (even 5 times smaller than the

competition) may be more popular, i.e. more people may talk about them on Facebook in comparison with greater competition.
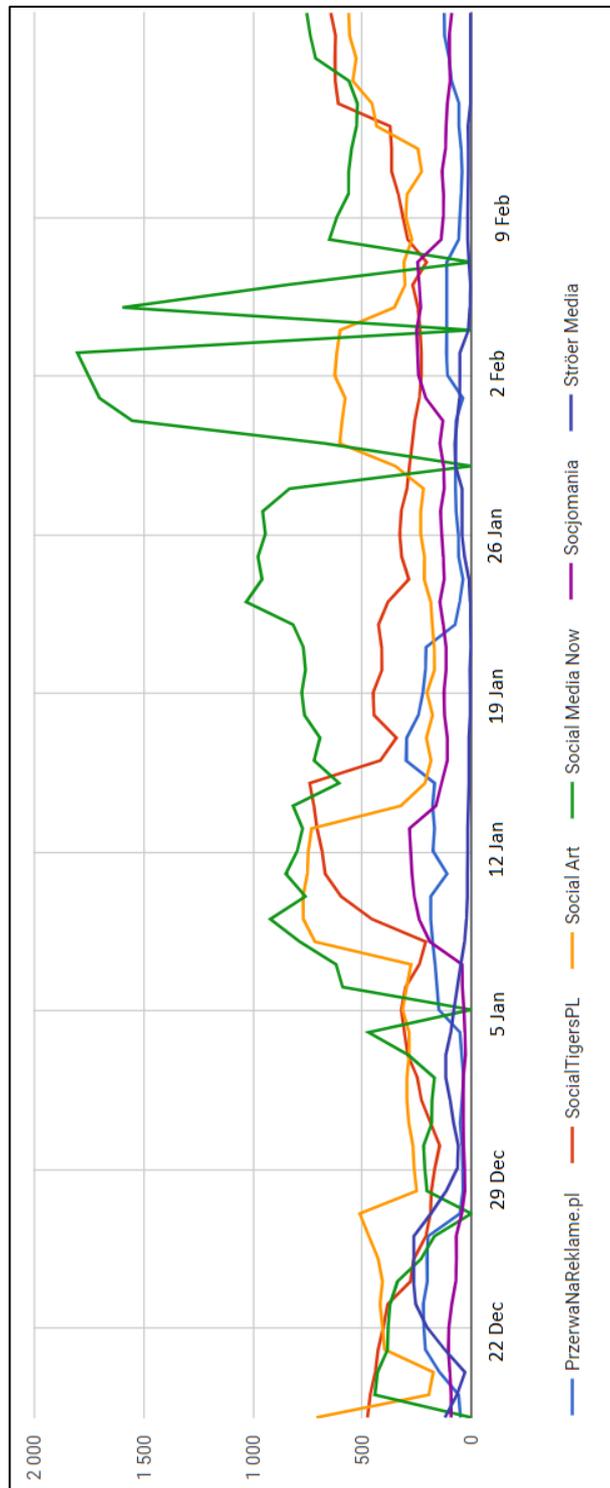
Figure 2. People who talk about researched agencies on Facebook in the period 18/12/2018-18/02/2019 (weekly).
Source: own research.

The strength of interaction of Facebook users with the agency's website is shown by the Social Interaction Index (SII). It takes into account posts, comments, reactions, shares and mentions about the agency's website, as well as references to their websites made by other parties or users. SII allows to directly compare profiles of different sizes (Table 2).

Table 2. Social Interaction Index (SII) of researched agencies on Facebook in the period 18/12/2018-18/02/2019 (daily).

Agency	Avarage SII	Max SII	Min SII	
PrzerwaNaReklame.pl	1.410	22.971 +2019/01/15	0	+2018/12/19
SocialTigersPL	5.589	44.165 +2019/02/13	0	+2018/12/21
Social Art	4.388	88.118 +2019/01/29	0	
Social Media Now	2.790	26.324 +2019/01/03	0	
Socjomania	1.211	21.071 +2019/02/01	0	
Ströer Media	2.861	85.324 +2018/12/20	0	

The highest interaction forces in the analyzed period were: Social Tigers (5.6) and Social Art (4.4). Interestingly, the Social Art and Ströer Media agencies managed to work out the maximum SII at the level of 88.1 and 85.3. These values were much higher than, for example, Social Media Now (26.324), which had the largest community gathered on Facebook in the analyzed period. The H2 hypothesis was confirmed that even a few dozen times smaller profiles than the competition may have greater interaction strength (compare Ströer Media and Social Media Now). It's also worth to follow the Engagement Rate (ER) daily. It illustrates how engaging is the content published on the website. It is calculated based on the ratio of number of interactions under posts (reactions, comments, sharing) to the number of fans on the day of publication of the content. And in this case, one can compare websites with different numbers of fans as well (table 3).

Table 3. Engagement Rate (ER) of researched agencies on Facebook in the period 18/12/2018-18/02/2019 daily.

Agency	Avarage ER	Max ER	Min ER	
PrzerwaNaReklame.pl	0.016	0.220 +2019/01/15	0	+2018/12/18
SocialTigersPL	0.284	1.930 +2019/01/17	0	+2018/12/21

Social Art	0.176	3.866 +2019/01/29	0	+2018/12/18
Social Media Now	0.025	0.269 +2019/01/03	0	+2018/12/18
Socjomania	0.034	0.644 +2019/02/01	0	+2018/12/18
Ströer Media	0.470	13.735 +2018/12/20	0	+2018/12/18

Source: own research.

It turns out that the most engaging content in the analyzed period was published by Ströer Media (0.470). In the best period (20/12/2018), the agency developed the ER at a very high level – 13.735. The Social Tigers agency (0.28) was in second place in terms of the average ER. Social Media Now reached the ER at 0.025. H3 hypothesis was confirmed, that even a few dozen times smaller profiles from the competition may have more engaging content (compare Ströer Media and Social Media Now).

One summarized also the daily interactions on the Facebook profiles of the studied agencies, i.e. the sum of responses, comments and postings published by the administrator, as well as mentions and posts added by users on the websites of the studied agencies (Table 4).
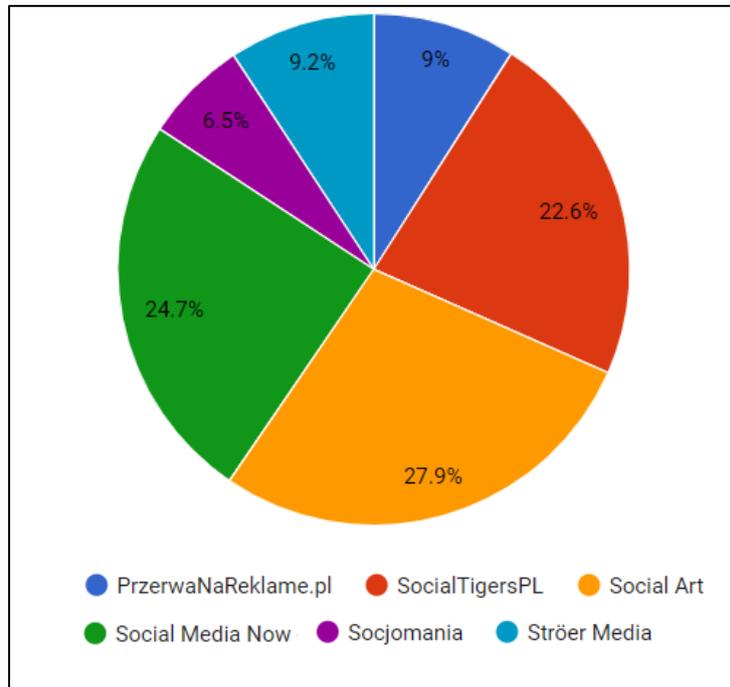
Table 4. Interactions of researched agencies and their fans on Facebook in the period 18/12/2018-18/02/2019 (daily).

Agency	Number of fan posts	Mentions about the profile	Comments	Fan reactions	Shares	Total
PrzerwaNaReklame.pl	1	0	20	796	75	892
SocialTigersPL	7	0	219	1 875	134	2 235
Social Art	1	0	186	2 528	45	2 760
Social Media Now	0	0	449	1 874	121	2 444
Socjomania	0	0	72	547	27	646
Ströer Media	0	0	132	759	21	912

Source: own research.

In the analyzed period, the most interaction on Facebook was recorded on the websites: Social Art (2760), Social Media Now (2444) and Social Tigers (2235). The H4 hypothesis was confirmed that much significantly Facebook profiles (even 5 times smaller than the competition) may have more interaction on their websites than their competition (see Social Art and Social Media Now profile). Figure 3 presents percentage share of all user interactions on the profiles of the analyzed agencies. One can see that the share of Social Art in user interactions

on the profile of this agency in the analyzed period was 27.9%, while Social Media Now - 24.7%. This confirms the H5 hypothesis that significantly smaller profiles (up to 5 times smaller than the competition) can have a larger share in user interactions.

Figure 3. Percentage share of all user interactions on the profiles of the analyzed agencies in the period 18/12/2018-18/02/2019.
Source: own research.

It is worth paying attention to the activity of administrators of the studied agencies (Table 5).

Table 5. Activity of administrators of the studied agencies.

Agency	Posts of the administrator	Comments	Likes	Total
PrzerwaNaReklame.pl	9	1	0	10
SocialTigersPL	19	62	0	81
Social Art	25	62	0	87
Social Media Now	22	39	0	61
Socjomania	23	4	0	27
Ströer Media	4	3	0	7

Source: own research.

Among the studied agencies, the most active administrators in the analyzed period were: Social Art (87 interactions) and Social Tigers (81). The Social Media Now agency (61) had slightly less activity. This confirms the H6 hypothesis that Facebook profiles with the most user involvement have the most active administrators.

Administrators can post various types of posts: status (in the form of text), link (post redirecting to another website), graphics (post in the form of photos, graphics, etc.) and video. Figure 4 shows the quantity of published posts by their type by the studied agencies in the analyzed period of time and the average ER of these posts.
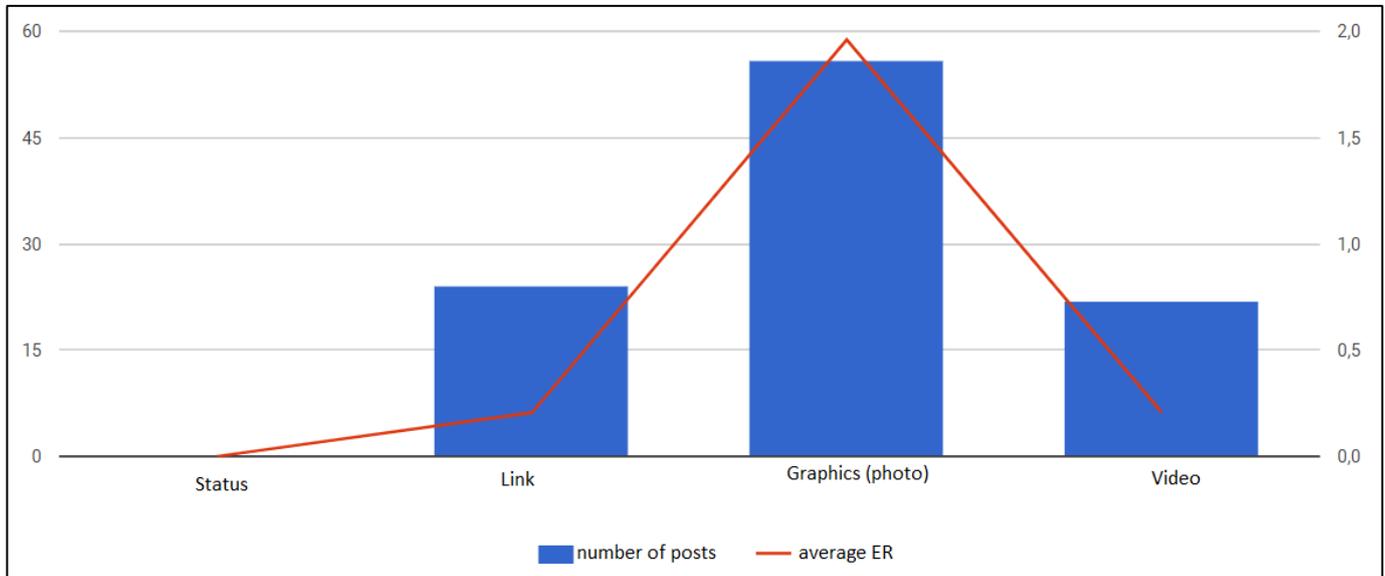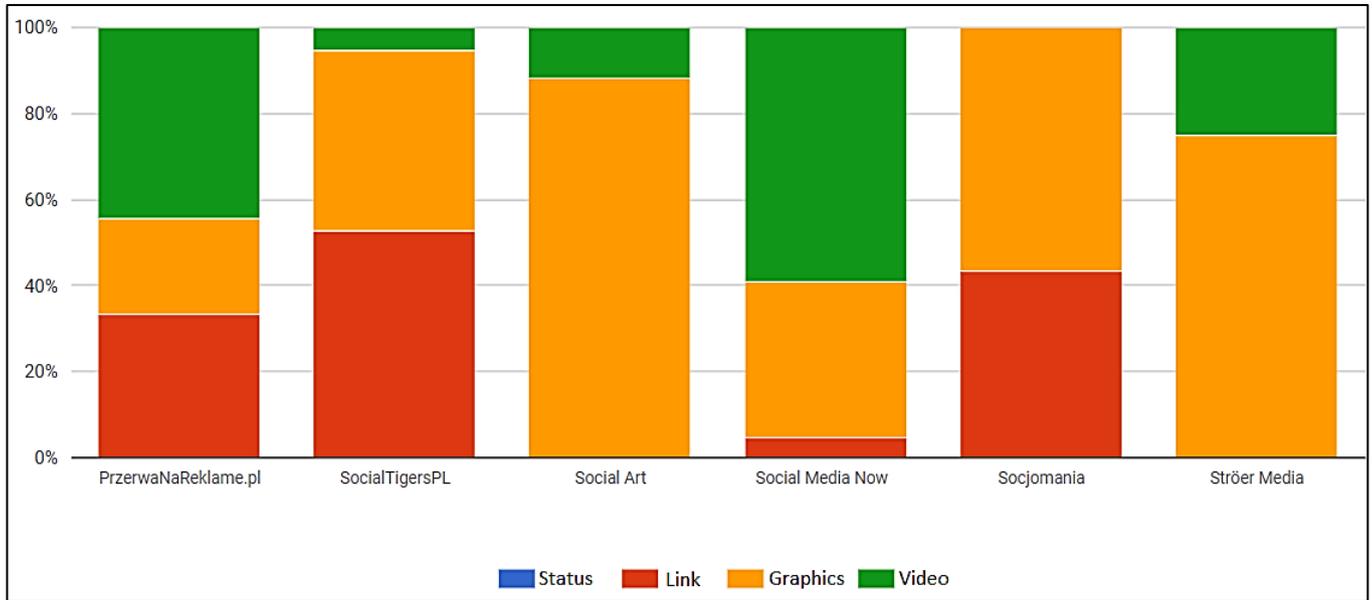

Figure 4. The sum of the types of posts published by the studied agencies and their average Engagement Rate.
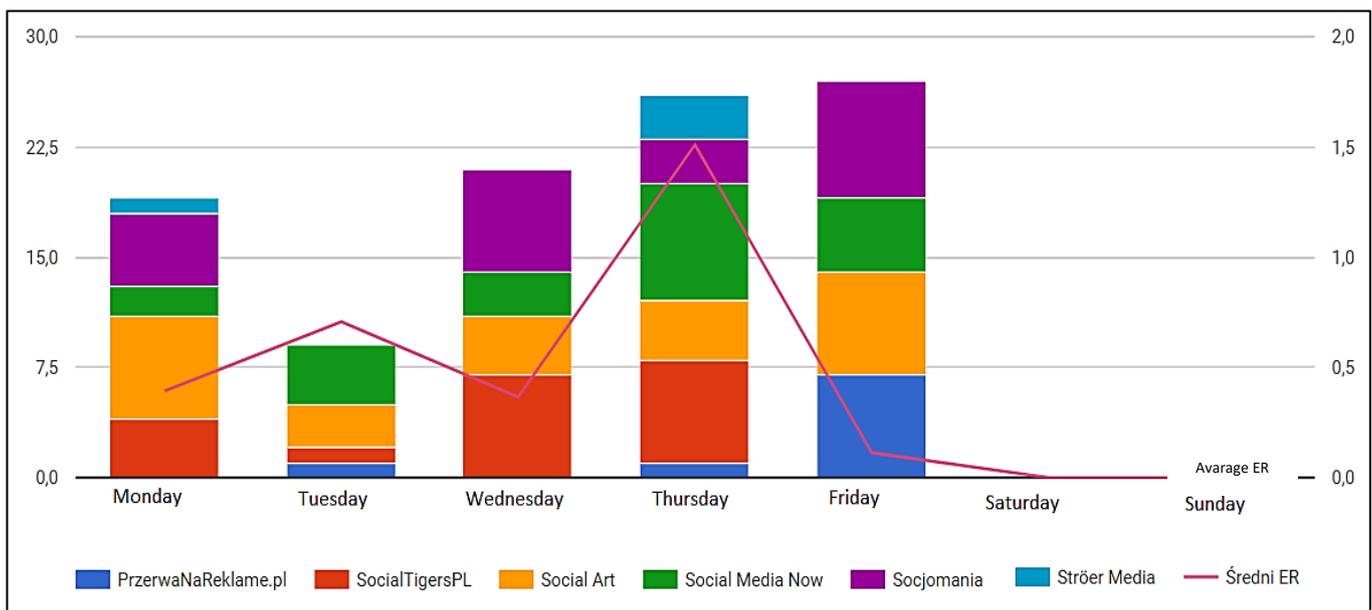Source: own research.

It turns out that the most posts have been published by agencies in the form of graphics (56). The average ER of these posts was also the highest and amounted to 1.961. Moreover, in the analyzed period, the studied agencies published 24 posts in the form of a link (ER - 0.206) and 22 posts in the form of video (ER - 0.208). None of the analyzed agencies published posts in the form of status at that time (according to practitioners, these posts enjoy the smallest engagement (Stelzner M.A. 2018, p. 37).

Figure 5 shows the percentage share of particular types of posts published in the analyzed period by the studied agencies. Among the studied agencies, the most posts in the form of graphics were published by Social Art (88%) and Ströer Media (75%). As is clear from the previous considerations, these agencies also achieve the highest engagement. Social Tigers Agency published some more posts in the form of a link (52.63%). In turn, the largest agency among the respondents - Social Media Now - in the analyzed period published the most posts in the form of video (59%). The above results positively verified the H7 hypothesis that the involvement of fans depends on the type of published post (graphics, video, link, status).

Fan engagement may also depend on the time the post was published, i.e. from the day of publication (Figure 6) and publication hours (Figure 7).

Figure 5. The percentage share of particular types of posts published in the analyzed period
by the studied agencies.
Source: own research.

Figure 6. The total number of administrator posts published on particular days of the week
and their average Engagement Rate.
Source: own research.

It turns out that the fans were the most involved on Thursdays (ER - 1.51). On this day,
the most posts were published by Social Media Now (8) and Social Tigers (7).
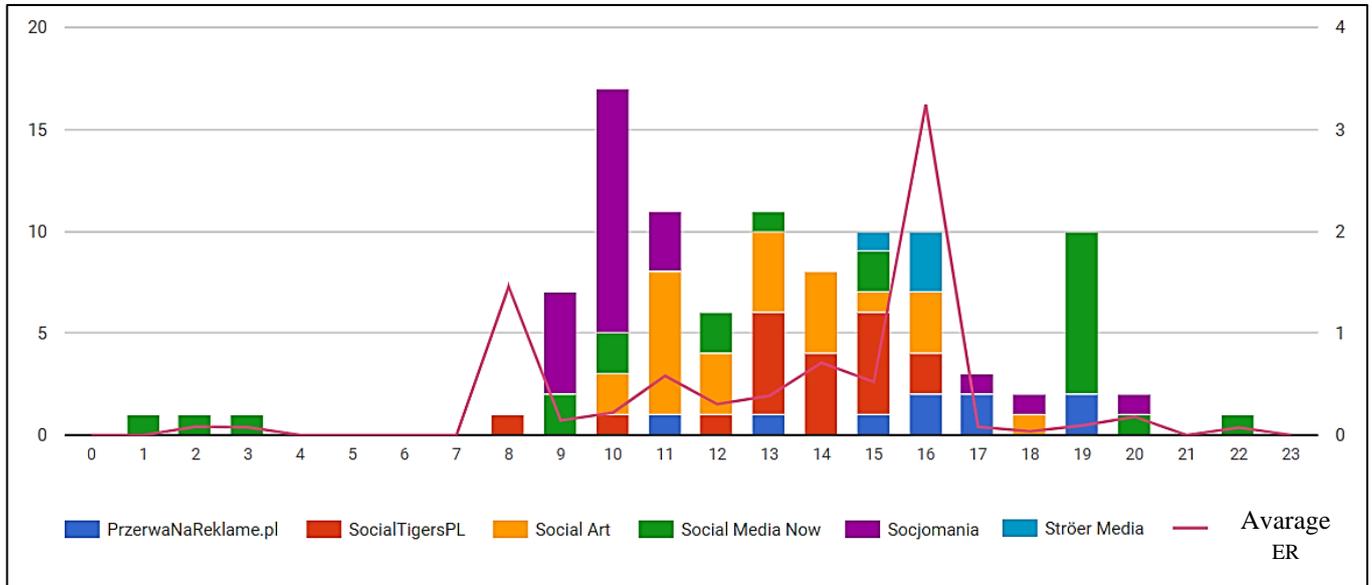
Figure 7. The total of administrator posts published in given hours and their average
Engagement Rate.
Source: own research.

The greatest engagement of fans was recorded at 16.00 (3.242). Ströer Media (3) published the most posts at this time among the analyzed agencies. It is worth noting that, for example, Socjomania published most posts (12.00) at 10.00, when the average was 0.219. Perhaps hence the relatively low involvement of fans of this agency.

The above results confirmed the H8 hypothesis that fans' engagement depends on the time of publishing the post. Finally, it is worth analyzing the most engaging posts published by the studied agencies in the analyzed period in in qualitative terms (Table 6).

Table 6. Top 10 of the most engaging posts of the researched agencies in the analyzed period.

Agency	Date of publication	Type of post	Category of content	Description of post	Post vitality	ER
Ströer Media	20/12/2018 16:28	Graphics	Contest	Contest for the best photo from the Christmas train	1 week, 3 day, 22 hour, 47 min, 54 sec	26.628
Social Art	29/01/2019 11:13	Graphics	News	Information about the controversial change of Zara's logo, asking fans to comment	22 hour, 3 min, 53 sec	4.049
Social Tigers	17/01/2019 15:32	Graphics	Practical advice	On the example of own brand, a very extensive advice on building a B2B brand	3 day, 23 hour, 33 min, 24 sec	1.875

Social Tigers	13/02/2019 16:04	Link	Practical advice	Advice on the current size of images on Facebook	16 hour, 24 min, 53 sec	1.754
Social Tigers	24/01/2019 14:45	Graphics	Practical advice	Practical advice on the example of your own brand regarding the management of a team of social media specialists	1 day, 6 hour, 45 min, 25 sec	1.551
Ströer Media	28/01/2019 16:17	Graphics	News	Information on what were the most important 2018 events on the Programmatic market?	0 seconds	1.544
Social Tigers	31/12/2018 08:07	Graphics	News about own brand	Summary of 2018 for the Social Tigers brand	2 day, 1 hour, 59 min, 4 sec	1.455
Social Art	20/12/2018 10:22	Graphic	News	news about the Google Assistant ad with Macaulay Culkin	1 day, 27 min, 15 sec	1.232
Social Tigers	16/01/2019 12:43	Link	Practical advice	Tips on how to successfully convert (sell) on Facebook	1 week, 4 day, 3 hour, 30 min, 50 sec	1.211
Social Art	07/01/2019 11:34	Graphics	News	News about Fiji Water brand that won Golden Globs	1 day, 14 hour, 2 min, 45 sec	1.142

Source: own research.

From among all the posts published by the studied agencies in the analyzed period of time, the most engaging was the post of Ströer Media, which concerned the competition for the best photo of fans. This post turned out to be the most engaging (ER - 26.628). Second place was the Social Art post, which involved fans to comment on the subject of a quite controversial change in the Zara brand logo (ER - 4.049).

In turn, in the third place was the Social Tigers post, in which the brand, on its own example, describes the steps of brand building in the B2B sector. In general, it should be noted that all of these most engaging posts were well-matched to the customers (they are mostly marketing and PR specialists).

On the analyzed Facebook profiles, one can find a lot of useful and practical tips on how to conduct marketing and PR activities. Customers can be up to date with all the new products and trends that appear in the industry. Thus, the H9 hypothesis is confirmed that posts which are valuable for the customers and are matched to them are the most engaged.

5. CONCLUSIONS

The research achieved the goal, which was to present determinants influencing fans' engagement on Facebook, on the example of the best interactive agencies & PR in Poland. The main hypothesis has been confirmed that the size of Facebook profile (determined by the number of fans) does not affect the fans' engagement. It means that one do not have to build a large community to succeed in social media. As research has shown, even several times smaller profiles may be more popular in social media, may have more engaging content than competition and have greater interaction strength. Moreover, they can also have a greater share in user interactions. The hypothesis was confirmed that the activity of administrators plays a key role in building engagement on Facebook. Profiles with the most user involvement have also the most active administrators. The research shows that the engagement of fans depends on the type of published post (the graphic is more engaging than e.g. the link) and time of the publication (in the case of the analyzed agencies the greatest engagement of fans was recorded on Thursdays at 16.00). Undoubtedly, the greatest engagement have posts that are valuable to customers and are matched to their needs. For example, the most engaging posts of the studied agencies concerned valuable advice and tips for marketers and social media specialists as well as news from the industry.

References

[1] Ashley, C., & Tuten, T. (2015). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology & Marketing,* 32(1), 15-27.

[2] Berthon, P. R., Pitt, L. F., Plangger, K., & Shapiro, D. (2012). Marketing meets Web 2.0, social media, and creative consumers: Implications for international marketing strategy. *Business horizons,* 55(3), 261-271.

[3] Castronovo, C., & Huang, L. (2012). Social media in an alternative marketing communication model. *Journal of marketing development and competitiveness,* 6(1), 117-134.

[4] De Vries, L., Gensler, S., & Leeflang, P. S. (2012). Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing. *Journal of interactive marketing,* 26(2), 83-91.

[5] Dutot, V. (2013). A new strategy for customer engagement: how do French firms use social CRM? *International Business Research,* 6(9), 54

[6] Frick, T. (2013). Return on engagement: Content, strategy and design techniques for digital marketing. Focal Press. ISBN-13: 978-0240812830

[7] Heller Baird, C., & Parasnis, G. (2011). From social media to social customer relationship management. *Strategy & leadership,* 39(5), 30-37

[8] Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business horizons,* 54(3), 241-251

[9]   Kozinets, R. V. (2014). Social brand engagement: A new idea. *GfK Marketing Intelligence Review,* 6(2), 8-15

[10]   Macnamara, J., & Zerfass, A. (2012). Social media communication in organizations: The challenges of balancing openness, strategy, and management. *International Journal of Strategic Communication,* 6(4), 287-308.

[11]   Malthouse, E. C., Haenlein, M., Skiera, B., Wege, E., & Zhang, M. (2013). Managing customer relationships in the social media era: Introducing the social CRM house. *Journal of Interactive Marketing,* 27(4), 270-280.

[12]   Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business horizons,* 52(4), 357-365

[13]   Pronschinske, M., Groza, M. D., & Walker, M. (2012). Attracting Facebook'fans': the importance of authenticity and engagement as a social networking strategy for professional sport teams. *Sport marketing quarterly,* 21(4), 221-232

[14]   Sashi, C. M. (2012). Customer engagement, buyer-seller relationships, and social media. *Management decision,* 50(2), 253-272

[15]   Schivinski, B., & Dabrowski, D. (2016). The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications,* 22(2), 189-214

[16]   Stelzner M.A. How Marketers Are Using Social Media to Grow Their Businesses, 2018 Social Media Marketing Industry Report, Social Media Examiner, May 2018

[17]   Wang, X., Yu, C., & Wei, Y. (2012). Social media peer communication and impacts on purchase intentions: A consumer socialization framework. *Journal of interactive marketing,* 26(4), 198-208

[18]   Winer, R. S. (2009). New communications approaches in marketing: Issues and research directions. *Journal of interactive marketing,* 23(2), 108-117

[19]   VanAuken, K. (2015). Using social media to improve customer engagement and promote products and services. Journal of Airport Management, 9(2), 109-117