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THE EFFECTIVENESS OF PUBLIC COMMUNICATION: THE CASE OF UKRAINIAN ENTREPRENEURSHIP AND BUSINESS ASSOCIATIONS

ЕФЕКТИВНІСТЬ ПУБЛІЧНИХ КОМУНІКАЦІЙ: НА ПРИКЛАДІ УКРАЇНСЬКОГО ПІДПРИЄМНИЦТВА ТА БІЗНЕС-ОБ'ЄДНАНЬ

ANNOTATION

This paper examines the approach and the effectiveness of public communication (conducted via Facebook posts) by the most prominent entrepreneurial and business associations in Ukraine. The data covers five associations over the period of 6 months during 2023. This paper focuses on two major areas. First, the types and the characteristics of the content business associations share. Second, the effectiveness of the communication approaches. The main results of the paper are as follows. First, we find that there are some differences in the communication approach among the reviewed business associations. Frequency of posts differs across organizations and each organization has its own way of mixing the use of the posts of different formats, functions, and sub-functions. Second, the research indicates that there is a difference in the effectiveness of collecting the reactions.

Keywords: public communication, entrepreneurship, business associations, Facebook posts, Ukraine entrepreneurship.

АНОТАЦІЯ

Дана стаття присвячена актуальному питанню суспільної комунікації між найвідомішими підприємницькими та бізнес-обєднаннями України. Основним предметом дослідження є пости, які розміщувалися в соціальній мережі Facebook. Практичні результати дослідження доведені шляхом аналізу п'яти обєднань протягом 6 місяців 2023 року. Теоретична база, що використовується в цій роботі, складається з трьох елементів: 1. формальне визначення типу комунікації, яку ми вивчаємо; 2. класифікація повідомлень Facebook, які використовують українські бізнес-обєднання; 3. фіксація відгуків аудиторії як спосіб вимірювання ефективності постів. Зібрані дані про стратегічну комунікацію об'єднань включають загальну кількість реакцій, коментарів і репостів. Реакції розділяються відповідно до можливостей платформи: лайки, смайлики сердець, тримаючи серце смайлики, здивовані смайлики, сумні смайлики, і сердиті смайлики. Основні результати дослідження: по-перше, ми виявили, що існують деякі відмінності в комунікаційному підході серед розглянутих бізнес-асоціацій. Частота постів відрізняється між організаціями, і кожна організація має свій власний спосіб змішування використання постів різних форматів, функцій та субфункцій; по-друге, дослідження вказує на те, що існує різниця в ефективності збору реакцій. Прикладом стала Рада директорів та Американська торговельна палата, які мають значно вищу ефективність порівняно з іншими бізнес-асоціаціями. В результаті дослідження визначено, що підхід та ефективність публічної комунікації мають певні відмінності для кожного конкретного обєднання. Асоціації, які досліджувалися, продемонстрували суттєві кількісні відмінності в частоті повідомлень на Facebook. Визначено, що найбільш ефективним форматом публікації є пости з зображеннями. Крім того визначені значні відмінності в ефективності постів, які розміщували автори, які обіймають посади різного рівня. Згідно проведеного аналізу в нашій вибірці міра ефективності відрізняється коефіцієнтом 6,5 для середніх реакцій і коефіцієнтом 9,5 для скоригованих середніх реакцій. Розуміння факторів, що сприяють таким відмінностям, визначається як потенційна область для майбутніх досліджень.

Ключові слова: публічна комунікація, підприємництво, бізнес-обєднання, повідомлення у Facebook, підприємництво України.

Formulation of the problem. Entrepreneurial and business associations play a significant role in shaping Ukrainian business society as well as influencing the relevant policy making. The way subscribers and society react to the initiatives and communication of a particular association may indicate how well an associationand meets the needs of the business community.

Analysis of recent research and publications. The strategic communication literature pays a lot of attention to the ways organizations make decisions about how they invest and allocate their resources in the development of their communication strategy. The variety of strategic communication evaluation models, as well as different options on strategic communication data classification, provide a coherent overview of whether the organizations get the desired level of public awareness and attention.

Kuhn (1996) popularized the concept of strategic communication and outlined the six communication

specialties. Hallahan et al. (2007) further advanced this work by taking into consideration the purpose for each of the specialties (see Table 1). Hallahan et al. (2007) also distinguish between one-way and two-way communication [7]. One-way communication is defined as transaction of information with a limited feedback capacity and two-way communication allows for interaction in some form. The two-way communication is further subdivided into symmetrical and asymmetrical. Symmetrical communication occurs when "each participant in the communication process is equally able to influence the other" and asymmetrical occurs when the influence is distributed unequally.

Coelho et al. (2016) review the connection between the type of the post and the strategic communication path that the organization chooses [5]. Authors propose their own variable categorization for the Facebook posts which was developed based on the studies of other scholars. For instance, authors borrow post categories from Swani et. al. (2017), technical post classification from Rauschnabel et al. (2012) and distinguish between six types as per Lisette de Vries et al. (2012) [10]. Authors conclude that the usage of Facebook and Instagram is more effective when the promotion on these platforms is used for non-commercial benefit, rather than commercial which includes direct promotion of products, services, and prices. This implies that the most successful posts on Facebook and Instagram are the ones that create emotional engagement, rather than showcase a direct commercial benefit.

Effectiveness of Public Communication and Facebook Posts. Pletikosa et al. (2014) aim to evaluate the effect of the chosen three metrics of Facebook posts – post type, post category, and weekday of posting – on a sponsored Facebook brand page [11; 12]. Authors used the data from 14 sponsored Facebook brand pages. In the conclusions authors discuss that the day of the post showed a small effect. Posts under the classification of Information caused a significantly larger number of likes compared to other posts.

Moreover, *Photos* gain 56 % more likes and 57 % more comments than Links. *Photos* post types also show the biggest amount of interaction duration and account for 44 % of interaction duration out of all reviewed post types. *Status* posts gained the biggest number of comments and overall format of *Videos* was the most successful in accumulating likes.

Rahman at al. (2017) measure the effectiveness of public communication of the electronic companies by consumer engagement actions in the social media posts of the chosen companies – likes, reposts, comments, and shares [13]. Authors conclude that electronic companies develop their social media engagement through images and visuals, hence use the design to drive the two-way interaction with the current and potential customers.

Hou & Lampe (2015) partially informs our research with the classification of the engagement goals that authors use for the research of the social media effectiveness for the NPOs (Table 2) [8]. Researchers conducted semi-structured phone interviews with the designated people from various NPOs as well as conducted the content analysis of the latest 30 posts of 25 Facebook pages and 23 Twitter pages. The findings show how NPOs use social media and what they lack to be more effective. Authors argue that social media platforms should include specific design and functionality to meet the needs of the small NPOs in terms of the engagement with the core stakeholders.

Table 1

Specialties of communication based on Kuhn

Specialty	Short Description w/ Purpose
Management Communication	Focus on administrative personnel and purpose to facilitate operation in the organization
Marketing Communication	Focus on marketing staff and purposes of attracting and retaining the customers.
Public Relation	Purpose of conducting and maintaining fruitful relationships with the key constituencies.
Technical Communication	Purpose of proper technical e education of employees for the sake of improving their efficiency.
Political Communication	Purpose to build political affairs and consensus
Social Marketing Campaigns	Purpose to promote significant social causes

Source: based on data [7]

Table 2

Content Analysis on NPOs Facebook and Twitter

Engagement goals	Code type
Information	News and updates / Education, tools / Media
Communication	Other organization / Conversation / Giving recognition and thanks
Action	Event / Call for action

Source: based on data [8]

Ayaji & Mmutle (2021) explore how the communication of social corporate responsibility (CSR) influences the organization's reputation [1]. Researchers conclude that CSR should use the informational communication approach over the interactive one while making sure that CSR priorities are clearly communicated and that the promised results are realistic. This paper highlights the need for clear and targeted communication to achieve organization's goals.

The paper analyzes the differences in communication approaches of prominent entrepreneurial and business associations as well as differences in the effectiveness of the communication.

Highlighting previously unresolved parts of the overall problem. The research questions this paper addresses are as follows:

Research Question 1. What are the communication approaches of the associations?

Research Question 2. Does the effectiveness of communication differ across the associations?

Formulation of the purposes of the article. This paper contributes to the literature in a few key areas. First, the paper explores the differences between the communication approaches of Ukrainian entrepreneurial and business associations. Second, the data on effectiveness of every format of post as well as function of post illustrates the difference in the effectiveness of communication across organizations. Third, the results allow us to better understand the effectiveness of communication across various types of communication. The insights provided in this paper can be applied by organizations that aim to improve their public communication.

Presentation of the main research material.

1. Theoretical Model. The theoretical framework used in this paper is comprised of three elements: (1) formally defining the type of communication we study, (2) adopting a classification of Facebook posts utilized by the Ukrainian business associations, and (3) capturing the audience's feedback as a way to measure the effectiveness of the posts.

Strategic Communication and Content Classification. We follow Hallahan et al. (2007) that define strategic communication as "the purposeful use of communication by organization to fulfill its mission" [6].

The classification of the data is driven by the literature, in particular Hou & Lampe (2015), Coelho et.al (2016), Berg (2017), and specifics of posts' content [4; 5; 8]. The posts are divided into functions and subfunctions. We follow Hou & Lampe (2015) and other, by dividing posts into two main functions: informative and engaging. Assigning sub-functions is based on the details of the posts (Table 3) [1; 3; 8].

The format division is proposed according to the capacity of the Facebook platform and its functionality. The platform allows 5 formats of posts: with or without text, with image and with or without video. For this research the additional functionality of Facebook posts such as "check-in", "gif", "tag of the person" and others were not considered. See Table 4 for more details.

Measuring the Effectiveness of Strategic Communication. The data about the strategic communication of the associations that has been collected includes the total number of reactions, comments and reposts, whereas the reactions are being divided according to the platform's capabilities: likes, hearts emoticons, holding heart emoticons, surprised emoticons, sad emoticons, and angry emoticons.

To measure the effectiveness of strategic communication, we are able to analyze the number

Table 3

Post Classification by Post Function

Post Function	Sub Function	Explanation
Information	About team	The post describes and / or presents the in-house teammate of the association / business community
	Working process	The post describes the process and / or result of the operational activity of the association / business community
	Markt information	The post includes the information about the conditions, analytical results, findings and thoughts about the business environment in Ukraine
Engaging	Medical link	The post is used to engage the audience in the link integrated to the post
	Event announcement	The post shares the information about the internal and / or external event organized and / or sponsored / co-organized by the business community

Source: based on data [1; 3–5; 8]

Table 4

Post Classification by Post Format

Post's Format	Explanation
Only Text Post	The post includes only the text without any additional materials
Post's Format	The post includes Image as the additional core element and includes Text
Post with Video	The post includes Video as the additional core element and includes Text
Only Image	The post includes only Image file as the core material shared with the audience
Only Video	The post includes only Video file as the core material shared with the audience

Source: compiled by the authors

of all reactions per each particular format of the post, function and subfunction. Besides, we also have access to the data about the shares and comments on the posts which can provide us with the additional context upon the necessity. This leads us to the further discussion on the collected data and its more thorough description.

Data Description. The data collected covers the five business associations that are considered to have the biggest number of business members (companies) both of Ukrainian and foreign origin as well as influence on the business and political community in Ukraine. Overall, the business environment in Ukraine consists of more than 80 business associations. The five associations studied in this paper were taken from the list of most socially active associations and business chambers in Ukraine.

To measure the effectiveness of the communication strategy of each chosen business association, the particular period of 6 months was chosen. It covers all the Facebook communication that every business association has delivered since 01.04.2023 until 01.10.2023. This period is chosen as the most recent 6-month period before the research. The data was collected manually, and each post was classified by format, function, and sub- function. Table 5 provides the list of organizations used in this study, the number of subscribers, the number of posts during the 6-month period, and the total number of reactions.

The data analysis section addresses each of the research questions. Board Association stands out as it collected the biggest number of reactions while having the lowest number of posts.

Data Analysis. Research Question 1 9: The communication approach of the business associations.

The overall pattern of activity is considered to answer RQ1. the frequency of public communication, the average number of reactions, the distribution of reactions across posts, and the type of posts used by the associations. Table 6 provides a summary of frequency of posts and the average number of reactions.

The highest frequency of posts is produced by SUP (1.74 / posts per day), while the lowest number of posts is provided by the Board Association (0.75 / posts per day). The biggest difference in the average reaction per day parameter is between EBA and Board. While EBA manages to collect 14.7 reactions per day on average, Board manages to collect 49.8 which is almost 3.5 times higher relative to EBA. Both frequency of posts and the average reaction parameters provide a first look at the differences between the organizations.

Interestingly, most of the posts by SUP, EBA and UCCI collect less than 50 reactions with relatively few posts collecting more than 100 reactions. The situation is different for ACC and Board where about 25 % and 50 % of posts respectively gather more than 100 reactions. Board Association stands out even more considering that it has the lowest number of posts.

The next parameter to discuss is the distribution of reactions (Figure 1).

To provide more context on how business associations communicate with their members, we breakdown the total posts number of every business association according to our classification of the format, function and subfunction (Table 7).

First of all, all of the reviewed business associations have the biggest number of posts delivered in the *Post with Image format.* For instance, the Board Association delivered 94.2 % of posts in this format, SUP – 88.4 %, EBA – 91.3 % ACC – 80 % and UCCI – 88.4 %. No organization delivered less than 88 % posts in *Post with Image format.*

Table 5

Number of Total and Average Reactions

Organization	Number of Subscribers	Number of posts [6-month period]	Total number of Reactions
SUP (Association of Ukrainian Entrepreneurs)	24,000	321	5877
EBA (European Business Association)	34,000	266	2712
ACC (American Chamber of Commerce)	23,000	221	4168
Board (Association "Board")	23,000	139	9155
UCCI (Ukrainian Chamber of Commerce and Industry)	16,000	181	4015

Source: compiled by the authors

Table 6

Post Frequency and Average Reactions

Organization	Number of subscribers	Number of posts	Total Number of Reactions	Frequency of posts per day	Average Reactions per Post	Average Reactions per Day
SUP	24,000	321	5877	1.74	18.30	31.94
EBA	34,000	266	2712	1.44	10.19	14.73
ACC	23,000	221	4168	1.20	18.85	22.65
Board	23,000	139	9155	0.75	65.86	49.75
UCCI	16,000	181	4015	0.98	22.18	21.82

Source: compiled by the authors

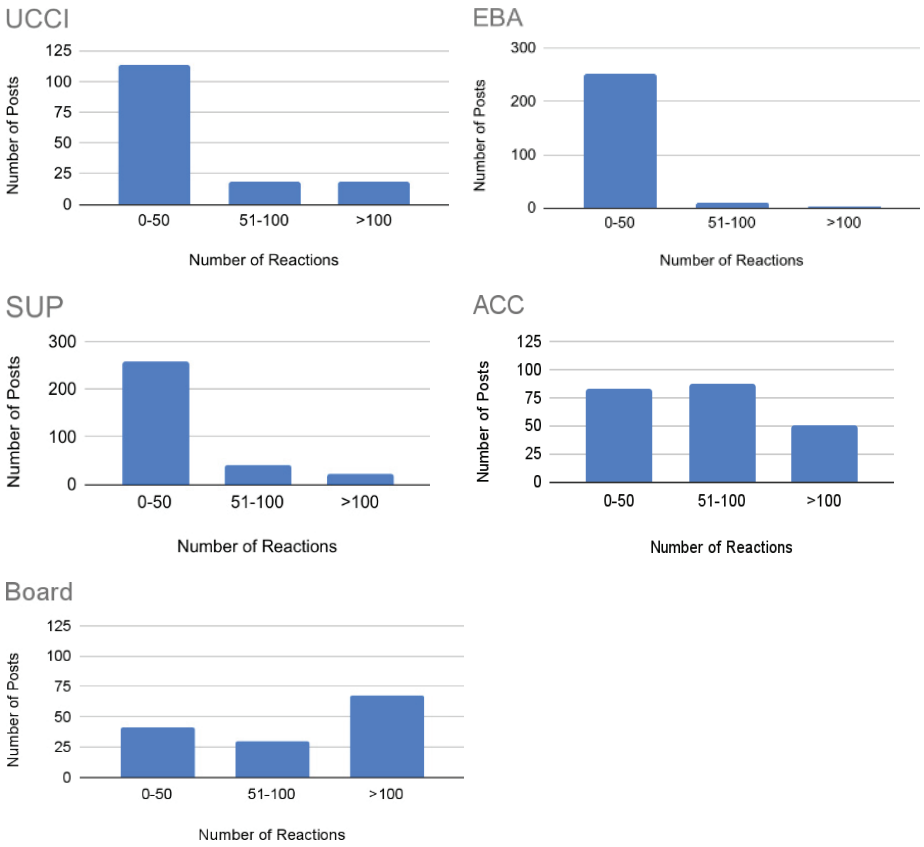

Figure 1. Histogram of the number of reactions by organization

Source: compiled by the authors

Table 7

Post division by Format, Function and Subfunction

Organization		SUP	EBA	ACC	Board	UCCI
	Total Number of Posts	321	266	221	139	181
Format of Post	Only text Post	6	0	0	0	2
	Post with Image	284	243	177	131	160
	Post with Video	26	20	44	8	1
	Only Image	1	0	0	0	17
	Only Video	4	3	0	0	1
Function	Information	168	173	159	83	106
	Engaging	153	93	62	56	75
Subfunction	About team	50	7	11	12	0
	Working process	64	123	133	69	102
	Market information	54	39	15	2	4
	Media Links	7	64	25	4	6
	Event Announcement	146	33	37	52	69

Source: compiled by the authors

In terms of the Function, all the reviewed business associations have delivered more posts of *Informative* function rather than *Engaging*. The organization with the highest share of *Engaging* posts is SUP with 48 %, followed by UCCI and Board with 41 % and 40 % respectively. Furthermore, we summarize the communication approach of the chosen business associations as per event-related posts (Table 8).

Even though the percentage of event-related posts seems to be somewhat similar across organization there are statistically significant differences between the organizations. In particular, SUP's fraction of event-related posts is higher than that of EBA, ACC and Board (t-test with p-value of 0.01). This result might indicate that SUP is deliberate in both running events and actively communicating these in-person networking opportunities to its members.

The case of the Board Association is also interesting as it has the highest number of reactions per post and the lowest fraction of the event-related

Table 8

Communication Dedicated to the Event

Organizations	Number of event related posts	Total Posts	Event-related posts	Engaging posts
SUP	181	321	56 %	48 %
EBA	107	266	40 %	35 %
ACC	101	221	45 %	28 %
Board	53	139	38 %	40 %
UCCI	101	181	55 %	41 %

Source: compiled by the authors

posts. There can be various explanations for this. For instance, Board may have the capacity to produce more original content besides the events. Second, the Board may not organize or be part of that many events as other organizations. Third, there might be other factors driving the effectiveness of Board's communication that are not related to their approach to events. In any case, Board Association is a definite outlier in terms of gathering reactions and more research will be needed to understand the sources of their success in engaging with their members and the ways of replicating it.

Research Question 2: Differences in the communication effectiveness across organizations. Our understanding of the effectiveness of the strategic communication strategy of every business association starts from analyzing the average reactions number per each format, function and subfunction of posts (Table 9).

The key takeaways from the data in Table 9 are as follows: (1) Posts with Image average reactions results roughly reflect the average for Total Average Reactions per posts results since Post with Image category constitutes about 90 % of all posts for all organizations but ACC; (2) ACC is the exception here with 65.5 % and 33.5 % of posts in Post with Image and Post with Video categories respectively. Posts with video receive on average 31.7 reactions, which is twice the average number of reactions for posts with image. A similar tendency holds for Board association where posts with video gather almost twice the number of reactions relative to the posts with image but the overall number of posts with video is relatively small (about 6 %); (3) Regarding the functions of the posts, the overall tendency is that the informative posts gather about 1.5–2.0 times more reactions relative to engaging posts with the exception of EBA; (4) Average Reactions statistic differs significantly across organizations and further analysis is need to see if the differences are statistically significant.

To further understand the differences between Average Reactions parameter we ran a series of t-tests (p = 0.01). The first t-test was done on the original Average Reactions parameter (i.e. unadjusted data) and the second one was done on the adjusted data that seeks to limit the impact of subscriber base factor by reducing the Average Reactions parameter proportionally to the subscriber base (Table 10).

The results presented in Table 10 provide us with some important takeaways. First, adjusting the number of subscribers is important and contributes toward establishing a clear ranking across the organizations when it comes to the effectiveness of the posts. In particular, we establish that UCCI is more effective than SUP and ACC when the *Adjusted Average Reactions* parameter is used. Second, SUP and ACC remain statistically indistinguishable at 1 % level with

Table 9

Average reactions per format, function, and sub-function of posts

Organization		SUP	EBA	ACC	Board	UCCI
Number of Total Posts		321	266	221	139	181
Total Reactions		5877	2712	4168	9155	4015
Average Reaction per Post		18.3	10.2	18.9	65.9	22.2
Average Reactions	Posts with Image format *	17.9	10.2	15.7	63.4	21
Average Reactions	Posts with Video format *	17.8	10.4	31.7	107	18
Average Reactions per each Function	Informative Posts	23.7	10.3	21.8	77.9	27.2
	Informative Posts	12.3	9.9	11.3	48	15.1
Average Reactions per each Sub Function	About team	34.5	16.7	11.3	72.3	-
	Working process	14.9	2.7	23.7	77.9	2 7.9
	Market information	10.7	6.3	12.7	110	7
	Media link	17.9	5.1	13.2	77.8	2 0.7
	Event Announcement	17.6	13.1	9.9	45.7	14.7

Source: compiled by the authors

** Post with Image category constitutes about 90 % of all posts. The only exception is ACC with about 65.5 % posts in Posts with Image category and 33.5 % in Posts with Video category. For this reason, other categories were omitted from this table.*

Table 10

T-test for Differences in the Average Reactions

Organization	Average Reactions per Total Posts [Unadjusted Effectiveness	Adjusted Average Reactions per Total Posts2	Is the difference in Adjusted Average Reactions statistically significant at p=0.01?			
			SUP	EBA	ACC	Board
SUP	18.3	25.9	-	-	-	-
EBA	10.2	10.2	Yes	-	-	-
ACC	18.9	27.9	No	Yes	-	-
Board	65.9	97.4	Yes	Yes	Yes	-
UCCI	22.2	47.2	Yes[1]	Yes	Yes[1]	Yes

Source: compiled by the authors

Note: The results presented hold not only for the Total Number of Reactions, but also for Posts with Image category,

Engaging and Informative function posts, and Working Process Subfunction posts.

[1] The result holds for Average Number of Reactions for each sub-category of reactions, but not for Post with Image category indicating that the effectiveness of posts in this category is statistically indistinguishable across the two organizations.

*[2] This number was calculated by dividing the Average Reactions parameter by the number of subscribers and then proportionally adjusting the estimate to make it more readily comparable with the Average Reactions by using EBA's number of subscribers as a baseline (i.e. Adjusted Average Reactions = (Average Reactions / Number of Subscribers)*34,000).*

25.9 and 27.9 adjusted effectiveness numbes respectively. Third, if we were to rank these organizations by the *Adjusted Average Reactions*, Board takes the first place, followed by UCCI. SUP and ACC take a third place in this ranking with EBA ranked the lowest.

It is important to note of the many limitations of the approach presented in this paper. One of the limitations is that the comparison presented in Table 10 applies only to the narrow definition of the effectiveness of communication as the total number of reactions. Our data does not allow us to measure engagement on a deeper level. For example, do not know if any action was taken as a direct result of seeing the communication. Facebook algorithms may have had a significant impact on the number of reactions by promoting certain types of posts for certain organizations. Furthermore, we did not account for the fact that some organizations might have a highly visible founder, co-founder, or a board member with significant personal following that might influence the number of reactions the posts get.

Conclusions from the research. Current study shows that the associations differ in their Facebook communication approach and its effectiveness. First, there are measurable differences in the frequency of posts ranging from 0.75 for Board to 1.74 posts per day for SUP. Second, about 90 % of all the posts follow the *Post with Image* format. The only exception is ACC with about 65.5 % in Posts with Image category and 33.5 % in *Posts with Video* category. Importantly, posts with video receive on average 31.7 reactions, which is twice the average number of reactions for posts with image. A similar tendency holds for Board association but the overall number of posts with video is relatively small (about 6 %). Third, the differences in the *Average Reactions* parameter are statistically significant and allow us to rank the organizations based on this measure: Board takes the first place with 65.9 reactions per post, followed by UCCI (22.2), ACC (18.9), SUP (18.3) and EBA (10.2). Forth, posts with *Informative* function usually gather more reactions relative to posts with *Engaging* function across all organizations; EBA's results show almost no difference in this regard, SUP's *Informative* posts gather twice as many reactions on average relative to *Engaging* posts.

There is a significant variation of the effectiveness of Facebook posts. For the organizations in our sample the measure of effectiveness differs by a factor of 6.5 for *Average Reactions* and a factor of 9.5 for the *Adjusted Average Reactions*. One of the key questions for future research is to better understand the contributing factors of such differences and ways to design effective online communication strategies.

One promising area for future research is to replace simple classifications with the textual analysis of the posts. Considering other forms of engagement (e.g. sharing, commenting, donating, attending in-person events) is also important given that organizations pursue a variety of goals that go beyond generating reactions. Evaluating the impact of highly visible public personas is another potential line of inquiry.

Ability to engage with relevant constituents is an invaluable asset for any organization. Understanding factors that drive engagement for online communication will help entrepreneurship and business associations develop effective communication approaches to better serve the business community and positively impact business activity.

REFERENCES:

1. Ajayi O. A., & Mmutle T. (2021) Corporate reputation through strategic communication of Corporate Social Responsibility.

Corporate Communications: An International Journal, no. 26(5), pp. 1–15.
2. Argenti P. A. (2005) Measuring the value of communication. SSRN Electronic Journal. 16 p. Available at: https://www.researchgate.net/publication/228178459_Measuring_the_Value_of_Communication
3. Bentele G., & Nothhaft H. (2010) Strategic communication and the public sphere from European perspective. *International Journal of Strategic Communication*, no. 4(2), pp. 93–116.
4. Berg L. (2017) Communication tools' impact on project communication efficiency: An evaluation of traditional communication tools and Social Media. 59 p. Available at: https://www.diva-portal.org/smash/get/diva2:1115705/FULLTEXT02
5. Coelho R. L., Oliveira D. S., & Almeida M. I. (2016) Does social media matter for post typology? Impact of post content on Facebook and Instagram metrics. *Online Information Review,* no. 40(4), pp. 458–471.
6. Hallahan K., Holtzhausen D., van Ruler B., Verčič D., & Sriramesh K. (2007) Defining strategic communication. *International Journal of Strategic Communication*, no. 1(1), pp. 3–35.
7. Holtzhausen D., & Zerfass A. (2014) Strategic communication: Opportunities and challenges of the Research Area. *The Routledge Handbook of Strategic Communication*, pp. 27–41.
8. Hou Youyang, Lampe Cliff (2015) Social Media Effectiveness for public engagement. Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems.
9. Kunal Swani, George R. Milne (2017) Evaluating Facebook brand content popularity for service versus goods offeringsm. *Journal of Business Research,* pp. 123–133.
10. Lisette de Vries, Sonja Gensler, Peter S. H. Leeflang Popularity of Brand Posts on Brand Fan. *Journal of Interactive Marketing.* Pages: An Investigation of the Effects of Social Media Marketing. Pp. 83–91.
11. Pletikosa Irena & Spiegler Erica & Michahelles Florian (2011) The Effect of Post Type, Category and Posting Day on User Interaction Level on Facebook.
12. Pletikosa Cvijikj I., & Michahelles F. (2011) A case study of the effects of moderator posts within a Facebook Brand Page. Lecture Notes in Computer Science. Pp. 161–170.
13. Rahman Z., & al. (2017) Social Media Content Analysis "Study on Brand posts of Electronics Companies". A*RPN Journal of Engineering and Applied Sciences*, no. 12(1), pp. 87–94.