

Bartın Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, BÜİİBFD, 2025, Cilt 16, Sayı 32

Bartin University Journal of Faculty of Economics and Administrative Sciences, BUJFEAS, 2025, Volume 16, Issue 32

> E-ISSN: 2148-2497 https://dergipark.org.tr/tr/pub/bartiniibf

Research Article, Received: 12.05.2025; Accepted: 23.10.2025 DOI: 10.47129/bartiniibf.1697566

Examining Social Media Usage Strategies of NGOs in the Context of TEMA, TEGV, and LÖSEV¹

Meric ALTAYLI*

Phd. Student, İstanbul University, Institute of Social Sciences, Department of Marketing meric.altayli@ogr.iu.edu.tr, Orcid ID:0009-0009-6651-1106

Prof. Dr. Zehra BOZBAY

İstanbul University, Faculty of Business, Department of Marketing zehrat@istanbul.edu.tr, Orcid ID:0000-0002-2728-8003

Abstract

Social media is an important digital marketing tool used in non-governmental organizations (NGOs) to increase awareness, reach large audiences, and create a desire to volunteer. In this study, three foundations from non-governmental organizations operating in the fields of environment, health, and education in Turkiye are selected and it is determined how the relevant foundations use social media and what content they highlight. Choosing foundations operating in different fields is important for comparability. In this context, TEGV, TEMA, and LÖSEV foundations were scrutinized. The posts shared by the relevant foundations on the X (Twitter) platform over a period of one month were examined. Tweets on the X platform were analyzed by classifying them according to communication types. For this purpose, a content analysis was carried out by examining the foundations' X pages via MAXQDA. It is aimed to contribute to the literature on how non-governmental organizations adopt digitalization processes through social media. It is thought that this study will provide guiding advice to other non-governmental organizations in developing their social media strategies.

Keywords: Social Media, Non-Governmental Organizations, NGOs, Digitalization, Content Analysis, X (Twitter)

JEL Classification: M31, M37, L31

-

APA: Altaylı, M & Bozbay, Z. (2025). Examining Social Media Usage Strategies of NGOs in the Context of TEMA, TEGV, and LÖSEV. Bartın Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 16(32), 108-121.

¹ This study is an expanded version of the paper presented by the first author at the 3rd International Congress on the Management of Organisations.

^{*}Corresponding Author (Research Assistant, Arel University)

TEMA, TEGV ve LÖSEV Bağlamında STK'ların Sosyal Medya Kullanım Stratejilerinin İncelenmesi

Öz

Sosyal medya, sivil toplum örgütlerinde farkındalığı artırmak, geniş kitlelere ulaşmak ve gönüllü olma isteği yaratmak amacıyla kullanılan önemli bir dijital pazarlama aracıdır. Bu çalışma ile Türkiye'de çevre, sağlık ve eğitim alanlarında faaliyet gösteren sivil toplum örgütlerinden üç vakıf seçilmiş ve ilgili vakıfların sosyal medyayı nasıl kullandıkları ve hangi içerikleri öne çıkardıkları belirlenmiştir. Farklı alanlarda faaliyet gösteren vakıfların seçilmesi karşılaştırılabilirlik açısından önemlidir. Bu bağlamda TEGV, TEMA ve LÖSEV vakıfları ele alınmıştır. İlgili vakıfların bir ay boyunca X (Twitter) platformunda yaptıkları paylaşımlar incelenmiştir. X platformundaki tweetler, iletişim türlerine göre sınıflandırılarak analiz edilmesi amacıyla, nitel araştırma yöntemlerinden içerik analizine başvurulmuştur. MAXQDA programı üzerinden analiz yapılmıştır. Bu çalışma ile sivil toplum örgütlerinin sosyal medya aracılığıyla dijitalleşme süreçlerini nasıl benimsedikleri konusunda literatüre katkıda bulunması amaçlanmaktadır. Diğer sivil toplum örgütlerine sosyal medya stratejilerini geliştirmelerinde yol gösterici tavsiyelerde bulunacağı düşünülmektedir.

Anahtar Kelimeler: Sosyal Medya, Sivil Toplum Kuruluşları, STK, Dijitalleşme, İçerik Analizi, X (Twitter)

JEL Sınıflandırması: M31, M37, L31

Introduction

Non-governmental organizations (NGOs) are non-profit, voluntary organizations that respond to various needs of society and focus on solving social problems (Rahman and Tasnim, 2023). NGOs primarily address issues of equality, education, health, environmental protection and human rights (Teegen et al., 2004). Besides, NGOs play an important role in enabling increased interactions between individuals within a community. Such interactions are important for building strong communities and relationships within society (Armstrong and Butcher., 2018). In this context, it can be stated that the establishment of just and democratic societies gains momentum with the existence of civil society organizations.

Civil society organizations can operate in many different fields such as education, health, environmental protection, culture, arts, and faith-based charities. In this study, the social media usage strategies of TEMA (Turkish Foundation for Combating Erosion, Afforestation and Protection of Natural Habitats), LÖSEV (Children with Leukemia Health and Education Foundation), and TEGV (Turkish Education Volunteers

Foundation) foundations, which are non-governmental organizations operating in the fields of education, health, and environment respectively, are examined. TEMA is a nongovernmental organization founded in 1992 to protect natural assets and raise environmental awareness. TEMA prioritizes advocacy and environmental policies, climate, forest, rural development, and biodiversity issues (Yıldırım and Ayna, 2018). On the other hand, LÖSEV is a non-governmental organization founded in 1998 to provide material and moral support to children with leukemia in their fight against cancer. In addition to the medical support, LÖSEV also provides support to children in the social, psychological, and educational fields (Akkurt, 2014). TEGV, on the other hand, is a nongovernmental organization established in 1995 to support basic education provided by the state. TEGV also carries out activities in areas such as science, sports, arts, and technology to support the development of elementary school children (Ardahan, 2010). The selection of foundations operating in different fields is important for comparability. The fact that the relevant foundations are active in social media and conduct effective campaigns can be shown among the reasons for the selection of these foundations. This study stands apart from previous studies by analyzing the posts of non-governmental organizations operating in different fields as shared on the X platform.

1. Literature Review

Marketers and companies are using different social media tools as an important medium to create and communicate marketing messages and maintain relationships with customers (Gu and Ye, 2013). Social media platforms have begun to attract more attention in the literature with increased use of marketing activities in digital environments through digital transformation in recent years (Ali et al., 2023). This study examines the social media platforms of non-governmental organizations (LÖSEV, TEGV, TEMA) on the X (Twitter) platform. Following the purchase of the Twitter platform by Elon Musk, the Platform changed its logo and name and started operating as the X platform in 2023 (Robertson, 2023). X is a social media platform used by millions of people every day since 2012, where people send thousands of messages and interact with each other (Marin et al., 2023). X is a widely used platform worldwide and it is stated that 347,200 tweets are shared every minute (Domo, 2022). Since the X platform is a widely used platform for social issues and tweets that address social issues (e.g. climate change) become trending, making it easier for a tweet to spread quickly (Fownes et al., 2018:2).

Therefore, NGOs can reach large audiences by using the features of this platform (such as hashtags) and its power of interaction correctly. In their study, Zhou and Pan (2016) stated that NGOs actively use the local social media platform Sina-Weibo due to government restrictions on the global X platform. In their study, they emphasized the effectiveness and power of social media and stated that civil society organizations should be active on social media.

With the advancements in technology, traditional communication tools have been replaced by digital communication tools. Social media as a digital communication tool is

frequently used by profit and non-profit organizations to increase their interactions with target groups. It is also supported by studies in the literature that non-governmental organizations (NGOs) use social media as it is believed that promoting their activities that can enable NGOs to reach donors and supporters more effectively than ever before (Tripathi and Verma, S. 2017). Civil society organizations are highly dependent on material and non-material resources to carry out their activities. This situation reveals the necessity of continuous monitoring of stakeholders and individuals who provide resources (Boyd and Ellison, 2007). This is difficult to achieve with traditional communication tools. Therefore, social media is frequently used to increase interaction, ensure mutual information flow, and to keep track of stakeholders and individuals. In this context, the increasing importance of social media has led civil society organizations to strengthen their presence in the digital environment (Alonso-Cañadas et al., 2019, Fischer et al., 2023). It can be stated that the desire of civil society organizations to expand their sphere of influence by raising awareness is the driving force behind their use of social media platforms.

2. Research Design

This section consists of the purpose and importance of the study, limitations and evaluation of research findings.

2.1. Purpose and Importance of the Study

This study examines the social media strategies of non-governmental organizations (TEMA, LÖSEV, and TEGV) with the aim of comparing and evaluating their social media usage by considering their posts on X platforms. In this study, the X page of the foundations was examined and content analysis was carried out with the MAXQDA program. In this way, the tweets shared by the TEMA, TEGV, and LÖSEV foundations on their X accounts between 1.10.2024 and 31.10.2024 were examined and evaluated under three main categories. These categories consist of high interaction, partial communication and one-way communication. In this study, the classification developed by Armstrong and Butcher (2018), was used in the formation of these categories.

2.2. Limitations of Research Findings

This study is limited to examining the civil society organizations TEMA, LÖSEV, and TEGV. Another limitation of the study is that social media posts are solely evaluated as they are posted on the X platform, without regard to posts on other social media platforms. The reason why the X platform was chosen is that NGOs actively use this platform and its interaction rate is high. In addition, TEGV, TEMA and LÖSEV share tweets regularly on a daily basis. Therefore, it can be stated that they actively use the X platform.

October was chosen for this study because this period is when the communication activities of the three NGOs, LÖSEV, TEMA, and TEGV, intensify significantly, and campaign sharing increases. For LÖSEV, it is a period of preparation for the Leukemia Awareness Week in November, while TEMA reintensifies its awareness-raising activities during this period. Field activities and educational activities, which decrease during the summer months, pick up speed again in the fall. TEGV, on the other hand, increases its projects and volunteer calls with the start of the academic year. Findings that NGOs' social media interactions tend to increase during campaign periods have also been addressed in various studies (Lovejoy et al., 2013; Altar and Topsumer, 2023). However, examining only a one-month time period may not fully reflect the periodic differences in communication strategies, and this can be noted as one of the limitations of the study.

2.3. Evulation of Research Findings

This section consists of general findings obtained from the X platform of TEMA, LÖSEV and TEGV. The posts shared by the organizations on the X platform have been analyzed.

2.3.1. General Findings Obtained from the (X) Platform of TEMA, LÖSEV, and TEGV in Terms of Content

The posts of TEMA, TEGV, and LÖSEV foundations on the X platform were evaluated according to their communication types. In this context, communication types were evaluated under three categories: one-way communication, partial communication and high communication. In this context, one-way communication is usually carried out for informational purposes and there is no expectation of any interaction with followers (Ma, 2022,). Previous studies have noted that tweets shared by civil society organizations on the X platform generally fall into the one-way communication category (Waters et al., 2011; Lovejoy et al., 2013). On the other hand, partial communication leads to greater interaction with followers. Partial communication involves a certain level of engagement with users. It can be evaluated by looking at retweets and likes. On the other hand, high communication includes situations where follower participation is expected. For example, starting a campaign, inviting users to a dialogue, and posts that aim to get responses from users through surveys can be evaluated under the heading of high communication (Armstrong and Butcher, 2018).

 Table 1: Findings Obtained from (X) Platform of TEMA in Terms of Content

Tweet Category	Sample tweet from dataset	Interaction Types
1 Giving thanks	We are proud and happy that Prof. Dr. Daron Acemoğlu, one of our successful economists, was awarded the Nobel Prize in Economics.	one-way communication
	We congratulate Acemoğlu and wish him continued success	

2.Donation	Would you like to create a Memorial Forest in Eskişehir on	partial
request and information	behalf of your loved ones?	communication
information	For detailed information http://tema.org.tr/bagis-ve-destek/bagis/hatira-ormani-olusturma	
3.Selling a product	For Your Happiness in Autumn, To Make Hope Blossom	partial communication
	You can choose TEMA Foundation Wedding Products to invite your guests, welcome them and share the memory of this happy day with them, and support leaving a livable world for future generations. For all our product categories and different designs: http://tema.org.tr/urunler	
4.Encouring comminity	Flowers will bloom again in Izmir's mountains	high communication
participation	You can contribute to the reforestation of the areas damaged by the forest fires in Izmir by donating saplings to the work we have started in response to public demand. #We Will Reforest	Communication
5.Information	Because prevention is easier than extinguishing. Citizens, authorities, politicians, media and institutions should take precautions before the fire at https://bit.ly/DahaYanmadan	one-way communication

Resource: Created by the author with data from the X platform.

Table 1 provides examples of tweets shared on TEMA's X account and classifies these tweets according to interaction types (one-way communication, partial communication, and high communication). In addition, the classes of tweets according to their categories are indicated. Tweet categories were evaluated under 8 headings. These headings consist of information, selling a product, giving thanks, donation requests and information, encouraging community participation, requests for additional connections, acknowledging community events and asserting efficacy, and soliciting dialogue.

Table 2: Findings Obtained from (X) Platform for LÖSEV in Terms of Content

Tweet Category	Sample tweet from dataset	Interaction Types
1.Information	"Olive Harvest for Children with Leukemia in Tarsus" @dhainternet	one-way communication
2.Acknowledging community events and asserting efficacy	We attended the reception hosted by Goran Beus Richembergh on the occasion of the 30th anniversary of the Croatian-Turkish Friendship Association. We were given an award honoring our efforts to bring hope to children suffering from leukemia. This award is a guarantee of our past achievements and future steps.	one-way communication

3.Acknowledging community events and asserting efficacy	Medine, our little heroine who defeated the leukemia monster by receiving treatment at our Leukemia Hospital, now continues her education life at LSV Schools. Listen to her story full of hope from herself	one-way communication
4.Encouraging community participation	Thousands of people flocked to Anitkabir with LÖSEV Family. We commemorated our Great Leader with our enthusiasm, hope and unity! We will continue to walk in the footsteps of our ancestor with determination. #5 October at ANITKABİR with LÖSEV	high communication
5 Encouraging community participation	Happy birthday fairy girl Alya We celebrated the 4th birthday of Alya, our heroine with leukemia, with enthusiasm at Lösante Hospital:) Leave a like and let's share this happy moment together!	high communication

Resource: Created by the author with data from the X platform.

Table 2 includes examples of tweets shared on LÖSEV's X account. Tweet categories are evaluated in the same way as Table 1.Similarly, intraction types explain three main topics: one-way, partial, and high communication. When LÖSEV's tweets shared between 1.10.2024 and 31.10.2024 are examined, It can be said that they share tweets that can be evaluated mostly in the category of one-way communication and high communication.

Table 3: Findings Obtained from (X) Platform of TEGV in Terms of Content

Tweet Category	Sample tweet from dataset	Interaction Types
1.Giving thanks	We wish all students a successful year of fun learning, great	one-way communication
	friendships and lifelong learning.	
2.Donation	With quality education, One Child Changes, Turkey Develops!	partial
request and	For 29 years, with the support of our donors, we have	communication
information	provided more than 3 million children all over our country with	
	quality education completely free of charge and supported them	
	to look to the future with hope	
	If you would like to contribute to the quality education of more	
	children and the bright future of our country, you can support	
	education with your regular monthly donation of any amount	
	you wish.	
	We believe that with quality education,	
	#OneChildChangesTurkeyDevelops You can visit the link to	
	give regular donation instructions; http://bit.ly/3Nq0DBf	
3.Acknowledging	The Republic has done a lot for them with the vision it has	one-way
community events	provided and the opportunities it has created.	communication
and asserting	Now it is our children's turn. Our children, who have met with	
efficacy	quality education under the light of the Republic all around	
	Turkey, have made a promise to the Republic.	

You can also use the template in our Instagram story to share your #PromisesToTheRepublic so that our Republic can live	
for many more centuries.	
Happy October 29 Republic Day!	

Resource: Created by the author with data from the X platform.

Table 3 demonstrates TEGV tweet examples as posted on TEGV's X page. Interaction types are categorized as one-way communication, partial communication, and high communication. When TEGV's tweets shared between 1.10.2024 and 31.10.2024 are examined, it can be stated that they did not post tweets that would attract high interaction. The tweets examined fall into partial communication and one-way communication categories.

LÖSEV's Twitter account has 643.2 thousand followers, TEMA's Twitter account has 479.9 thousand followers, and TEGV's Twitter account has 46.8 thousand followers. The posts of TEMA, LÖSEV and TEGV's X accounts between 1.10.2024 and 31.10.2024 are analyzed. TEMA generally provides informative content about the environment and nature, but it can be stated that it prioritizes events and campaign-related posts to increase interaction. LÖSEV focuses on children and families in general, and tries to interact with the society by establishing emotional bonds. It is thought that LÖSEV's posts encouraging community participation and soliciting dialogue categories will contribute to high interaction. When TEGV's tweets are analyzed, it can be posited that there are tweets in the partial and one-way communication category. It can be said that TEGV can increase its interaction rate by prioritizing tweets with high communication content.

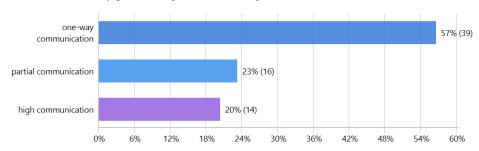


Figure 1: Distribution by Interaction Type

Figure 1 shows that one-way communication is the most shared tweet category with 57%, followed by partial communication with 23% and high communication with 20%.

	LOSEV Twitter	TEGV Twitter	TEMA twitter	Toplam
✓				
encouraging community participation	2		6	8
soliciting dialogue	5		1	6
▼ □ partial communication				
selling product	1		1	2
requests for additional connections	3	5	1	9
odonation request and information	3	2		5
▼ one-way communication				
acknowledging community events a	5	5	1	11
giving thanks	2	5	5	12
information	7	3	6	16
∑ TOPLAM	28	20	21	69
# N= Belgeler	1 (33,3%)	1 (33,3%)	1 (33,3%)	3 (100,0%)

Figure 2: General Information About Tweets

Figure 2 illustrates the 69 tweets were analyzed with the MAXQDA program. Among these tweets, there are 28 tweets from LÖSEV, 20 tweets from TEGV and 21 tweets from TEMA. As shown in Figure 2, tweets posted between 1.10.2024 and 31.10.2024 were taken into consideration and examined.

	LOSEV Twitter	TEGV Twitter	TEMA twitter	Toplam
high communication				
encouraging community participation	25,0%		75,0%	100,0%
soliciting dialogue	83,3%		16,7%	100,0%
✓ □ partial communication				
selling product	50,0%		50,0%	100,0%
requests for additional connections	33,3%	55,6%	11,1%	100,0%
odonation request and information	60,0%	40,0%		100,0%
one-way communication				
acknowledging community events a	45,5%	45,5%	9,1%	100,0%
giving thanks	16,7%	41,7%	41,7%	100,0%
information	43,8%	18,8%	37,5%	100,0%
∑ TOPLAM	40,6%	29,0%	30,4%	100,0%
# N= Belgeler	1 (33,3%)	1 (33,3%)	1 (33,3%)	3 (100,0%)

Figure 3: Percentage Distribution of Shared Tweets

Figure 3 shows that, according to the category classification table obtained from MAXQDO, it can be said that NGOs share tweets by using mostly one-way communication. While LÖSEV and TEMA associations give importance to posts for high communication, TEGV's posts are concentrated in one-way communication and partial

communication categories. It is thought that even one-way communication between NGOs can help establish and strengthen relationships with the general public, thus contributing to the creation of a strong civil society. The highest number of tweets is from LÖSEV, accounting for 40% of the total. It is followed by TEMA with 30.4%, and TEGV with 29%.

TEMA demonstrates a clear focus on this area in its social media strategy by creating the vast majority (75%) of posts that "encourage community participation." The act of "encouraging community participation" falls under the heading of "high communication." This can be interpreted as part of TEMA's effort to establish its communication on a highly interactive and two-way model. TEMA prioritizes messages that motivate the audience to take action rather than providing passive information.



Figure 4: Code Cloud of Tweet Keywords

The code cloud in Figure 4 provides a visual summary of which themes are more dominant. The largest and boldest themes stand out as the most recurrent or important themes in the dataset. Accordingly, it can be stated that the themes shown in red are more dominant. The themes in red are information, acknowledging community events and asserting efficacy, giving thanks, which are the most frequently used themes. This is followed by green, and the least dominant themes are shown in purple. The green category, including encouraging community participation and soliciting dialogue, are less dominant than the red categories. The findings in Figure 4 also visually confirm that NGOs primarily focus on one-way messages such as information, event announcements, and thank-you messages.

3. Discussion and Conclusion

There are many studies examining the strategies of civil society organizations in using social media (Armstrong and Butcher, 2018; Zhang, et al., 2023; Dimitrova et al., 2024). Studies show that civil society organizations aim to reach large masses and increase social awareness through social media (El Chaarani and Raimi, 2022; Desai,

2024). In this study, the tweets of civil society organizations on the social media platform X were analyzed according to the types of communication. In conclusion of the study, although it cannot be generalized that high interactive sharing increases retweet and like rates, it can be said that it has a positive impact.

It is seen that the tweets shared by non-governmental organizations are mostly in the one-way communication category. Existing studies have also emphasized that NGOs use one-way communication to raise awareness and gain support for campaigns (Lovejoy et al., 2013; Altar and Topsumer, 2023).

TEGV's low 'high communication' percentage can also be explained by the structure of its target audience. While TEMA's target audience (environmental activists) is highly responsive to calls to action and has a high level of digital engagement, TEGV's main target audience (students, parents, education donors) is more focused on acquiring information and following the continuity of projects. Due to the nature of educational content, this audience tends to prefer information-focused content rather than initiating dialogue. LÖSEV's emotional connection strategy stems from its desire to create a sense of community. It often blends elements of empathy, charity, and calls for volunteering in its tweets. In other words, LÖSEV does not merely provide information. Zhou and Pan (2016) classify NGO posts (using Weibo as an example) in the Chinese context as Information / Community / Action and show that each function serves different purposes. LÖSEV's emotional bonding strategy generally blends the components of community (belonging/empathy) and action (donation, call for volunteering).

It can be stated that there are more tweets in the information category, which is a subcategory of one-way communication category. It can be assumed that if civil society organizations share tweets for high interaction, they will receive more interaction. When the frequency of tweet sharing by civil society organizations is examined, it is seen that civil society organizations share on the X platform almost every day. This may indicate that they aim to raise awareness through social media. Thus, it can be proposed that increasing the variety of posts to attract greater community interaction will lead to increased awareness-raising.

Conflict of Interest: There is no conflict of interest in this study.

Compliance of Ethical Standard Statement: Ethics committee approval is not required for the study.

Contribution Statement of Researchers: The first and second authors contributed equally (50% each) to the writing of this study.

References

- Akkurt, S. (Ed.). (2014). *İYTE Bülten* (Sayı 18, Nisan). İzmir Yüksek Teknoloji Enstitüsü. https://iyte.edu.tr/wp-content/uploads/2018/12/sayi18.pdf
- Ali, I., Balta, M., and Papadopoulos, T. (2023). Social media platforms and social enterprise: Bibliometric analysis and systematic review. *International Journal of Information Management*, 69, 102510.
- Alonso-Cañadas, J., Galán-Valdivieso, F., Saraite-Sariene, L., and Caba-Perez, M. D. C. (2019). Unpacking the drivers of stakeholder engagement in sustainable water management: NGOs and the use of Facebook. *Water*, 11(4), 775.
- Altar, O. and Topsumer, F. (2023). Sosyal Medyada Etkileşim: Çevreci Sivil Toplum Kuruluşları Üzerine Bir İnceleme. İstanbul Arel Üniversitesi İletişim Çalışmaları Dergisi, 11(23), 1-31.
- Ardahan, F. (2010). Sivil toplum kuruluşlarının etkin yönetimi için stratejik işbirliği ve Türkiye Eğitim Gönüllüleri Vakfı (TEGV) Suna-İnan Kıraç Antalya Eğitim Parkı Örneği. *Uluslararası İnsan Bilimleri Dergisi*, 7(2), 210-233.
- Armstrong, C. and Butcher, C. (2018). Digital civil society: How Nigerian NGOs utilize social media platforms. *International Journal of Politics, Culture, and Society*, 31, 251-273.
- Boyd, D. M. and Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
- Cano-Marin, E., Mora-Cantallops, M., and Sánchez-Alonso, S. (2023). Twitter as a predictive system: a systematic literature review. *Journal of Business Research*, 157, 113561.
- Desai, V. (2024). Role of non-governmental organisations (NGOs). In *The companion to development studies* (pp. 149-155). Routledge.
- Dimitrova, D., Heidenreich, T., and Georgiev, T. A. (2024). The relationship between humanitarian NGO communication and user engagement on Twitter. *new media & society*, 26(5), 2514-2534.
- Domo (April, 2022). Data Never Sleeps 10.0. https://www.domo.com/data-never-sleeps.
- El Chaarani, H. and Raimi, L. (2022). Determinant factors of successful social entrepreneurship in the emerging circular economy of Lebanon: exploring the moderating role of NGOs. *Journal of Entrepreneurship in Emerging Economies*, 14(5), 874-901.
- Fischer-Preßler, D., Marx, J., Bunker, D., Stieglitz, S., and Fischbach, K. (2023). Social media information governance in multi-level organizations: How humanitarian organizations accrue social capital. *Information & Management*, 60(7), 103838.

- Fownes, J. R., Yu, C., and Margolin, D. B. (2018). Twitter and climate change. *Sociology Compass*, 12(6), e12587.
- Gu, B. and Ye, Q. (2013). First step in social media: Measuring the influence of online management responses on customer satisfaction. *Production and Operations Management*, 23(4), 570–582.
- Lovejoy, K., Waters, R. D., and Saxton, G. D. (2012). Engaging stakeholders through Twitter: How nonprofit organizations are getting more out of 140 characters or less. *Public relations review*, *38*(2), 313-318.
- Ma, Y. (2022). Role of communication strategies in organizational commitment, mediating role of faculty engagement: Evidence from English language teachers. *Frontiers in psychology*, *13*, 921797.
- Rahman, S., and Tasnim, F. (2023). The role of NGOs in ensuring local governance in Bangladesh: From the perception of other actors of governance. *Asia-Pacific Journal of Regional Science*, 7(3), 1007-1034.
- Robertson, C. (2023). Here's what our research says about news audiences on Twitter, the platform now known as X. *Reuters Institute for the Study of Journalism*, 25.
- Teegen, H., Hildy, J. P., and Vachani, S. (2004). The importance of nongovernmental organizations (NGOs) in global governance and value creation: An international business research agenda. *Journal of International Business Studies*, 35(5), 463-483.
- Tripathi, S. and Verma, S. (2017). Analysing technological dimensions for engagement with NGOs on social media. *The International Journal Research Publications Research Journal of Social Science and Management*, 7(4), 174-184
- Waters, R. D. and Jamal, J. Y. (2011). Tweet, tweet, tweet: A content analysis of nonprofit organizations' Twitter updates. *Public Relations Review*, 37(3), 321–324.
- Yıldırım, K. and Ayna, Y. E. (2018). The role of non-governmental organizations in environmental governance in Turkey. *Adam Academy Journal of Social Sciences*, 8(2), 409-431.
- Zhang, Y., Dong, C., and Cheng, Y. (2023). How do nonprofit organizations (NPOs) effectively engage with the public on social media? Examining the effects of interactivity and emotion on Twitter. *Internet Research*, 33(2), 550-577.
- Zhou, H. and Pan, Q. (2016). Information, community, and action on Sina-Weibo: How Chinese philanthropic NGOs use social media. Voluntas: *International Journal of Voluntary and Nonprofit Organizations*, 27, 2433-2457.

APPENDIX

Tweet Category	Sample tweet from dataset	Interaction Types
1.Information	General informational posts (e.g. inspirational quotes) and retweets.	one-way communication
2.Selling a product	Content aimed at selling products or services.	partial communication
3.Giving thanks	Thank you messages to donors, volunteers or the community.	one-way communication
4.Donation request and information	Calls for donations or requests for financial assistance.	partial communication
5.Encouraging community participation	These posts go beyond sharing information, aim to mobilize the community, create a sense of belonging and action by feeling part of the community	high communication
6.Requests for additional connections	Posts that include requests to follow other social media accounts	partial communication
7.Acknowledging community events and asserting efficacy	This category includes posts on events organized by NGOs themselves and other organizations. Special day celebrations are also evaluated in this group.	one-way communication
8. Soliciting dialogue	Asking questions to get answers or asking for feedback on a topic.	high communication