

Benefits of using social network X in the effectiveness of the food bank of the Foundations Affiliated with the Bogotá Food Bank

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Introduction

In the current context, marked by increasing digitalization, social media platforms have become essential tools for non-profit organizations to strengthen their communication with various audiences. These platforms enable the creation of meaningful connections, promote organizational transparency, and stimulate citizen participation (Levasseur et al., 2021; Wang & Yang, 2020), which is key to building public trust (Sun & Asencio, 2019; Grillo Torres & Moreno López, 2022).

In particular, digital social profiles offer strategic opportunities to encourage actions such as volunteering, manage awareness campaigns, and foster donations, with a reach that significantly transcends the virtual sphere (Boulianne, 2023; Bhati & McDonnell, 2020). Innovative strategies, such as the use of emotional narratives and immersive audiovisual content, have proven effective in capturing users' attention and significantly increasing their level of engagement with causes (Grillo Torres & Vega, 2024; Pérez-Seijo et al., 2018).

Within this framework, foundations affiliated with the Bogotá Food Bank play a crucial role in combating hunger and food insecurity. Their impact extends not only to the logistics of food distribution but also to strategic communication management, which is capable of mobilizing resources and strengthening community support networks (Seo & Vu, 2020; Grillo Torres et al., 2023).

In this regard, the social network X (formerly Twitter) has emerged as a particularly relevant platform for fostering interactive relationships with the public (Cartwright et al., 2021; Ihm, 2019). Its bidirectional nature enables third-sector organizations to actively engage with diverse audiences, expand their social reach, and reinforce their institutional positioning (Elvira-Lorilla et al., 2024; Mercado et al., 2022).

The primary objective of this study is to thoroughly evaluate how communication strategies on X, regarding formats, themes, publication frequency, and content quality, contribute to fostering reciprocal and meaningful interactions with audiences. The findings of this research provide relevant insights for optimizing digital communication in non-profit organizations, contributing to the development of effective practices in strategic social media management.

Theoretical Approaches to Understanding the Strategic Use of Social Media in the Third Sector

Digital social networks have transformed organizational communication, particularly within the third sector, by facilitating bidirectional relationships with diverse audiences. Their use enables not only the

dissemination of information but also the reinforcement of transparency, the promotion of participation, and the formation of support communities around social causes (Baladron, 2020; Castillo-De Mesa & Gómez-Jacinto, 2020).

Various studies have documented how NGOs in Latin America have adopted digital strategies to foster engagement, despite challenges such as limited connectivity and technological inequity (Ortiz Rodríguez, 2021; Cheyne et al., 2020). In these context, visual content, emotional narratives, and calls to action have proven particularly effective in capturing attention and mobilising users (Koutromanou et al., 2023; Saikia & Barman, 2023).

From a theoretical perspective, two key models stand out for analyzing digital engagement: Social Presence Theory, which emphasizes the perception of emotional closeness in communication (Rauniar et al., 2019; Grillo Torres, 2021), and the Social Media Engagement Model, which describes the user's progression from passive observation to active co-creation (Shawky et al., 2020; Rodriguez-Lozada et al., 2024). Both models agree that communication becomes more effective when rational and emotional strategies are integrated (Dolan et al., 2019; Cabrera-Cordova et al., 2023).

Additionally, recent studies have highlighted that publication frequency, the use of interactive formats, and message coherence are key factors in stimulating participation on platforms such as X. In particular, the inclusion of multimedia resources and hashtags, along with clear calls to action, enhances both visibility and institutional legitimacy (Taylor, 2023; Zhang et al., 2023).

In the case of food banks, research has highlighted the importance of integrating effective communication practices with logistical and technological models to maximize the impact of their interventions (Rizvi et al., 2021; Martínez & Ayala, 2024). Digital communication, therefore, not only disseminates institutional efforts but also acts as a catalyst for community engagement.

This conceptual framework supports the analysis of the strategic use of X by foundations affiliated with the Bogotá Food Bank, allowing for the identification of digital interaction patterns that may optimize their communicative performance and strengthen their social impact.

The Multiple Correspondence Analysis (MCA) revealed two main dimensions explaining 40% of the variability: the first associated with content types and formats, and the second with publication frequency and interaction. The graphical representation shows two foundation profiles: a majority group employing static strategies and exhibiting low interaction, and a minority group focused on audiovisual content, high frequency, and strong audience engagement.

The results confirm that foundations affiliated with the Bogotá Food Bank achieve more meaningful interaction on the social network X when they adopt dynamic communication strategies, including frequent posting, the use of visual resources, and the incorporation of calls to action. This finding reinforces the proposal made by Koutromanou et al. (2023) and Boulianne (2023), who highlight the effectiveness of emotional and audiovisual content in fostering engagement within non-profit organizations.

The Multiple Correspondence Analysis allowed for the identification of two differentiated profiles: one predominantly static, characterized by low activity and limited interaction, and another more active, with practices oriented towards participation. This segmentation supports the Social Media Engagement Model (Shawky et al., 2020), which distinguishes between different levels of digital engagement based on the quality and frequency of content.

Likewise, the Kruskal-Wallis test and the Chi-squared analysis confirmed that publication frequency and communicative quality have a significant impact on the level of interaction. However, there was considerable variability among posts even within active groups, suggesting that frequency alone is not sufficient: content must be strategic and tailored to the audience.

Among the study's limitations are its cross-sectional design, which prevents the establishment of causal relationships, and its exclusive focus on the X network, which limits the generalizability of the findings to other digital environments. Furthermore, the analysis did not include qualitative metrics regarding audience type or the emotional effects of content.

Future research could address these gaps through longitudinal studies and mixed methods approaches, incorporating interviews or qualitative content analysis to gain a deeper understanding. It would also be helpful to compare communicative performance across other platforms (such as Instagram or TikTok) and explore the impact of emerging technologies, such as personalization algorithms, on citizen engagement.

Conclusions

This study demonstrates that nonprofit organizations affiliated with the Bogotá Food Bank (Banco de Alimentos de Bogotá) effectively enhance digital engagement on the social network X (formerly Twitter) through participatory communication strategies. The frequency of publication, use of visual and interactive formats, and integration of strategic calls to action are significantly associated with higher engagement levels, contributing to increased institutional visibility and strengthened community relations.

Multivariate analyses, including Multiple Correspondence Analysis (MCA), Chi-square, and Kruskal-Wallis tests, revealed significant associations between communication variables and interaction metrics. Organizations employing more dynamic communication approaches exhibit a greater potential to consolidate support networks, reinforce legitimacy, and increase organizational sustainability.

From a strategic perspective, the findings highlight the importance of incorporating emotional and visual content into social media profiles and maintaining a consistent online presence. These practices facilitate broader audience reach and foster stronger, reciprocal relationships with stakeholders.

It is recommended that future research employ longitudinal designs and mixed-method approaches to better understand the evolution of digital engagement, compare communicative effectiveness across different platforms, and evaluate the role of technological tools—such as recommendation algorithms—in shaping audience interactions.

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