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ESTRATÉGIAS DE COMUNICAÇÃO DIGITAL E PARTICIPAÇÃO DOS CIDADÃOS NA ADMINISTRAÇÃO LOCAL: EVIDÊNCIAS DE UM MUNICÍPIO PORTUGUÊS

DIGITAL COMMUNICATION STRATEGIES AND CITIZEN ENGAGEMENT IN LOCAL GOVERNMENT: EVIDENCE FROM A PORTUGUESE MUNICIPALITY

ESTRATEGIAS DE COMUNICACIÓN DIGITAL Y PARTICIPACIÓN CIUDADANA EN LA ADMINISTRACIÓN LOCAL: EL CASO DE UN AYUNTAMIENTO PORTUGUÉS

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RESUMO

Introdução: A crescente utilização das redes sociais pelas administrações locais tem transformado a forma como os municípios comunicam com os cidadãos, promovem iniciativas e procuram reforçar a participação da comunidade, e entre estas plataformas, o Instagram tem assumido particular relevância devido ao seu carácter visual e interativo.
Objetivo: Analisar de que forma as estratégias de comunicação digital adotadas por um município português influenciam o envolvimento dos cidadãos no Instagram.
Métodos: Foi desenvolvido um estudo de caso com recurso a métodos mistos. Foram analisadas 543 publicações da conta oficial de Instagram do município, publicadas entre janeiro de 2024 e junho de 2025. A análise integrou métricas de desempenho, características dos conteúdos, formatos, temas, utilização de hashtags e padrões temporais, tendo sido complementada com uma entrevista semiestruturada ao responsável pela área de Comunicação e Marketing, analisada tematicamente com recurso ao NVivo.
Resultados: Os resultados mostram que os conteúdos relacionados com juventude e educação, eventos e atividades municipais geraram níveis mais elevados de envolvimento; os vídeos e os carrosséis apresentaram melhor desempenho do que as imagens estáticas e a utilização de hashtags associadas à identidade local e a iniciativas específicas revelou-se igualmente relevante. As perceções do responsável pela comunicação confirmaram os padrões identificados nas métricas do Instagram.
Conclusão: A eficácia da comunicação digital municipal depende sobretudo da relevância dos conteúdos e da escolha dos formatos, mais do que da frequência de publicação. Uma estratégia centrada na comunidade, na identidade local e em formatos visuais mais dinâmicos pode contribuir para reforçar o envolvimento dos cidadãos.

Palavras-chave: comunicação digital; envolvimento dos cidadãos; governo local; redes sociais; Instagram

ABSTRACT

Introduction: The growing use of social media by local governments has transformed the way municipalities communicate with citizens, promote initiatives and seek to strengthen community participation. Among these platforms, Instagram has become particularly relevant because of its visual and interactive nature.
Objective: This study analyses how the digital communication strategies adopted by a Portuguese municipality influence citizen engagement on Instagram.
Methods: A mixed-methods case study was conducted. A total of 543 posts published on the municipality's official Instagram account between January 2024 and June 2025 were analysed. The analysis included performance metrics, content characteristics, formats, themes, hashtag use, and temporal patterns, complemented by a semi-structured interview with the municipality's Head of Communications and Marketing, which was thematically analysed using NVivo.
Results: The findings show that posts related to youth and education, events and municipal activities generated higher levels of engagement. Videos and carousel posts performed better than static images, while hashtags associated with local identity and specific initiatives proved relevant. The communication manager's perceptions confirmed the patterns identified through the Instagram metrics.
Conclusion: The effectiveness of municipal digital communication depends primarily on content relevance and format choice, rather than on posting frequency. A strategy centred on the community, local identity and more dynamic visual formats may contribute to strengthening citizen engagement.

Keywords: digital communication; citizen engagement; local government; social media; Instagram

RESUMEN

Introducción: El creciente uso de las redes sociales por parte de las administraciones locales ha transformado la forma en que los municipios se comunican con los ciudadanos, promueven iniciativas y tratan de reforzar la participación de la comunidad. Entre estas plataformas, Instagram ha adquirido especial relevancia debido a su carácter visual e interactivo.
Objetivo: Analizar de qué manera las estrategias de comunicación digital adoptadas por un municipio portugués influyen en la participación ciudadana en Instagram.
Métodos: Se realizó un estudio de caso con un enfoque de métodos mixtos. Se analizaron 543 publicaciones de la cuenta oficial de Instagram del municipio, publicadas entre enero de 2024 y junio de 2025. El análisis incluyó métricas de rendimiento, características del contenido, formatos, temas, uso de hashtags y patrones temporales, y se complementó con una entrevista semiestructurada al responsable del área de Comunicación y Marketing, analizada temáticamente mediante NVivo.
Resultados: Los resultados muestran que las publicaciones relacionadas con juventud y educación, eventos y actividades municipales generaron mayores niveles de participación. Los vídeos y los carruseles obtuvieron un mejor rendimiento que las imágenes estáticas, mientras que el uso de hashtags asociados a la identidad local y a iniciativas específicas también resultó relevante. Las percepciones del responsable de comunicación confirmaron los patrones identificados a partir de las métricas de Instagram.
Conclusión: La eficacia de la comunicación digital municipal depende principalmente de la relevancia de los contenidos y de la elección de los formatos, más que de la frecuencia de publicación. Una estrategia centrada en la comunidad, la identidad local y formatos visuales más dinámicos puede contribuir a fortalecer la participación ciudadana.

Palabras clave: comunicación digital; participación ciudadana; gobierno local; redes sociales; Instagram

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INTRODUCTION

Digital transformation has been changing the way public organisations communicate with citizens, making social media key tools for disseminating information, enhancing transparency and fostering a closer relationship with the community. Among these platforms, Instagram is becoming increasingly important for local government, enabling local authorities to communicate in a more visual, immediate, and interactive way.

Despite the growing interest in digital communication within public administration, there remains limited evidence regarding the communication strategies adopted by local authorities and their influence on citizen engagement, particularly in the Portuguese context. Furthermore, most studies favour either exclusively quantitative or qualitative approaches, whilst the number of studies combining the analysis of social media performance metrics with the perspective of those responsible for institutional communication remains limited.

In this context, this study analyses how the digital communication strategies adopted by a Portuguese municipality influence citizen engagement on Instagram. To this end, it employs a mixed-methods approach that combines content analysis of posts, social media analytics indicators, and a semi-structured interview with the municipality's Head of Communications and Marketing, enabling an understanding of both the observed patterns of interaction and the strategic choices that underpin them.

The article is organised into five sections. Following this introduction, the theoretical framework and research questions are presented, and the methodology is described. Subsequently, the main results are presented and discussed, and the article concludes with the study's findings, limitations, and suggestions for future research.

1. THEORETICAL FRAMEWORK

1.1 Digital communication in local government

The integration of digital technologies into public administration has transformed the way public institutions deliver services, disseminate information, and interact with citizens (Sienkiewicz-Małyjurek & Zyzak, 2025). Initially associated with the development of e-government centred on the digitisation of procedures and the provision of online services, this evolution has given rise to the concept of digital government, which integrates digital technologies into governance, institutional communication, and relations with various stakeholders. In this context, digital platforms have moved beyond being mere channels for disseminating information to assume a strategic role in promoting a more accessible, transparent, and citizen-centred administration (Wukich, 2025).

This transformation is particularly relevant in local government, where the close relationship between local authorities and citizens requires regular, clear, and accessible communication. The digitisation of institutional channels enables the dissemination of information about services, decisions, and initiatives more quickly and effectively (Sienkiewicz-Małyjurek & Zyzak, 2025). In this context, social media stands out for its ability to facilitate more immediate, visual, and interactive communication. Its importance was highlighted during the COVID-19 pandemic, when Padeiro et al. (2021) demonstrated Facebook's central role in communication across 304 Portuguese municipalities.

In addition to disseminating information, digital tools strengthen the relationship between citizens and local authorities, facilitating access to municipal services and promoting more participatory communication (Maziashvili et al., 2023; Wukich, 2025). In this context, social media constitute an important tool for engagement, provided they are integrated into a communication strategy grounded in relevant content and citizen interaction (Contri et al., 2025). However, their use remains constrained by organisational limitations and the lack of well-structured communication strategies (Criado & Villodre, 2022).

1.2. Social media as a tool for citizen engagement

The growing use of social media has been transforming the way local governments communicate; they have come to use these platforms in a complementary manner to disseminate institutional information and to promote dialogue, civic participation, and closer ties with citizens (Bonsón et al., 2019; Sienkiewicz-Małyjurek & Zyzak, 2025), in a two-way process. Unlike traditional one-way media, these platforms facilitate two-way communication, allowing users to comment, react, share content, and interact directly with public bodies (Perea et al., 2021; Wukich, 2025); in this context, the concept of citizen engagement plays a central role in digital public communication.

Thus, engagement represents the degree to which citizens engage with published content, reflecting the ability of public organisations to encourage participation and forge closer relationships with the community (Amores et al., 2023; Wukich, 2025). Higher levels of engagement reinforce transparency, accountability, and trust in public institutions (Tejedo-Romero et al., 2022), whilst social media promotes processes of co-creation of public value and more participatory governance (Blasi et al., 2022). However, the effectiveness of social media does not depend solely on an institution's mere presence on these platforms; digital communication must be underpinned by a consistent strategy, based on relevant content, continuous interaction, and responsiveness to citizens (Contri et al., 2025). In this regard, engagement is currently recognised as a key indicator of the effectiveness of digital communication in local government and is often assessed using metrics such as likes, comments, shares, and other forms of user interaction (Perea et al., 2021; Amores et al., 2023).

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1.3 Communication strategies on Instagram

Instagram has become one of the main communication platforms for public organisations due to its visual nature and high potential for user engagement. The platform's evolution, through features such as Stories, Reels, and videos, has broadened the possibilities for institutional communication, enabling local authorities to tailor content to different audiences and objectives (Peter & Dalla Vecchia, 2021).

According to Chaffey and Smith (2022), effective social media management requires setting objectives, understanding target audiences, planning editorial content, and continuously monitoring results. In this context, whilst the regularity of posts contributes to a consistent presence, it is the quality and relevance of the content that most influence the success of communication.

Furthermore, the choice of formats is also a strategic factor. Instagram offers different types of content, such as static posts, carousels, videos, and Reels, with audiovisual formats being particularly effective at capturing users' attention and promoting interaction, partly due to how the platform's algorithms work (Kuo & Chen, 2023). At the same time, the use of storytelling, a consistent visual identity, and appropriate hashtag use can increase content visibility and boost follower engagement (Peter & Dalla Vecchia, 2021; Santos et al., 2023; Wukich, 2025).

However, evaluating these strategies requires continuous monitoring of performance indicators, metrics such as reach, views, likes, comments, shares, and saves enable us to assess user response and identify the content that generates the most engagement (Chaffey & Smith, 2022; Wukich, 2025). Engagement is widely recognised as a key indicator of the effectiveness of communication on Instagram, providing relevant information for optimising communication strategies for public organisations (Santos et al., 2023).

This perspective underpins the analysis carried out in this study, which seeks to understand how different communication strategies adopted on Instagram influence the level of engagement generated amongst citizens.

1.4 Social media analytics for evaluating institutional communication

The growing use of social media by public organisations has generated a significant volume of digital data, enabling objective analysis of institutional communication and user behaviour. Social media posts continuously generate digital traces, manifested in metrics such as views, reach, likes, comments, and shares, which enable an objective analysis of user behaviour and the effectiveness of institutional communication, overcoming the limitations of traditional evaluation methods based on surveys or interviews (Wedel & Kannan, 2016; Ohme et al., 2024; Wukich, 2025).

In this context, social media analytics has increasingly established itself as a key tool for research into digital communication, as it enables the collection and processing of quantitative indicators, which allow for the assessment of the performance of posts, the identification of user behaviour patterns, the comparison of different communication strategies, and the analysis of the effectiveness of content produced by organisations, with a view to monitoring the evolution of communication over time, thereby supporting the development of strategies better aligned with institutional objectives (Santos et al., 2023; Wedel & Kannan, 2016).

However, the interpretation of quantitative metrics requires integration with content analysis, enabling the correlation of publication characteristics, such as format, topic, language, visual elements, or timing of publication, with levels of user engagement and, consequently, an understanding of which communication strategies are most effective (Perea et al., 2021; Santos et al., 2023; Ohme et al., 2024).

Hence, integrating content analysis with the metrics provided by digital platforms constitutes a robust methodological approach for assessing the effectiveness of institutional communication on social media. In addition to quantifying results, this combination enables us to understand which communication strategies generate the most engagement and deliver the best outcomes, thereby supporting a more comprehensive assessment of the communication undertaken by public organisations.

1.5 Research gap

The literature has shown a growing interest in digital communication in the public sector, highlighting the potential of social media to promote transparency, strengthen civic participation, and bring institutions closer to citizens (Bonsón et al., 2019; Contri et al., 2025). Studies commonly analyse concepts such as citizen engagement, identify factors influencing users' interaction with published content, and propose metrics to assess the effectiveness of communication on digital platforms (Perea et al., 2021; Amores et al., 2020; Ohme et al., 2024).

Despite these contributions, the research continues to have certain limitations, as the majority of studies focus on public organisations at the national level or on comparative analyses between different platforms, whilst research dedicated to the context of local government, and, in particular, to Portuguese municipalities, is less common. Similarly, although Instagram has taken on an increasingly important role in institutional communication, the empirical evidence regarding the communication strategies adopted by local authorities and their impact on citizen engagement remains relatively limited (Santos et al., 2023; Kuo & Chen, 2023). Furthermore, either exclusively quantitative or qualitative approaches predominate, whilst studies that combine content analysis, social media analytics indicators, and the perspectives of those responsible for institutional communication remain scarce. In this context, the present study analyses how the digital communication strategies adopted by a Portuguese local

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authority influence citizen engagement on Instagram, using a mixed-methods approach that integrates these different sources of evidence.

Research questions

Problem question: How do the digital communication strategies adopted by a Portuguese municipality influence citizen engagement on Instagram?

RQ_1: Which communication strategies are most frequently adopted by the municipality on Instagram?

RQ_2: How do different communication strategies (e.g., content type, format, and communication approach) influence citizen engagement?

RQ_3: To what extent do the quantitative patterns of engagement identified through Instagram analytics align with the communication manager's perceptions regarding the municipality's digital communication strategy?

2. METHODS

This study adopts a mixed-methods case study to examine how the digital communication strategies adopted by a Portuguese municipality influence citizen engagement on Instagram, integrating quantitative analysis of Instagram performance metrics with qualitative content analysis of published posts and a semi-structured interview with the municipality's communication manager, thereby providing a more comprehensive understanding of the phenomenon (Creswell & Plano Clark, 2018).

2.1 Case study

The study focuses on a medium-sized municipality located in the Northern Region of Portugal, in the district of Vila Real and the Alto Tâmega sub-region. The municipality covers an area of approximately 437 km² and has a resident population of around 11,800, distributed across 14 civil parishes, and is characterised by a predominantly rural territory and low population density.

The municipality was selected through purposive sampling (Palinkas et al., 2015) because of its well-established institutional presence on Instagram and its regular use of the platform to disseminate public information, promote municipal initiatives, and interact with citizens. As an official institutional communication channel, the municipality's Instagram account provides a suitable context for examining the relationship between digital communication strategies and citizen engagement through an in-depth analysis of a contemporary phenomenon in its real-life context (Yin, 2018).

The analysis focused on the municipality's official Instagram account. It covered the period from January 2024 to June 2025, encompassing a full annual communication cycle that included regular municipal activities, seasonal campaigns, and major local events. During this period, 543 posts published on the municipality's official Instagram account were extracted and analysed using automated data collection tools, and the timeframe was considered sufficiently representative to capture the communication strategies adopted throughout the year and the corresponding patterns of citizen engagement.

2.2 Data collection

Data were collected from three complementary sources, consistent with the adopted mixed-methods design.

The first source consisted of posts from the municipality's official Instagram account; posts published between January 2024 and June 2025 were analysed, a period covering various municipal campaigns, events, and initiatives. The posts and their metadata were extracted via the Apify platform using automated collection tools, enabling export for subsequent processing and analysis.

The second data source comprised the performance metrics of the municipality's official Instagram posts. Following data extraction via the Apify platform, the dataset was processed in Python to generate quantitative indicators for publication activity, content characteristics, user engagement, and communication performance. These indicators included publication frequency, interactions (likes and comments), content format, hashtag use, thematic categories, temporal patterns, and sentiment and emotion analyses of captions and user comments. Together, these indicators provided the basis for evaluating the municipality's digital communication strategies and their relationship with citizen engagement.

The third source of information was a semi-structured written interview with the head of the municipality's Communications and Marketing department, selected because of his direct involvement in defining and implementing the local authority's digital communications strategy. The interview guide included open-ended questions on the objectives of institutional communication, the content planning process, publication criteria, and the use of Instagram as a tool for communication and citizen engagement. The written responses were subsequently organised and qualitatively analysed using NVivo software, thereby supplementing and contextualising the results from the quantitative analysis of posts and their respective performance metrics.

Data were collected and analysed using three digital tools: Apify for extracting posts and metadata, Python for quantitative data processing and analysis, and NVivo for organising and analysing the qualitative interview data. Combining these three data sources enabled the analysis of institutional communication practices, publication performance metrics, and the communication manager's perspective, providing a more comprehensive understanding of the relationship between digital communication strategies and citizen engagement.

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2.3 Variables

Table 1 presents the variables analysed in this study, their types, and the corresponding measurements or operationalisations.

Table 1 - Analysed variables

Variable	Type of variable	Measurement / Operationalisation
Publication frequency	Quantitative	Number of posts by month, weekday, and hour of publication
Likes	Quantitative	Number of likes per post
Comments	Quantitative	Number of comments per post
Content format	Categorical	Image, carousel, video, and reel
Hashtag use	Quantitative/Categorical	Number of hashtags and most frequently used hashtags
Content theme	Categorical	Institutional (official municipal information and institutional activities); Events and Activities (promotion or coverage of municipal events); Youth and Education (content primarily concerning young people, students, schools, educational or youth initiatives); Culture and Heritage (cultural activities and local heritage); Social and Community (social and community initiatives); Other (content not fitting the preceding categories)
Citizen engagement	Quantitative	Mean number of interactions (likes and comments) by theme, content format, and caption emotion
Caption sentiment	Categorical	Positive, negative, neutral, and mixed
Caption emotion	Categorical	Neutral, joy, trust, fear, sadness, and surprise
Comment emotion	Categorical	Neutral, joy, and sadness
Temporal evolution of themes	Quantitative	Monthly distribution of thematic categories
Interview categories	Qualitative	Communication objectives; communication channels and strategies; editorial style and language; citizen engagement; dissemination of initiatives; crisis management; performance monitoring; innovation and future communication

Note: The variables were derived from data extracted from the municipality's official Instagram account using Apify and subsequently processed in Python. Qualitative variables were obtained through content analysis of the written semi-structured interview using NVivo

2.4 Data analysis

Data analysis integrated quantitative and qualitative approaches, consistent with the adopted mixed-methods design. Quantitative data extracted from the municipality's official Instagram account were processed in Python to organise, clean, and analyse the posts and their associated performance metrics. Descriptive statistics were used to characterise publication patterns and levels of citizen engagement by analysing posting frequency by month, weekday, and time of publication, as well as the number of likes and comments received. Differences in performance across content formats, thematic categories, and hashtag use were also examined.

A systematic content analysis was then conducted (Krippendorff, 2018), classifying each post by thematic category and content format. In addition, sentiment and emotion analyses of captions and user comments were conducted to identify emotional patterns associated with published content and citizens' interactions. Posts were classified according to their primary thematic focus, thereby distinguishing, for example, youth or education-centred content from posts whose main purpose was institutional communication.

The qualitative data obtained from the semi-structured interviews were organised and analysed using NVivo through thematic analysis, following the approach proposed by Braun and Clarke (2006). The coding process identified themes related to communication objectives, content planning, publication criteria, citizen engagement strategies, and the evaluation of digital communication performance.

Finally, the quantitative and qualitative findings were integrated to interpret publication performance metrics from the communication manager's perspective. This integration provided a more comprehensive understanding of the municipality's digital communication strategies and their influence on citizen engagement.

3. RESULTS

3.1 The municipality's digital communication strategies

An analysis of the posts published by the Municipality of Vila Pouca de Aguiar on Instagram shows consistent use of this platform as a tool for institutional communication and citizen engagement. Throughout the period under review, the local authority used the social media platform to publicise information on municipal initiatives, events, cultural activities, public-interest initiatives, and projects carried out in the municipality, maintaining a regular presence tailored to the calendar of organised activities.

The results show that the communication strategy is characterised by a strong focus on institutional content and the promotion of events and activities, which were the most frequent themes throughout the period analysed; by contrast, posts relating to the areas of culture and heritage, youth and education, and social and community issues were less prominent, although they remained consistently present. The temporal evolution of the posts also reveals some fluctuations linked to the municipality's annual

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programme, with a surge in communication during periods coinciding with events of greater local significance, whilst activity remains more stable during the remaining periods.

The qualitative analysis of the interview provides further insight into the strategic rationale underlying these publication patterns. The Head of Communications and Marketing described the main objectives of digital communication as seeking to "integrate the community" and involve both residents and other people connected to the territory. He also explained that the editorial line is primarily defined by "agenda and current affairs," combining planned communication around scheduled municipal activities with content produced in response to emerging situations. This perspective is consistent with the predominance of institutional content and Events and Activities observed in the Instagram posts, as well as with the fluctuations in publication activity associated with the municipality's annual programme. The interview, therefore, indicates that these patterns are not simply the result of posting activity but rather reflect an editorial logic closely tied to the municipal agenda and the perceived relevance of initiatives to the local community.

Overall, the results highlight a digital communication strategy centred on promoting local identity, publicising institutional activities, and encouraging community participation through the communication of municipal initiatives and events. This approach provides the framework for the analysis of post-performance, presented in the following section.

3.2 Communication strategies and citizen engagement

An analysis of the performance metrics for the posts revealed significant differences in citizen engagement levels depending on the subject matter of the content published by the local authority. As shown in Figure 1, posts relating to Youth and Education recorded the highest average level of engagement, with around 160 interactions per post; these were followed by content associated with Events and Activities, with an average of approximately 145 interactions, whilst posts classified in the 'Others' category also performed well, with around 131 interactions. In contrast, content related to Institutional matters, Culture and Heritage, and Social and Community issues showed lower average engagement, ranging from approximately 105 to 119 interactions. These results demonstrate that the topic of the posts influences user engagement on the council's page.

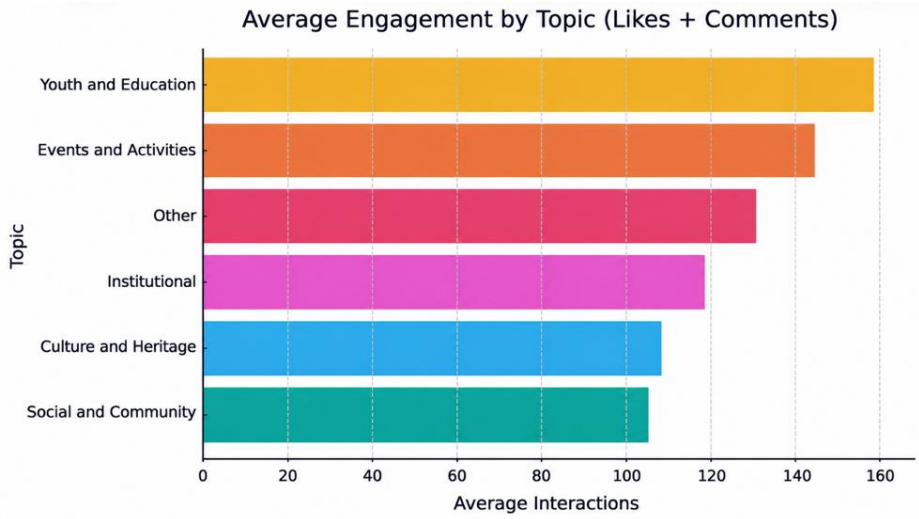

Figure 1 – Average citizen engagement by content theme

Analysis by post type also reveals differences in content performance. Videos had the highest average number of interactions, followed by carousel posts, whilst static images recorded significantly lower figures. These results suggest that more dynamic and visually appealing formats tend to capture users' attention more effectively, thereby boosting interaction with the published content.

In analysing hashtags, the importance of using tags associated with local identity and specific events in the municipality is evident. The best-performing hashtags correspond, above all, to high-profile initiatives or elements that define the municipality's identity, suggesting that linking posts to relevant events and the local context may help to broaden reach and encourage user interaction.

Cross-referencing the interview with the engagement metrics reveals both convergence and a relevant divergence between the perceived strategy and observed communication performance. When asked which content generated the greatest engagement, the communication manager specifically cited content involving "ordinary people," local residents who stand out in particular areas, and "associative and student activities." This perception is consistent with the quantitative results, since Youth and Education generated the highest average engagement (approximately 160 interactions per post), followed by Events and Activities

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(approximately 145). However, this alignment is only partial. Youth and Education was less prominent in the municipality's overall publication mix than Institutional content and Events and Activities, despite producing the highest average engagement. The comparison, therefore, suggests that the municipality can identify the types of community-oriented content that attract greater interaction, but that this knowledge is not fully reflected in the relative prominence it gives to these themes in its editorial practice. The findings thus reveal not only consistency between managerial perceptions and audience behaviour, but also a potential gap between recognised engagement drivers and the actual prioritisation of content.

Overall, the results show that content relating to events, community-focused initiatives, and topics of local interest, particularly when presented through more dynamic visual formats, promotes higher levels of citizen engagement, reinforcing the importance of a communication strategy aligned with citizens' interests and expectations.

Cross-analysis of caption emotion and engagement adds further nuance to these patterns. Although neutral captions predominated, posts classified as expressing sadness, fear, and joy recorded higher average interaction levels (approximately 285, 196, and 150 interactions, respectively) than neutral posts (124) or trust-related posts (121). These results suggest that less routine and more emotionally salient content may attract greater attention than predominantly neutral institutional communication. However, because non-neutral categories were comparatively infrequent, these differences should be interpreted cautiously.

4. DISCUSSION

The results of this study show that the digital communication strategies adopted by the local authority influence the level of citizen engagement generated on Instagram. Although the local authority maintains a consistent institutional presence on the platform, interaction levels vary depending on the subject matter of the published content, the format used, and the relevance of the information to the local community. This suggests that citizen engagement depends less on the frequency of posts than on the ability to develop a communication strategy aligned with the interests and expectations of different audiences, reinforcing the importance of strategic social media use in the context of local government.

The results show that the local authority prioritises publicising events, municipal initiatives, and content of interest to the community, whilst maintaining regular communication guided by the institutional agenda. This is corroborated by the Head of Communications and Marketing, who notes that editorial planning seeks to balance the publicising of municipal activities with community-focused communication, based on accessible language and content relevant to citizens. These findings are consistent with the literature, which argues that digital communication in public administration has evolved from a predominantly informative approach to more strategic approaches, geared towards transparency, community engagement, and strengthening the relationship between institutions and citizens (Contri et al., 2025; Criado & Villodre, 2022; Sienkiewicz-Małyjurek & Zyzak, 2025).

The results show that citizen engagement varies depending on the communication strategies adopted, being higher in posts relating to youth and education, municipal events and activities, as well as in audiovisual formats, notably videos and carousels, which suggests that thematically relevant and visually more dynamic content enhances citizen interaction, unlike purely institutional content and static images, which record lower levels of engagement. These results corroborate previous studies that identify the simultaneous relevance of both the content and the format of posts as determining factors in the success of digital communication on social media (Kuo & Chen, 2023; Perea et al., 2021; Santos et al., 2023). The cross-analysis of caption emotion further suggests that engagement is not determined solely by theme or format. Although neutral institutional communication predominates, the comparatively higher interaction observed for some emotionally salient posts suggests that exceptional or less routine content may also contribute to audience response; however, the small number of posts in some emotional categories limits strong conclusions.

More importantly, the contribution of these findings does not lie in confirming the already established advantage of more dynamic visual formats. Rather, it lies in the relationship identified between the communication strategy articulated by the practitioner, the municipality's actual editorial practices, and the response observed among Instagram users. The communication manager explicitly associates engagement with community-centred content, particularly content involving local people and associative and student activities. The comparatively high engagement recorded for Youth and Education, and for Events and Activities, supports this perception. However, the fact that Youth and Education content generates the highest average engagement while remaining less prominent than institutional and event-related communication reveals a noteworthy implementation gap. In other words, awareness of content likely to engage citizens does not necessarily translate into its prioritisation within the editorial mix. This finding suggests that performance monitoring and strategic learning should be distinguished: collecting and recognising engagement patterns does not, by itself, ensure that those patterns are systematically incorporated into subsequent content planning.

The higher engagement observed for Youth and Education content should also not be interpreted as evidence that younger users were responsible for these interactions. The available Instagram data identifies the thematic content of the posts, but does not provide the demographic profile of the users interacting with individual publications. The finding, therefore, concerns the performance of youth- and education-related content rather than an age-based effect among Instagram users.

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One of the main contributions of this study lies in integrating a quantitative analysis of Instagram performance metrics with a qualitative analysis of an interview conducted with the head of institutional communications. The consistency between the patterns identified in the posts and the interviewee's perceptions, which highlight the importance of the municipal agenda, the promotion of local identity and the production of content relevant to the community, reinforces the robustness of the results and demonstrates the potential of mixed-methods approaches for understanding the communication strategies developed by public organisations (Ohme et al., 2024; Wedel & Kannan, 2016).

This study contributes to a deeper understanding of digital communication in local government, providing empirical evidence from a Portuguese municipality, a context that remains largely unexplored in the international literature. The combination of content analysis of posts, social media analytics metrics, and an interview with the communications officer enabled a more comprehensive understanding of the relationship between digital communication strategies and citizen engagement. Despite these contributions, the results should be interpreted whilst taking into account certain limitations, namely the analysis of a single municipality and a single digital platform, which restricts the generalisability of the findings. Future research could extend this approach to different municipalities, compare various social media platforms, and utilise longitudinal studies to analyse the evolution of digital communication strategies and patterns of citizen engagement over time.

CONCLUSION

This study analysed how the digital communication strategies adopted by a Portuguese municipality influence citizen engagement on Instagram. The results show that municipal communication focuses primarily on disseminating institutional information and local events and initiatives, and on maintaining a regular presence aligned with the municipality's agenda.

In response to RQ_1, it is concluded that the most common strategies are based on promoting municipal activities and content relevant to the community. Regarding RQ_2, it was found that posts on youth and education, as well as municipal events and activities, generate greater engagement, particularly when presented as videos and carousels. More importantly, the contribution of these findings does not lie in confirming the already established advantage of more dynamic visual formats. Rather, it lies in the relationship identified between the communication strategy articulated by the practitioner, the municipality's actual editorial practices, and the response observed among Instagram users. The communication manager explicitly associates engagement with community-centred content, particularly content involving local people and associative and student activities. The comparatively high engagement recorded for Youth and Education, and for Events and Activities, supports this perception. However, the fact that Youth and Education content generates the highest average engagement while remaining less prominent than institutional and event-related communication reveals a noteworthy implementation gap. In other words, awareness of content likely to engage citizens does not necessarily translate into its prioritisation within the editorial mix. This finding suggests that performance monitoring and strategic learning should be distinguished: collecting and recognising engagement patterns does not, by itself, ensure that those patterns are systematically incorporated into subsequent content planning. This partial convergence between managerial perceptions and observed engagement patterns directly addresses RQ_3, showing that the Instagram data broadly support the communication manager's understanding of the content that generates engagement. However, this awareness is not fully translated into the municipality's editorial priorities.

The higher engagement observed for Youth and Education content should also not be interpreted as evidence that younger users were responsible for these interactions. The available Instagram data identifies the thematic content of the posts, but does not provide the demographic profile of the users interacting with individual publications. The finding, therefore, concerns the performance of youth- and education-related content rather than an age-based effect among Instagram users.

These results also suggest that the effectiveness of digital communication depends more on the relevance of the topics and the choice of formats than on the frequency of posts. From a practical perspective, local authorities could boost citizen engagement through content that is more closely aligned with the community and more dynamic visual formats.

As the analysis is limited to a single municipality and a single platform, the results cannot be generalised; future studies could therefore include other municipalities, compare different social media platforms, and track changes in citizen engagement over time.

AUTHOR´S CONTRIBUTION

Conceptualization, F.S. and S.C.; data curation, J.F. and F.S.; formal analysis, F.S., A.B.F.; investigation, S.C., F.S. and J.F.; methodology, F.S. and J.F.; project administration, S.C. and J.F.; resources, F.S. and A.B.F.; software, F.S., J.F. and A.B.F.; supervision, S.C. and A.B.F.; validation, S.C. and J.F.; visualization, S.C. and J.F.; writing – original draft, S.C. and F.S.; writing – review & editing, J.F. and A.B.F.

CONFLICT OF INTERESTS

The authors declare no conflict of interests.

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