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A Mixed-Method Approach to Evaluating Citizen Engagement on Government Social-Media Pages

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Abstract

In their communication on social media, most organizations consider engagement as a core objective. In the public sector, a vast majority of contributions have studied citizen engagement through metrics such as post reactions, comments, and shares. In this article, we prefer another approach in seeking to understand both the perceptions and practices of engagement management and evaluation from the municipalities' point of view. We combine qualitative and quantitative data stemming mostly from communication managers in Nordic countries. Qualitative insights come from interviews conducted with these managers ($N = 19$) in Spring and Summer of 2024. Quantitative data come from a survey distributed to the communication managers of all Nordic municipalities with over 10,000 inhabitants ($N = 525$) in early 2025. Our findings show high heterogeneity in monitoring and evaluation of engagement; a focus on the metrics provided by social-media platforms, as well as content; and the importance of the quality of state–citizen exchanges. These findings call for a refined, qualitative approach to engagement on government social-media pages that goes beyond the metrics that are almost always used as a starting point in previous research.

Keywords

citizen engagement; engagement evaluation; engagement monitoring; municipalities communication; Nordic countries; public sector; social media

1. Introduction

In the public sector, the perceived value of new information and communication technologies in facilitating communication with citizens has led to the widespread adoption of online channels. Many public

organizations have integrated social media into their communication strategies to leverage their advantages, particularly the ability to lower barriers to citizen engagement. Social media are defined as "technologies that facilitate social interaction, make possible collaboration, and enable deliberation across stakeholders" (Bryer & Zavattaro, 2011, p. 327). Their features are particularly relevant for fostering citizen participation in policy- and decision-making processes. This engagement is crucial for governments, as they increasingly prioritize interactions that enhance public service delivery, strengthen civic participation (Manetti et al., 2017), and build citizen trust. Social media offer opportunities to reduce information asymmetry and to overcome the limitations of traditional top-down communication between citizens and public bodies (Bonsón et al., 2017). Prior research has recognized their potential to establish a dialogic, bidirectional relationship with the public, thereby improving state-citizen interactions and fostering greater democratic engagement. In this case, democratic engagement is defined as individuals and groups' participation in democratic processes, including voting, public deliberation, and involvement in societal issues (Kahne et al., 2016).

Numerous articles have been published about social-media adoption and use in public bodies. However, the theory regarding citizen engagement needs further development, as engagement has been mostly measured as a dependent variable and rarely considered from the communication managers' perspective. This is especially the case in Nordic countries, where most contributions have focused on political communication (private, personal messages shared by politicians), and not on public organizations disseminating official and neutral information under a strict legal framework (see Pasquier & Villeneuve, 2018). Our article aims to fill this gap by exploring the situation in Nordic municipalities. Here, municipalities are considered as administrative and not political units: We gather data from communication managers in their administrative capacity and look at social-media communication on official municipal accounts. We adopt a mixed-method approach, starting with interviews in order to understand how municipalities conceive, implement, and evaluate engagement. This makes a first contribution to the literature on social-media communication, augmented by a survey distributed to all municipalities that builds on these qualitative insights. This approach allows us to go beyond the focus on metrics—reactions, comments, shares—used in prior research (e.g., Bonsón & Ratkai, 2013; Bonsón et al., 2017). Against this background, our article aims to respond to the following research questions (RQs):

RQ1: What are municipalities' strategies to foster citizen engagement on social media?

RQ2: And how do municipalities measure and assess citizen engagement on social media?

Responding to these RQs serves a double purpose. First, it encourages scholars to prefer a broad definition of engagement, too often regarded as a narrow measurement that is not relevant in a public-sector context. Public organizations often regard social media as an opportunity to create and maintain relationships with citizens via information exchange and enhanced transparency (S. Khan et al., 2021). This perspective differs significantly from the accumulation of financial benefits based on views (stimulated by reactions, comments, and shares). Second, it refines our approach to citizen engagement strategies, often connected to institutional and content-related factors. We investigate the effects of individual and organizational variables, which can't be fully captured through the analysis of content and metrics.

Section 2 describes how social-media use and engagement have been addressed previously. Section 3 relates to the context of our study, presenting prior contributions on the Nordic region and key figures regarding

social-media use. Then, we depict the methodology, emphasizing the importance of applying a mixed-method approach, followed by the findings. Section 6 and 7 expose the limitations, discuss our results, and propose paths for future studies.

2. Theoretical Considerations

The growing presence of governments on social media has sparked increasing interest in these channels. Their ability to facilitate interactions and deliver timely information explains the enthusiasm surrounding these platforms (Mabillard et al., 2024). Consequently, most public administrations have progressively integrated social media into their communication strategies. This evolution has led to the development of research on social-media use in the public sector. In what follows, we present the key theoretical approaches used in the literature, define the most central and relevant concepts to our study, and review key contributions on usage patterns and determining factors, before examining citizen engagement specifically.

2.1. Governments' Use of Social Media

The reasons underlying the adoption of social media often echoed government-communication plans. Kavanaugh et al. (2012) stated that establishing new communication patterns was a great expectation among public administrations on social media. This relates partly to reaching new audiences and targeting specific groups, especially in particular circumstances (e.g., the most vulnerable people during crises). Brainard and Edlins (2015) showed that social media could help governments build social capital and foster a shared sense of purpose through citizen engagement. For G. F. Khan (2017), collecting feedback helped governments understand citizen perceptions about policies and can potentially improve policies and services. However, while social media offered opportunities for gathering reactions and comments, they also provided public organizations with the ability to reply, enabling them to "address citizen concerns and mitigate negative feelings and comments" (Graham, 2014, p. 372).

Additionally, Chatfield and Reddick (2018) argued that social media could help change the "single-loop" model of communication management (focusing on efficient service delivery via a top-down approach) towards citizen participation. In this case, citizen participation is considered as participation in the planning and administrative processes of government (Callahan, 2007), involving a "double-loop" dynamic about citizen desires and suggestions for improving the delivery of public services (Reddick et al., 2017). Gálvez-Rodríguez et al. (2018, p. 267) wrote that internet use should promote the "exchange of ideas and opinions, in which the parties in a relationship engage in an honest, open, ethically-based give and take" and that "organizations should implement communication strategies aimed at increasing stakeholder engagement, in order to achieve better mutual understanding and greater opportunities for fruitful communication."

From a theoretical perspective, governments' use of social media, and engagement in particular, has been connected to the improvement of inter-stakeholder relationships. Regarding citizens specifically, Margetts and Dunleavy (2013) have insisted on the necessity to develop holistic strategies to favor joined-up, citizen-centric services, as part of their reflection around "digital-era governance." Another theoretical approach is the "smart-governance" paradigm, according to which solving complex problems involves participatory and co-production strategies with citizens. Public administrations must consider citizens as active agents rather than passive

customers and work closely with them to reach satisfactory and legitimate policy solutions that also add public value (Criado & Gil-Garcia, 2019).

From an empirical perspective, studies have mostly captured social-media use via the number of posts published by governments. Typically treating use as the dependent variable, they have shown the effect of various explanatory factors. For instance, in Italy and Spain, Guillamón et al. (2016) highlighted the influence of user participation, population size, and citizen income on information diffusion. Demographic and social factors were also identified in Portugal by Silva et al. (2019), who complemented these findings with the role played by political incentives, and local political competition in particular. In Austria and Switzerland, Bhatia and Mabillard (2022) found a strong, significant effect of municipal-population size on social-media use. They also found that intense activity on one platform, especially Instagram, had a significant effect on municipalities' activity on Facebook and X (ex-Twitter). Finally, the analysis of mayors' characteristics on social-media use led to mixed evidence in the literature: In Italy, Raimo et al. (2024) presented contrasting results depending on the platform used. While mayor gender was significantly linked with Facebook and Instagram use (female mayors tended to use these platforms more than their male counterparts), this relationship was not significant on YouTube. In contrast, the effect of mayors' education level on use was significant in the case of Facebook and YouTube. A complete list of the determinants of social-media use was recently presented by Padeiro et al. (2021) in their study of Portuguese municipalities' communication during the Covid-19 pandemic. They tested the effect of 20 variables related to the "socio-spatial" (context-related factors), "institutional" (e.g., municipal resources), and "epidemiological" (e.g., health-related factors) environment on the volume of posts. In addition to the role played by sociodemographic features (especially income), they emphasized the influence of municipal autonomy on social-media use.

Prior research has, however, shown that public administrations have not yet fully capitalized on social-media properties (Marino & Lo Presti, 2018), since they often use these platforms to disseminate information. This "dissemination by default" strategy often lacks a clear purpose. For instance, Jungblut and Jungblut (2022) found that the German police rarely used X to gather information or improve public relations; in contrast, disseminating information was often the norm. Mansoor (2021) underlined that while governments increasingly used social media during crises like Covid-19, many still used these platforms for one-way communication rather than for fostering citizen engagement. In previous research, the analysis of engagement mostly relied on characteristics of posts and interactions, as developed in Section 2.2.

2.2. Citizen Engagement on Government Social-Media Pages

For public organizations, engagement is deemed essential for increasing transparency and participation, and is often presented as their main objective on social media. For McNutt (2014), the shift from a "broadcast" to a "communicative" paradigm linked to Web 2.0 tools, including social media, should foster citizen participation. However, public organizations have regularly failed to achieve this goal. This situation raised the interest of numerous researchers, whose contributions focused specifically on the drivers of citizen engagement. For example, a meta-analysis conducted by Contri et al. (2025) found that photos generated more engagement because of their eye-catching nature, various content topics influenced engagement, timing increased post visibility, and communication intensity had little impact on engagement. Contributions highlighting these aspects in the literature came from various disciplines.

From a communication perspective, the literature has underlined social media's potential for developing interactions, and the fact that posts related to government competences and political activity may foster more engagement than others (Paiva Dias, 2022). Dobija et al. (2023) distinguished passive from participatory communication, based on the respective influence of textual (e.g., readability) and intertextual (e.g., hashtags) connectivity. Focusing on the Covid-19 crisis, they highlighted that passive communications elicited more engagement than what is usually advanced in the literature. From a management perspective, several contributions showed that posting frequency had no significant effect on engagement; in contrast, the timing of posts did (Metallo et al., 2020). Consequently, any strategic communication should include volume but also additional factors such as message quality, content relevance for users, emotional resonance, etc. For Bonsón et al. (2017), effective and interactive participation depended on individual public administrations, since they may behave as either neutral or dynamic advocates of citizen participation.

While social media aroused great enthusiasm, in practice, there was no evidence that citizens generally use social media for interaction purposes (Haro-de-Rosario et al., 2018). One reason pertained to context: Bonsón et al. (2015) showed that engagement rates varied from one region to another (they are higher in Nordic and Southern European municipalities than in Anglo-Saxon and Germanic municipalities). Another reason related to platforms: Henisa and Wilantika's (2021) findings revealed that Instagram was the most engaging channel. Finally, research also showed that most governments preferred dissemination over interactivity; this did not strongly encourage citizen engagement.

However, previous research has mostly preferred a quantitative point of view, relying on metrics directly retrieved from social-media platforms, using Bonsón and Ratkai's (2013) calculation of engagement: the sum of popularity (reactions, such as likes), commitment (comments), and virality (shares). Going beyond this perspective, we focus on an under-studied aspect of engagement: the production conditions of posts published by public administrations. This aspect, often neglected, will enrich the literature with engagement-related insights that will capture considerations other than those reflected in the abovementioned metrics. These metrics only highlight public administrations' capacity to generate reactions, comments, and shares, as if it were the sole objective of their communication on social media.

The focus on social-media platforms has often ignored the role played by users in the state-citizen relationship. Most studies have used metrics as the dependent variable. To the extent of our knowledge, only a few contributions have investigated how government (frontline personnel in Stone et al., 2024) and citizens (Wang et al., 2025, in emergency situations) envisaged engagement on social media. We address this issue by focusing on communication managers' perceptions of social-media use and engagement and the corresponding strategies implemented in municipalities. To do so, we used a mixed-method approach, as detailed in Section 3.

3. Methodology

As mentioned earlier, this article goes beyond quantitative metrics to offer a more nuanced understanding of citizen engagement. To achieve this, we have adopted a mixed-method approach. For Belardinelli and Mele (2020), mixed-method approaches belong to pragmatist methodologies, combining different methods to collect and analyze data. We preferred a sequential-qualitative first process, starting with the collection of insights from interviews, followed by a survey that builds on these insights. Concretely, we interviewed

communication managers from selected Nordic municipalities to make themes emerge from their practice regarding social-media engagement (the interview guide is available in Supplementary File, Appendix 2). We followed this by distributing a survey to the communication managers of all 525 Nordic municipalities with over 10,000 inhabitants. This strategy (Figure 1) is central for researchers who want "to build, supplement, and/or interpret qualitative findings with additional quantitative data" (Creswell, 2009, p. 195). As this aligned with our article's objective, we preferred this sequential exploratory strategy.
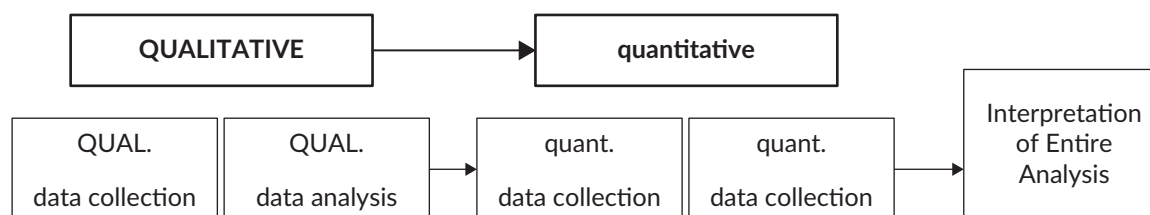
Figure 1. Sequential exploratory strategy. Note: Capitalization indicates a weight or priority on the quantitative or qualitative phase in the analysis. Source: Creswell (2009).

We selected all municipalities with over 10,000 inhabitants, a threshold used in other studies (e.g., Mabillard et al., 2021). Prior research (e.g., Lovari & Materassi, 2021; Perea et al., 2021) focused on large municipalities for various reasons including their systematic presence on social media, intense activity, and, more generally, greater likelihood of interacting with citizens on social media compared to small municipalities. Using this threshold also allows for international comparison. The creation of categories led to the selection of interviews based on population range. After a first round of email invitations, we sent reminders and secured 19 positive replies. The list of interviewees covered all countries, although the number of respondents varied between population categories (Table 1). Conducted in early 2024 using Microsoft Teams, the semi-structured interviews lasted between 39 and 92 minutes (average: 64 minutes). They consisted of open-ended questions based on our RQs. The interview grid was enriched with new information gathered during the interviews, offering opportunities for various themes to develop (Harvey-Jordan & Long, 2001). We sorted these themes through the data-coding process. Interviews were recorded and transcribed verbatim using Notta (https://www.notta.ai/en). Each transcription was then checked for accuracy. Quotations from interviewees were sometimes slightly edited to guarantee anonymity.

Data analysis started immediately after each interview. Thematic analysis served to separate conventional themes and identify innovative ideas emerging from the interviews. We used NVivo (https://lumivero.com/products/nvivo) to code the transcriptions; the data-driven process relied on the evolution of a node structure, based on words and expressions raised by the interviewees. We then organized the codes, created inductively, in emerging themes that aligned with our RQs. During the coding process, new themes did not emerge after the 19th interview, reaching code saturation (Hennink et al., 2017).

To further explore the themes identified in the qualitative phase, we designed a survey (see Appendix 1 in the Supplementary File) based on the previously established codes. This survey was aimed at deepening our understanding of how these themes applied to municipalities, how they were perceived, and their potential challenges. We structured the survey in three main parts. The first includes questions about the strategy and management challenges linked to social-media use in municipalities, the type of platforms used, and the main communication goals, as well as planning issues. The second focuses on citizen engagement, in line with our RQs. It includes questions on reactions to users' comments, the evaluation of engagement, and the type

Table 1. List of interviewees and survey respondents, by country and population category.

Country	Population range	Sample size	Interviewees	Respondents' designation	Survey respondents (complete replies)
Sweden	10,000–19,999	92	0	–	11
	20,000–49,999	74	2	R1, R2	5
	50,000–99,999	31	4	R3–R6	5
	≥100,000	19	1	R7	4
Denmark	10,000–19,999	5	0	–	0
	20,000–49,999	49	1	R8	16
	50,000–99,999	32	2	R9, R10	6
	≥100,000	8	1	R11	3
Finland	10,000–19,999	43	0	–	7
	20,000–49,999	33	0	–	5
	50,000–99,999	12	0	–	3
	≥100,000	9	2	R12, R13	2
Norway	10,000–19,999	45	2	R14, R15	8
	20,000–49,999	45	1	R16	10
	50,000–99,999	13	1	R17	3
	≥100,000	7	1	R18	1
Iceland	10,000–19,999	4	0	–	1
	20,000–49,999	3	1	R19	1
	50,000–99,999	0	0	–	0
	≥100,000	1	0	–	1
Total		525	19	19	92

of measurement used. The third includes questions about the responsibilities of communication managers regarding social-media use and management.

We distributed the survey via email to all communication managers, allowing us to collect data that would support and complement the key qualitative findings. Data treatment started right after the survey's closure. Out of the 525 invitations and reminders sent, we received 119 responses (22.67%), of which 92 (17.52%) were either fully or partially complete (but with a completion rate that made these replies usable). Out of these 92 replies, 69 respondents stated that their municipality assesses citizen engagement on social media. Because of the small size and non-representativity of our sample, we preferred to augment the qualitative insights with descriptive statistics.

4. Context

The Nordic region is of particular interest for research on social media, since its countries are among the European states with the highest proportion of internet users (Nordicom, n.d.). Regarding social media, usage rates vary much more than internet use. Here, we display figures regarding social-media use by Nordic municipalities on the most popular platforms among governments: Facebook, X, and Instagram (Figure 2). Facebook is the most popular platform (registration rate: 99%), followed by Instagram (88%) and X (56%). This is quite high in international comparison: For example, Zumofen et al. (2023) have found significantly lower registration rates in Central and Eastern Europe.
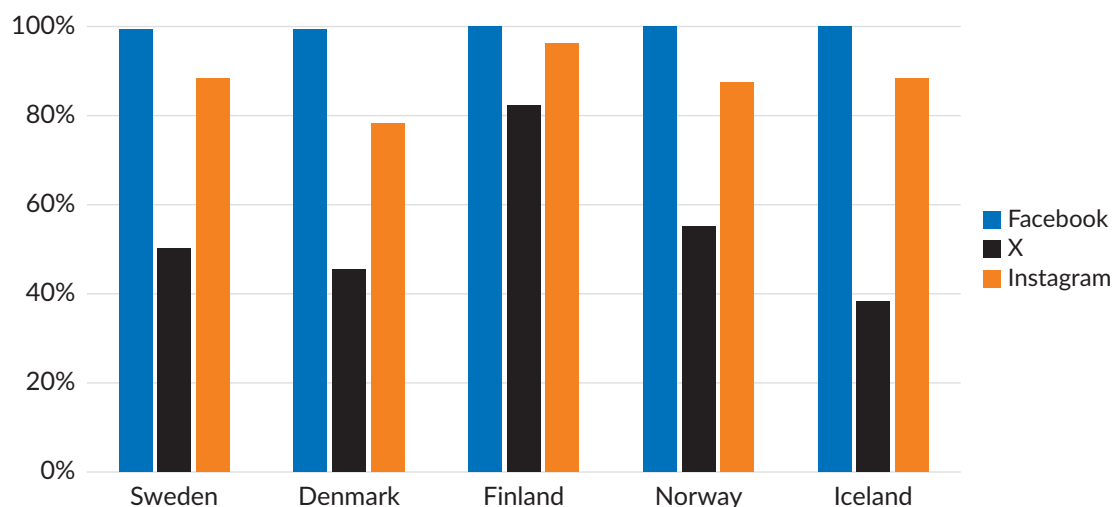
Figure 2. Number of registered accounts by country and platform (end of 2023), in percentages.

Based on the metrics of Bonsón and Ratkai (2013), Instagram is the platform with the highest levels of engagement in the Nordic countries as of late 2023 (Table 2). The cross-country comparison reveals that while some municipalities in Finland and Sweden are very active, median values are quite high in the whole sample. This finding indicates sustained activity on Instagram in all countries. The data show significant differences between Facebook and X, in line with the difference between the two in terms of popularity (registration).

Table 2. Engagement in active municipalities (September 1–November 30, 2023).

	Facebook			X			Instagram		
	Min.	Max.	Median	Min.	Max.	Median	Min.	Max.	Median
Sweden	1.33	44.71	9.24	0.07	0.09	0.08	5.05	280.05	26.34
Denmark	1.26	34.60	7.71	0.22	29.09	1.79	4.61	56.18	17.71
Finland	1.10	17.26	4.88	0.06	32.09	1.63	3.01	217.66	20.68
Norway	1.30	33.72	5.01	0.09	0.85	0.23	4.70	71.05	17.64
Iceland	1.66	5.52	3.04	2.19	2.90	2.54	13.25	35.50	18.64

Despite the high figures shown in Figure 2 and Table 2 (in international comparison), studies specifically focusing on social-media use by public administrations and on citizen engagement in Nordic municipalities remain relatively limited, although a few notable contributions do exist. They include Klang and Nolin's (2011) study of social-media policies in 26 Swedish municipalities, Bellström et al.'s (2016) focus on state-citizen exchanges in only one municipality, and Baltz's (2023) investigation of municipal communication on social media. In line with previous research, Baltz (2023) confirmed that Swedish municipalities still preferred information dissemination over interactivity. Nielsen and Salomonsen (2012) analyzed the institutional perspective in strategic communication in Danish local governments, showing how normative and mimetic institutional pressures occur. Other contributions, such as Lockert et al.'s (2019) and Wæraas et al.'s (2015), focused more on reputation building and reform strategies at the local level in Denmark or Norway. They discussed how administrative actors were likely to cultivate different types of reputation strategies depending on the size of the municipality and the type of actors involved. Finally, other studies mostly focused on neighboring topics. They addressed, for instance, the relationship with media use

in Norway (Wold, 2022) and the effects of social networks on volunteering during the Covid-19 crisis in Denmark (Carlsen et al., 2021).

5. Findings

5.1. Tailoring Content to Platforms and Target Groups

As highlighted during the interviews, one of the main strategies deployed by Nordic municipalities to engage with citizens is to tailor content to specific audience groups (e.g., young population). Targeted content and demographic segmentation ensure that different age groups effectively receive different messages. Older demographics are typically reached on Facebook, while younger adults engage actively on Instagram, and teenagers prefer TikTok. By differentiating content based on the platforms used, municipalities can ensure that messages resonate with the targeted groups. The aim is to maximize interaction and citizen participation:

> And then we have those channel-based KPIs, like how we measure the goal on Facebook, the reach of the people aged over 65 increases, and on Instagram the reach of the people aged 17 to 24 increases. So, we wanted the reach of the people targeted to increase. And every month we also do a couple of posts that are planned beforehand to engage especially those targeted age groups for those channels. (R12)

Beyond segmentation, most interviewees reported that they also adjusted the way they communicate to appear approachable and relatable. Using accessible and friendly language helps create a strong connection with citizens. Instead of relying on a bureaucratic or formal tone, many municipalities adopt a conversational style to foster familiarity and trust. Some even use humor and informal expressions to make their posts engaging, ensuring that communication is not only informative but also enjoyable for the audience. This shift in tone has been reinforced by the use of visual cues like emojis, which have become a key component in social-media engagement. They help convey emotions, clarify intent, and make posts visually appealing. However, municipalities must strike a balance between using emojis to humanize their communication and maintaining their professional image. A consistent visual approach ensures that citizens recognize official communications while feeling that their municipality is approachable and responsive:

> And now we have a much softer tone, a little more "we're friends" tone, and sometimes with a bit of humor. It's good. Of course, it's because we want people to like and follow us. So, we have to adjust the tone in the channel. We also use emojis sometimes, but we have noticed that if we use a lot of emojis, the reach is smaller. (R2)

Another powerful engagement tactic mentioned by Nordic municipalities is to encourage public interaction through open questions or polls. This stimulates reflection and conversation, encouraging citizens to share their opinions. Using social media as a participatory tool also helps municipalities better understand public sentiment (while making citizens feel heard), gather input on projects, and reach a broad audience (beyond traditional town-hall meetings). Through surveys and polls, municipalities may gather insights from residents not attending in-person consultations.

Turning to our survey, these elements align with the overall majority of replies that we collected, as most municipalities valued responsiveness and interactivity. Out of the 69 municipalities that measured and assessed citizen engagement on social media, only four (5.80%) and 13 (18.84%) found that being responsive and interactive, respectively, was "not important" or "not important at all." However, these numbers are even lower for awareness: Only one municipality found it to be not important. This means that increasing awareness through information diffusion remains central for most municipalities. Finally, increasing trust via exchanges with citizens on social media was raised by most municipalities as a key objective (only seven [10.14%] municipalities found it "not important" or "not important at all").

5.2. Leveraging Visual Content and Local Stories to Generate Engagement

Most interviewees emphasized the importance of content types for generating high engagement. Visual content and local stories, especially through photos and videos, were found to be compelling since they capture attention more quickly than text posts. Municipalities leverage social-media stories and user-generated content to showcase community life, promote local businesses, and advertise public events. This approach not only increases engagement but also strengthens the sense of community, making residents feel more connected to their municipality:

> But then what we have been thinking is just that we have to share beautiful photos from our municipality with the posts....Sometimes it's a festival in some school or something. Then we go there first, and then we share it afterwards. (R19)

Another important approach is integrating citizens into municipal communication. Rather than relying solely on top-down messaging, some municipalities actively involve residents in content creation. Featuring community members in posts adds authenticity and fosters a sense of shared ownership. Finally, municipalities encourage direct person-to-person interactions, on a regular basis, rather than impersonal institutional messaging to maintain engagement. This presupposes that municipalities respond frequently and react to citizens' inputs (e.g., questions) on their pages.

In this sense, our survey shows that 67 municipalities (97.10%) react to comments. Twenty-seven (39.13%) react selectively, when users require clarification or address critical issues; 14 (20.29%) actively monitor posts and remove posts that violate their social-media policies; and 26 (37.68%) react systematically. Additionally, almost two-thirds (41 out of 69, 59.42%) of the municipalities evaluate their activity, including the monitoring of state-citizen exchanges and engagement, at least once a month. Twenty-four municipalities (34.78%) conduct this evaluation at least once a week, with half of them (17.39%) making this effort on a daily basis.

5.3. Heterogeneous Measurement and Assessment Practices

Interviewees defined engagement through various indicators, including likes, shares, comments, reach, and follower growth. Many municipalities track these indicators to determine the effectiveness of their communication strategy. Some prioritize followers and their retention rate, recognizing that losing followers could indicate a disconnect between content and the public's interest. Others consider the reach of posts as a crucial metric, understanding that posts with fewer interactions can be valuable if they reach the right

audience. Additionally, measuring citizen engagement based on interactions, relative to the number of followers, offers insights into the relevance of social-media content:

> Reach is the most important thing. And that's just my opinion, because it's hard to know which one of them, but I think reach is often based on how many likes, how many comments, how much engagement you have got. And I think sometimes we hear this thing that this post only reached like 1,000 people, but it was the 1,000 right people. (R9)

Some municipalities also assess the type and sentiment of engagement. Rather than focusing solely on the number of interactions, they analyze whether comments are positive, neutral, or negative. The use of emojis and reactions, such as "happy" or "angry," helps understand citizen perceptions. For certain municipalities, qualitative aspects of engagement are considered just as important as numerical data since they allow them to refine their messaging strategies to better align with citizens' expectations.

Results from our survey confirm this heterogeneity of practices highlighted in the interviews. When asked about the type of engagement evaluation preferred in their municipality, respondents pointed to a wide range of approaches. For 53 (77.94%) of them, metrics provided by social media are used most of the time or always; 47 (68.11%) of them look at engagement from a content-type point of view most of the time or always. In contrast, most of them more rarely evaluate engagement based on the number, type, and quality of exchanges on their pages (see Table 3).

Table 3. Preferred approaches to engagement evaluation on social media.

	How do you evaluate citizen engagement on your social-media pages?—We look at:				
	Engagement based on metrics (e.g., likes)	Engagement based on content type	The quality of our exchanges with users	The number of exchanges with users	The type of content shared between users
Never	0 (0%)	2 (2.90%)	6 (8.82%)	7 (10.29%)	9 (13.24%)
Sometimes	12 (17.65%)	12 (17.39%)	20 (29.41%)	23 (33.82%)	16 (23.53%)
About half of the time	3 (4.41%)	8 (11.59%)	11 (16.18%)	6 (8.82%)	12 (17.65%)
Most of the time	32 (47.06%)	26 (37.68%)	17 (25.00%)	18 (26.47%)	18 (26.47%)
Always	21 (30.88%)	21 (30.43%)	14 (20.59%)	14 (20.59%)	13 (19.12%)
N	68	69	68	68	68

5.4. Measuring Engagement Remains a Challenge

According to most interviewees, municipalities use a mix of built-in platform tools and third-party software to analyze social-media engagement. Many rely on Meta Business Suite for Facebook and Instagram, as well as TikTok's in-platform analytics, to gather statistics on engagement. These tools provide insights into impressions, audience demographics, and the performance of specific content. Some municipalities use external software (such as Hootsuite or Sprout Social) for comprehensive tracking, producing monthly reports with trends and comparisons. Others use external agencies or specialized analytics platforms to supplement internal data collection. These agencies conduct long-term assessments, typically on a quarterly basis, to provide a broader perspective on engagement trends.

Data from our survey indicate that monitoring tools provided by social-media platforms are dominant in engagement evaluation (59 out of 69 municipalities, 85.51%). Seventeen municipalities (24.64%) use additional software to analyze engagement, combined with social-media tools in 13 cases (1884%). The survey confirms the dominance of these two approaches, with only 5 municipalities (7.25%) evaluating citizen engagement manually. In most cases, municipalities focus on specific engagement indicators; only 16 of them (23.19%) envisage engagement in all its dimensions, through a global overview of post quality, reactions, content, etc.

Most interviewees also reported that despite the availability of tools, measuring engagement remained a challenge due to the evolving nature of social-media algorithms and shifting user behaviors. One primary difficulty is distinguishing between genuine engagement and passive interaction. For example, a post with high reach but few comments may be considered successful if it conveys essential information effectively. Conversely, a post with numerous likes and shares may not necessarily reflect meaningful civic participation:

> It depends much on the content. If it's content that we want engagement on, then we pay more attention, maybe to if we want, if we think, okay, here we're trying to get people to interact in comments, then that matters more. But if it's just information, then we're more like okay, how far can we reach? (R18)

Another challenge lies in benchmarking performance. While some municipalities set specific numerical goals such as increasing followers or achieving a particular engagement rate, others find it difficult to establish clear targets. Engagement is often content-dependent; municipalities recognize that posts designed to inform (e.g., policy updates) may generate less interaction than those aimed at sparking discussions (e.g., local events or polls). Consequently, municipalities must interpret engagement metrics within the broad context of their communication objectives.

The replies gathered through our survey corroborate these qualitative findings. They show that engagement is indeed assessed by municipalities across channels: 70% of respondents indicated that their municipality evaluates citizen engagement on various platforms and channels. Thus, evaluating engagement on social media exclusively is preferred by a minority of municipalities.

6. Discussion

Regarding RQ1, most Nordic municipalities combine diverse strategies to foster citizen engagement on social media. Adjusting tone and content, as already underlined by Faber (2022) in his study of Dutch municipalities, strategically using emojis, leveraging visual storytelling, and integrating citizens into municipal communication appear to be among the ways municipalities use to communicate as effectively as possible. By adopting a dynamic, accessible approach and tone, municipalities seek to strengthen their connection with residents and encourage greater participation. Similar results have been observed in Italian municipalities by Lovari and Parisi (2015). These strategies are perceived as aiming for interactions and engagement, as raised by most interviewees. In addition to these insights, survey respondents pointed to the importance of increasing interactivity and their responsiveness on social media. In this sense, respondents from almost all municipalities indicated that comments were addressed either selectively (e.g., to respond to questions, provide clarifications,

or address critical issues) or systematically. Another way to encourage public interaction was through open questions or polls, as observed by Jäntti and Kurkela (2021) in Finnish municipalities.

Regarding RQ2, both qualitative insights and quantitative data show that Nordic municipalities use various methods to measure and assess citizen engagement on social media. While built-in analytics tools provide baseline data on interactions, external software and manual tracking methods supplement these insights. This finding aligns with the qualitative insights presented above and, more generally, with the idea that social media should be part of a broad communication strategy. As explained by Pasquier and Villeneuve (2018), social media are often used jointly with other channels. Therefore, the assessment of citizen engagement should be part of a large, cross-channel effort, although social media offers specific tools to measure engagement (e.g., Agostino & Arnaboldi, 2016). However, the interpretation of engagement data remains complex, requiring municipalities to contextualize metrics within their communication objectives. Despite challenges such as algorithm changes, content variability, and changing citizen preferences, municipalities continue to adapt and refine their strategies based on data-driven insights. In this sense, survey respondents indicated that more than half of the municipalities used social-media metrics extensively, and mostly focused on the effects of post types; a little less than half of them focused on the number, quality, and type of exchanges between users on social-media pages.

7. Conclusion

Nordic municipalities employ various strategies to foster citizen engagement on social media, such as adjusting tone, using visual content and emojis, and encouraging interaction through comments, questions, and polls. They then use a mix of built-in analytics, external tools, and manual tracking to assess engagement, integrating these insights into broader communication strategies despite the challenges of interpreting metrics. Both interviews and the survey showed high heterogeneity in practices. Various reasons may explain this finding. One may relate to the high level of autonomy in local governments. In the local autonomy index developed by Ladner et al. (2025), the five Nordic countries rank in the top eight (out of 57 states), showing the high level of organizational autonomy and freedom enjoyed by municipalities. While this may explain the variations observed in our study, other reasons could pertain to the size of communication teams and political willingness to support engagement on social-media pages.

Unfortunately, the relatively small size of our sample and the prevalence of small municipalities in our survey respondents do not allow for a more advanced and robust statistical analysis. A higher number of replies in future studies may help reach a deeper understanding of the subject through an explanatory research design, based on a large sample. For instance, it would be interesting to test, in line with previous studies (see Contri et al., 2025), whether the trends observed in our article relate to specific patterns, such as municipalities' resources, population size, and socio-demographic characteristics of communication managers. While the threshold used in our study allows for international comparison, including small municipalities would also represent an interesting path for future research centered on Nordic countries since this region is characterized by specific urban-rural dynamics in local governance. Moreover, a comparison between the Nordic municipalities themselves would also be a promising path for research.

The methodology used here also presents limitations. First, we did not possess a full list of communication managers (no such document exists). And second, it was difficult to contact managers in a systematic way,

since structures, such as communication departments, may strongly vary from one case to another, and not all municipalities have a communication manager. We envisage these limitations as promising paths for future research. One suggestion would be to gather a large representative sample of respondents through a survey distributed to numerous municipalities (in populous countries). This would make it possible to use causal research, enabling researchers to test the determinants of engagement, based on both our qualitative insights and findings from prior studies. Another suggestion would be to delve into the political, organizational, and individual factors that impede the evaluation of citizen engagement on social media. Our survey showed that 25% of the municipalities (23 out of 92) neither measured nor monitored engagement on their social-media pages. Future research should also investigate citizen engagement in other contexts where, despite the universality of social-media potentialities, approaches to citizen engagement may differ strongly. Finally, future research should look into citizens' expectations, since they have been, somewhat paradoxically, largely neglected in previous analyses on engagement, although they are the "citizen" part of citizen engagement.

Conflict of Interests

The authors declare no conflict of interests.

Data Availability

The data are available from the authors upon request.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited): Appendix 1 provides the interview guide and Appendix 2 the survey questions.

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