Virtual influencers for municipalities: A content analysis of risks and opportunities in public digital transformation

Silvana Secinaro [a], Federico Lanzalonga [a,b,*], Federico Chmet [a], Ing. Milos Poliak [c]

[a] Department of Management, University of Turin, Corso Unione Sovietica, 218 bis, Turin 10134, Italy
[b] Społeczna Akademia Nauk, University of Social Science, 9 Sienkiewicza St., 90-113 Łódź, Poland
[c] Faculty of Operational and Economics of Transport and Communications, University of Zilina, Univerzitna 1, Zilina 010 26, Slovakia

ABSTRACT

The rapid advancement of digital technology has enabled the emergence of virtual influencers (VIs), who are being considered for their potential impact across various sectors, including the public sector and place branding. This study examines the integration of VIs into municipal branding, offering a novel perspective on the role of digital transformation in public-sector communication strategies. A content analysis of 262 cases sourced from various digital media was conducted to explore the potential and limitations of VIs in enhancing city images and engaging citizens. The findings highlight two main advantages of adopting VIs, which align with modern communication demands: their flexibility and innovative capabilities. However, significant challenges such as high production costs and concerns over authenticity and genuine engagement pose critical risks. This study further delves into the classification of VIs as "hyperreal capital," expanding traditional categorizations of municipal assets to include digital and virtual elements. These insights are critical in redefining strategic public management and place branding, suggesting practical applications for digital personas in urban branding initiatives. This analysis serves as a foundational exploration, encouraging further investigation into the tangible and intangible impacts of VIs on municipal branding. We propose a new theoretical framework for understanding the role of digital innovation in public communication, providing a basis for future studies.

1. Introduction

Had a virtual influencer (VI) defined Paris as "the city of love" for the first time, would it have been as iconic and beneficial for the city? The rapid advancement of digital technology has enabled the emergence of VIs, which are increasingly being considered for their potential impact across various sectors, including the public sector and place branding.

VIs represent an interesting development to explore social media, regarding their potential role in place branding. For example, Botticelli's *Birth of Venus* is considered a VI at the heart of the Italian Ministry of Tourism's new international tourism promotion campaign (Fowler and Thomas, 2023). VIs, which are driven by artificial intelligence (AI) and sophisticated algorithms, first appeared on social media platforms in 2016. Despite lacking human emotions, these entities have successfully amassed millions of followers and

* Correspondence to: Department of Management, University of Turin, Italy.
E-mail addresses: silvana.secinaro@unito.it (S. Secinaro), federico.lanzalonga@unito.it (F. Lanzalonga), federico.chmet@unito.it (F. Chmet), milos.poliak@uniza.sk (Ing.M. Poliak).

engaged in thousands of interactions (Leone et al., 2021). Several fashion brands have already integrated VIs into their marketing campaigns, making commercials in which VIs sing and interact with real people (Tafesse and Wood, 2021).

The trend raises the question of how new business models tested by private companies can be successfully applied in the public sector to achieve social change and digital transformation (Caputo et al., 2021; Schiavone et al., 2019). Indeed, public organizations have the potential to significantly improve the quality and efficiency of the services they provide by adopting innovative business models. By leveraging innovative approaches traditionally used in the private sector, public entities can optimize resource allocation, streamline processes, and create more value for citizens (Wirtz et al., 2023).

Over time, some cities have extended their place-brand value through successful digital communication campaigns (Sadler et al., 2016), promoting user interaction (Metallo et al., 2018). For these features, VIs can represent an attractive communication channel for municipalities; ignoring them could mean losing an opportunity to engage with citizens (Sadler et al., 2016; Schiavone et al., 2021). Place branding encompasses the strategic and political use of communication to enhance a place's image and identity, emphasizing both tangible dimensions, such as infrastructure, and intangible aspects, such as values and culture, while promoting stakeholder engagement for successful branding initiatives (Pike, 2005). The aim is to stimulate local economic development (Jørgensen, 2015) and urban regeneration (Eshuis and Edwards, 2013), in light of the history, culture, art, and natural resources of the area (Calandra and Lanzalonga, 2021). Furthermore, the literature has explored how cities market themselves, and place branding represents a positive approach to promoting a city's brand (Kemp et al., 2012). Owing to the peculiarities of place branding, influencer or VI patterns related to companies appear difficult to apply (Farivar and Wang, 2021; Schouten et al., 2019).

To the best of our knowledge, and considering the nascent stage of the phenomenon, VIs in the context of municipal place branding have not been adequately investigated. Therefore, the risks associated with and benefits of applying VIs in a municipal context require exploration. Existing literature has investigated the adoption of VIs in various sectors, such as fashion (Moustakas et al., 2020), food and beverage (Franke et al., 2022), and tourism (Ingrassia et al., 2022). Despite the notorious public-sector delay in technology adoption (AlKharusi and Al-Badi, 2016), VIs represent a potential strategy to enhance uniqueness to grow a city's positive image; that is, it may strengthen the municipality through a message that evokes the values and opportunities associated with the city (Avraham, 2004). Given VIs' potentially transformative impact on these dimensions, it becomes crucial to thoroughly assess both the opportunities they present and the challenges they pose. Notably, this leads to the formulation of our first research question, which seeks a comprehensive understanding of the implications of adopting VIs in municipal digital communication strategies:

RQ1: What are the risks and competitive advantages of incorporating VIs into a place brand's business-model strategy?

Furthermore, the study addresses the ongoing debate on place branding and capital, exploring the allocation of value by VIs in municipal contexts. It considers the effects of branding policies on both tangible and intangible municipal capital (Baker, 2007), viewing social and city spaces as sites for capital accumulation (Peck, 2002). The traditional literature defines tangible capital as physical municipal assets, such as infrastructure (Alfiero et al., 2021), whereas intangible capital encompasses cultural and service elements. Place branding, therefore, not only builds a unique municipal identity but also develops capital from perceived values (Hanna and Rowley, 2011), highlighting its role in enhancing a location's attributes through its impact on capital accumulation. Therefore, to shed light on VIs' value attributions, the second research question is:

RQ2: What factors shape VIs as tangible or intangible capital for a municipality?

Given the topic's complexity and limited academic research, we utilized practitioner business cases, newspaper articles, press releases, and specialized blogs. This study applied a rigorous qualitative content analysis (CA) to identify key concepts and stakeholders associated with the use of VIs in municipal branding (Biancone et al., 2022). The initial search on the Nexis Uni database was refined (Massaro et al., 2021), yielding 262 documents. These documents were analyzed using the Leximancer software, which automates CA and extracts concepts from textual data (Smith and Humphreys, 2006).

The analysis enabled an exploration of practitioner issues and opinions, laying a theoretical foundation for further research. This study enhances digital communication strategies for municipalities by classifying influencer use within place branding (Kavaratzis, 2004) and delineating primary and tertiary influencer communications based on information governance (Cleave et al., 2017). It identifies the risks of employing VIs in municipal communications, such as production costs (Söderlund and Oikarinen, 2021), biased expectations (Adeola et al., 2020), challenges with authenticity (Conti et al., 2022), and a digital-only presence (Guthrie, 2020). Conversely, benefits include exclusiveness (Conti et al., 2022), flexibility, adaptability (Thomas and Fowler, 2021), risk reduction
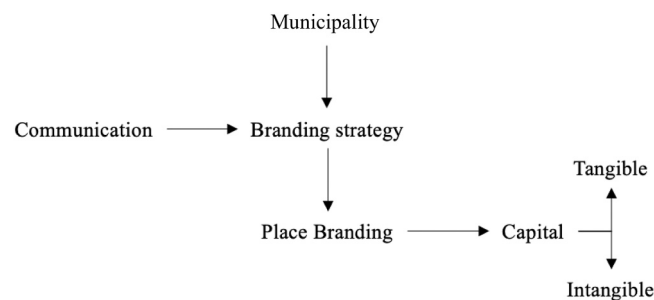

Fig. 1. Theoretical framework.
Source: Author's elaboration

(Conti et al., 2022), and innovation (Adeola et al., 2020). The study also examines VIs as tangible and intangible capital, informed by technical infrastructure and the sociological concept of hyperreal capital (Luke, 1991). Key implications for decision-makers include using VIs for political and social campaigns and their potential to minimize the risk of inappropriate behavior, positioning a brand as an institutional ambassador (Conti et al., 2022).

2. Literature review

2.1. Place brand for a municipality business model: theoretical framework

This section aims to explore the literature related to the branding concept within municipal business models and communication to provide a theoretical framework (Fig. 1).

A conventional business model provides a conceptual framework to understand an organization's underlying business logic (Schiavone et al., 2021). This concept extends to the public sector, where digitalization and renewal often cause friction between managers and stakeholders (Schiavone et al., 2019). Overcoming barriers such as resistance to change and risk aversion is critical (Micheli et al., 2012).

Business-model innovation in the public sector frequently involves social change and digital transformation, redefining the value proposition for stakeholders (Caputo et al., 2021). A notable example is place branding for cities, leveraging the business model to highlight local needs and resources, thereby accelerating digitization in response to contingent, technological, and systemic changes (Bagnoli et al., 2018).

Branding, commonly linked to the business sector, is used to define a product or company's qualities and messages (Khirfan and Momani, 2013), and is also applicable in the public sphere. It aims to create an emotional connection between an entity and its consumers (Hislop, 2001) while conveying the organization's values and image (Rooney, 1995). In the urban context, branding manifests as a positive attitude toward a city's brand (Kemp et al., 2012), where residents showcase their pride in their city's unique cultural and natural heritage (Calandra and Lanzalonga, 2021). Notable examples include New York as "The City That Never Sleeps," Rome as "The Eternal City," and Paris as "The City of Love."

Studies in the last decade consider place branding in the context of city governance (Harvey and Young, 2012). Like other strategies, it can be a political strategy for urban regeneration and redevelopment (Eshuis and Edwards, 2013). In this context, branding uses different connotations to create a favorable image of a place by emphasizing certain functional, symbolic, and experiential aspects. By contrast, a place brand is a symbol that suggests ways of living or relating to a municipality (Hansen, 2010). In other words, it represents the municipality with a message that evokes the values and opportunities it wants to associate with the city (Avraham, 2004) by allowing psychological and social connotative meanings to be expressed (Spence and Van Doorn, 2022).

Therefore, decision-makers must consider the unique and dynamic aspects to represent the unique identity characteristics of a place (Martínez, 2007). Basically, all place branding can be considered an effort to enhance local economic development (Jørgensen, 2015).

2.1.1. Place communication and branding: a three-phase analysis through social media

The evolution of social media inevitably involves municipalities communicating place-related events and activities (Appel et al., 2020). According to Kavaratzis (Kavaratzis, 2004), place promotion through social media can be defined through three different communication steps.

Primary communication is concerned with the communicative impacts of a city's activities, such as actions and decisions that are important for urban planning, the creation of a distinctive character, the effectiveness of the municipality's local government, and the behavior of the municipality based on its actions (Eshuis et al., 2014).

Secondary communication is the formal, deliberate communication that occurs most frequently through established marketing methods (Kavaratzis, 2004). Therefore, content is the most crucial aspect of secondary communication, confirming that promotion can only happen if some concrete element can be marketed. However, these aspects are selective as they are purposefully reinforced to establish good connections (Boisen et al., 2011).

According to Hakala (2021), secondary communication is based on communicative competence. In other words, it represents the ability to understand the requirements of a promotion technique and how it is executed and employed.

Finally, tertiary communication refers to word of mouth or reputation, neither of which is under the authority of those conducting the promotion (Kavaratzis, 2009). Ultimately, tertiary communication results from the primary and secondary types of communication. The first two forms of communication are regarded as how the municipality's brand image is conveyed; however, tertiary communication reflects how the image has been digested and thus affects how the brand is perceived by the target audience (Cleave et al., 2017). Through social media, municipalities can implement governance with the entrepreneurial characteristics that enable urban areas to remain economically relevant through repackaging and inventive promotion (Pasquinelli, 2013).

Thus, place branding represents an effort to improve local economic development (Jørgensen, 2015), must be explored as an expression of the interests of a particular group or groups, and can be contextualized as a political act aimed at producing particular outcomes (Eshuis and Edwards, 2013). Specifically, municipalities' branding strategies operate to satisfy a specific category: internal stakeholders (Pike, 2005). Without the consensus of local businesses, communities, and residents, place-branding strategies are likely to fail (Jørgensen, 2015).

According to Baker (2007), it is possible to consider, in this context, the tangible and intangible capital of a city and the consequences of a branding policy thereon. Notably, it is possible to consider social and city space as a site of capital accumulation (Peck, 2002). Based on these assumptions, place and city branding represent a place's attributes and deserve to be explored through the

impact of the process on capital accumulation. The traditional capital literature defines tangible capital as the infrastructure and landscape strategies that a municipality owns or implements (Alfiero et al., 2021; Hanna and Rowley, 2011). Conversely, several authors define symbolic traits such as culture and services as intangible capital (Gaggiotti et al., 2008). In this sense, place branding gives a municipality a specific and distinctive identity and reputation that cannot be achieved through tangible assets alone, nurturing capital derived from perceived "values" and "intangible" factors (Hanna and Rowley, 2013).

2.2. The influencing activity in municipalities

Social media platforms are pivotal in facilitating public engagement and fostering the development of relationships through sustained dialogue and interactive exchanges (Lovejoy et al., 2012). Platforms such as Facebook, Instagram, Twitter, and YouTube are instrumental in placing citizens at the center of reform discourse and public decision-making processes, thereby exerting a considerable influence on public opinion (Agostino, 2013; Wibawa et al., 2022). This interactive digital environment enhances the emergence of key opinion leaders and influencers, who play an indispensable role in shaping public perceptions and enhancing civic engagement with municipal policies (Ki and Kim, 2019).

The rise of digital influencers, catalyzed by the proliferation of social media, plays a crucial role in shaping public opinion and influencing municipal policies (Schouten et al., 2019). Influencers gain credibility through trustworthiness, attractiveness, and expertise, significantly affecting followers' perceptions and behaviors (Djafarova and Trofimenko, 2019). This credibility is vital in political contexts, where influencers simplify complex topics, promote political literacy, and stimulate civic engagement, especially among the youth (Donhauser and Beck, 2021; Uzunoğlu and Kip, 2014).

High popularity determines an influencer's effectiveness in influencing users' opinions about a product or service (Hill et al., 2017). According to Ladhari et al. (2020), the emotional connection established with an influencer is driven by characteristics such as attitude, values, and appearance, described as homophily.

Previous studies have explored how influence requires emotional attachment based on the needs for idealism, similarity and likability, and informational competence (Ki et al., 2020). Finally, an influencer's prominent characteristic is the ability to share quality content. Notably, sharing visually appealing, informative, and interactive content contributes to the prestige of a product or service (Ki and Kim, 2019).

On the one hand, social media engagement must be consistent with user-message intentions. On the other hand, it appears necessary to align the informational purposes and construction of an entire advertising campaign to the target platform (Hughes et al., 2019). Thus, municipalities must be able to seize the opportunities to track opinions and thoughts and define the information needs using tools suitable for measuring user interest, such as sentiment analysis (Grossi et al., 2021).

Table 1 below summarizes influencers' characteristics that are beneficial for municipalities aiming to enhance public engagement, based on the existing literature.

2.2.1. The rise of VIs in digital communication

The rapid advancement of disruptive technologies has integrated AI into social media, leading to the rise of VIs. These VIs are computer-generated characters that may closely resemble human beings, possessing realistic traits and personalities (Wibawa et al., 2022). Despite some appearing as animated characters from comic books or video games (Bechmann and Bowker, 2019), VIs are predominantly used to post content on technology, fashion, daily life, and social issues, with a preference among users for those that mimic real human appearances (Conti et al., 2022).

The blurred line between VIs and human characters complicates their definition; however, they are generally recognized as entities autonomously controlled by AI, rendered in real-time within a digital environment (Sands et al., 2022). Their increasing realism continues to narrow the distinction between virtual and human agents on social platforms (Seymour et al., 2019). The well-known VI, @lilmiquela, with approximately 3 million followers, exemplifies this by engaging in activities typically associated with human influencers, such as political advocacy to mobilize young voters in the United States elections (Rodrigo-Martín et al., 2021) and influencing interest in music, film, and luxury (Kadekova and Holienčinova, 2018).

Table 1
Municipality interest in influencer features.

Area	Feature	References
Credibility	Trustworthiness	(Djafarova and Trofimenko, 2019)
	Attractiveness	
	Expertise	
Power	Reliability	(Donhauser and Beck, 2021)
	Knowledge	(Uzunoğlu and Kip, 2014)
Engagement (Emotional attachment)	Popularity	(Hill et al., 2017).
	Attitude	
	Values	
	Appearance	
Content	Quality	(Ki and Kim, 2019)
	Prestigious	
	Level of information	

Source: Authors' elaboration

In the context of this study, Table 2 is derived from an in-depth analysis of the literature on VIs. This study has enabled the development of a comprehensive framework highlighting the characteristics of VIs that are relevant to place branding. Through this analysis, specific opportunities and risks associated with the use of VIs have been identified, providing essential insights into how these VIs can be effectively utilized in communication and for places.

First, VIs are entirely flexible and adaptable. Creators can use VIs placed anywhere and anytime instead of real influencers that require time and cost to move (Thomas and Fowler, 2021).

Second, VIs can be produced specifically for a particular brand and remain attached to it forever. Through features, brands can customize VI personas to fit their image and align with brand values, reducing the risk of company exposure due to inappropriate behavior (Conti et al., 2022). Regarding brand innovation, companies collaborating with VIs are perceived as more innovative and technological, despite leading to biased expectations (Adeola et al., 2020). Indeed, VIs seem to redefine expectations for appearance, style, and culture, which adolescents may seek to emulate.

Additionally, the relationship consumers may develop with VIs may be limited due to the need for more human contact (Guthrie, 2020). This aspect seems easily overcome by the exponential growth of the metaverse (Hazan et al., 2022).

In this sense, the metaverse development enables space growth for digital interaction (Hirsch, 2022). Finally, authenticity and cost are the last two characteristics identified (Sands et al., 2022). The first, combined with trust and transparency, represents critical values for any influencer. Examples of bias may be selling weight-loss products advertised by digital creations (Conti et al., 2022). Meanwhile, costs are represented by the high expense of computer-graphics experts behind their actions (Söderlund and Oikarinen, 2021).

3. Methodology

This section describes the rigorous qualitative methodology applied in this study to meet the purposes of professional source-based research. CA represents a research technique for conducting replicable and valid inferences from different meaningful materials (Krippendorff, 2009). Although scholars initially used it only for text, nowadays, it is applied to analyzing different media sources, such as audio and video content (Krippendorff, 2018). Therefore, this method allows for research using multiple sources and computational tools for scientific comparisons (Elo and Kyngäs, 2008). Based on the gaps identified in this study, the research benefits from the present methodology to encode the main concepts and actors of the phenomenon related to the study of VIs in the branding context for municipalities (Biancone et al., 2022). The literature presents CA with three different declinations: conventional, direct, and summative (Hsieh and Shannon, 2005).

This study applies direct CA using place branding theory and recent studies on the phenomenon of influencers and VIs to obtain initial coding (Massaro et al., 2021). Aiming to obtain a preliminary exploratory analysis on a frontier topic, the present CA uses a holistic research key to pursue the study's objectives.

The Nexis Uni database was used to collect a sample of practitioners' documents (Massaro et al., 2021). It has already been used in the literature to explore digital dimensions related to management (Calandra et al., 2023) and has proven to be a valid tool for delving into frontier topics (Cook et al., 2018). The platform appears suitable for identifying emerging themes through news articles, including public information on municipalities and innovative solutions (Kim et al., 2015).

Specifically, 262 individual documents, including popular articles and economic and legal reports, were collected (Brehmer et al., 2018). This study provides a comprehensive overview of the geographical scope, professional involvement, and thematic focus of the collected data, addressing key aspects raised by the reviewers. Covering 25 countries across North America, Europe, South America, Asia, and Oceania (Fig. 2), the analysis highlights the global relevance of the findings. Data were derived from 107 municipalities, reflecting a significant representation of diverse local contexts and urban dynamics.

In terms of professional involvement, the study identifies 71 individual professionals, including branding experts, event managers, strategists, and communication specialists, who play key roles in shaping regional initiatives and contributing expertise across various domains. The thematic focus, detailed in Table 3, reveals insights from 38 general-interest articles and 41 specific events, which represent well-defined occurrences or initiatives observed during the investigation period. These events, ranging from city-wide festivals and municipal-branding campaigns to cross-municipal collaborative projects, are characterized by their temporal specificity, geographical focus, and practical outcomes, offering concrete examples of branding strategies and shared experiences

Table 2
Opportunity and threat in VI features.

| Cluster	Feature	References
Opportunity	Exclusiveness	(Thomas and Fowler, 2021; Conti et al., 2022).
	Flexibility	(Thomas and Fowler, 2021)
	Adaptability	(Conti et al., 2022).
	Risk reduction	(Adeola et al., 2020; Conti et al., 2022).
	Innovation	(Adeola et al., 2020; Sands et al., 2022).
Threat	Production cost	(Söderlund and Oikarinen, 2021)
	Biased expectations	(Hirsch, 2022; Adeola et al., 2020).
	Authenticity	(Conti et al., 2022; Guthrie, 2020)
	Digital only	(Hazan et al., 2022; Hirsch, 2022)

Source: Authors' elaboration
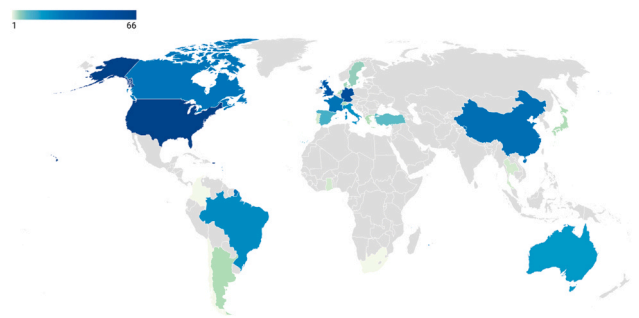
Fig. 2. Global distribution map of articles.
Source: Author's elaboration

Table 3
Territorial and professional data.

Countries	25
Individual municipality under investigation	107
General-interest articles involved	38
Individual professionals involved	71
Specific events under investigation	41

Source: Authors' elaboration

implemented in real-world contexts.

To preliminarily exclude any items of interest, the following search key was applied in December 2022: "Municipalit*" AND "Brand*" OR "Place brand*" AND "influencer" OR "VI". From the initial result of 892 documents, languages other than English and those published more than 2 years prior were excluded. According to Wong (2018), the phenomenon of virtual influencing appears to have started earlier. We refined the results of 312 papers by randomly analyzing the papers' content for relevance to the topic (Krippendorff, 2018). Based on Secinaro et al (Secinaro et al., 2022)., we individually screened the articles to avoid redundancy and produce the final sample (Table 4).

The findings were derived using the Leximancer software, which enables automatic CA searching and extracts thesaurus-based concepts from textual data (Smith and Humphreys, 2006). The literature has already validated Leximancer as a reliable tool for examining text content. In particular, the software represents an approach to transform lexical co-occurrence data from natural language into semantic patterns through an unsupervised learning model (Massaro et al., 2018). Additionally, Leximancer enables the establishment of relationships between concepts by employing two different information-extraction steps and using two different algorithms (Smith and Humphreys, 2006). This process renders the analysis trustworthy and objective (Massaro et al., 2021), enabling the application of an in vivo method that allows authors to read and encode practitioners' contents (Miles et al., 2018).

4. Results

This section illustrates the study's findings based on the sample of professional articles from the Nexis Uni database. The CA conducted using the Leximancer software generated the output in Fig. 3, which identifies key themes such as "Brand," "Social," "Municipality," "Platform," "Value," "Reputation," "Information," "Communication," "Capital," "Accessibility," and "Governance." Furthermore, Table A.1 in the appendix summarizes the key topics, sources, and textual references used.

The diagram visualizes how these concepts interact with one another, forming a network of relationships that can influence the effectiveness of municipality branding and communication. Each circle represents a concept or area of interest, whereas the connections between them indicate possible interactions or correlations. This mapping helps clarify how different aspects of management and communication influence one another in the specific context of place or city branding.

Table 4
Data-collection process.

| Variable	Information	Data
Database	Nexis Uni	Practitioners' news, articles
Time span	Period under observation	December 2020 – December 2022
Language	Language of documents	English only
Initial search	"Municipalit*" AND "Brand*" OR "Place brand*" AND "influencer" OR "Virtual influencer"	892 documents
First refinement	Random analysis (Krippendorff, 2018)	312 documents
Second refinement	Individual screening, (Secinaro et al., 2022)	262 documents

Source: Authors' elaboration
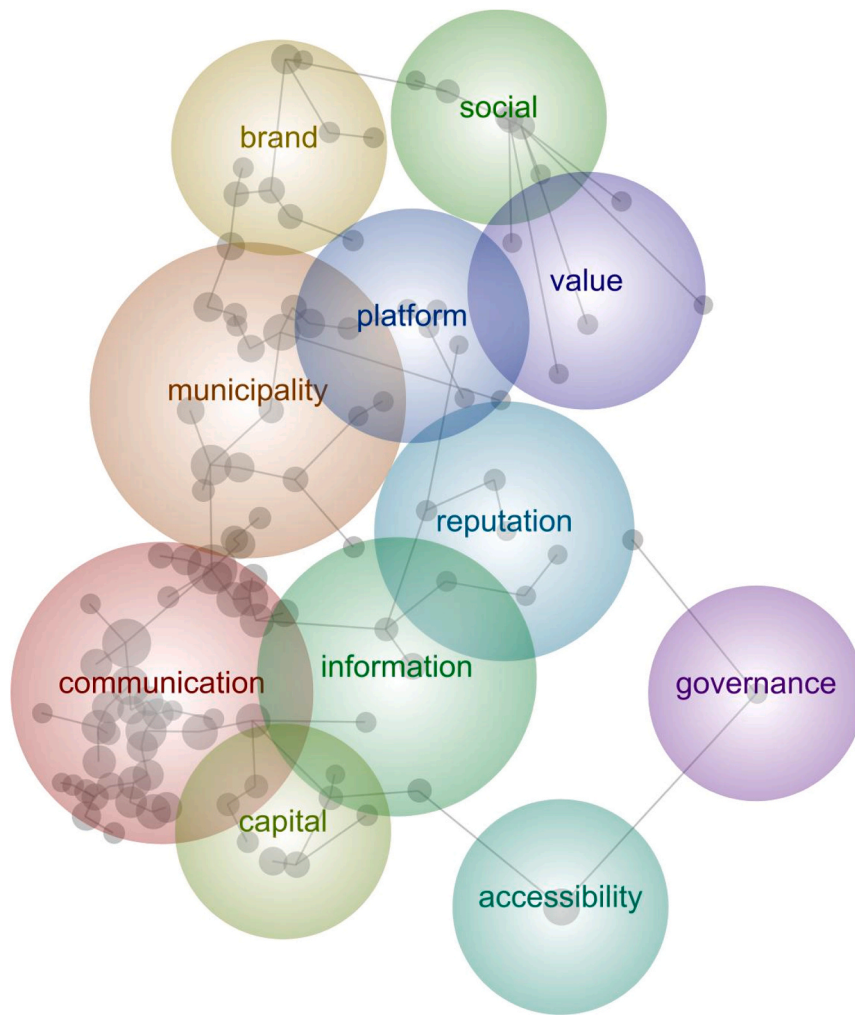
Fig. 3. Key themes and their relationship in practitioners' sources.
Source: authors' elaboration via Leximancer

The proximity between two or more spheres indicates that the concepts have a direct and significant interaction with each other in the studied context. For example, the closeness of the spheres labelled "brand" and "municipality" suggests that a city's brand identity is strongly influenced by the municipality's policies, initiatives, and governance.

This visual configuration helps us understand how the various aspects of a municipality's management and communication do not operate in isolation but are interconnected in ways that mutually influence public perception and operational effectiveness.

Below is a detailed exploration of the concepts that emerged for each main theme.

4.1. Content analysis

CA is provided for the keywords that emerged as critical themes in the analysis of the 262 documents resulting from the comprehensive search key.

The following subsections are analyzed in the context of the broader "municipality" theme and should be understood in connection with this study's main topic.

4.1.1. Communication, platform, and brand

The communication concept appears central in the analysis. Primary importance is attached to the information-dissemination channels and language used. Social media language is not limited to conventional forms; rather, purpose-generated resources, including stickers, filters, GIFs, and more, available on all major platforms, including TikTok, Instagram, Twitter, and Facebook, must be considered when building a place brand (Newswire and Shine, 2022).

Platforms create a direct connection with communication. For instance, YouTube is characterized as an active platform where

authentic language is used (CE Noticias Financieras English, 2021a). Active users, called *YouTubers*, can share their experiences related to tourist visits, surpassing the engagement limitations of traditional tourist guides. In this context, influencers can think outside the box and operate effectively, regardless of industry experience (Campaign Middle East, 2022).

Brand building can result from the ability to innovatively represent tradition. One example is the use of dialect, an element of pride and emotional attachment for locals. In this sense, dialect can represent a colloquial communication language useful for integrating visitors who want to feel a part of a community (Nordic Daily, 2022a).

4.1.2. Information

Closely related to communication is information, which is understood as the amount of information to be provided to users and the quality of the content shared. Planning a schedule for monthly publication is necessary to establish the information level of communication (Tenders Monitor Africa-Asia, 2022).

Therefore, a combination of highly informative and entertaining content increases online presence and connection with users. Influencers (virtual and real) can be a vital tool for presenting a place's facts and culture without claiming to provide an exhaustive overview (CE Noticias Financieras English, 2021a). Consequently, the attractiveness of an area depends on the reliability of information and knowledge.

4.1.3. Reputation, governance, and capital

Regarding reputation, practitioners provide an interesting insight for municipalities. Specifically, relying on messages transmitted through external partners may threaten a city's reputation. The use of virtual services to present places can expand beyond traditional tourist guidebooks; however, it exposes the user to the risk of numerous advertisements for related services or attraction spots (CE Noticias Financieras English, 2021a).

Poor governance can reduce the reliability and communication transparency of a municipality and consequently, damage the brand's reputation (News, 2022). Indeed, document analysis presents brands responsive to popular opinion by enhancing the power of positive comments. Receiving positive feedback means a brand's growth and the potential number of visitors can be increased (Nordic Daily, 2022b). Therefore, involving popular influencers allows campaigns to broaden awareness of a place's culture. For example, influencers' travel videos facilitate learning about the best accommodation and eating places in a location (CE Noticias Financieras English, 2021a).

Video storytelling, especially from influencers, offers practical, everyday narratives about a place that debunk biases and highlights a location's values (CE Noticias Financieras English, 2022). Furthermore, quality content about a place generates a feeling of pride and increases people's engagement with the brand. In this sense, the capital theme intersects with tourism by highlighting the complex system of tangible and intangible assets that support and promote the holistic development of the national tourism potential.

A public brand benefits from natural, cultural, and heritage resources but also exploits the creative arts, typical artefacts, food and drink, news, and social media (Business and Financial Times Ghana, 2022).

4.1.4. Social, value, and accessibility

The CA of the social sphere led to the exploration of two concepts. On the one hand, social media are instrumental in presenting a municipality's activities (brown sphere) by narrating the infrastructure development and disseminating the achievements (Nordic Daily, 2022b). On the other hand, the CA involved social dynamics closely linked to values (violet sphere).

To keep the audience engaged, social media management influences everyday life. For example, a city can use different channels for communicating fun projects in public art to rejuvenate places and build stronger communities (Krause and Konstantinides, 2021). However, influencers can be enhancers of social issues based on strong values, such as battles against discrimination (Newswire and Shine, 2022).

In this vein, disseminating activities and values expands social media users' access to information and raises awareness of common goals. It is now common for influencers to use their popularity to motivate citizens to vote by sharing photographs, urging their followers to vote (CE Noticias Financieras English, 2021b). Therefore, the ease of access to political dynamics through social media requires certain aspects of governance to be regulated.

Unregulated influencer activity and the uninformed use of social media for political campaigns can distort information for a citizen. During elections, citizens witness slander, scandals, and social media clashes between political candidates, with the risk of losing interest in the political debate (CE Noticias Financieras English, 2021c).

5. Discussion

5.1. Place-brand communication through social media

Through their characteristics of dialogue and interaction, social media are powerful tools for disseminating a municipality's brand (Lovejoy et al., 2012). Place branding aims to satisfy the interest of the municipality's internal stakeholders and increase public engagement (Rowe and Frewer, 2005), thus increasing acceptance by local businesses, communities, and residents (Pike, 2005; Jørgensen, 2015). However, the use of universal platforms enables place branding to extend beyond internal communication to a global dimension, to showcase cities' unique characteristics (Calandra and Lanzalonga, 2021). Therefore, the strategies implemented by governance aim to enhance the values and opportunities associated with a city (Avraham, 2004). It seems essential for municipal communication to take place through social media (Wibawa et al., 2022). Consequently, based on the analysis results, it is clear how

influencers' role can be delineated in the three communication steps for place branding proposed by Kavaratzis (2004).

5.1.1. Primary communication

Primary communication represents the communicative impacts of a city's activities to establish a distinctive character and highlight the effectiveness of local governance (Eshuis et al., 2014). The need for strategic choices involving governance appears prominent. Underlying the communication strategy are choices regarding the channels of dissemination and language used. The findings highlight the importance of institutional platforms on different media, such as TikTok, Instagram, Twitter, YouTube, and Facebook (Newswire and Shine, 2022).

Furthermore, a stronger and more consistent presence on social media platforms is required; however, planning tailored to the social media users' attributes becomes necessary (Tenders Monitor Africa-Asia, 2022). In this respect, a decisive role is played by popular opinion that enhances a brand through positive feedback regarding government activities (Nordic Daily, 2022b). Monitoring user feedback through sentiment analysis can facilitate understanding the quality of government decisions (Grossi et al., 2021).

5.1.2. Secondary communication

Secondary communication is based on communication competence and content, representing the ability to understand the requirements of a promotion technique and how it is executed and implemented (Hakala, 2021). Communication should consider the quantity and quality of information (Tenders Monitor Africa-Asia, 2022). For instance, using dialect and colloquial language in communications can increase internal stakeholders' pride and emotional attachment while reducing a branding campaign's perceived universality (Nordic Daily, 2022a). Among the most frequent ways to increase place branding is through travel videos shared on YouTube. The platform's visual content allows influencers to work effectively for brand building beyond traditional travel guides (Campaign Middle East, 2022). Theoretically, the results suggest an essential distinction based on information governance. If a municipality controls an influencer's content, it can increase the area's attractiveness by presenting the places and culture without risk of reputational damage (News, 2022).

5.1.3. Tertiary communication

Reputation and word of mouth are the characteristic elements of tertiary communication that shape how an image has been assimilated and thus affect how a brand is perceived by the target audience (Cleave et al., 2017). Therefore, where content is not under municipal governance, it is tertiary communication. The creation of unsolicited content by influencers poses a risk for a municipality that, without control of the information, could witness the dissemination of content on the web that increases bias and undervalues the place (CE Noticias Financieras English, 2022). Therefore, direct management of an influencer's content risks leading to cherry-picking information without maximizing a place's brand value.

5.2. Risks and competitive advantage regarding VIs in place branding

This section presents and discusses the results based on the literature to address the first research question. Municipalities' digital communication is based on the following attributes: Credibility is based on trustworthiness, attractiveness, and expertise (Djafarova and Trofimenko, 2019). Knowledge (Donhauser and Beck, 2021) and reliability (Uzunoğlu and Kip, 2014) build the power to influence popular opinion. Engagement determines effectiveness in controlling views based on popularity, attitude, values, appearance, and the emotional appeal (Hill et al., 2017). Content features include quality, prestige, and an appropriate information level (Ki and Kim, 2019). The four elements are key factors in exploring the risks associated with and the competitive advantage of VIs for a municipality (Table 5).

The analysis of the practitioners' documents revealed an influencer's characteristics in a municipality's activities. Different platforms enable an influencer to perform effectively and creatively based on peculiarities and content format (Campaign Middle East, 2022). Furthermore, a virtual or real influencer increases place branding by presenting a place's events and culture without claiming to provide an exhaustive overview (CE Noticias Financieras English, 2021a). Thus, an influencer's reliability is vital in establishing the credibility of travel routes through video trips, debunking misconceptions, and revealing a location's values (CE Noticias Financieras English, 2022). Moreover, the figure of an influencer for a municipality is not relegated to the role of an entertainer. Indeed, they can promote socially rooted affairs such as anti-discrimination campaigns (Newswire and Shine, 2022). The power of influence can stimulate followers in political activities (CE Noticias Financieras English, 2021b).

Table 5 addresses the first research question by highlighting the risks related to and the competitive advantage of introducing a VI for place branding. Regarding credibility, the most significant risk is the public perception of a VI as only digital (Guthrie, 2020) and concerns about their authenticity (Sands et al., 2022). Social and political issues are often driven by a sense of injustice and shades of sensitivity that appear (at least) forced when communicated by a VI (CE Noticias Financieras English, 2021c). Therefore, the risk is

Table 5
VI features for place branding.

	Credibility	Power	Engagement	Content
Risks	Digital only; Authenticity	-	Biased expectations	Production cost
Competitive advantage	Risk reduction	Exclusiveness	Innovation	Flexibility; Adaptability

Source: Authors' elaboration

related to homophily, which scarcely emerges if moral issues are considered. However, a VI is designed to avoid inappropriate behavior, thus allowing a brand to have an ambassador consistently oriented toward the required values (Conti et al., 2022). From this perspective, a VI offers a competitive advantage in terms of brand credibility. The power characteristic promotes exclusivity (Conti et al., 2022). Therefore, establishing ad-hoc local brand VIs represents an element of pride for internal stakeholders (Nordic Daily, 2022a).

Regarding engagement, the most significant risk is that a VI may inherently set unrealistic expectations regarding appearance, style, and culture (Adeola et al., 2020). This could lead to failure to meet the desire to keep the audience engaged through social media management based on everyday life (Krause and Konstantinides, 2021). The benefit of potentially attracting a segment of the audience drawn by innovation balances the risk (Adeola et al., 2020). Among the main aspects of engagement for a local brand is the ability to revitalize tradition through innovative exposition formats (Nordic Daily, 2022a). Finally, content can benefit from a VI's flexibility and adaptability characteristics (Thomas and Fowler, 2021). To showcase natural, cultural, and heritage resources, the possibility of being arbitrarily allocated to any location represents a great competitive advantage for a place brand (Business and Financial Times Ghana, 2022). However, the costs of AI and 3D modelling for representation are a risk that could restrict the content for a brand and its widespread diffusion (Söderlund and Oikarinen, 2021).

5.3. VIs as tangible or intangible capital

Starting with capital in Fig. 4, this section addresses the second research question extending the ongoing debate on capital in place branding to VIs. City branding represents a place's attributes and deserves to be explored through the impact of the process on capital accumulation (Peck, 2002). Traditionally, tangible capital is defined as the infrastructure and landscape strategies a municipality adopts or implements (Alfiero et al., 2021; Hanna and Rowley, 2011). Conversely, intangible capital deals with symbols such as culture and logos (Gaggiotti et al., 2008). By design, VIs represent an original and organic embodiment of a brand's vision and identity.

The prerequisites for the origin of the VI phenomenon lie in the ability to control communication that the rights owner can manage (CE Noticias Financieras English, 2021a). In this respect, it is possible to define VI as tangible capital where the government controls the infrastructure and communication strategies. Therefore, the definition applies under the condition that the municipality wholly owns the rights to the creation and management of the technical aspects of AI and 3D modelling (Business and Financial Times Ghana, 2022). By contrast, the value accumulated by a VI qualifies as intangible capital if the technical aspects are outsourced. In other words, the right to use does not provide tangible capital but only intangible value (Fig. 4).

However, this separation might seem anachronistic, given the nature of the topic. "Real" and "virtual" are no longer members of a polar relationship. The elements are no longer opposing concepts because what is commonly called "real" is now profoundly and irretrievably controlled by the virtual. Consequently, it is possible to reclassify a VI as hyperreal capital (Luke, 1991). The concept of hyperreal capital originates from sociology. Nonetheless, it fits into the place-branding field as VIs create their target audience's reality, mimicking their behavior and influencing their choices through developing a relationship with the followers (Grossi et al., 2021).

6. Conclusion

This study makes a pioneering contribution to the emerging intersection of digital innovation and public-sector branding by
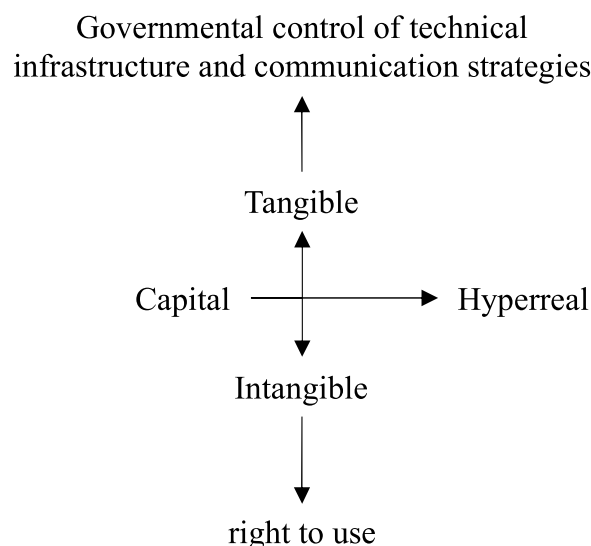

Fig. 4. VI as tangible or intangible capital for municipalities.
Source: Author's elaboration

positioning VIs as strategic tools in municipal communication. By introducing the concept of hyperreal capital (Luke, 1991), it reframes how value is created, governed, and perceived in place branding, extending beyond traditional tangible and intangible assets (Baker, 2007; Hanna and Rowley, 2011). Grounded in a robust content analysis of 262 practitioner cases across 25 countries, this study develops a novel theoretical and operational framework that municipalities can adopt to harness the potential of VIs while mitigating associated risks. In doing so, it addresses a current digital trend and sets the foundation for a forward-thinking model of public engagement and urban identity construction.

6.1. Theoretical implications

This study contributes to theory in three distinct ways. First, it advances the categorization of influencer roles in municipal digital communication, building on the framework proposed by Kavaratzis (2004). By emphasizing the role of information governance (Cleave et al., 2017), it clarifies the distinction between primary communication, where content is monitored or created by municipal authorities, and tertiary communication, driven by user-generated or influencer content outside institutional control.

Second, the study integrates and extends social media influencers literature into the public sector (Ki and Kim, 2019; Djafarova and Trofimenko, 2019), mapping out a comprehensive set of VI characteristics that define both risks (production cost (Söderlund and Oikarinen, 2021), biased expectations (Adeola et al., 2020), authenticity (Conti et al., 2022) and digital only (Guthrie, 2020)) and competitive advantages exclusiveness (Conti et al., 2022), flexibility, adaptability (Thomas and Fowler, 2021), risk reduction (Conti et al., 2022), and innovation (Adeola et al., 2020).

Third, the study introduces the concept of hyperreal capital (Luke, 1991) as a new category of value in intangible assets for the municipality. VIs, as algorithmic and symbolic constructs, challenge the binary between tangible and intangible capital (Alfiero et al., 2021; Guthrie, 2020), thus offering a richer lens for theorizing value creation and identity management in digital cities.

6.2. Practical implications

From a practical standpoint, this study provides actionable insights for public managers and communication strategists. First, it highlights the importance of strategic alignment between VI use and message type. VIs offer flexibility, cost-effectiveness in the long term, and full message control (Thomas and Fowler, 2021). However, their lack of emotional authenticity may undermine trust in cases involving civic values, policy decisions, or ethically sensitive narratives (Wibawa et al., 2022).

Second, the study highlights the challenge of budget sensitivity. The high development costs of VIs (Söderlund and Oikarinen, 2021) may discourage smaller municipalities from adoption. To overcome this, regional cooperation or shared-service platforms could offer a scalable and cost-efficient alternative.

Third, the research positions VIs as potential institutional ambassadors. Unlike human influencers, they are less prone to reputational risk or off-message behavior (Conti et al., 2022). Their design allows for long-term narrative consistency, provided that municipalities implement governance structures that ensure transparency, ethical standards, and audience trust (Guthrie, 2020; Hazan et al., 2022).

6.3. Limitations and future research avenues

This study, although exploratory and innovative, has limitations that suggest promising avenues for future studies. First, the use of secondary sources, including news reports, blogs, and professional case studies, offers valuable insights but limits empirical generalizability. As the phenomenon evolves, longitudinal and primary data will be necessary to validate the framework over time.

Future studies should explore comparative case studies across cities with different digital maturity levels, cultural contexts, and political frameworks (Eshuis and Edwards, 2013; Appel et al., 2020). This would clarify how contextual variables influence the adoption, governance, and performance of VIs in public communication.

Additionally, citizen perceptions and emotional engagement with VIs need to be investigated. Survey-based and experimental studies could assess the effectiveness of VIs in stimulating trust, resonance, and behavioral change among different demographic groups (Ladhari et al., 2020; Ki et al., 2020).

The rapid development of immersive technologies, such as the metaverse and augmented reality (Hazan et al., 2022; Hirsch, 2022), invites research into how VIs operate in those contexts. This raises the question of whether immersive environments enhance or undermine brand authenticity and the potential for community-building.

Finally, the ethical and governance challenges linked to using virtual entities in public administration deserve deeper investigation. Transparency, algorithmic accountability, and democratic oversight will be essential to avoid manipulation and ensure that public trust is not eroded by digital opacity.

CRediT authorship contribution statement

Silvana Secinaro: Methodology, Formal analysis, Supervision, Investigation, Conceptualization. **Federico Lanzalonga:** Writing – review & editing, Software, Conceptualization, Writing – original draft, Methodology. **Federico Chmet:** Writing – original draft, Investigation, Writing – review & editing, Methodology, Conceptualization. **Milos Poliak:** Writing – original draft, Conceptualization, Software.

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Declarations of interest

None.

Appendix

Table A.1
Brand and influencer in the municipality in practitioners' sources

Topic	Source	Original Quote
Brand	(Nordic Daily, 2022b)	*Thanks to the power of positive commenting, it gained a lot of visibility and built a positive Imatra brand. 43,000 people got to know the campaign page and thus the hospitable Imatra. (Nordic Daily October 13, 2022)*
	(CE Noticias Financieras English, 2021a)	*Ramita promotes places and corners (it will show the minibar and bathroom of the hotel room that housed it and give details of the mattress and pillows). But, fundamentally Ramita eats. And on your visit to Rosario you will be seen having breakfast, dinner and even learning good manners at the table (CE Noticias Financieras English January 29, 2021).*
	(CE Noticias Financieras English, 2022)	*The farmer's vlogs also attracted the public's attention to the agreste region of Rio Grande do Norte. "It's very good to present the Potiguar state in a positive way. Showing that here is not only drought as people think. In a small piece of land, as it is here, there is so much to show. My countrymen always comment that they are proud to have such an influential person representing the state, with my way of showing the simple side of life. Everything is lighter when you do it with love. And there are also many people getting inspired by Maria Lucia, wanting to make vlogs, to show their day-to-day life and their culture. This is very good, you know?" (CE Noticias Financieras English August 7, 2022)*
Social	(Tenders Monitor Africa-Asia, 2022)	*Plan A Strong Social Media Presence is Made through Sharing Relevant, Well-Curated, And Highly Engaging Content to the Audience in a Consistent Manner. For the First 2 Months: Daily Posting (Once a Day) For the Next Succeeding Months: Thrice a Week or as Needed (Tenders Monitor Africa-Asia July 4, 2022)*
	(Tenders Monitor Africa-Asia, 2022)	*Creating Impactful Content is a Good Thing. Making Your Audience Engaged as Much as Possible is Another. To Help Keep the Audience More Connected and Engage, Several Activities will be Rolled out (Tenders Monitor Africa-Asia July 4, 2022).*
Municipality	(Nordic Daily, 2022b)	*The city's marketing company Imatra Base Camp has implemented impressive marketing campaigns for several years. With their help, three new school centers and the city's tourist attractions have been made known, among other things (Nordic Daily October 13, 2022)*
Platform	(Tenders Monitor Africa-Asia, 2022)	*Official Social Media accounts The Campaign will Utilize the Top Social Media Platforms Namely; Facebook and Instagram (Tenders Monitor Africa-Asia July 4, 2022)*
	(Nordic Daily, 2022b)	*Its channels were YouTube, Google, Facebook, Instagram, Finnkino cinemas, influencer marketing, Ruutu service and outdoor advertising (Nordic Daily October 13, 2022)*
Value	(Krause and Konstantinides, 2021)	*Uses public art to rejuvenate public places to build stronger communities (Insider May 14, 2021)*
	(Newswire and Shine, 2022)	*Compelling content, talent and brand partnerships that spotlight the many ways Jewish hate manifests in society today, igniting conversation and enabling dialogue through culturally relevant campaigns alongside influential creators (PR Newswire October 26, 2022)*
Reputation	(CE Noticias Financieras English, 2021a)	*It did not transcend how much the municipality paid for this virtual service that throws away the traditional tourist guides, although it is historical that this item is largely supported by advertising places and services for redemption (CE Noticias Financieras English January 29, 2021)*
Information	(Tenders Monitor Africa-Asia, 2022)	*A Monthly social media Calendar will be Created in Order to Establish a Guide in Posting and Management Of Social media Accounts. This will Also Make Sure that the Actions Taken will Positively Influence and Capture the Attention of the Audience and Create a Strong Online Presence. Sub-Topics or Feature Guides will be Created to Highlight Specific Attributes of the Tourism Spectra of the Region (Tenders Monitor Africa-Asia July 4, 2022)*
	(CE Noticias Financieras English, 2021a)	*Non-traditional ways to promote Tourism or ways to get to know the city without too much thoroughness, with a lot of personal brand, and for all tastes, from networks, of course (CE Noticias Financieras English January 29, 2021).*
Communication	(Nordic Daily, 2022a)	*Dialects evoke a lot of emotions. Although the media, from radio to social media, are full of different colloquialisms, there may be prejudices associated with dialects. However, like Sanni Inget, Oulu and the people of Oulu are proud of their recognizable colloquial language, and by teaching it in a fun way, the people who come to the city also want to become part of the Oulu community. (Nordic Daily September 3, 2022)*
	(Newswire and Shine, 2022)	*A comprehensive social media tool kit, with specially generated assets including stickers, filters, GIFs and more, available across all major platforms including TikTok, Instagram, Twitter and Facebook (PR Newswire October 26, 2022).*
	(CE Noticias Financieras English, 2021a)	*In Turismo prima promote the "cute" of a city, but the communication manager of the ETUR, Santiago Valenti, considered that - unlike the traditional guides and promotional trips organized by the states- "youtubers handle a somewhat more sincere language: they can come to say that a taste of ice cream did not like it or that something is expensive" (CE Noticias Financieras English January 29, 2021).*
	(Campaign Middle East, 2022)	*One of the most pronounced challenges facing the communication sector is the scarcity of talent. This is made even more perplexing given the nature of the industry, which covers a wide spectrum of fields, including digital,*

Table A.1 (*continued*)

Topic	Source	Original Quote
Capital	(Business and Financial Times Ghana, 2022)	*traditional, branding and social media. To tackle this hurdle, our prerogative is to work with and train individuals who think outside the box and are able to seamlessly operate across sectors through dynamic imagination, no matter their industry experience (Campaign Middle East September 3, 2022).* *Part of the new tourism sector reforms review and harmonise all tourism sector laws including the (…) and (…) as one simplified, inclusive and holistic National Tourism Development Law that creates and makes adequate provision for man-made, natural, cultural and heritage broader tourism sub-sectors as well as their related sub-sectors such as textiles, fashion and clothing, make-up, creative arts, arts and artefacts, food and beverages, news and social media, publishing, ceramics, visual arts, performing and screen arts, among others, which support and promote holistic national tourism potential development (Business and Financial Times (Ghana) May 12, 2022).*
Accessibility	(CE Noticias Financieras English, 2021b)	*In the framework of the 2021 Midterm Elections that take place this Sunday in Mexico, dozens of characters of the show have already cast their votes. In an effort to motivate citizen suffrage, the celebrities shared photographs inviting their followers to participate in the voting and to follow the sanitary measures established by the authorities (CE Noticias Financieras English June 6, 2021).*
Governance	(CE Noticias Financieras English, 2021c)	*The beatings of the candidates and the "bomb news" work. They generate controversy and morbidity. However, there is a risk of using it prematurely. If campaigns are just starting out and candidates are already attacking and people lose interest easily, then campaign teams may feel the need to pull more and more rags out of the opponent. So, they will fill us with slander, scandals, confrontations, and the effect will be that the election will resemble a program of "Laura in America" and in the long run, the people; voters, they end up getting fed up. (CE Noticias Financieras English March 29, 2021)*
	(News, 2022)	*Proceedings concerning surreptitious advertising aim to determine whether the activities undertaken by influencers on portals such as Instagram, Facebook, Youtube or TikTok do not mislead consumers with regard to the way advertising content is presented on those social networks, since this could violate the provisions of the Polish Act on Competition and Consumer Protection in a way that would justify the initiation of proceedings for practices infringing the collective interests of consumers. (News Bites - Private Companies September 16, 2022)*

Source: authors' elaboration.

Data availability

Data will be made available on request.

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