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Co-creating cultural narratives. TikTok's role in enhancing museum engagement.

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Co-creating cultural narratives. TikTok's role in enhancing museum engagement.

Abstract

Purpose: This study explores the crucial role of TikTok in enhancing museum visibility and digital engagement across social media brand communities. Specifically, we investigate social media users' and creators' mechanisms and patterns in driving the dissemination of museum-related content. We delimit the boundaries of the phenomenon by defining key dimensions of co-creation within the #museumtok landscape, extending our understanding of how social media generate value in the cultural industry.

Design methodology: A qualitative approach based on mixed-methods was employed. In Study 1, content and thematic analysis were performed using NVivo 14 on nine TikTok videos, analysing 9223 user comments to reveal recurring themes and patterns. In Study 2, sentiment analysis was conducted on Python's NLTK and Vader Lexicon modules, classifying users' sentiments and engagement scores to assess user involvement.

Findings: We defined two critical dimensions of the digital museum experience: *MuseumCriticism* and *MuseumStorytelling*. These themes reflect the shift of museums' role from mere exhibition spaces to vehicles for digital storytelling and ethical debates. TikTok enables social conversations, allowing content creators to influence museums' digital perceptions. Sentiment analysis reveals a predominance of positive sentiments, underscoring content creators' contribution to promoting the museum's digital visibility. However, criticism-focused videos elicit negative sentiments, indicating a need for moderation when addressing ethical issues.

Originality: The study enhances the understanding of social media's role in cultural heritage communication, offering managerial insights on how to effectively leverage digital platforms to engage younger audiences. By outlining five distinct subdimensions of the phenomenon, we provide actionable strategies to build stronger connections with younger demographics.

Keywords: Co-creation, MuseumTok, Museum, Cultural Engagement, Sentiment Analysis, Thematic Analysis, China.

1. Introduction

The widespread success of social networks has drastically transformed human interactions and organisational frameworks, redefining communication structures and creating new opportunities for reaching global audiences (Hennig-Thurau et al., 2013). Social media platforms have created rich

contexts for enhancing individual expressions (Byrnes & Paull, 2015), disseminating ideas, and sharing personal memories (Biały, 2017) through user-generated content (Bruns & Bahnisch, 2009). The rise of influencer marketing (Barta et al., 2023), mainly via short videos across digital platforms, has opened new opportunities for enhancing user engagement and influence over products, brands, experiences, and sectors (Jayasinghe, 2021). Numerous studies highlight social media benefits to marketing strategies, inducing managers to integrate new social networks into their strategic and marketing efforts (Li et al., 2013).

In the digital age, co-creation has emerged as a critical domain of digital marketing, affecting both economic and social value (Ozuem & Willis, 2022). Social media platforms are critical ecosystems for value co-creation, encouraging authentic human exchanges and meaningful community interactions (Yüksel & Yanik, 2018). Platforms like TikTok in China are increasingly highly influential, stimulating viral trends through short video content. These trends capitalise on user's desire for social validation, resulting in significant behavioural shifts (Yang & Ha, 2021). The impact of this social hype extends beyond online environments, with tangible effects on various industries, including the cultural heritage sector (Carignani et al., 2023).

Despite this rapid digital expansion, the global cultural industry, particularly the museum sector, has faced considerable challenges in adapting to the recent changes. The museum industry is currently confronting significant issues, including the pandemic's disruptive effects (Mackay, 2021; King et al., 2021), a substantial funding decrease (Romolini et al., 2020; Rex, 2020), withdrawals of critical financial assets (Weide, 2011), and a growing disinterest and disengagement from new generational cohorts (CCS Fundraising, 2023; Cesário & Nisi, 2023).

As custodians of tangible and intangible artefacts, museums have an essential role in preserving cultural heritage and determining a collective identity and memory (Blake, 2000; Kjeldstadli, 2008; Logan, 2005). In the digital age, balancing this traditional role with the need to engage a digitally native audience is critical for the whole sector's long-term survival (Zollo et al., 2022).

In this landscape, social media, especially platforms like TikTok, provide museums with strategic opportunities to reach younger generations, promote inclusivity in the cultural heritage domain and redefine user engagement and behaviour (Lau et al., 2024; Carignani et al., 2024). The rise of the "museumtok" trend, where users share experiences and stories about museums, art, and cultural heritage on TikTok, is clear evidence of its importance, with 586 million digital views in 2023 (Dawson, 2023). Moreover, according to TikTok, #museum posts saw a 30% increase between January and April 2024 (Elliot, 2024). Thus, understanding how TikTok users co-create value for the cultural industry is crucial for exploring the multifaced role of TikTok in enhancing museum digital visibility and driving engagement across social media communities.

While previous studies have examined consumer behaviour in the context of social media value cocreation (Mladenovic & Dolenec, 2016; Prebensen et al., 2013; Kim & Choi, 2019), much of the focus has been on sectors like retail, entertainment, or consumer goods (Hennig-Thurau et al., 2013; Ozuem & Willis, 2022). Likewise, studies on museum co-production (Thyne & Hede, 2016; Massari et al., 2022) primarily address organisational strategies rather than user behaviour. Additionally, studies by Polat (2022), Du et al. (2022) and Sebayang et al. (2024) indicate that many businesses in the Asian tourist sector, including museums, have yet to fully leverage TikTok's potential to engage younger audiences like Millennials and Gen Z effectively.

All these considerations indicate a significant gap in understanding how users contribute to value cocreation in the museum realm, particularly on platforms like TikTok, which offers distinctive opportunities for interactive and participatory content creation (Ramaswamy & Ozcan, 2018; Weber, 2009). Our study focuses on TikTok as a critical platform to raise digital awareness for cultural heritage, aiming to better explore the mechanisms of user contribution in developing and framing digital cultural narratives across social media communities. To understand this phenomenon, under the light of Value Co-Creation theory from a user viewpoint, we address two main objectives: (1) to understand how social communication patterns of content creators and users are formed on TikTok and (2) to analyse how these patterns facilitate value co-creation and dissemination of emerging industry trends. In pursuit of these goals, we pose three specific research questions: (RQ1) What are the main dimensions of co-creation in the digital communication of cultural heritage content on social media? (RQ2) What is the extent of digital engagement in co-creating cultural heritage content on social media? and (RQ3) How are user sentiments directed in co-creating cultural heritage content on social media?

To address these questions, we employ a qualitative approach based on ethnography, involving an immersive observation of consumers in their social context. This approach includes (a) defining the phenomenon through hashtags and video selection, (b) conducting content analysis on a sample of short videos, (c) performing thematic analysis on users' comments using NVivo,14; (d) calculating engagement scores from a sample of videos and (e) performing sentiment analysis on a sample of users' comments, on Python libraries.

This paper is organised as follows: Chapter 2 will discuss the theoretical background, Chapter three will present the methodology and findings, and Chapter 4 will explore implications and offer suggestions for future research.

2. Theoretical Background

2.1. Introducing value co-creation

The advent of Web 2.0 has drastically increased consumer relationships and information sharing among social media platforms, leading to exponential growth in information and communication technologies (Sharma & Baoku, 2013). Platforms in this digital era have become central in facilitating customer value co-creation (Mladenovic & Dolenec, 2016) by leveraging users' word of mouth, which in turn boosts trust and purchase intentions (See-To et al., 2014; Cheung et al., 2021). As highlighted by Prahalad and Ramaswamy (2004), the notion of value co-creation regards value generated collaboratively by suppliers and customers. This synergetic approach extends to communication channels, where partnerships, knowledge sharing, and information exchange significantly contribute to building value. Co-creation is integral to understanding how value is generated on social media as it emerges from users' active participation, reflecting the dynamic nature of social interactions and shared creativity (Ramaswamy & Ozcan, 2018). In our research, co-creation blurs the boundaries between content creation, interaction, and consumption, offering a more integrated perspective of value in digital settings. Consumers are increasingly involved in delivering digital experiences that influence value across various stakeholders (Rihova et al., 2015), positioning them as active participants in both value production and dissemination (Prebensen et al., 2013). This interactive mechanism explains why user engagement is crucial for supporting the conceptualisation and sharing of experiential narratives (Oyner & Korelina, 2016). In this context, value emerges from the interactions between organisations and users, facilitating the integration of industry assets with consumer-generated content (Piligrimienė et al., 2015). Since consumers are constantly encouraged to collaborate on digital platforms using widely accessible tools, often for free (Weber, 2009), this creates a collaborative environment where users and organisations collaborate. This co-creation enhances the narrated interactive experience through content dissemination. Such interactive relationships deliver reciprocal benefits to all the parties involved (Kujala et al., 2017) since social media environments tend to amplify the processes (Payne et al., 2008; Kim & Choi, 2019).

2.2. Value co-creation in the cultural sector

Regarding the cultural sector's long-term development, previous studies reported a comprehensive interconnection of users' involvement in value co-creation, offering a solid foundation for our research. Value co-creation has been broadly investigated across different sectors, including magazine publishing, where research highlights the strategic role of user engagement in ensuring long-term sectorial success (Viljakainen & Toivonen, 2014). This perspective on user contribution is consistent with the broader view that value co-creation encompasses co-participative actions that can generate cultural products by matching various stakeholders' needs and expectations (Barile &

Saviano, 2014). In the cultural sector, especially museums, specific collaborative behaviours, such as sensory engagement and consumer interaction, become critical for influencing experiential perceptions and forming positive attitudes toward the cultural realm (Antón et al., 2018).

In this experiential context, the role of social media in museums' strategic communication has been increasingly recognised as critical to engaging digital audiences and improving content dissemination. Studies have identified significant business opportunities involving implementing social platforms for content dissemination, particularly in understanding user-generated creative expressions (Holdgaard & Klastrup, 2014). These expressions, such as interactive storytelling or visual contributions, enhance consumer cultural involvement and extend the museum experience to digital spaces. Indeed, the successful implementation of museums' digital co-creations is founded on the critical use of essential drivers such as content creation, artistic processes, and users' perceptions (Govier et al., 2009). Understanding these factors can help museums create more engaging digital environments, thus improving user experience and attracting new audiences (Wiastuti et al., 2020; Zollo et al., 2022).

Further studies focused on the relationships between museums and consumers, particularly exploring how effective co-production tactics and authenticity can enhance collaborative efforts in co-creating value. For instance, Nowacki and Kruczek (2021) observed the intricacies between museums, historical sites, and visitors' co-creative experiences, revealing the vital role of emotions and satisfaction in determining behavioural intentions and enhancing the relationship value. Massari et al. (2022) extended this understanding by demonstrating that a robust digital presence on museum platforms facilitates positive stakeholder interactions and boosts active participation and social exchanges, eventually enriching the broad cultural experience.

Given that previous research mainly investigated co-creation in terms of relationship complexities, digital presence and engagement, there needs to be a significant gap in understanding users' direct contributions and sentiments in highly interactive platforms such as TikTok. Therefore, our study aims to address this gap by using a mixed methods approach to explore how users engage with and contribute to disseminating cultural content, providing relevant insights into how digital interactions on TikTok can enhance museums' social visibility.

2.3. TikTok and digital marketing in Asia

In this study, understanding the digital marketing landscape in Asia is essential for investigating TikTok's effects on the museum industry. Recent research highlights how TikTok has transformed marketing practices and strategies in the region. Choudhary et al. (2020) emphasise that the platforms' video format and creative features effectively enhance the dissemination of interactive content, leading to massive audience engagement. Gupta (2020) further supports this view, underscoring the

growing influence of video marketing in affecting consumer purchase intentions, evidencing the growing importance of digital marketing strategies. Moreover, Piccolo and Boero (2024) suggest that TikTok effectively combines digital and physical elements, creating more immersive and satisfying user experiences. Despite the rise of digital settings, consumers still value sensory events, aesthetics, and innovative designs (Piccolo & Boero, 2024). Combining immersive settings with strategic content dissemination offers an exciting setting for investigating TikTok's role in enhancing museums' social visibility. These studies show the importance of digital marketing in leveraging experiential factors and semiotics to influence consumer behaviour in Asia.

Alcántara-Pilar et al. (2024) add a layer to previous research, highlighting the role of TikTok influencers in building a credible presence through authentic content creation. This approach not only positively affects consumer loyalty but also influences the overall process of consumer decision-making. Such influence becomes strategic for organisations operating in the museum sector since it reinforces an integrated digital presence combined with effective audience engagement. Recent studies suggest that TikTok can potentially disrupt the cultural and museum sector. Lau et al. (2023) and Lau et al. (2024) evidence that short videos improve information accessibility and historical storytelling, attracting young virtual tourists thanks to distinctive, engaging elements (i.e., video captions, background, music, subtitles, communication style, additional text, thematic categories). Building on this finding, Ho et al. (2024) evidence how a strategically designed TikTok content plan can boost audience involvement for museums in Asia by generating compelling and updated material and encouraging digital collaboration with younger employees.

Even though TikTok has a significant presence in the digital marketing domain, many businesses in the Asian tourism and cultural sector have yet to fully leverage its potential to effectively reach younger, tech-friendly audiences like Millennials and Gen Z (Polat, 2022; Du et al., 2022; Sebayang et al., 2024). In the field of digital marketing in Asia, TikTok is a dominant player, but its ability to increase museums 'visibility through audience interactions and value co-creation remains unexplored. This gap provides a strong rationale for our study, which aims to explore the effects of TikTok on a museum's digital marketing, focusing specifically on users' co-creative efforts.

2.4. Social media communities

Individuals tend to create meanings when expressing their identities by associating themselves with actual or symbolic social groups (Tajfel et al., 1979). As virtual spaces, social media communities enable people with similar group interests to engage in meaningful connections and form specific relationships beyond geographical barriers. These platforms are incredibly impactful as they define group participation and information exchange, which becomes the foundational pillar in forming a

sense of belonging among participants (Kavoura, 2014). Social media brand communities expand this mechanism, allowing individuals to express themselves through brands and jointly contribute to a brand identity infused with shared values (Fujita et al., 2018). In these groups, individuals with shared values express themselves through brand archetypes of their personalities (Kumar & Kaushik, 2020; Zaglia, 2013). In this context, brands act as social entities with symbolic meanings embedded in products, places, services, or experiences (Kavaratzis, 2005; Moorthi, 2002). Thus, they become vehicles for personal self-expression within social circles (Jiao et al., 2018).

Social media brand communities empower users to express their creativity and develop individuality, facilitating the social sharing of unique voices and ideas. These networks enhance individuals' overall level of participation, creating value for both groups and brands (Armstrong & Hagel, 1996). Through user-generated content, these communities enhance social interactions and organic branded gatherings (Boyd & Ellison, 2007), frequently showcasing creative efforts beyond conventional business hours (Vickery & Wunsch-Vincent, 2007). Consequently, social media provide distinctive settings for continuous communication and involvement that stimulate community development and a common brand identity (Boyd & Ellison, 2007).

Within this co-creative interplay, consumers and organisations jointly contribute to promoting value by enhancing social engagement levels through actions like creation, discovery, and analysis of usergenerated content (Sorensen et al., 2017). This mechanism offers innovative consumer-centric solutions and generates substantial benefits for both parties. From their end, customers engage in a range of social activities that deepen their social connections (Song et al., 2022). Their primary role is distributing brand-related content, which further benefits firms by influencing peer attitudes and behaviours (Healy & McDonagh, 2013; Vollenbroek et al., 2014). Social media platforms' functionality, usability, and design encourage this peer influence (Heinrichs et al., 2011). However, by exploiting the sense of commitment inspired inside the community, organisations also benefit from boosted customer trust, brand loyalty, and equity (Kamboj et al., 2018; Ramaswamy & Gouillart, 2010). The mutually beneficial interaction between consumers and organisations underscores the major role of co-creation in generating value over time. Consumers and enterprises engage in mutually beneficial ways that highlight co-creation's critical role in creating value over time. Specifically, by promoting innovative communication patterns and social behaviours, social media platforms provide a context favourable for users to share and narrate cultural content (Gao et al., 2018; Santos et al., 2022). Determining how consumers participate in the storytelling process of cultural heritage in digital environments requires an understanding of these co-creative mechanisms. As a result, we suggest the following research question:

R.Q.1. What are the main dimensions of co-creation in the digital communication of cultural heritage content on social media?

2.5. Consumer engagement

Consumer engagement refers to how consumers actively engage in interactive experiences beyond traditional marketing exchanges (Brodie et al., 2011). Consumers and organisations collaborate to develop value during these contacts, frequently with purposeful interactions, feedback channels, and interactive activities (Brodie et al., 2011). These brand-customer interactions are particularly stimulated by social networks, which boost brand loyalty through captivating and creative communication actions. Because social media is participatory, users feel more involved in the brand's narratives, creating unique and personalised relationships. Since these interactions define users' ideas and preferences, the relational approach encourages building long-term loyalty and deeper engagement (Santos et al., 2022). Organisations can benefit from cooperative user exchanges, including enhanced social engagement, positive customer feedback and referrals (Verhoef et al., 2010). Value co-creation benefits all parties involved, contributing to brand trust, loyalty, and consumer satisfaction (Lujja & Özata, 2017). This process generates various types of value–economic, social, and functional (Piligrimiene et al., 2015) – which offer a distinct competitive advantage from the managerial perspective (Ida, 2017).

In addition to the numerous benefits of consumer engagement, researchers have examined the motivational drivers behind this phenomenon (Palma et al., 2019), highlighting that interactive relationships among stakeholders significantly influence innovation and customer value co-creation practices (Yen et al., 2020). In this landscape, museums, identified as critical spaces for co-creation and co-production, gain substantial advantages from these mutual practices and processes (Rock et al., 2018). Engaging consumers in value co-creation supports social communities and facilitates skills development and lifelong experiences that, in turn, reinforce cultural heritage (Thyne & Hede, 2016). Given this scenario, incorporating communities into cultural events allows museums to support the creation of innovative movements and trends while maintaining the cultural context of their collections and their status as authoritative voices (Ross & Saxena, 2019).

Despite previous research investigating consumer engagement, there remains to be a considerable gap in understanding the scope and extent of this engagement when it involves value co-creation of cultural heritage content. Consequently, address this gap by advancing the following research question:

R.Q.2. What is the extent of digital engagement in co-creating cultural heritage content on social media?

2.6. TikTok and users' sentiments

China has experienced remarkable growth in information and communication technology (ICT) in recent decades, resulting in a vast social network of over 700 million Internet users (Lin et al., 2017). The country's software and information technology sector has seen exponential development, especially in the services sector, with a growth rate of 13.4% in 2023 (The State Council, PRC, 2024). This vibrant technological environment has led to the emergence of prominent digital platforms such as TikTok (Sun et al., 2024), a video-sharing app introduced on a global scale in 2017 by the Beijing tech company ByteDance. TikTok is especially popular among young people, as most of its users and content creators are members of Generation Z (Statista, 2024). Thanks to its unique algorithmic features that promote creativity and original expressions, the platform has become a key player in the diffusion of viral trends (Collie & Wilson-Barnao, 2020). This influence surged notably during the COVID-19 pandemic, accelerating the spread of viral digital content (Stahl & Literat, 2023). By providing easy access to information anytime and anywhere (Li & Rao, 2010) and offering appealing digital tools, TikTok makes the organic dissemination of experiences, products, and services (Kaplan & Haenlein, 2020).

TikTok videos employ specific communication modalities to support the community, offering a unique perspective on young audiences and their cultural or linguistic narrations (Fu & Cook, 2020). This creative platform serves as virtual playrooms where young users can freely explore distinct visual styles. They produce a wide range of content that aligns with a meta-modernist cultural attitude with sentimental, sceptical, and impulsive communication approaches (Collie & Wilson-Barnao, 2020). In this creative realm, TikTok content creators pursue three primary dissemination purposes: engaging their audience to achieve specific objectives, supporting under-recognised creators or communities, and amplifying visibility for social justice issues (Maris et al., 2024). This conceptualisation illustrates how TikTok communities cooperate in an algorithmic value rearrangement driven by their needs and purposes (Maris et al., 2024). It is consistent with psychological research that stresses the relationship between emotions and cognitive processes (Scherer, 2000), especially when investigating the emotional influence of digital platforms on user behaviour. Previous studies demonstrated that users' shareability behaviours are primarily influenced by their sentiments (Yue et al., 2019) and affect opinions, attitudes, and memory (Stieglitz & Dang-Xuan, 2013). Specifically, emotions and sentiments are distinct concepts. Emotions encompass intricate psychological states defined by arousal and valence, influencing whether people approach or avoid specific behaviours (Herman et al., 2018).

Conversely, sentiments are mental attitudes generated in response to certain emotions (Yue et al., 2019). Scholars already employed sentiment analysis methodologies to gather extensive data from various public sources, including popular ideas or views, to capture emerging trends or distinct social outcomes (Rout et al., 2018; Nemes & Kiss, 2021; Singh et al., 2020). In this context, we aim to explore how the platform's content dissemination features influence users' emotional responses and subsequent behaviours in emerging new industry trends. Building on previous research, we identify a need to investigate the ramifications of users' sentiments in co-creating value on TikTok for the cultural industry. Accordingly, the third research question is developed:

R.Q.3. How are user sentiments directed in co-creating cultural heritage content on social media?

3. Methodology and results

3.1. Study 1

3.1.1. Methodology

We implemented a mixed-methods approach to address research questions and investigate the communication patterns of content creators and users on TikTok, focusing on their role in value cocreation within the museum industry (Creswell et al., 2006). The aim of Study 1 was to explore social interactions within TikTok communities through a content and thematic analysis addressing RQ1. It involved three main steps: (1) sample identification, (2) content analysis, and (3) thematic analysis. The content analysis was performed to identify critical dimensions related to cultural co-creation (Krippendorff, 1989), which provided insights into how museums are represented on TikTok through content creators determining cultural narratives. The thematic analysis was conducted on NVivo, 14, to explore the main themes of users' perceptions (Braun & Clarke, 2012; Yeung & Yau, 2022). From the thematic and further sentiment analysis (in study 2), we gathered 9223 user comments using Python Selenium XPath for web crawling (Liu et al., 2024). A preliminary data cleaning process was performed on data, removing comments with account tags, repeated letters, and articles and translating non-English comments. The process included: (a) familiarising with the data which required multiple readings of user comments to immerse fully in the phenomenon and identify preliminary patterns and themes; (b) developing initial codes to capture essential elements with the data; (c) seeking for potential themes by grouping related codes; (d) refining themes to ensure coherence, and (e) presenting the outcomes.

3.1.2. The sample

Following a nethnographic approach (Kozinets, 2006), we conducted immersive observations of consumer interactions on digital content, including videos, clips, captions, and comments on TikTok's social context. The identification of hashtags categories aimed to collect large volumes of social data and ensure a comprehensive representation of the "museumtok" phenomenon (Pang & Lee, 2008). First, we focused on English language hashtags to capture a broader scope of the phenomenon, considering the widespread use of English in digital environments. After identifying the prominent popular hashtags (Figure 1a.) started with defining "museumtok" phenomenon, final hashtags were included based on three main criteria: prominence, which focused on high-frequency categories to achieve the study robustness (using TikTok's view metrics); congruity: which prioritised keywords like "museum" and variations to delimitate the searching with the study objectives; content propensity: which ensured the inclusion of museum-related content. After applying these criteria, we decided to include, through a group discussion, three final categories, "museum", "museumtiktok", and "museumtok", from an initial group of twelve hashtags (Table 1; Figure 1b). For each category, three videos were selected as a unit of analysis following the same selection criteria for a balanced representation across hashtags (Table 2, Figure 2a-2i). This systematic sampling aligns with qualitative research principles in focusing the sample to achieve indepth exploration and comprehension of the phenomena (Patton, 2014).

From this phase, it emerged that #museum is the most frequently used hashtag, accumulating over 4.2 billion views and indicating an overall favorability for museum-related content. However, due to the massive reach of this hashtag, it may take time for individual content to achieve significant visibility among the vast range of museum-related content. In addition, #museumtiktok evidenced 86.8 million views, while #museumtok attracted 403.9 million views, revealing a specific interest in the #tok trend, aligning with the TikTok branding. Indeed, #tok, with 18.7 billion views and #tiktok, with 5.4 billion views, resulted as the most successful hashtags of the network (Figure 1a). Despite other hashtags like #tiktokmuseum (17.8 million views) and #museosTikTok (92.8 million views) also emerged, the focus remained on the three chosen hashtags because of their prominence and popularity.

Moreover, the video group further exemplified the trend: Videos such as those by @eccentric_wildflower (2.2 million views), @mznuki (8 million views), and @cismateo (1.7 million views) using #museum reveal compelling stories about the exhibitions while appealing to a wide range of viewers. On the other hand, pics using #museumtiktok, like those from @sofikulin (582K views) and @blogionistatravels (10.4K views), could target more specialised audiences or creative content forms. Videos from @artlust (727K views) and @itstamybc (1.1 million views) for #museumtok showcase imaginative art displays that encourage community involvement.

From the first sample observation, content creators seek and share digital material associated with the TikTok experience as an effective vehicle for connecting with the latest digital trends aligning with Greenhalgh et al. (2018). The widespread use of these hashtags facilitates user engagement, enabling a more efficient discovery and interaction with cultural trends (Laucuka, 2018). Overall, the frequency of these hashtags reflects a positive integration of the museum-related experience with TikTok's distinctive trend-creation characteristics.

3.1.3. Content Analysis

From content analysis, video groups associated with #museum and #museumtiktok suggested a broad focus on themes involving artistic and musical experiences. Users positively engaged in actions such as visiting museums, discovering artworks, and sharing cultural moments. On the other hand, the group associated with #museumtok mainly centred on cultural and ethical issues such as artwork repatriation, exposing a wider conversation about cultural heritage preservation. In addition, the digital content reflects a heterogeneity of museum-related experiences, highlighting distinct behavioural trends in sharing museum experiences, exploring distinct behavioural trends in sharing museum visits, exploring art, and debating relevant cultural topics. After this initial overview, videos were grouped based on similar content, leading to four relevant cultural topics.

Cluster 1: Museum as aesthetic exhibition space (composed by video 2b, 3a, 3c). The museum is portrayed as a space for capturing and sharing hedonic experiences, narrating enjoyable events, or offering social and cultural inspiration for a digital boost of travelling experiences.

Cluster 2: Museum as lifestyle narrative space (composed by videos 1a, 1b). The museum acts as a vehicle to narrate specific categories of usage behaviours among social media communities. This experience showcases lifestyle inspirational suggestions (e.g., solitary personal experiences) and place promotion trends (e.g., travel destinations).

Cluster 3: Museum as inspirational space (composed by video 2a, 2c). Museums serve as a tool to open a social conversation for inspirational or existential life aspects among younger female generations, where they discuss and interpret art pieces and cultural heritage.

Cluster 4: Museum as a means for criticism (composed by video 3b, 1c). Museums provide a platform for spreading critical thinking among social media users. There is evidence for an open debate on social causes (e.g., social inequalities or artefact appropriation) conveyed among cultural content.

3.1.4. Thematic Analysis

For the thematic analysis, we initially performed a word frequency exploration (Figure 3), which highlighted frequent terms such as: "museum," "people," "like," "art," "country," "loving," "beauty," and "destroying." Based on this exploration, five principal codes were developed: *MuseumLifestyle, MuseumNarration, MuseumHedonic, MuseumPlace,* and *MuseumCritisism*. In addition, from the coding matrix (Table 3a), we evidenced significant intersections among the first codes, leading to the identification of two major themes: *MUSEUMSTORYTELLING* and *MUSEUMCRITICISM* (Table 3a-3b and 4a-4b), suggesting distinct dimensions of user engagement with museum-related content. WE identified two first-order themes and child codes as follows:

MuseumStorytelling (coverage = 15.89, references = 123) encompasses four sub-dimensions of how museums are portrayed on social media. This theme integrates lifestyle, self-expression, and aesthetic excitement, reflecting how visitors view and share their museum experiences. It describes the variety of perspectives that emerge, where museums are sites for exploring cultural heritage and platforms for personal narratives and social interactions.

MuseumLifestyle (coverage = 3.63, references = 22) depicts the museum as an experiential location where visitors express and share their life-related events. Comments reflect a social conversation in which people perceive the museum not as a mere venue for artistic or cultural exhibitions but also as an environment to convey their lifestyle. This finding suggests that museums are viewed as an extension of everyday life within social communications.

MuseumNarration (coverage = 4.96, references = 41) reflects the trend of individuals sharing their viewpoints about artworks during exhibitions. This includes detailed comments on the art pieces, personal interpretations, general reflections on cultural heritage, or creative interactive exhibitions. Users actively contribute to developing a narrative surrounding art and musical events, stimulating a broader socio-cultural discourse that emphasises the importance of storytelling in a cultural context. These factors transform museums into catalysts for conversation and connection among visitors.

MuseumHedonic (coverage = 2.48, references = 33) emphasises the aesthetic dimension of museum visits, focusing on beauty, inspiration, and pleasure derived from viewing works of art. Users express their love for unique museum locations and intriguing art pieces, often describing their experience as dynamic, evocative, or intrinsically pleasurable. The emotional and aesthetic aspects are key to social discussions since they support a positive attitude toward the art experience.

MuseumPlace (coverage = 4.82, references = 27) evidence users' conversations about places and tourist destinations correlated to museum experiences. Users discuss museums in terms of geographic areas where they are located, expressing the desire to visit or share those places. Iconic venues such as the Museum of Modern Art in New York and the Field Museum in Chicago are mentioned. These discourses demonstrate a keen interest in enhancing the reputation of distinct cultural locations and

destinations, contributing to effective place branding and underscoring museums' role as integral parts of their geographical identity.

MuseumCritisim (coverage = .70, references = 35) was identified as a distinct theme due to its unique focus and lack of intersection with other codes. It suggests a key social awareness of ethical considerations related to the administration of artworks in museums. It explicitly involves issues such as cultural appropriation or misrepresentation of Indigenous cultures. This theme reflects a growing social sensitivity toward ethical dimensions involving artwork preservation, inclusivity, ethics, and accountability for cultural heritage management.

3.1.5. Discussion

In study 1, we addressed RQ1, investigating the main dimensions of co-creation in the cultural heritage domain. We found that content creators and users actively promote the cultural heritage industry by boosting value co-creation, mostly occurring spontaneously within TikTok. This behaviour inspires younger audiences to feel appreciated and encourages active participation in the museum experience by diffusion of relevant, aesthetically pleasing and emotionally captivating content (Poch & Martin, 2015; Kim & Johnson, 2016).

Findings suggest positive perceptions of museum storytelling, involving collections and exhibitions through compelling social media stories, reflecting their positive role in enhancing museum digital narratives (with 41 codings for "Museum Narration"). The trend of associating museums with lifestyles (22 codings in "Museum Lifestyle") reflects TikTok's influence in portraying museums as fashionable environments and integrating cultural experiences into daily lives. However, users also raise social awareness on ethical issues and call for activism and accountability in managing cultural heritage (35 codings in "Museum criticism").

Our code matrix identifies significant overlaps between the first four codes. For instance, a comment could fall under "Museum Hedonism" and "Museum Place" since it emphasises beauty and narration. This overlap suggests the emergence of a broader theme called *MuseumStorytelling*. As the hedonistic perspective becomes preponderant, it reflects a shift in the museum experience perception from a mere exhibition place to a dynamic, social, and digitally rewarding environment that stimulates the senses and evokes positive attitudes.

In addition, the lifestyle perspective underscores the need for museums to align their offerings with trends that incorporate cultural, artistic, or entertaining features, resonating with visitors' identity traits and preferences (Minkiewicz et al., 2014). The narration code plays a crucial part in museum storytelling, facilitating sharing engaging, meaningful, and relevant stories that resonate with social

audiences. Finally, the notion of place underscores the need to establish museums' brands as prominent cultural destinations in physical and digital realms (Kotler et al., 2008).

The identification of the *MuseumCriticism* theme offers precious insights into the tendency of social audiences' willingness to engage in social conversations about ethical issues related to cultural heritage. This dialogue should be strategically moderated on social platforms to prevent the propagation of negative attitudes.

3.2. Study 2

3.2.1. Methodology

To address RQ2 and RQ3, we performed a sentiment analysis using the Natural Language Toolkit (NLTK) library on Python for tokenisation and word stemming (Yao, 2019). In addition, the Python VADER lexicon was employed to calculate sentiment scores on users' comments (Mahmoudi et al., 2024). In this phase, the collected comments were systematically organised for sentiment analysis and engagement metrics calculation, which included the number of likes, shares, and views for each video. The VADER lexicon categorised users' sentiments based on sentiment polarity, consistent with previous scholars (Isnan et al., 2023). Lastly, we calculated engagement levels and the weighted average sentiment scores.

3.2.2. Findings

As shown in Table 4, displaying sentiment scores and engagement levels, high levels of engagement resulted in exhibiting an average engagement rate (12.58%) far above the platform average (4.24%), as suggested by (Cucu, 2022). Also, the compressive number of total comments evidence significant levels of user involvement since "comments" reflect a user action characterised by higher efforts if compared to a "like" or "share" (Nicholson, 2020). Following sentiment analysis, the results evidenced a predominantly high average of positive sentiment scores for most of the sample (video: 1a, 3a, 1b, 2b, 2c,3c). In addition, three videos (2a, 3b, 1c) exhibited slightly higher negative sentiment scores.

3.2.3. Discussion

Overall, findings show a high volume of hashtags (from study 1) and comments, likes, and shares. This indicates a positive propensity for museum-related content to reach a younger social demographic, pivotal for building meaningful user-museum relationships and enhancing the museum's brand awareness. The overall positive sentiments also suggest a user's tendency to evoke and co-create positive attitudes toward cultural heritage content. Their effective engagement with

individuals across social media museum communities elicits positive sentiments in response (Vassiliadis & Belenioti, 2017). In addition, the emergence of negative sentiments in line with the MuseumCriticism theme suggests that engaging with content about ethical aspects may foster general critical thinking and stimulate a broad social debate. Therefore, content creators induce a sequential impact, causing negative sentiments among social group members, aligning with Dutceac Segesten et al. (2022) and Vilella et al. (2022).

4. Implications and conclusions

4.1. Theoretical and Practical Implications

This research briefly explores TikTok's role in determining viral community trends that generate positive outcomes for industries such as museums, often tied to district geographic destinations. The study provides theoretical and practical contributions through a mixed methods approach. Theoretically, it increases our understanding of how digital spaces facilitate value co-creation and cultural awareness for younger audiences. It addresses a fundamental gap in co-creative processes and their role in enhancing social engagement and digital visibility for museums across social media communities. Practically, we provide insights for managers in the cultural heritage domain to leverage TikTok to increase engagement, engage in digital storytelling, and promote tourism to key cultural destinations.

Firstly, the digital engagement with museum content is characterised by a dynamic and interactive nature. This finding, supported by the thematic analysis (e.g., museums as narrative and inspirational spaces and MuseumStorytelling theme), suggests that leveraging branded-museum positioning strategies can trigger rewarding results regarding perceived value for the cultural heritage. By aligning with social values, these strategies can enhance meaningful emotional and social bonds and improve digital communities' broader sense of community. This approach enriches the personal museum experience and contributes to the long-term promotion of cultural organisations. From this perspective, managers could adopt strategic actions to stimulate engagement and enhance the exchange of museum experiences among community members (van Eldik et al., 2019). In response to previous research that underlines the need to engage younger audiences in the cultural heritage sector (Cesário & Nisi, 2023), our findings underscore the importance of interactive collaborations with social media influencers and creators to design engaging, narrative-driven content appealing to GenZ and Millennials lifestyles. As suggested by the MuseumPlace code, strategic planning to support the co-creative flow toward specific museum destinations becomes essential for generating

long-term value. Facilitating a mutually beneficial collaboration between branded museums and social media creators can effectively promote cultural heritage. Furthermore, these strategies encourage the active participation of social audiences and raise cultural awareness, especially among younger generations (Stoica et al., 2021).

Secondly, embracing brand storytelling that involves hedonic elements, reflecting social audiences' lifestyles, can significantly intensify the attractiveness of cultural experiences. This holistic phygital viewpoint allows for compelling narratives that boost visitors' presence and value co-creation. To fully exploit TikTok's potential for effective digital promotion across museums in Asia (Polat, 2022; Du et al., 2022; Sebayang et al., 2024), the study further highlights the importance of digital storytelling integrating the aesthetic appeal with the cultural relevance when aligning with users' ethical values. Museum managers can exploit TikTok's video creative features to address these narratives, focusing on inspiring content that resonates emotionally and cultivates positive sentiments among community members (Ignat et al., 2021). This strategy can develop deeper connections between museums and their audiences, upgrading the cultural experience.

Thirdly, the rise of critical thinking and ethical discussions surrounding cultural heritage highlights a necessity for careful communication and moderation of these issues across social platforms, as suggested by Morrow et al. (2022) and Levin (2020). Inspiring communities who voice their concerns and participate in social debates can enhance brand approval, co-create knowledge, and disseminate relevant word-of-mouth around art creations (Izogo & Mpinganjira, 2020).

Lastly, museums are increasingly serving as platforms for individuals to integrate into their lifestyles, express self-identity and engage in critical societal debates. This shift reflects the cultural transformation of values younger generations drive on social media (Du & Cui, 2021; Falk, 2021). In response to these changes, museums can enhance digital experiences while also taking part in larger social discourses, reflecting and influencing the narratives of modern culture.

4.2. Conclusions

This study highlighted the revolutionary potential of social media, especially TikTok, in transforming the museum experience. Through the examination of communication patterns and user sentiment, we determined critical co-creative dimensions for museums to improve audience engagement and establish more meaningful relationships. According to the findings, museums have the potential to become more than places for exhibitions; they can develop into vibrant third places where people can actively exchange cultural narratives and societal discussions. Theoretically, this study expands the value co-creation theory by clarifying the main dimensions of digital interactions, the orientations of social media users' sentiment polarity and the overall impact of engagement in the cultural domain.

From a practical standpoint, we emphasised how crucial it is for museum brands and social media creators to work together strategically to promote the cultural heritage effectively. Through the adoption of a comprehensive digital strategy, museums may craft engaging stories to connect with younger audiences, generate positive feelings, and encourage higher participation. Finally, these perceptions can support museum administrators in developing social media plans that improve visitor experiences and foster cultural awareness.

4.3. Limitations and Future Directions

Despite the valuable insights we provided, some limitations should be noted. First, we focused on the Asian TikTok platform since the phenomena under study emerged withing this setting. This may restrict the applicability of implications to other social media networks. To provide a more thorough investigation on the global impact of social media for museum experiences, future research might broaden the scope to encompass a more diverse range of platforms. Additionally, our research implemented a qualitative approach necessary to explore preliminarily #museumtok. However, future studies should consider employing an empirical data analysis to develop measurable scales based on the key themes developed in this study and identify a comprehensive theoretical framework. In conclusion, even though this research improves the understanding of the evolving relationship between social media and museum experiences, more investigation is required to address these limitations and continue examining the vital field of digital engagement in cultural heritage.

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Co-creating cultural narratives. TikTok's role in enhancing museum engagement.

List of Figures

Figure 1.a. Hashtag search

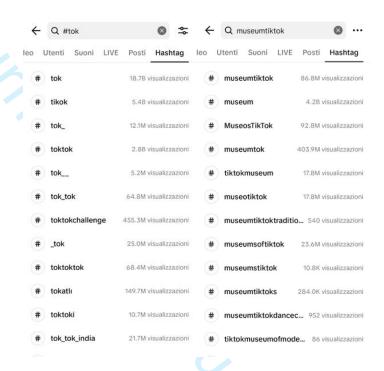
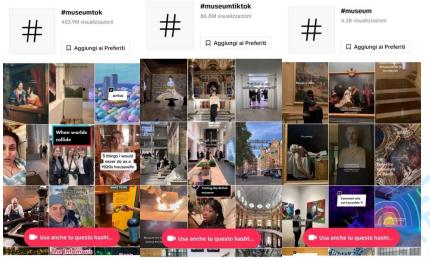
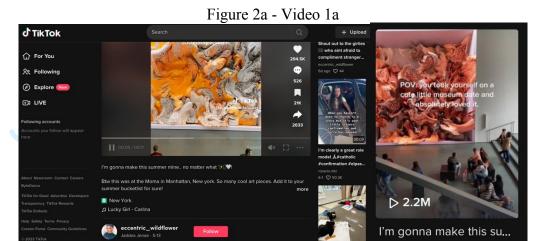


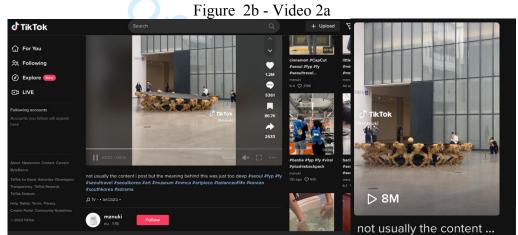
Figure 1.b. Hashtag Popularity



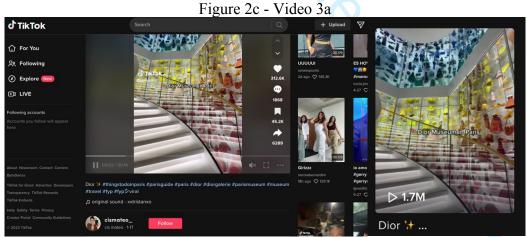
Source: TikTok.com (accessed 13 June 2023)



Source: TikTok.com (accessed 13 June 2023)

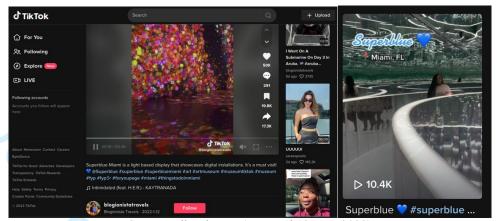


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Source: TikTok.com (accessed 13 June 2023)

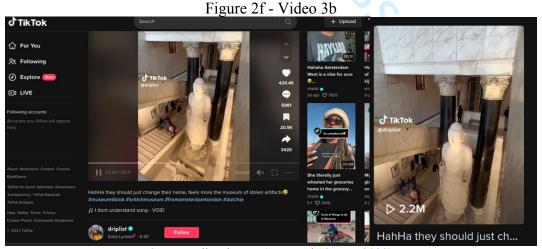
Figure 2d - Video 1b



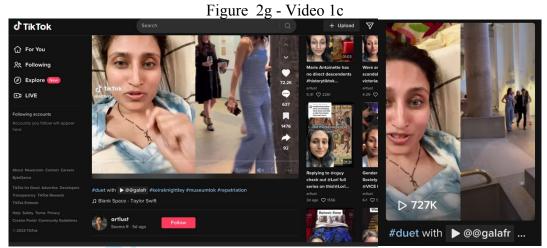
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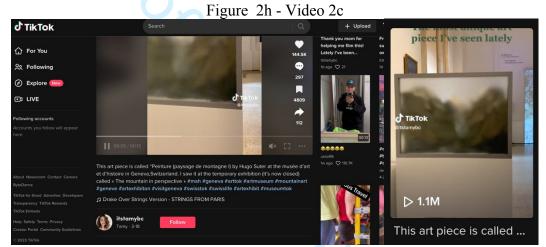
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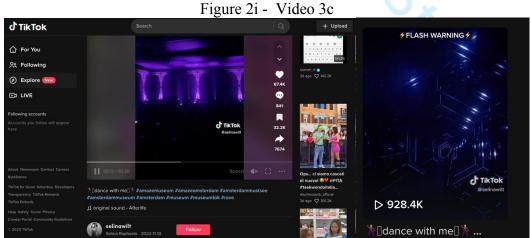
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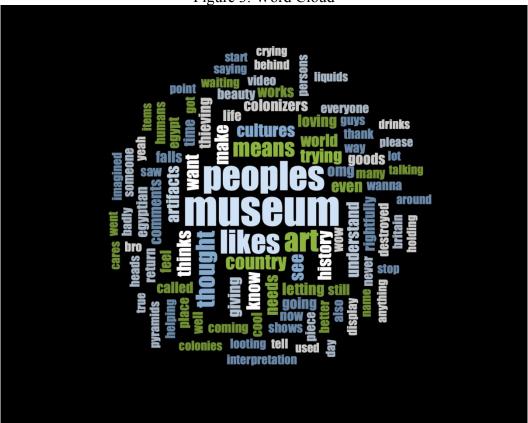


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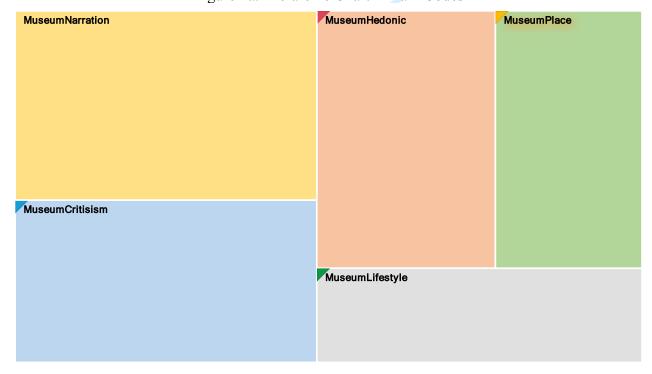
Source: TikTok.com (accessed 13 June 2023)

Figure 3. Word Cloud



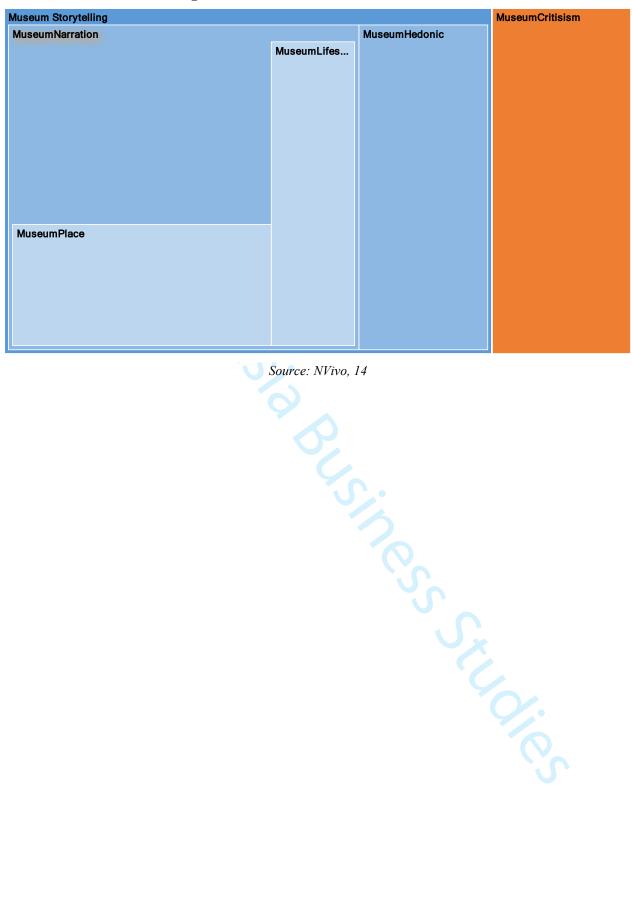
Source: NVivo, 14

Figure 4a. Hierarchic Chart – Main Codes



Source: NVivo, 14

Figure 4b. Hierarchic Chart – Main Themes



Co-creating cultural narratives. TikTok's role in enhancing museum engagement.

List of Tables

Table 1. Hashtags' sample

N.	Hashtag	Popularity	Observation Time
	(Description)	(Visualizations)	(date)
a	#museum	4.2B	12 June 2023
b	#museumtiktok	86.8M	27 June 2023
c	#museumtok	403.9M	27 June 2023

Source: Own elaboration

Table 2. Video sample							
Video n.	Publisher	Popularity Views	Description	Content Analysis			
	#museum						
1a	@eccentric_wildfl ower (accessed 12 June 2023)	2.2 M	"I'm gonna make this summer mine no matter what \(t^{-1} \)! Btw this was at the Moma in Manhattan, New york. So many cool art pieces. Add it to your summer bucketlist for sure! \(\)#museum \(\)#art \(\)#nyc \(\)#solodate \(\)#summervibes"	Thematic Content: "Museum as a space for specific lifestyles trends. The POV (Point Of View) is of a young girl, with passions for fashion, lifestyle and positive experiences, that employ the museum space for the purpose of a solitary experience" Video Description (subtitle transcription): "POV: you took yourself in a cute little museum date and absolutely loved it" (Ref. Moma, New York) Publisher bio: "Fashion // Lifestyle and Good vibes"			
2a	@mznuki (accessed 13 June 2023)	8 M	"not usually the content i post but the meaning behind this was just too deep #seoul #typ #fy #seoultravel #seoulkorea #art #museum #mmca #artpiece #balanceoflife #korean #southkorea #kdrama"	Thematic Content: "Museum as an inspirational and aesthetic means of thinking. The publisher is a young girl with passions for travel and fashion" Video description: "The video depicts a modern artistic exhibition in which the performers balance a table on their backs while holding a ball in equilibrium." (Ref. N.D) Publisher bio: "travel, fashion, & room content"			
3a	@ cismateo (accessed 13 June 2023)	1.7 M	When the guy falls first > \times #booktok#reading#books#love#readingaesth etic#romancebooks#couple#fyp#bookaesthet ic#reading#readersoftiktok#reader#amilionk issesinyourlifetime#thefineprint#termsandconditions#thespanishlovedeception#thelovehy pothesis#igniteme	Thematic Content: "Museum as aesthetics exhibition space. The publisher is a young girl with passion for travel and beauty" Video description: "The video depicts the Dior creations in a museum." (Ref. Dior Museum, Paris) Publisher bio:			
	#museumtiktok						
1b	@blogionistatravel s (accessed 13 June 2023)	10.4 K	"Superblue Miami is a light based display that showcases digital installations. It's a must visit! ♥ @Superblue #superblue #superblue #superbluemismi #art #artmuseum #museumtiktok #museum #fyp #fyp ≯ #foryoupage #miami #thingstodoinmiami"	Thematic Content: "Museum as an entertainment space for lifestyle travel inspiration. The publisher is a young girl" Video description (subtitle transcription) "Fun things to do in Miami", the publisher is a travel blogger" (Ref. Superblue Museum, Miami" Publisher bio: "Travel-Lifestyle-Food"			
2b	@sofikulin (accessed 13 June 2023)	582 K	"One of the most beautiful places I've seen⊕ #travelwithme #travel2022 #travelbloggerlife #museumtiktok #vienna"	Thematic Content: "Museum as aesthetics space for pleasure and hedonic experiences. The publisher is a young girl" Video description (subtitle transcription) "One of the most amazing museums in the world, looks like a real palace with works of art, there is a cafe where you can drink coffee, surrounded by beauty" (Ref. Kunsthistorisches Museum, Vienna) Publisher bio: "Art & Travel find hidden gems for your travel wish list"			
3b	@driplist (accessed 13 June 2023)	2.2.M	"HahHa they should just change their name, feels more the museum of stolen artifacts #museumtiktok #britishmuseum #fromamsterdamtondon #dutchie"	Thematic Content: "Museum as a tool to open the conversation about artifacts appropriation from different countries. The publisher is a young girl" Video description (subtitle transcription) "When you go to the British Museum but there's nothing British there" (Ref. British Museum, London) Publisher bio: "Goodvibes and fun stories"			
	#museumtok						
1c	@artlust (accessed 13 June 2023)	727 K	"#duet with @@galafr #keiraknightley #museumtok #repatriation"	Thematic Content: "Museum as a tool to open the conversation about the social inequalities and art preservation issues" Video description "There is a criticisms about social inequalities and the respect for art which is not the same when it involves famous guests. In the video a young publisher comments a TikTok where famous guests are consuming drinks in a museum while having a ride among the artifacts" (Ref. N.D.) Publisher bio: "Thoughts on Art & Culture"			
2c	@itstamybc (accessed 13 June 2023)	1.1 M	"more - This art piece is called "Peinture (paysage de montagne I) by Hugo Suter at the musée d'art et d'histoire in Geneva, Switzerland. I saw it at the temporary exhibition (it's now closed) called «The mountain in perspective » #mah #geneva #arttok #artmuseum #mountainart #geneve #artexhibiton #visitgeneva #swisstok #swisslife #artexhibit #museumtok"	Thematic Content: "The museum as a space to showcase and discuss artworks and interpretations from users. The publisher is a young girl" Video description "The most unique art piece I've seen lately" (Ref. Museum of art and history, Geneva) Publisher bio: From Moldova□D now in Switzerlandc□			
3с	@selinawilt (accessed 13 June 2023)	928.4 4	"□□dance with me□□ #amazemuseum #amazeamsterdam #amsterdammustsee #amsterdammuseum #amsterdam #museum #museumtok #rave"	Thematic Content: "The museum as an entertainment space for hedonic experiences. The publisher is a young girl" Video description "Amaze museum Amsterdam, feels like a rave" (Ref. Amaze Museum, Amsterdam) Publisher bio: 22⊚□ fashion + vlogs + a good time			

Source: Own elaboration

Table 3a. Coding Matrix

	MuseumCriticism	MuseumHedonic	MuseumLifestyle	MuseumNarration	MuseumPlace
MuseumCriticism	35	0	0	0	0
MuseumHedonic	0	33	1	1	2
MuseumLifestyle	0	1	22	0	2
MuseumNarration	0	1	0	41	1
MuseumPlace	0	2	2	1	27

Source: NVivo 14

Table 3b. Codebook

ode Label	Coverage %	Reference n.	Order	Description	
MUSEUM STORYTELLING	15.89%	123	First	A first order theme integrating four sub-dimensions of museum- related narratives on social media.	
MuseumLifestyle	3.63%	22	Second	A second order code, indicating the museum as a space for expressing personal lifestyle experiences.	
MuseumNarration	4.96%	41	Second	A second order code, revealing the museum as a place to share personal viewpoints about artworks on exhibits.	
MuseumHedonic	2.48%	33	Second	A second order code, focusing on aesthetics and pleasurable aspects of the museum experience such as beauty and inspiration.	
MuseumPlace	4.82%	27	Second	A second order code, expressing user conversations about touristic place destinations.	
MUSEUM CRITICISM	.70%	35	First	A first order unique theme, reflecting the museum as a platform for social debate and critical discussion.	

Source: NVivo 14

Table 4. Sentiment analysis

Video	Hashtag	Comments	Engagement Rate	SA	SA
				(pos)	(neg)
Video n.1a	#museum	513	13,53	.321	.235
Video n.2a	#museum	3170	15,07	.234	.271
Video n.3a	#museum	911	18,81	.250	.211
Video n.1b	#museumtiktok	280	2,15	.276	.208
Video n.2b	#museumtiktok	168	10,48	.296	.205
Video n.3b	#museumtiktok	2707	19,66	.241	.265
Video n.1c	#museumtok	595	10,03	.258	.259
Video n.2c	#museumtok	255	13,17	.312	.264
Video n.3c	#museumtok	624	10,31	.228	.209
		Total	Average		
		9223	12,58		

Source: Own elaboration, Python – Vader Lexicon

S. O. S.