Content Analysis of Public Branding Strategies: Uniqueness and Isomorphism in Facebook Posts of Italian Museums

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Abstract

Public branding strategies can help create a strong identity for a public institution, fostering trust among potentially increasing conscious tourism. This research focuses on understanding the corporate branding strategies, i.e., uniqueness or isomorphism, enacted by Italian public museum by analyzing the content of official Facebook posts. Implementing a topic modelling analysis of the content of posts published over six months shows that generally museums pursue isomorphic branding strategies especially in connection to service-related themes, but uniqueness of branding strategies emerges especially in connection to experiences and knowledge themes for some museums. These results enrich public branding literature as well as provide relevant results for public managers and tourism managers.

Keywords

Content analysis, Public branding, Museums, Social media, Sustainable tourism.

1. Introduction

Social media public branding is highly relevant for sustainable tourism. An effective branding of public sector institutions helps create a strong identity for a destination, fostering trust among potential tourists [1]. This trust is especially important in the realm of sustainable tourism, where travelers are discerning about their impact on the environment and public branding can contribute to highlighting sustainable practices and initiatives, informing the public about eco-friendly options, sustainable accommodations, local conservation projects, and responsible travel practices hence attracting environmentally conscious travelers [2]. This can be achieved through compelling storytelling, making sustainability appealing and relatable to reach potential tourists globally [3]. Additionally, public branding can also engage local communities, employees and citizens by involving them in the narrative of sustainability, favoring not only sustainable tourism but also the development of a sense of pride among residents due to the alignments with local values and conservation efforts [4]. Moreover, a well-organized public branding strategy can support attracting investments into local infrastructure and tourism initiatives and in projects that further enhance this sustainable brand image [5].

Even if strategies of social media branding in the private sector have been largely studied [3,6], social media public branding still requires additional research [7,8,9,10,11]. While some evidence exists in highly competitive settings such as hospitals [12,13], in non-highly competitive settings there is still the need to empirically investigate the role of corporate branding strategies – i.e. isomorphism [14] vs uniqueness [15] –in connection to the typical objectives of public sector institutions, e.g., brand trust [16], social responsibility [17], equality of services and legitimacy [18].

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2. Setting

In line of this need, I focus specifically on the peculiar empirical setting of the 50 top-visited Italian public museums in 2017 and study their branding strategies on Facebook along a six-month period, between September 2018 and February 2019. I answer the following research question "Do top-visited Italian public museums pursue uniqueness or isomorphism as Facebook branding strategy?" by analysing the textual content of official posts generated on Facebook by museum accounts to identify whether there exist topics of discussion unique for specific museums or rather if the topics are shared across museums indicating isomorphism in the branding content. The specific empirical setting of top-visited Italian public museums is selected to support the research for four major reasons.

First, museums are extremely appealing for the sake of understanding whether unique aspects are leveraged in branding strategy as these institutions have the peculiar characteristic of targeting multiple objectives being oriented to sustainability, community and public value development, as clearly shown by the definition of museum provided by the International Council of Museums [19].

Second, public museums usually compete for visitors because the autonomous part of their economic sustainability largely depends on ticketing (see also [20]) but focusing on top-visited public museums alleviates this constraint of high-competition, as these public institutions operate in an environment of over-demand and hence in a non-highly competitive setting. Moreover, selecting top-visited museums guarantees an already consolidated brand, as shown by the fact that municipality may flagship monuments for touristic attraction [21], and guarantees homogeneity in the management problems they must face, like queue management.

Third, I focus on the 50 top-visited in Italy in 2017 not only because Italy is recognized as one of the countries with the highest density of cultural heritage and institutions in the world [22], but also because in the same period there has been institutional attention to digital aspects in cultural service delivery, among which social media adoption (see also [23]). Additionally, this provides homogeneity in governance as all the analysed institutions depend on the Italian ministry in charge.

Fourth, among all the online platforms, I focus specifically on social media as these platforms are the most used by public sector institutions and by citizens and users and have a great influence on external branding, making the study appealing to inform about public branding. Though considering multiple platforms could be interesting to compare branding strategies of museums across channels, the choice of selecting the specific channel of Facebook is motivated by the fact that in the period analysed it was the most used social media platform among Italian public museums and that various accounts on this platform were already strong and consolidated (e.g., [24]). As there is a strong dependency of the branding strategy on the social media platform, the choice of this single platform provides homogeneity in the social media audience and target of the official accounts of museums.

3. Methodology

3.1. Data collection

The main data source of this study is represented by Facebook posts published by a subset of the 50 Italian public museums representing the top-visited in 2017.

In this study, for the sake of simplicity, I use the term "museum" to refer to those institutes defined by the Italian national statistical institute as "museums and similar institutions", i.e., museums, galleries and archaeological parks, therefore excluding institutions that are only monuments [25]. Among public museums, I considered just institutions directly managed by the Italian ministry and excluded those managed by consortia or foundations. I then considered the 50 museum institutions mostly visited according to the official statistics on annual visitors of 2017 [25]. As one museum institution can be composed of multiple individual sites and museums that are managed by the same authority, the complete sample of individual museums most visited in 2017 considered for the study is composed of 71 individual museums listed in Figure 1.

For each of these museums, the official Facebook accounts have been manually identified, and the credibility of the web sources has been directly verified with museum managers. Though at the time

Facebook was the most diffused platforms among Italian museums, not all museums indeed managed an official Facebook account and only 39 unique official Facebook existed.

Between September 2018 and February 2019, 35 out of the 39 official Facebook accounts of museums actually published at least one post containing text or image generated by the account and were therefore included in the analysis. Through an ad-hoc implemented automated data collection system, 4888 unique posts have been collected.

The museums analysed have different characteristics in terms of onsite visitors, online followers and number of Facebook posts. Specifically, the average amount of published posts per account is highly variable, ranging from a minimum of 7 posts per account to a maximum of 600, with an average of 139 posts and a median of 102 posts.

3.2. Data preparation and analysis

Among the 4888 posts collected, 125 posts contain only images and, as the scope of the research is the analysis of the uniqueness and isomorphism in the textual content, these few posts (2.56% of total) are discarded from the analysis. The text of the official posts published by the museums of interest is analysed through a topic modelling technique to detect the semantic themes of discussion that occur. Among the wide set of methodologies for automatic text modelling, I select Latent Dirichlet Allocation (LDA) [26] as it enables the identification of latent dimensions through an unsupervised Bayesian model without making any preliminary assumption on the distribution of posts, other than assuming the existence of hidden semantic concepts within the posts. For the application of LDA, I construct a document-term matrix of 4758 posts and 18380 terms, obtained preprocessing text of posts with R software by means of lowercase conversion, elimination of specific characters (e.g., emojis, URLs, punctuation, and numbers), exclusion of language-specific and context-specific stopwords, and applying language-specific Porter's stemming algorithms, relying on packages *tm*, *SnowballC*, and *ldatuning*. Then, I fit the LDA model using a Gibbs sampling with the with 2000 Gibbs iterations, 2000 thinning and no burn-in.

The choice of the most suitable number of latent topics discussed has been based on the metrics proposed by [27-30], with the number of topics varying between 2 and 25 and selecting the candidate number of latent topics following the elbow criterion (Figure 2).

The topics are interpreted combining the analysis of the topic-word distribution of the 15 most probable words and of the probability of observing topics within the 30 most probable posts for each topic. The validity and robustness of the LDA results is assessed applying the non-negative matrix factorization method in R [31].

The resulting distribution of topics are analysed to further identify whether a topic is peculiar to a specific museum or, vice versa, if it is shared across different museums. Specifically, for each topic, the upper outliers of the distribution of posts over the topic are analysed. If the frequency of outliers' posts published by specific museum account is strongly unbalanced towards a specific museum account, the topic is considered peculiar to the specific museum account, and this constitutes evidence of the uniqueness of the topic for the specific museum account.

Institute Name	City	N Visitors	Facebook Name
Pantheon - Roma	Roma	8012861	pantheon.polomusealelazio
Colosseo - Roma	Roma	7036104	parcocolosseo
Foro Romano - Roma	Roma	7036104	parcocolosseo
Area archeologica di Pompei - Napoli	Napoli	3383415	pompeiisoprintendenza
Galleria degli Uffizi e Corridoio Vasariano - Firenze	Firenze	2235280	-
Galleria dell'Accademia e Museo degli Strumenti Musicali - Firenze	Firenze	1623690	-
Parco di Capodimonte - Napoli	Napoli	1161190	museodicapodimonte
Museo Nazionale di Castel Sant'Angelo - Roma	Roma	1155244	MuseoCastelSantAngelo
Parco del Castello di Miramare - Trieste	Trieste	986500	museomiramare
Complesso Vanvitelliano - Reggia di Caserta	Caserta	838654	reggiaufficiale
Galleria Borghese - Roma	Roma	568982	galleriaborgheseufficiale
Museo Archeologico Nazionale - Napoli	Napoli	529583	MANNapoli
Museo Archeologico Nazionale - Taranto	Taranto	529583	MuseoMARTA
Area archeologica di Ercolano - Ercolano	Ercolano	470123	parcoarcheologicodiercolano
Villa d'Este - Tivoli	Tivoli	461037	VilladEsteMibact
Circuito Archeologico di Paestum - Capaccio Paestum	Capaccio Paestum	432465	parcoarcheologicopaestum
Cenacolo Vinciano - Milano	Milano	416347	-
Pinacoteca di Brera - Milano	Milano	364541	PinacotecadiBrera
Musei Reali - Museo di Antichità - Torino	Torino	360847	museirealitorino
Musei Reali - Palazzo Reale - Torino	Torino	360847	museirealitorino
Musei Reali - Cappella SS Sindone - Torino	Torino	360847	museirealitorino
Musei Reali - Galleria Sabauda - Torino	Torino	360847	museirealitorino
Musei Reali - Armeria Reale - Torino	Torino	360847	museirealitorino
Musei Reali - Sale Palazzo Chiablese - Torino	Torino	360847	museirealitorino
Museo Archeologico - Venezia	Venezia	343582	archeovenezia
Cappelle Medicee - Firenze	Firenze	339870	-
Galleria Palatina e Appartamenti monumentali di Palazzo Pitti - Firenze	Firenze	336326	-
Galleria d'Arte Moderna (Palazzo Pitti) - Firenze	Firenze	336326	-
Museo di Palazzo Ducale - Mantova	Mantova	323255	DucaleMantova
Museo Nazionale - Terme di Diocleziano - Roma	Roma	322364	MNRomano
Museo Nazionale - Palazzo Massimo - Roma	Roma	322364	MNRomano
Museo Nazionale - Palazzo Altemps - Roma	Roma	322364	MNRomano
Museo Nazionale - Crypta Balbi - Roma	Roma	322364	MNRomano
Gallerie dell'Accademia - Venezia	Venezia	316995	gallerieaccademiavenezia
Scavi di Ostia Antica - Ostia	Ostia	311384	scavidiostia
Museo Storico del Castello di Miramare - Trieste	Trieste	293911	museomiramare
Grotta Azzurra - Anacapri	Anacapri	263741	-
Abbazia di Montecassino - Cassino	Cassino	263680	abbaziadimontecassino
Museo di Capodimonte - Napoli	Napoli	262440	museodicapodimonte
Castel del Monte - Andria	Andria	249527	PugliaCasteldelMonte
Area Archeologica di Villa Adriana - Tivoli	Tivoli	242772	VillaAdrianaMibac
Castello Scaligero - Sirmione	Sirmione	241595	Castello-Scaligero-di-Sirmione-
Palazzo Reale - Napoli	Napoli	229296	PalazzoRealeNapoliUfficiale
Museo Nazionale del Bargello - Firenze	Firenze	218850	-
Museo Archeologico Nazionale - Reggio Calabria	Reggio Calabria	215846	MuseoArcheologicoRC
Grotte di Catullo e Museo Archeologico - Sirmione	Sirmione	209648	grottedicatullo.sirmione
Galleria Nazionale d'Arte Moderna e Contemporanea - Roma	Roma	208447	LAGNroma
Rocca Demaniale - Gradara	Gradara	206740	RoccadiGradara
Castel Sant'Elmo - Napoli	Napoli	194436	castelsantelmo
Abbazia di Casamari - Veroli	Veroli	193000	casamari.it
Basilica di Sant' Apollinare in Classe - Ravenna	Ravenna	175640	ApollinareClasse
Galleria Nazionale delle Marche - Urbino	Urbino	163781	PalazzoDucaleUrbino
Museo Nazionale di Villa Pisani - Stra	Stra	153350	VillaPisani
Museo di San Marco - Firenze	Firenze	150906	-
Complesso Monumentale del Castello e Parco di Racconigi - Racconigi	Racconigi	146155	castellodiracconigiofficial
Parco Archeologico dell'Appia Antica - Roma	Roma	143817	archeoappia
Tomba di Cecilia Metella - Roma	Roma	143817	archeoappia
Villa dei Quintili - Roma	Roma	143817	archeoappia
Parco degli Acquedotti - Roma	Roma	143817	archeoappia
Via Appia Antica - Roma	Roma	143817	archeoappia
Antiquarium di Lucrezia Romana - Roma	Roma	143817	archeoappia
Tombe di Via Latina - Roma	Roma	143817	archeoappia
Chiesa di San Nicola a Capo di Bove - Roma	Roma	143817	archeoappia
Capo di Bove - Roma	Roma	143817	archeoappia
Parco Di Tor Fiscale - Roma	Roma	143817	archeoappia
Museo di San Martino - Napoli	Napoli	137497	museodisanmartino
Complesso Monumentale della Pilotta - Galleria Nazionale - Parma	Parma	120022	PilottaParma
Complesso Monumentale della Pilotta - Teatro Farnese - Parma	Parma	120022	PilottaParma
Complesso Monumentale della Pilotta - Archeologico Nazionale - Parma	Parma	120022	PilottaParma
Area archeologica di "Tharros"	Cabras	114371	-
Museo d'Arte Orientale - Venezia	Venezia	107902	MAOVenezia

Figure 1: List of museums analyzed.

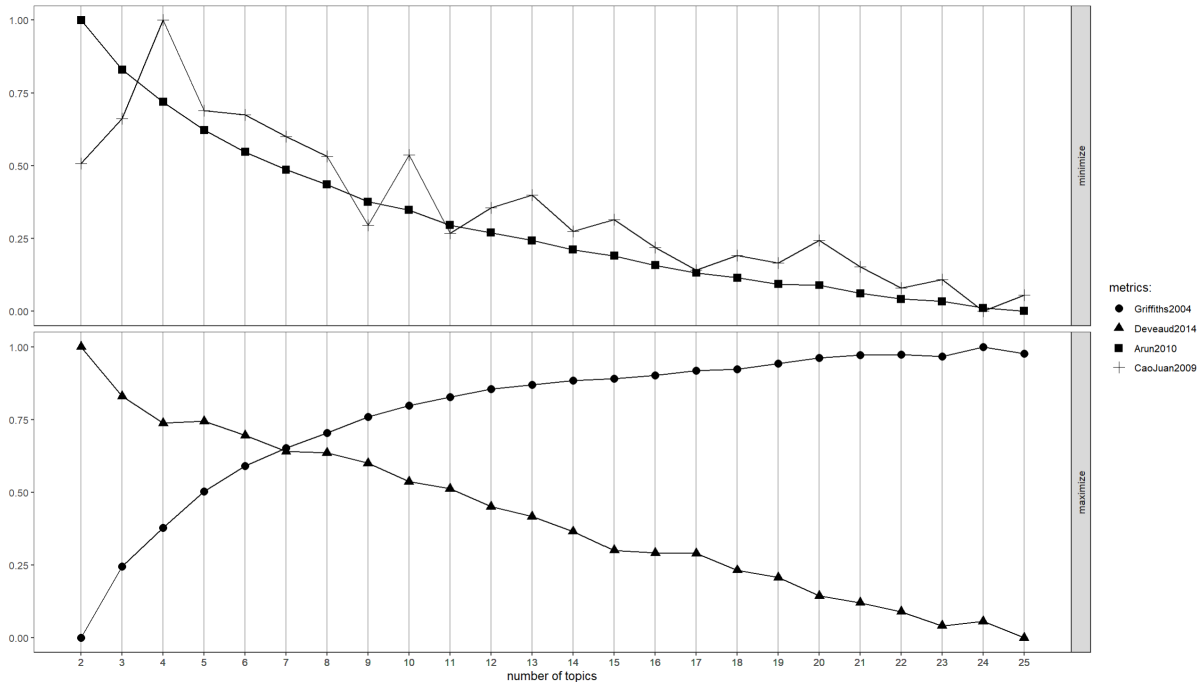

Figure 2: Choice of number of topics of discussion.

4. Results

From the visual inspection of Figure 2 it is possible to attest the existence of k=8 topics of discussion across museum posts, namely:

T1) Educational activities with art & artists, e.g., educational activities with art & artists
T2) Expositions & heritage, e.g., expositions, history, building, facades, …
T3) Calendar, e.g., openings, special events, …
T4) Archaeological narratives, e.g., archaeological discoveries, research, life, …
T5) Museum for the community, e.g., participatory activities, spirit healing, inclusion, …
T6) Collection & Curatorship, e.g., collection, restoration, research, …
T7) Cultural anecdotes, e.g., curiosities, ironies, …
T8) Special events & offerings, e.g., festivities, discounts for subscriptions, …

The analysis of the outliers of the upper-right tails of the distribution of posts per each topic shows that topics T1, T4, T5 and T8 grasp contents that are peculiar to specific museums.

Specifically, Figure 3 shows that 48.11% of extreme posts in the distribution of topic T1 are published only by gallerieaccademiavenezia. Moreover, the second museum (PinacotecadiBrera) in terms of extreme posts with respect to topic T1 has a frequency of 12.75%. This shows that the discussion of educational activities with art and artists (T1) is not generally shared across different museum accounts but rather it is a highly specific content presented in the Facebook branding strategy of gallerieaccademiavenezia. Similarly, Figure 4 shows that 49.87% of the upper outliers for topic T4 are published only by MuseoArcheologicoRC, with the second account (parcocolosseo) achieving a publishing rate of 6.82% among outliers' posts. Therefore, archaeological narratives (T4) are not generally shared across different museum accounts but rather are highly specific contents branded by MuseoArcheologicoRC. In similar fashion, Figure 5 shows that 60.26% of the outliers' posts for topic T5 are published only by museocapodimonte, with the second account (museodisanmartino) publishing only the 11.59% of the outliers' posts. This shows that the delivering content about the museum as a community (T5) is not generally shared across different museum accounts but rather it is highly specific for the branding strategy of museocapodimonte. The analysis of Figure 6 shows that 63.21% of the extreme posts in the distribution of topic T8 are published only

by MANNapoli, with the second account (PilottaParma) publishing just the 7.77% of the outliers' posts. This shows that discussing special events and offerings is not generally shared across different museum accounts but rather highly specific content to the branding strategy of MANNapoli.

Additionally, the analysis of the outliers of the upper-right tails of the distribution of posts per each topic shows that the other topics – namely topics T2, T3, T6 and T7 - are not peculiar to specific museums but rather are shared across various museums. For instance, the analysis of the upper outliers of the distribution of posts within topic T3 shows (Figure 7) that the 16.62% of these posts are published by scaviostia, the 12.47% by museomiramare, and the 11.91% by parcoarcheoilogicopaestum. As similar shared behaviours are observed considering topics T2, T6 and T7, these results symbolize the existence of isomorphic branding strategy among museums in terms of content of posts published when it comes to communicating about calendar (T3), collection and curatorship (T6), describing the expositions and heritage (T2) and narrating cultural anecdotes (T7).

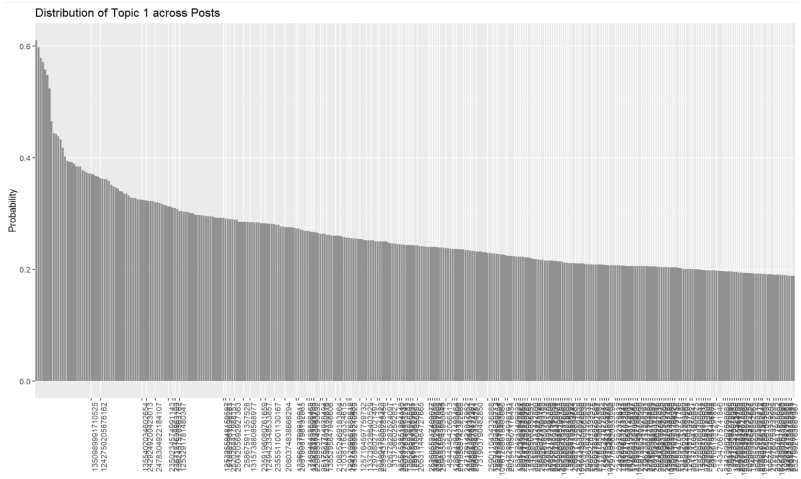

Figure 3: Upper outliers of the distribution of topic T1, i.e., most probable posts per topic T1, with labels of posts published on x-axis. Posts with missing labels are published by galleriaaccademiavenezia.

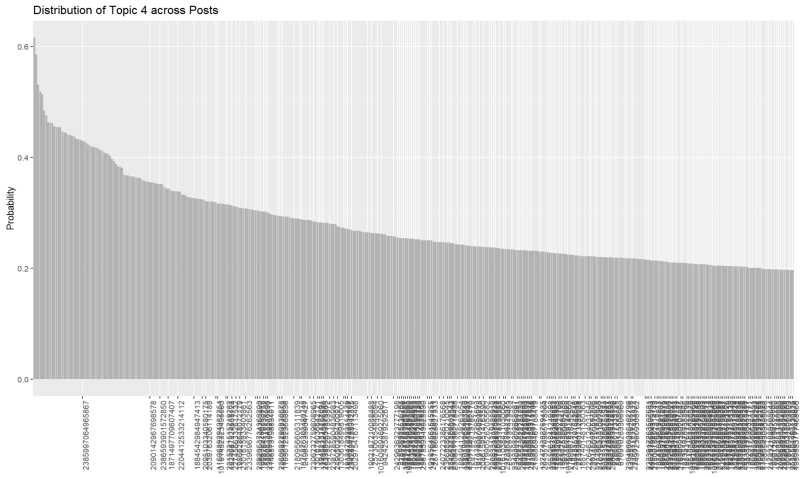

Figure 4: Upper outliers of the distribution of topic T4, i.e., most probable posts per topic T4, with labels of posts published on x-axis. Posts with missing labels are published by MuseoArcheologicoRC.

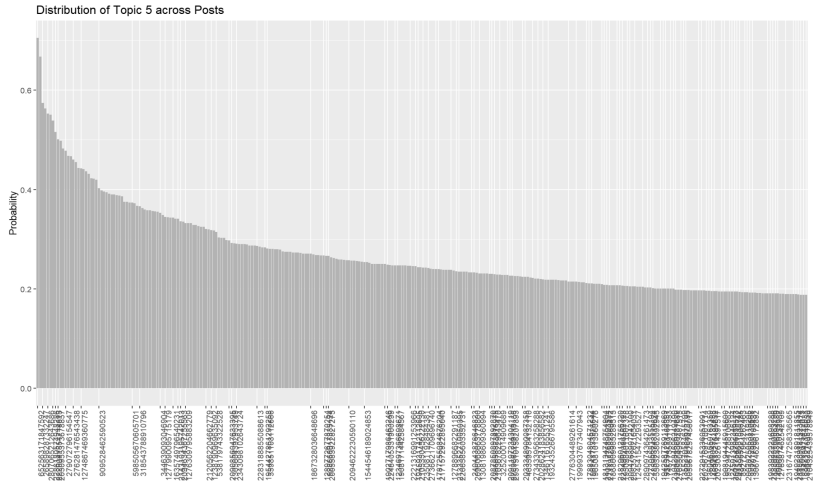

Figure 5: Upper outliers of the distribution of topic T5, i.e., most probable posts per topic T5, with labels of posts published on x-axis. Posts with missing labels are published by museocapodimonte.

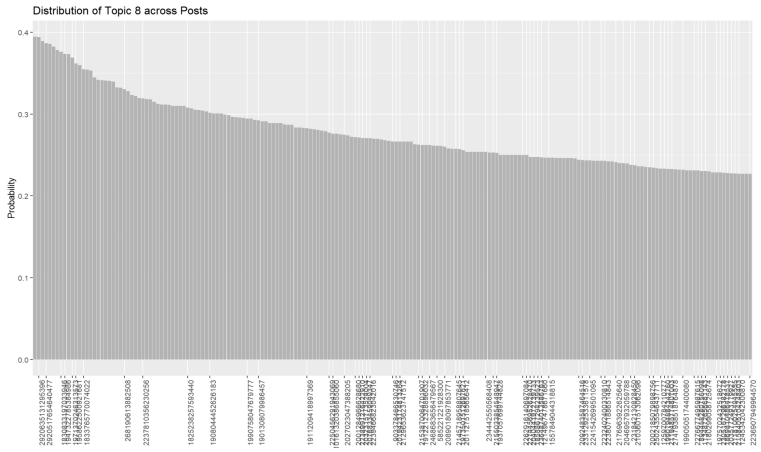

Figure 6: Upper outliers of the distribution of topic T8, i.e., most probable posts per topic T8, with labels of posts published on x-axis. Posts with missing labels are published by MANNapoli.

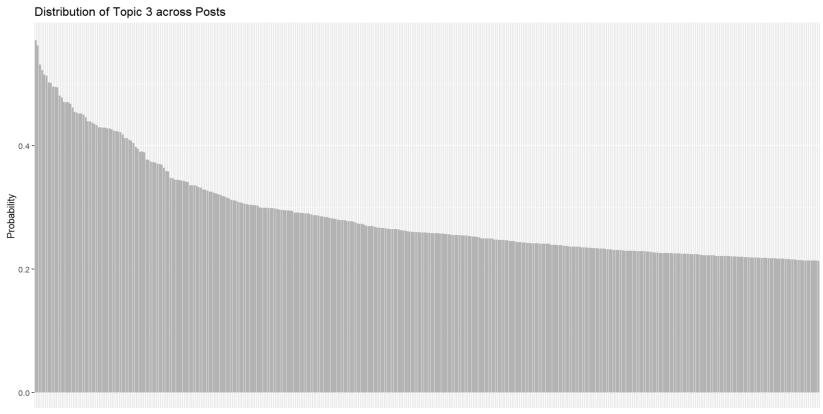

Figure 7: Upper outliers of the distribution of topic T3, i.e., most probable posts per topic T3.

5. Conclusions

Since four of the topics emerging from the official Facebook posts published by top-visited Italian public museums are spread across various museum accounts, the analyses shows that museums do not generally pursue a branding strategy which favours uniqueness but rather pursue a branding

logic of isomorphism in terms of semantic of textual description of the post. This is evidenced by the topics four topics identified concerned with service-provision aspects, namely expositions and heritage (T2), calendar (T3), collection and curatorship (T6) and cultural anecdotes (T7).

Nonetheless, the analyses also show that there are four topics that are strongly referred to specific museums. This is the case of topics concerned with experiences and knowledge that are provided by some museums as a uniqueness branding value. This is the case of educational activities with art and artists (T1) for gallerieaccademiavenezia, of archaeological narratives (T4) for MuseoArcheologicoRC, of description of the role of the museum for the community (T5) for museocapodimonte, and narratives about special events and offerings (T8) for MANNapoli.

Though the nature of this study is exploratory, this research offers at least two major contributions. First, the empirical findings of the study enrich the debate in public sector branding literature concerned with the tensions between corporate branding and mission and values of the public sector institutions, providing empirical evidence in an empirical case of relatively low competition, thus far underexplored. Second, the findings show that some shared values exist in the branding strategies of different museum institutions and identifies which are the specific themes that are shared across various museums. These results could be leveraged also by other public sector institutions, such as local government institutions and administrations, to establish online connections with extant cultural institutions to interact with the community and to foster collaborations to target specific audiences that could be further attracted to these destinations relevant for the public administrations.

Nonetheless, the explorative nature of this research also presents some limitations that could be further explored as future developments to provide relevant robust statistical results of the measurement of the uniqueness and isomorphism of social media public brand strategies.

First, extensions should consider wider timespans, e.g., one year or more than one year, to compare the potential seasonality of results and public branding strategies connected to special campaigns. Second, extensions of the current study should study what happens to the strategies when more than one channel is considered, e.g., Instagram, X, and TikTok, to establish whether also uniqueness or isomorphisms are channel-specific or preserves across channels. Third, additional analyses could consider the physical distances between museums and with other institutions, e.g., schools, to assess whether there exists a model of public branding strategy specifically connected to some territories. Fourth, the study could be expanded to the analysis of niche museums instead of focusing only on top-museums, to consider also the stronger effect of the variable of economic sustainability and studying the uniqueness and isomorphism of public branding strategies in a highly competitive but understudied setting. Fifth, the study could be extended considering also the role of brand image, i.e., perceptions and reactions of online users to specific strategies, to consider also the reactions of users to the public branding strategies. Finally, the study could be expanded analysing also the content of images in the public branding strategy, to compare the semantic similarities across images used in the public branding strategies and identify uniqueness or the isomorphism also connected to the content of images.

Declaration on Generative AI

The author has not employed any Generative AI tools.

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