ARTIGOS

EXPLORINGTHE RELATIONSHIP BETWEEN PLACE BRANDING AND TECHNOLOGY: A SYSTEMATIC REVIEW

EXPLORANDO A RELAÇÃO ENTRE PLACE BRANDING E TECNOLOGIA: UMA REVISÃO SISTEMÁTICA

Patrick Wendell Barbosa Lessa
patrickwbarbosa@gmail.com
Mestrando em Administração pela Universidade Federal de Santa Catarina. Florianópolis - SC - BR.

Marco Antonio de Moraes Ocke
marco.ocke@ufsc.br
Doutorado em Administração na Linha de Marketing pela Faculdade de Economia e Administração da Universidade de São Paulo. Professor Adjunto do Centro Socioeconômico da Universidade Federal de Santa Catarina - UFSC. Florianópolis - SC - BR.

ABSTRACT

Este artigo analisa a ligação entre place branding e a tecnologia. A concorrência global por investimentos e pessoas se intensificou, e a tecnologia acelerou a globalização. No entanto, apenas 52 artigos e revisões foram encontrados de 2004 a 2022, indicando a necessidade de mais pesquisas. Place Branding and Public Diplomacy e o Journal of Place Management and Development eram as principais revistas do setor no momento da elaboração, com Foroudi P., Gupta S., Kitchen P., Foroudi M.M., Nguyen B. e Jacobsen B.P. como autores principais. Pesquisas futuras devem investigar o papel da tecnologia no place branding, inclusive o uso de novas tecnologias como ferramentas promocionais, a governança de cidades inteligentes, a aceitação de novas tecnologias pelos usuários, a percepção do valor da marca e os ramos da tecnologia no place branding. Esta pesquisa é fundamental para abrir novos horizontes e fornecer percepções para informar e orientar futuras investigações acadêmicas sobre o assunto.

Palavras-chave: place branding; tecnologia; revisão sistemática; bibliometria.

RESUMO

This article analyzes the link between place branding and technology. Global competition for investment and people has intensified, and technology has accelerated globalization. Nevertheless, only 52 articles and reviews were found from 2004 to 2022, indicating a need for more research. Place Branding and Public Diplomacy and the Journal of Place Management and Development were the leading industry journals at the time of writing, with Foroudi P., Gupta S., Kitchen P., Foroudi M.M., Nguyen B., and Jacobsen B.P. as the primary authors. Future research should investigate the role of technology in place branding, including the use of new technologies as promotional

tools, smart city governance, user acceptance of new technologies, brand equity perception, and technology branches in place branding. This research is fundamental to open new horizons and provide insights to inform and guide future academic investigations on the subject.

Keywords: place branding; technology; tystematic teview; bibliometry.

1 INTRODUCTION

Attention to place branding is increasing in the academic and managerial fields (KAVARATZIS; HATCH, 2013; OCKE; PLATT, 2022). One factor that expands this growth is the capability of place branding to be multidisciplinary (KUMAR; PANDA, 2019; OCKE; PLATT, 2022). However, although place branding has been discussed in various ways, it continues to be very complex and requires a unique approach process for each case (GREBOSZ-KRAWCZYK, 2021). Moreover, Lopes, Leitão and Rangifo-Gallego (2022) defended that conducting more exploratory research about different contexts is necessary.

Place branding refers to the process of creating and managing the reputation, image, and identity of a place, such as a city, region, or country, to attract visitors, residents, and investments (KAVARATZIS; ASHWORTH, 2005). It involves strategic marketing and communication efforts aimed at positioning the place in the minds of its target audience and differentiating it from competitors. Place brand management encompasses various competitive attributes, including cultural heritage, natural landscapes, infrastructure, services, and the overall experiences and perceptions associated with the place (KAVARATZIS; HATCH, 2013; OCKE; PLATT, 2022; LIMA et al., 2022; JAIN et al., 2022; KAVARATZIS; ASHWORTH, 2005; OCKE; PLATT, 2022), the professionals responsible for the place brand (e.g., policymakers or entrepreneurs) started to engage with concepts from business such

as marketing and management (BJÖRNER; ARONSSON, 2022), actions observed since the 1980s (PEDERSEN, 2004). Thereby, new strategies are developed to attract people for either leisure or work (BARKUN; GLIŃSKA; DĘBKOWSKA, 2021; BLUE, 2021; CLEAVE; ARKU, 2017), adding value to the place and showing other areas how inviting it is (CRISTÓFOL; CRUZ-RUIZ; ZAMARREÑO-ARAMENDIA, 2021).

Technologies are heavily referenced when the topic is to generate value in each place (LIMA et al., 2022; KAVARATZIS; FLOREK, 2021; OCKE; PLATT, 2022). However, little has been reflected in the literature about the relationship between place branding and technology. For instance, Acharya and Rahman (2016) argued that new research on this relationship needs to be carried out. Thus, with technology being a tool able to accelerate globalization and transform lifestyles (SINGH; SIDDIQUI, 2021), a need to assess the alignment or controversies existing between place branding and technology is observed.

Previous studies have researched the relationship between place branding and other factors. For example, Kavaratzis (2005) sought to clarify the concept of place branding, an objective similar to the article by Kumar and Panda (2019) since it clarified the relationship between place brands and place marketing. In turn, Kavaratzis and Hatch (2013) introduced a novel approach to place branding theory, researching place branding and place identity. In another context, Chan and Marafa (2013) reviewed the application of research methods and statistical analysis with place branding, whereas Shahabadi, Sajadzadeh and Rafieian (2019) provided background and a theoretical basis for the concepts of place branding and place brand.

Even with an exhaustive number of articles reviewing the term place branding, finding any document addressing the relationship between place branding and technology was not possible. Therefore, the present article aims to map the literature

about the relationship between place branding and technology, following the bibliometric procedures and reviewing the main articles found. Hence, besides discovering how the literature works with the terms mentioned, we intend to bridge the gaps left by authors such as Acharya and Rahman (2016) and Ocke and Platt (2022), given that the results will clarify how technology has been impacting the place branding theory.

1.1 PLACE BRANDING AND TECHNOLOGY: IS THERE ANY RELATIONSHIP?

Defining the place branding concept has been a challenge since its creation due to the multidisciplinary approach existing in theory (KUMAR; PANDA, 2019; OCKE; PLATT, 2022). Studies like those by Kavaratzis (2005) and Kumar and Panda (2019) have demonstrated the concern with distinguishing it from other theories. However, the clarity of place branding is on the actions of various stakeholders to render a given place more attractive for foreign investments and entertainment (CLEAVE; ARKU, 2020; OCKE; PLATT, 2022). Thereby, it is possible to notice a growth in the horizontality of local transparency since the space conceived by those at the center, e.g., policymakers and tourism managers, must demonstrate the reality observed by those at the fringes, e.g., residents and tourists (PEDERSEN, 2004).

In another prism, technology has strongly developed in the last decades (SINGH; SIDDIQUI, 2021), amplifying the information exchange between people and institutions (UKPABI; KARJALUOTO, 2017). Social media, blogs, and any other types of means of communication allowed increasing the speed of information, besides giving voice to the different hierarchical social levels (BRAUN; KAVARATZIS; ZENKER, 2013; UCHINAKA YOGANATHAN; OSBURG, 2019). Thus, it is possible to identify an emergent relationship between the participation of different stakeholders

in the place branding process and the potential of technology to highlight the convergences and divergences between the groups.

Jacobsen (2009) stated that one of the effects that characterize the situation in pos-industrial cities is technological development; that is, the evolution of a place has, as one of its pillars, the technological capacity and infrastructure existing there (DUBINSKY, 2022). In addition, technology may be observed in different areas when the topic is place branding. For instance, Grebosz-Krawczyk (2021) presented the Smart City Brand Management model and formulated recommendations regarding the implementation of strategies for place branding. The author stated that smart city management must develop long-term strategies involving residents and other stakeholders. It is important to note that this concern about stakeholders had already been observed by Kavaratzis (2012), showing that, at that time, it was already necessary to reflect on the roles of stakeholders and their process of involvement with place branding.

Following the line of thought on the role of stakeholders, social media has also been researched and found to be able to impact the place brand (CLEAVE et al., 2017; EBRAHIMI; HAJMOHAMMADI; KHAJEHEIAN, 2020; TAECHARUNGROJ, 2019). With user-generated content (UGC), Taecharungroj (2019) inferred the possible place brand identities of two famous metropolitan areas and found three pillars (place physics, place practices, and place personality) that may be studied to represent the place identity. In turn, Ebrahimi and Hajmohammadi and Taecharungroj (2020) analyzed the role of social media and discovered that social media is not sufficient to create a distinguished image in the minds of potential visitors but must be used as a supplementation.

These articles show the importance of studying technological tools and their impact on place branding. If place branding may be viewed as an instrument for developing an area (KAVARATZIS, 2005), technology must be analyzed in many ways, given that

its development or the lack thereof may boost the local brand or repel potential foreign investments and visitors (DUBINSKY, 2022; LUND; COHEN; SCARLES, 2018; OCKE; PLATT, 2022). Finally, together, place branding and technology have the potential to aggregate the development of cities and the literature about the place branding theory (DICKINGER; LALICIC, 2016; DUBINSKY, 2022).

2 METHODOLOGICAL PROCEDURES

To map the literature on the relationship between place branding and technology, bibliometric procedures were followed, as they are primordial to reaching the objective of analyzing the development of research in a given field (VIEIRA; GOMES, 2009). Thereby, on September 23, 2022, we searched the articles in the Scopus and Web of Science (WoS) databases. It should be noted that these databases are considered the main ones for this type of research, in addition to having fundamental filters that improve the search mode of the documents (MARTÍN-MARTÍN et al., 2021; ROSA; ROMANI-DIAS, 2019; VISSER; VAN ECK; WALTMAN, 2021). Besides Scopus and WoS, documents were sought in Spell and

Scielo in an attempt to find manuscripts that address the relationship between place branding and technology; however, we were unable to find any such documents.

Seeking to find articles that addressed place branding and its relationship with technology, the keywords "place brand*" AND "technology*" were used in both Scopus and Web of Science, returning 55 and 69 documents, respectively. It is worth mentioning that the "*" was used to find variations in brand or branding and technology or technologies. After the first search, only articles and reviews were chosen to integrate the database of this study, resulting in 36 and 53 articles or reviews from Scopus and WoS, respectively.

To render the extracted database more assertive, the following exclusion process was performed: of the 89 articles, 23 were repeated, leaving 66 articles, three of which were out of the scope of this research as they addressed other topics and eleven of which we were unable to access. Thus, 52 articles remained to develop this research (see Figure 1). Finally, to complete the database, Google Scholar was used to incorporate the number of citations of each article since Scopus and WoS have different methods to quantify citations.

Figure 1- Methodological procedures

KEYWORDS: "PLACE BRAND*" AND "TECHNOLOG*"
SEARCH WITHIN: ARTICLE TITLE, ABSTRACT, KEYWORDS
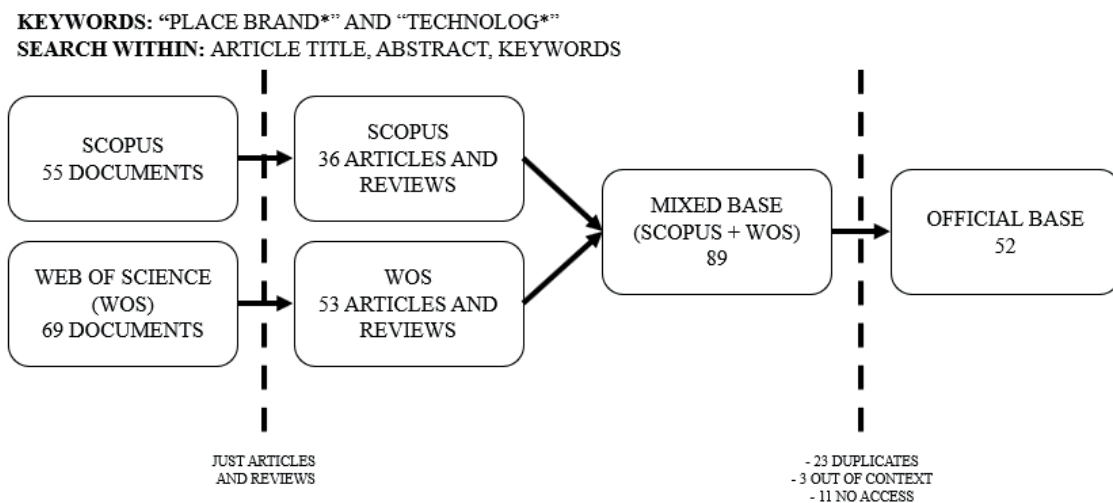
Source: survey data.

Regarding the analysis of articles and reviews, the bibliometrics steps were followed: (i) Bradford's law, which indicates the leading journal that addresses the researched topic (GUEDES; BORSCHIVER, 2005; MACHADO JUNIOR *et al*., 2016); (ii) Lotka's law, which demonstrates the authors that most produce articles about the topic (LOTKA, 1926); and (iii) Zipf's law, which highlights the main keywords of the articles, indicating how the terms are being used with others (GUEDES; BORSCHIVER, 2005). A thematic analysis was performed with the keywords of the manuscript to improve the research analysis, following the steps shown by Braun and Clarke (2012), Caregnato and Mutti (2006).

3 RESULTS AND DISCUSSIONS

Regarding the number of studies on place branding and technology, it was possible to observe very few publications from 2004 to 2012, with only five manuscripts found (see Figure 2). In addition, little was discussed about the relationship between place branding and technology. However, the first article from the official database, titled "*Place Branding: Giving the Region of Øresund a Competitive Edge*" (PEDERSEN, 2004), showed the start of the transformation of the way a place is managed, bringing business concepts to the government to develop the city. Furthermore, Pedersen (2004) suggested that place branding has its technology and that it works by combining those at the center (e.g., policymakers) and those at the fringes (e.g., residents) to raise the credibility of a place, thus bringing the image of a place closer to its reality.

Figure 2 - The number of articles per year
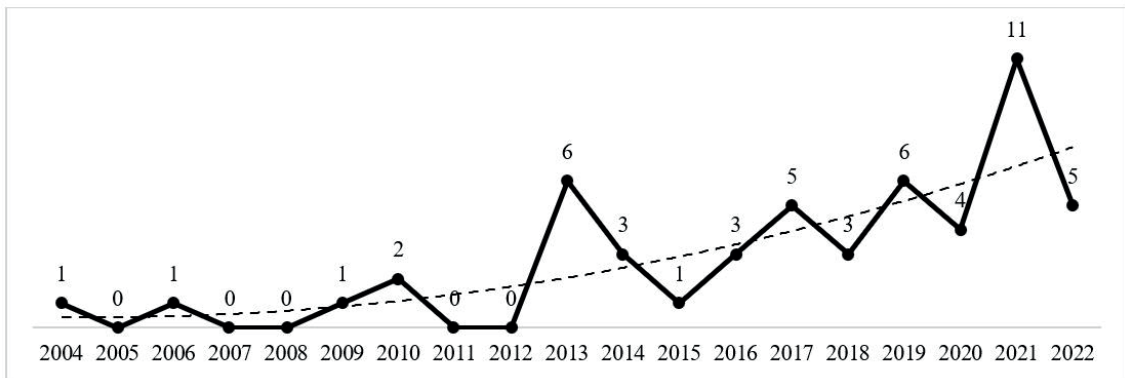
Note. The dotted line refers to the second-order polynomial trend curve.
Source: survey data.

Following the chronological order of the articles and reviews, it was possible to notice a stream of value creation through the creative industry. However, this industry does not only change the economy of a country but also the social space and, consequently, a place as a whole, which may transform the perception of a city (ANHOLT, 2010; KOTLER; GERTNER, 2002; MADSEN, 1992; NOBUOKA, 2010; OCKE; PLATT, 2022). Yue (2006), for instance, showed that the cultural policy developments of Singapore in tourism, broadcasting, and new media were significant because they created increased economic growth, creative wealth, and social participation. In line with this, Jacobsen (2010, 2009) sought to develop a framework to analyze place brand equity from the viewpoint of foreign direct investors.

In summary, in the 2000s, there was concern with demonstrating how place branding can generate value through different contexts as long as it has greater horizontal participation

among stakeholders (NOBUOKA, 2010). This greater participation among the stakeholders was observed and discussed by Kavaratzis (2012), who showed that different groups can also transform the image of a place through technology.

In the 2010s, we observed that more manuscripts were developed (see Figure 2). In addition, as declared by Kavartzis (2005), Ocke and Platt (2022), it was noticed in the branding literature that the multidisciplinary aspect exists in a place. For instance, Porter (2013) analyzed the brand of a region through mediatic characteristics and showed that the media developed in that brand was focused only on meeting the demands of the existing media environment. In turn, Sziva and Bassa (2017) highlighted the importance of the World Heritage Site in cultural tourism. These authors assumed in their suggestions that new technologies can improve the popularity of a site by drawing attention to its real values that may be experienced by visitors.

More recent studies addressed the relationship between place branding and technology more clearly. For example, Cleave *et al.* (2017) examined how social media was used as a promotional tool for economic development at the municipal level through place marketing and branding, showing that it was employed to promote local services and political information rather than communicate place branding. Also, Dubinsky (2022) sought to explore and discuss the role of the growing sport-tech ecosystem and the branding of Israel as a start-up nation in the sports diplomacy of the country, defending that these types of studies should be conducted to explore more relationships among technology, innovation, diplomacy, and sports.

Table 1 - Main journals from the official database

Source Title	H-index	SJR 2021	Manuscripts	Cited by
Place Branding and Public Diplomacy	30	0.43	11	162
Sustainability	109	0.66	7	26
Journal of Place Management and Development	31	0.57	5	192
European Planning Studies	88	1.24	2	102
Urban Studies	157	1.91	2	67
Qualitative Market Research	59	0.56	1	149
International Journal of Cultural Policy	49	0.65	1	110

Source: survey data.

Table 1 was prepared to determine which were the leading journals that addressed place branding and technology (**Bradford's Law**). Only journals with at least one well-cited document or more than one document were included in the table. In this sense, one may observe that Place Branding and Public Diplomacy lead the rank, with 11 articles or reviews. However, the most cited journal was the Journal of Place Management and Development, with 192 citations. These journals are specific to the field of place branding, spanning various related disciplines.

Table 2 was prepared to determine the leading authors (**Lotka's law**). Foroudi *et al.* (2016) were the authors most cited. In the article titled "*A framework of place branding, place image, and place reputation: antecedents and moderators*", Foroudi *et al.* (2016) developed a framework that links different concepts of an emerging country, namely Iran, and found that the key indicator for identifying a place brand comes under national culture and infrastructure. Furthermore, the authors identified five main moderators of the outcomes of place branding: political perception, social media and news, place awareness, place association, and tourism experience.

It is worth mentioning that Foroudi, Gupta, Kitchen, Foroudi, and Nguyen were not the most productive authors. This recognition could go to Jacobsen (2010, 2009), but it was possible to note that the two articles are the same but published in different journals. However, Jacobsen (2009) was one of the most cited. Their article sought to present a framework to analyze place brand equity from the viewpoint of foreign direct investors, a subject that is quite relevant to developing a place brand since studies on the topic can render stakeholder decision-making more assertive about the place.

Table 2 - Main articles from the official database

Authors	Title	Year	Source Title	Cited by
Foroudi P., Gupta S., Kitchen P., Foroudi M.M., Nguyen B.	A framework of place branding, place image, and place reputation: antecedents and moderators	2016	Qualitative Market Research	149
Jacobsen B.P.	Investor/based place brand equity: A theoretical framework	2009	Journal of Place Management and Development	129
Yue A.	Cultural governance and creative industries in Singapore	2006	International Journal of Cultural Policy	110
Pedersen S.B.	Place branding: Giving the region of Øresund a competitive edge	2004	Journal of Urban Technology	96
Della Lucia M.	Economic performance measurement systems for event planning and investment decision making	2013	Tourism Management	69
Goess, S., de Jong, M., Meijers, E.	City branding in polycentric urban regions: identification, profiling, and transformation in the Randstad and Rhine-Ruhr	2016	European Planning Studies	59
Cleave E., Arku G., Sadler R., Kyeremeh E.	Place Marketing, Place Branding, and Social Media: Perspectives of Municipal Practitioners	2017	Growth and Change	58

Source: survey data.

With the keywords, it was possible to identify the main contexts addressed by the authors (**Zipf's law**). In this sense, 369 keywords were found, and the main ones were the following: city branding, with six occurrences; marketing, economic development, and city/cities, with five occurrences each; and social media, smart city, place marketing, place brands, innovation, information-technology, identity, and brand equity, with four occurrences each. Figure 3 was developed using VosViewer and shows the correlation between the keywords used at least twice by different articles or reviews. Thus, of the 369 keywords, 52 appear in Figure 3, grouped into eight clusters. These clusters are used to develop the thematic analysis hereafter.

Figure 3 - The correlations between the keywords
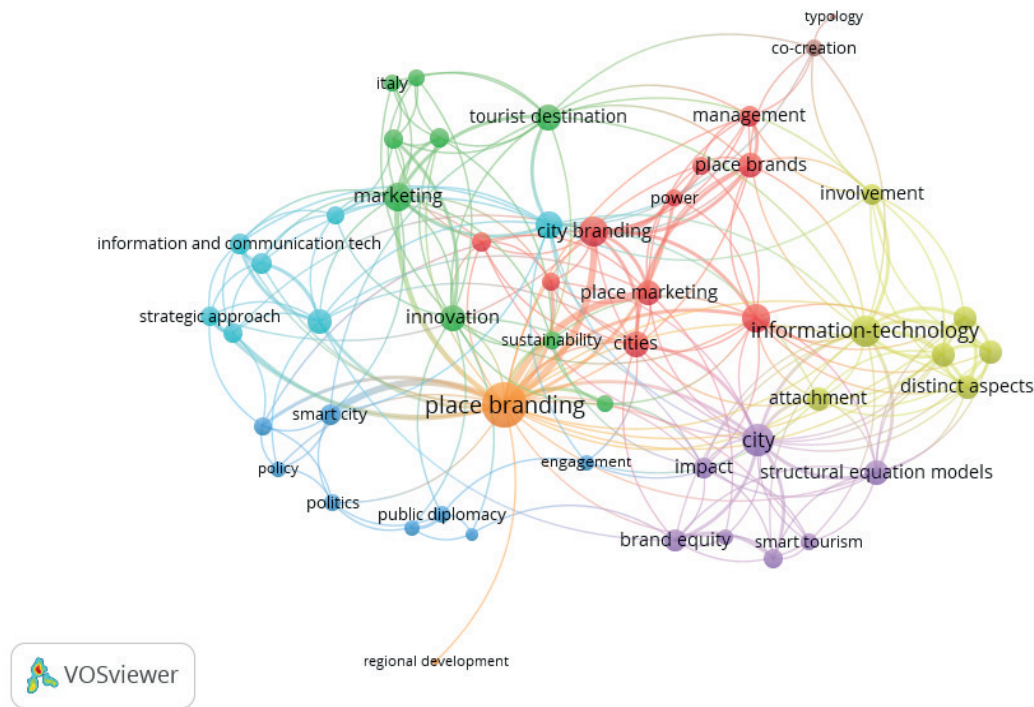
Source: survey data.

Each cluster has a color (see Figure 3) and represents how the keywords are related to each other. In addition, each keyword has a Total Link Strength (TLS) that explains which keyword is the most active among those in one cluster and the others. For example, city branding, located in the red cluster, has a TLS of 23, so it has the highest TLS in the red cluster and has a significant correlation with other keywords in general. Table 3 shows the topic of each cluster with the TLS of each keyword and the main objectives and gaps left by the authors for future research. It is also worth noting that the orange cluster (keywords place branding and regional development) and the brown cluster (keywords co-creation and typology) were removed from the table for two reasons: (i) place branding is one of the central topics, i.e., it has a link with all other keywords; (ii) the other keywords of this color had a comparatively lesser impact on the correlation when compared to the keywords of other clusters.

Table 3 - Main objectives and gaps of each cluster and its respective thematic

Topic	Cluster	Keywords (TLS)	Main objectives	Main gaps
Industry and society	Red	city branding (23), identity (20), cities (16), place brands (15), place marketing (15), management (11), competitiveness (09), image (08), knowledge (08), and power (06)	- Develop a framework (JABREEL; HUERTAS; MORENO, 2018; JACOBSEN, 2009; KOCHETKOV; VUKOVIĆ; KONDYURINA, 2021). - Relationship between industry and place (LOPES; LEITÃO; RENGIFO-GALLEGO, 2022) NOBUOKA, 2010; SCARBOROUGH; CRABBE, 2021). - Ecological modernization (GOESS; JONG; MEIJERS, 2016).	- Utilize frameworks to measure brand equity (JABREEL HUERTAS; MORENO, 2018; JACOBSEN, 2009). - Seek to identify natural experiments and how they affect place branding (SCARBOROUGH; CRABBE, 2021). - Cities that create urban (re)development projects (GOESS; JONG; MEIJERS, 2016).
New technologies as promotional tools	Green	marketing (20), innovation (17), tourist destination (16), decision-making (09), consumption behavior (09), sustainability (08), performance assessment (07), Italy (07), tourism (06)	- Test and analyze new technologies in events that promote a place (CLEAVE et al., 2017; HUERTAS MORENO; PASCUAL, 2021; LUCIA, 2013). - Analyze the export of popular culture to the world (NOBUOKA, 2010).	- Relationship between stakeholders on place branding (DUBINSKY, 2022; LUCIA, 2013; ZAVATTARO; ADAMS, 2016)
Smart cities and their governances	Blue	smart city (10), governance approach (08), politics (06), public diplomacy (06), engagement (05), policy (05), soft power (05), nation branding (04)	- Analyze the smart cities destinations (CHARNOCK MARCH; RIBERA-FUMAZ, 2021; GREBOSZ-KRAWCZYK, 2021; ; HUERTAS MORENO; PASCUAL; 2021; KOLOTOUCHKINA; SEISDEDOS, 2018).	- Analyze the management and communication of smart cities (GREBOSZ-KRAWCZYK, 2021). - Analyze how social media is used by the city managers (HUERTAS MORENO; PASCUAL, 2021) - Analyze the people's evolution regarding its social activism (KOLOTOUCHKINA; SEISDEDOS, 2018).

User acceptance of new technologies	Yellow	information-technology (26), commitment (14), distinct aspects (14), group self-esteem (14), user acceptance (14), attachment (13), involvement (11)	- Analyze the adoption and acceptance of territorial branding by people (BELANCHE; CASALÓ; FLAVIÁN, 2014; LASARTE; VICENTE,. ARIÑO; SASO, 2017; TRAN; NGUYEN; TRAN, 2021).	- Explore the introduced social processes to clarify the role of identity (BELANCHE; CASALÓ; FLAVIÁN., 2014; LASARTE; VICENTE;ARIÑO; SASO, 2017). - Explore the impact of social media on people (JABREEL; HUERTAS; MORENO, 2018).
Perceived brand equity	Purple	city (28), structural equation modeling (15), brand equity (12), impact (11), place brand (09), smart tourism (07), technology (5).	- Analyze the brand equity by stakeholders (LIN; DONG, 2021). - Analyze the web reputation of a place (GRAZIANO; ALBANESE, 2020).	- Find ways to measure the country's image in many places (LIN; DONG, 2021). - Analyze the relationship between consumer-based brand equity (CBBE) and financial-based brand equity (FBBE) (TASCI, 2020). - Develop a new conceptual/operational framework to place branding (GRAZIANO; ALBANESE, 2020).
Technology branches in place branding	Light blue	social media (19), economic development (15), information and communication technology (10), local economy (10), a strategic approach (09), urban economy (09), technology adoption (08)	- Explore place branding as an economic development strategy (CLEAVE et al., 2017; NATHAN; VANDORE; VOSS, 2019).	- Analyze the social media role in place branding (CLEAVE et al., 2017; HUERTAS et al., 2021)

Source: survey data.

Concluding this section, the results and discussions revealed an absence of research on this topic, particularly from 2004 to 2012. However, the emergence of the article "*Place Branding: Giving the Region of Øresund a Competitive Edge*" by Pedersen (2004) marked the beginning of a transformation in place management, introducing business concepts into government practices for city development. The results also indicated a growing interest in the value creation potential of the creative industry and its impact on the economy, social space, and overall perception of a place. Furthermore, more recent research has highlighted the role of social media as a promotional tool for economic development, as well as the relationship among technology, innovation, diplomacy, and sports. By examining leading journals, authors, and keywords in the field, this study identified

key topics and research gaps, emphasizing the need for frameworks to measure brand equity, explore natural experiments in place branding, and analyze stakeholder engagement. Additionally, the clusters of topics highlighted the importance of industry and society, new technologies as promotional tools, smart cities and their governance, user acceptance of new technologies, perceived brand equity, and technological branches in place branding.

4 CONCLUSION

This research aimed to map the literature about the relationship between place branding and technology, following the bibliometric procedures and reviewing the main articles found. While place branding is developing and becoming relevant to global competitiveness (KAVARATZIS; ASHWORTH, 2005; OCKE; PLATT, 2022), technology is improving globalization, making the world more connected and interchanging cultures and customs rapidly (HUDAK, 2019; LEYMAN *et al*., 2020; SINGH; SIDDIQUI, 2021). Thus, stakeholders interested in the growth of a city or region are using different technological methods to differentiate it from other places and attract resources or people (KAVARATZIS, 2012; REYNOLDS *et al*., 2022).

With this research, it was possible to identify the leading actors who studied or are studying place branding and technology. However, few articles and reviews have been produced, with only 52 being found in the Scopus and WoS databases. In this sense, there is a need to conduct more research about both themes since the technology may be viewed as a strong driving tool for place branding (BELANCHE; CASALÓ; FLAVIÁN, 2014; CHEUNG *et al*., 2021; KAVARATZIS, 2012; MOLINILLO *et al*., 2019; OCKE; PLATT, 2022).

This systematic and bibliometric review has shed light on the relationship between place branding and technology, revealing a significant knowledge gap in the existing literature. Although the analyzed articles and reviews offer valuable insights into the multidisciplinary nature of place branding and its potential impact on attracting investment and visitors, they fall short of fully exploring the contributions and robustness of this research area. Therefore, there is a pressing need for further investigation to delve deeper into the role of technology in place branding. Future studies should explore the use of new technologies as promotional tools, smart city governance, user acceptance of technology, brand equity perception, and the different technology branches involved in place branding. By doing so, researchers may uncover valuable insights that not only expand the knowledge on the field but also add substantial value to the market and guide practical applications in place branding.

In summary, the main findings of the bibliometric process (Bradford's, Lotka's, and Zipf's laws) were the following: Place Branding and Public Diplomacy is a strong journal that addresses topics related to place branding, so is the Journal of Place Management and Development; Foroudi P., Gupta S., Kitchen P., Foroudi M.M., Nguyen, B., and Jacobsen B.P. were considered the leading authors on the topic; city branding, marketing, economic development, and city/cities, social media, smart city, place marketing, place brands, innovation, information-technology, identity, and brand equity were the main keywords used by the authors.

Even with the important results for further research with different methods, this study had limitations. Firstly, it used only two databases, which may have limited the number of articles and reviews. Along this line, the type of document filters also limited this study. Further research may expand the number of databases or use additional keywords or new filters to find more research relating place branding with technology. Moreover, more specific research may also be conducted, aiming at new insights and pathways to place branding. Finally, it is worth noting that the thematic analyses were performed subjectively, which may lead to bias. Thus, new thematic analyses may be performed and compared with the present research to highlight their congruences and divergences.

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