

Bibliometric Assessment and Research Trends: Five Decades of Brand Image

(Penilaian Bibliometrik dan Aliran Penyelidikan: Lima Dekad Imej Jenama)

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ABSTRACT

Brand image distinguishes a company, product, or service from others, making it an asset worth investing in. Recognizing the key themes related to brand image is essential for fostering collaboration and ensuring that research progresses toward desired goals. Therefore, this bibliometric study's objective was to uncover global research trends on the topic of brand image based on publishing output, co-authorship, country, and co-occurrence. We used the Scopus indexing database to identify 2,605 relevant papers published from January 1971 to November 2021. Utilizing the VOSViewer application, bibliometric procedures were subsequently employed to analyze the global performance, development, and impact of brand image research. Our results revealed that: the USA has the most brand image-related publications; the majority of brand image articles have been published in Scopus Quartile 1 journals; and the most recent author keywords are social media, perceived value, and purchase intention. By tracking the origins and evolution of brand image research over time, this article's originality serves as a reference point for expanding the literature on brand image and providing directions for future study.

Keywords: Bibliometric; brand image; Scopus; VOSviewer; author keyword

ABSTRAK

Imej jenama membezakan syarikat, produk, atau perkhidmatan daripada yang lain, menjadikannya aset yang bernilai untuk dilaburkan. Mengiktiraf tema utama berkaitan dengan imej jenama adalah penting untuk memupuk kerjasama dan memastikan penyelidikan berkembang ke arah matlamat yang diinginkan. Oleh itu, objektif kajian bibliometrik ini adalah untuk mendedahkan tren penyelidikan global mengenai topik imej jenama berdasarkan hasil penerbitan, kerjasama penulisan, negara, dan kemunculan bersama. Kami menggunakan pangkalan data pengindeksan Scopus untuk mengenal pasti 2,605 kertas kerja relevan yang diterbitkan dari Januari 1971 hingga November 2021. Dengan menggunakan aplikasi VOSViewer, prosedur bibliometrik kemudiannya digunakan untuk menganalisis prestasi, pembangunan, dan impak global penyelidikan imej jenama. Keputusan kami mendedahkan bahawa: USA memiliki penerbitan tertinggi berkaitan imej jenama; majoriti artikel imej jenama telah diterbitkan dalam jurnal Scopus Quartile 1; dan kata kunci pengarang terbaharu ialah media sosial, persepsi nilai, dan niat membeli. Dengan menjejaki asal usul dan evolusi penyelidikan imej jenama merentasi tempoh masa, keaslian artikel ini berfungsi sebagai titik rujukan untuk mengembangkan literatur tentang imej jenama dan menawarkan tunjuk arah untuk kajian masa hadapan.

Kata kunci: Bibliometrik; imej jenama; Scopus; VOSviewer; kata kunci penulis

INTRODUCTION

Frequently theorized as a type of brand association (Uppal et al. 2018), brand image refers to “perceptions about a brand as reflected by the brand associations held in consumer memory” (Keller 1993: 3). It is the outcome of combining tangible and intangible factors to build a clear, distinct, and appealing image that aligns with the perceived image of various stakeholders (Wang & Xu 2015). Brand image research can be traced back to the

1970s (Jacoby et al. 1971), subsequently gaining traction in the 2000s. Over these five decades, the relevance of brand image has grown in marketing research, as evinced by the significantly rising number of publications. For example, empirical research has demonstrated the positive influence of brand image on numerous consumer outcomes, including: loyalty/retention (Hameed et al. 2021; Rahi & Ghani 2016; Shabbir et al. 2018; Thaichon & Quach 2015); satisfaction (ELSamen 2015; Bianchi et al. 2019; Kim & Lee 2018); expectations (Thaichon & Quach 2015); purchase/buying intention (Lu et al. 2021; Nusairat et al. 2021; Shin & Choi 2021); perceived product attractiveness (Yulianto et al. 2021); and trust (Diallo et al. 2021; Mabkhot & Shaari 2015; Susanto et al. 2021; Syed Alwi et al. 2016).

The literature has further presented diverse theories related to brand image, particularly in relation to personality (Zenker & Braun 2017), attitude (Schade et al. 2018), psychology (Mandagi et al. 2021), and combined attributes (Rodriguez-Santos et al. 2008). Additionally, recent research highlights the critical expansion of brand image towards addressing individual behaviors in specific contexts, such as corporate settings (Ab Hamid et al. 2020, 2021) and destination settings (De Noni et al. 2019; Stylos et al. 2017; Woosnam et al. 2020). While corporate brand image has historically underpinned destination brand image (Kavaratzis 2009), the latter is inherently more complex due to involvement from multiple stakeholder groups (Zenker et al. 2017).

Despite the vast amount of extant brand image studies, many of which remain relevant to researchers and practitioners today, certain areas remain underexplored. Specifically, a growing number of brand image studies focus on tourism and destination branding, including the works of Elouali et al. (2020), Freire and Curvelo (2021), Goda (2021), and Tran et al. (2019). In contrast, few studies have investigated how brand image is affected by unexpected scenarios, such as natural disasters and the Covid-19 pandemic. Moreover, with the digitalization of businesses, the formation of destination brand image through social media engagement remains inadequately studied. Indeed, understanding brand image is challenging, as it demands the consideration of numerous complex and subjective aspects (LeBlanc & Nguyen 1996; Sung & Yang 2008).

Therefore, this paper aimed to meticulously dissect 50 years of brand image literature to delineate research trends, identify research gaps, and propose potential avenues for exploration. The specific objectives of this paper were as follows: i) to analyze the distribution patterns of brand image journal articles across periodicals, and ii) to recommend potential directions for future research. To achieve these objectives, Scopus, an indexing database owned by Elsevier Co., was employed to conduct a bibliometric analysis of brand image. While Scopus and Web of Science (WoS) databases are interconnected and index many journals, there are certain variations between them (Aghaei Chadegani et al. 2013; Vieira 2013). Notably, Scopus encompasses the world's largest abstract and citation database, spanning a wide array of disciplines, thus covering a broader spectrum of topics compared to WoS.

The originality of this article serves as a reference for expanding the body of literature on brand image, benefiting researchers, government authorities, and practitioners alike with fresh insights into this domain. The subsequent sections of the paper follow this structure. First, the bibliometric citation meta-analysis method is introduced. Citation map analysis is then employed to assess the current status of brand image research, followed by a discussion of the results. Next, potential directions and recommendations for future studies are presented. Finally, the study's limitations are acknowledged, and concluding remarks are offered.

METHOD

Bibliometric analysis uses academic publications from reputable databases as the basis for assessing global research development in a given field. The publications are classified into two types, i.e., empirical papers and review papers. Review papers were excluded from this bibliometric analysis due to their similar focus on discussing recent developments, barriers, and future directions of a specific subject.

STRATEGY FOR DATA SOURCE AND SEARCH

To begin the bibliometric procedure, data mining was conducted in the Scopus database during the first week of November 2021. Titles and abstracts containing the phrase “brand image” were the primary focus, while the search range was from the first publication in 1971 to the most recent in 2021. The code for the search was: TITLE-ABS ("brand image") AND (EXCLUDE (PUBYEAR, 2022)) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (SRCTYPE, "j")). The search yielded 2,678 journal articles. Phrases like “review,” “bibliometric,” and “overview” were then inserted to exclude review articles, resulting in the identification of 40 publications. After abstract and full-text review, 33 review articles were excluded based on the appearance of the Scopus digital identifier EID as a footprint in the database. Thus, the final dataset consisted of 2,605 articles for bibliometric analysis (see Figure 1).

The VOSviewer program was employed to analyze the 2,605 selected articles based on the following criteria: author, affiliation, source, topic area, year, document type, and country. This software extracts author keywords, citations, countries of interest, and bibliographical data, facilitating the creation and visualization of bibliometric

maps showcasing these patterns. Connections or relationships between elements are represented by links, with each link possessing a strength reported as a positive numerical value. Stronger links are indicated by higher values, determined by factors such as the number of articles between connected countries in co-authorship analysis. The total link strength reflects the overall co-authorship strength between countries, while the link strength between author keywords in co-occurrence analysis is determined by the number of articles in which two keywords appear together. The manual authored by Jan van Eck and Waltman (2020) contains more detailed information on the VOSviewer program.

Additionally, the Scopus author’s profile contains a list of the author’s publications. As such, using scholars' unique IDs (Scopus field code: AU-ID) provided the most precise information about their outputs. We further used the code “AFFILCOUNTRY” to retrieve data for single country publications. Bibliometric indicators like total citation, total publication, h-index, and CiteScore were employed for ranking purposes. In addition, sub-themes (i.e., loyalty/retention, satisfaction, purchase/buying intention, and trust) were added to investigate output patterns in brand image research. Each search chain was implemented individually, with specific terminologies included based on the outcome (e.g., "brand loyalty" OR “retention” for loyalty/retention). The search results were assessed based on the number of yearly publications, with irrelevant or overlapping terms filtered out to focus on those relevant to brand image.

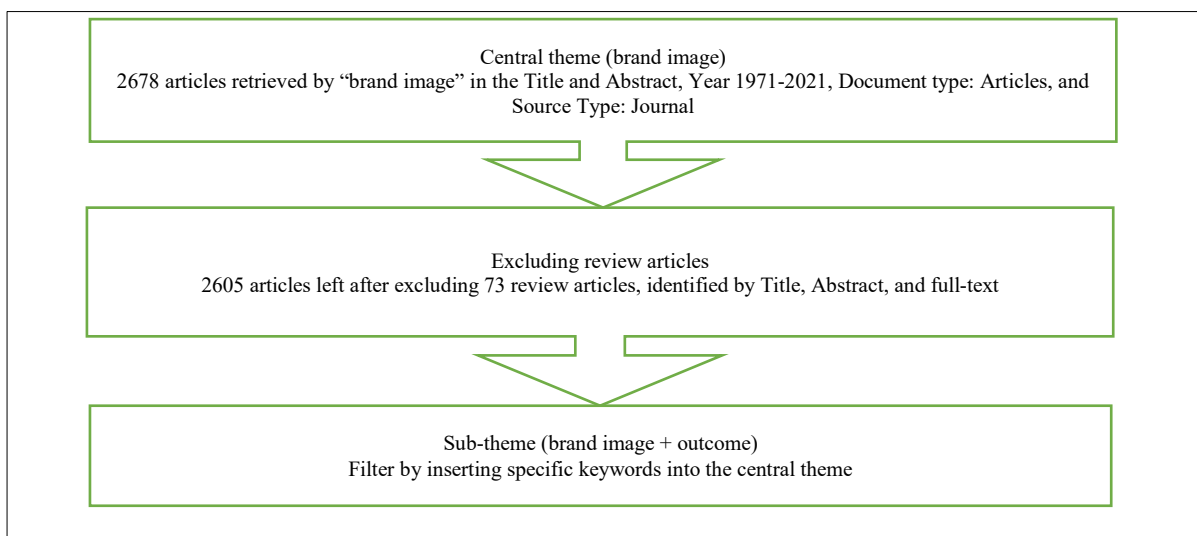


FIGURE 1. The number of the publications on “brand image”

BIBLIOMETRIC MAPS

Co-Authorship Analysis A total of 5,664 authors from 87 countries were included in the co-authorship analysis. The affiliated countries were split into five regions, namely America, Europe, Asia, Oceania, and Africa.

Co-Occurrence Analysis We identified a total of 6,045 keywords extracted from 2,605 journal articles. Before exporting these keywords to VOSviewer, we carefully inspected synonymous and congeneric phrases. For instance, phrases like "customer loyalty" and "consumer loyalty" were aggregated and counted as a single keyword, "loyalty." To visualize the average annual publication number, the link strength of keywords, and the number of occurrences, VOSviewer was employed to detect the minimum occurrences of a keyword.

RESULTS

To fulfil the first research objective, we examined the evolution of the brand image literature over 50 years. This involved various descriptive analyses intended to reveal: i) publication outputs and research interest development; ii) preferred journals as well as productive scholars, countries, and academic institutions; iii) key terms and field of research; and iv) dominant countries with remarkable contributions.

PUBLICATION OUTPUT AND RESEARCH INTEREST GROWTH

Over the past five decades, a total of 2,678 relevant research articles on brand image have been published in the Scopus database (Figure 2). The earliest publication dates back to 1971 (Jacoby et al. 1971), with less than 10 subsequent publications recorded until 1995. Figure 2 illustrates a significant surge in interest in brand image research after 2002, with an annual growth rate exceeding 100%. However, the annual publication record experienced a slight decrease in 2013. Since then, publications have steadily increased each year, contributing to

a gradual growth in the overall number of cumulative publications. Based on this trend, we anticipate that the annual publication rate will continue to rise hereafter. It is noteworthy that, as of early November 2021, only 21.5% (572 articles) were published in the open-access category. The majority of articles are not freely accessible but are categorized into other open-access types, including hybrid gold, bronze, and green. We thus support the suggestion proposed by Md Khudzari et al. (2018) to include more articles in all open-access categories, which would likely lead to a higher number of citations.

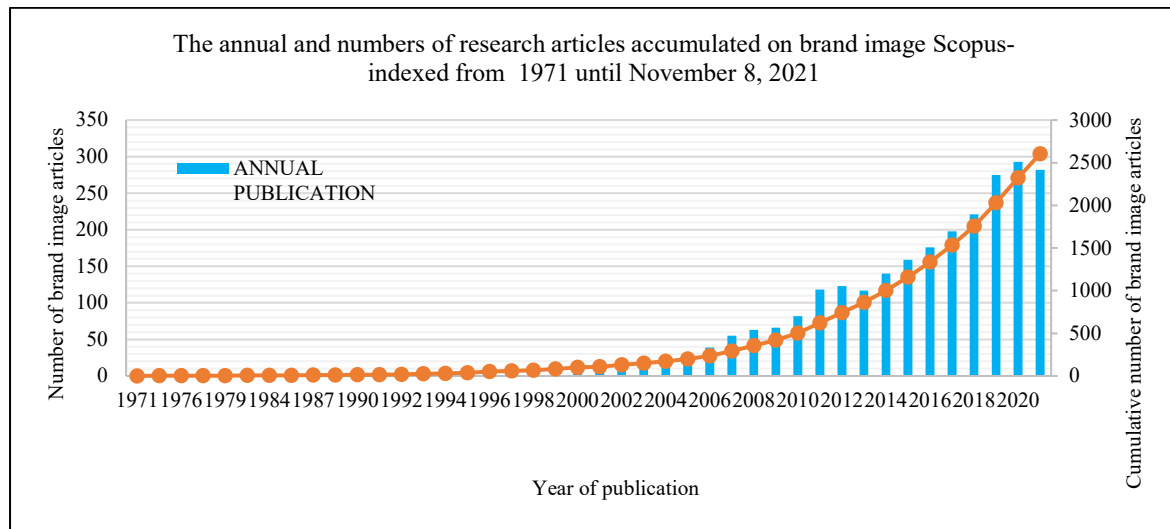


FIGURE 2. Annual and cumulative publications on brand image indexed in Scopus (1971-2021)

Several research groups worldwide are actively engaged in brand image studies, with the analysis indicating a predominant emphasis on the business area. This is evidenced by the significant number of articles grouped under the following topic areas: Business, Management and Accounting (1,849 articles); Social Sciences (658 articles); and Economics, Econometrics and Finance (394 articles). Brand image research articles are also categorized into various other subject areas, including Engineering (240 articles), Computer Science (217 articles), Environmental Science (152 articles), Art and Humanities (132 articles), Decision Sciences (121 articles), and Psychology (106 articles), among others. Indeed, brand image extends beyond the business field and encompasses multidisciplinary domains.

The empirical exploration of brand image originated in psychology, particularly regarding cues affecting the perception of beer quality in brands with favorable images (Jacoby et al. 1971). This seminal paper has become a reference point for 68.42% (231 articles) of the articles within the Business, Management, and Accounting subject areas.

Furthermore, findings revealed that brand image articles were published in 20 different languages. English emerged as the most common, with 2,527 articles (94.86%) published in this language. Other languages, including French, Korean, and Portuguese, were used in a range of 13 to 18 articles, while the remainder were used in less than five articles each. We also observed that for Scopus indexing, publishers typically prepare an English-language title and abstract for articles authored in foreign languages, ensuring accessibility and inclusion in the database.

TARGET JOURNALS

Our analysis revealed that the top 10 most productive journals in brand image research are managed by five publishers. Among these, Elsevier's two journals rank first and sixth, respectively. Emerald owns four of the most productive journals, ranked second, fourth, seventh, and tenth in the Scopus database. The other four journals were published by the Multidisciplinary Digital Publishing Institute (MDPI) in third position, Springer Nature in fifth position, Korea Distribution Science Association (KODISA) in eighth position, and Taylor & Francis in ninth position in the Scopus top 10 list.

The Journal of Business Research emerges as the most productive journal, with 63 papers accounting for 3.09% of all publications. This is followed by Sustainability and the European Journal of Marketing, representing 0.19% and 8.42% respectively. Notably, eight out of the 10 most productive journals are classified in Quartile 1, indicating their high impact and prestige. The remaining two journals are classified in Quartile 2 (Journal Of Consumer Marketing and International Marketing Review) and Quartile 3 (Journal Of Distribution Science) of the Scimago Journal Rank.

As a Clarivate Analytics metric similar to Impact Factor, CiteScore is widely utilized in the Scopus database. It plays a significant role in authors' journal selection decisions, influencing perceptions of originality and relevance. According to the 2020 CiteScore report, seven out of the 10 journals had a CiteScore of four or above, with the Journal of Business Research having the highest CiteScore of 9.2, while the Journal of Distribution Science had the lowest CiteScore of 1.1. Given that its coverage in Scopus began only relatively recently in 2016 and it is the youngest among the top 10 journals, we predict that the Journal of Distribution Science shows potential for future growth in total citations despite its low current score.

Table 1 presents the top 10 journals related to brand image for the benefit of fellow researchers.

COUNTRIES, INSTITUTIONS AND GLOBAL COLLABORATION

Table 2 outlines the 15 most productive countries that significantly contribute to the expansion of brand image research worldwide. Approximately 55% of global publications have originated from the USA, UK, India, China, and Spain, highlighting them as key contributors to the advancement of brand image research. The USA leads the list with 484 articles, accounting for 20.71% of all global publications. The UK follows as the second top contributor, representing over half of the USA's publications. Despite the USA leading in overall publications, Universitat de Valencia has the highest total publications among institutions.

Among the top 15 countries, Indonesia (88.80%), Iran (88.00%), India (87.67%), and Taiwan (82.39%) recorded more than two-thirds of their articles published as single-country publications, indicating significant intra-country collaboration. Conversely, Canada has the lowest single-country publication rate at 28.79%, indicating a higher level of international collaboration. International collaboration offers numerous advantages, including broadening networks, knowledge transfer, and skill sharing. Such collaboration can enhance a country's ranking, as exemplified by Pakistan's ranking as the 15th most productive country with only 49 articles, contributing 67.35% of international collaborative articles.

Furthermore, it is noteworthy that one university from the top 15 made the World University Rankings 2022 list of the top 100 institutions— University of Manchester (ranking 50th) (Times Higher Education, 2022). This shows that brand image research has attracted the interest of a global leading university.

TABLE 2. Top 15 productive countries and academic institutions in brand image publications

Rank	Country	TPc	SCP(%)	The most productive academic institutions	TPI
1	USA	484	61.98	University of North Texas	15
2	UK	234	47.86	The University of Manchester	15
3	India	227	87.67	Amity University	7
4	China	187	56.15	East China University of Science and Technology	8
5	Spain	165	63.64	Universitat de Valencia	30
6	Taiwan	159	82.39	National Cheng Kung University	10
7	Australia	152	47.37	Griffith University	18
8	South Korea	143	62.94	Kyung Hee University	14
9	Malaysia	136	62.50	Universiti Utara Malaysia	22
10	Indonesia	125	88.80	Bina Nusantara University	25
11	France	82	56.10	Rennes School of Business	8
12	Germany	78	56.41	Universitat Hamburg	11
13	Canada	66	28.79	Simon Fraser University	7
14	Iran	50	88.00	University of Isfahan	13
15	Pakistan	49	32.65	University of Punjab	5

TPc: total publications of a given country; TPI: total publications of a given academic institution; SCP: single-country publications.

Figure 3 depicts the breakdown of the top 15 countries by region and co-authorship. In VOSviewer, a country's proximity refers to how closely linked the two are. The line becomes thicker as the ties between two countries get stronger. Europe (29) and Asia (29) each had the most countries per region, followed by America (15), Africa (10), and Oceania (4), respectively. The findings of the co-authorship analysis revealed that the United Kingdom has the highest number of affiliations, having co-authored 158 times with 46 other countries. The USA (45 links, 220 co-authorships) came in second on the list, followed by Australia (32 links, 98 co-authorships), Spain (28 links, 70 co-authorships), China (27 links, 107 co-authorships), and the others.

TABLE 1. Ten most prolific journals on brand image research and their most cited article

Rank	Journal	Total Publication	CiteScore 2020	SJR	SNIP	Percentile	Quartile	Title of the most cited article	Times cited*	Publisher
1	Journal of Business Research	2036	9.2	2.049	2.852	92	Q1	'Destination image and destination personality: An application of branding theories to tourism places'	420	Elsevier
2	Journal of Product and Brand Management	269	4.7	0.982	1.435	77	Q1	'Are brands forever? How brand knowledge and relationships affect current and future purchases'	389	Emerald
3	Sustainability Switzerland	24902	3.9	0.612	1.242	84	Q1	'The influence of excessive product packaging on green brand attachment: The mediation roles of green brand attitude and green brand image'	35	Multidisciplinary Digital Publishing Institute (MDPI)
4	European Journal of Marketing	487	4.7	1.199	1.720	74	Q1	'UK Consumers' Attitudes Towards Imports: The Measurement of National Stereotype Image'	185	Emerald
5	Journal of Brand Management	180	4.8	0.784	1.343	80	Q1	'The importance of brand heritage as a key performance driver in marketing management'	54	Springer Nature
6	Journal of Retailing and Consumer Services	873	9.0	1.568	2.534	92	Q1	'The role of product brand image and online store image on perceived risks and online purchase intentions for apparel'	130	Elsevier
7	Journal of Consumer Marketing	305	2.8	0.645	1.070	66	Q2	'Strategies for reducing consumers' risk aversion in internet shopping'	282	Emerald
8	Journal of Distribution Science	398	1.1	0.190	0.270	33	Q3	'The influence of service quality factors on reuse intention'	6	Korea Distribution Science Association (KODISA)
9	Journal of Marketing Communications	172	4.6	0.838	1.476	82	Q1	'Food health branding: The role of marketing mix elements and public discourse in conveying a healthy brand image'	34	Taylor & Francis
10	International Marketing Review	209	5.7	1.202	1.567	88	Q1	'The relationship between country-of-origin image and brand image as drivers of purchase intentions: A test of alternative perspectives'	130	Emerald

*Time cited & CiteScore 2021 report data last updated 05 October 2021

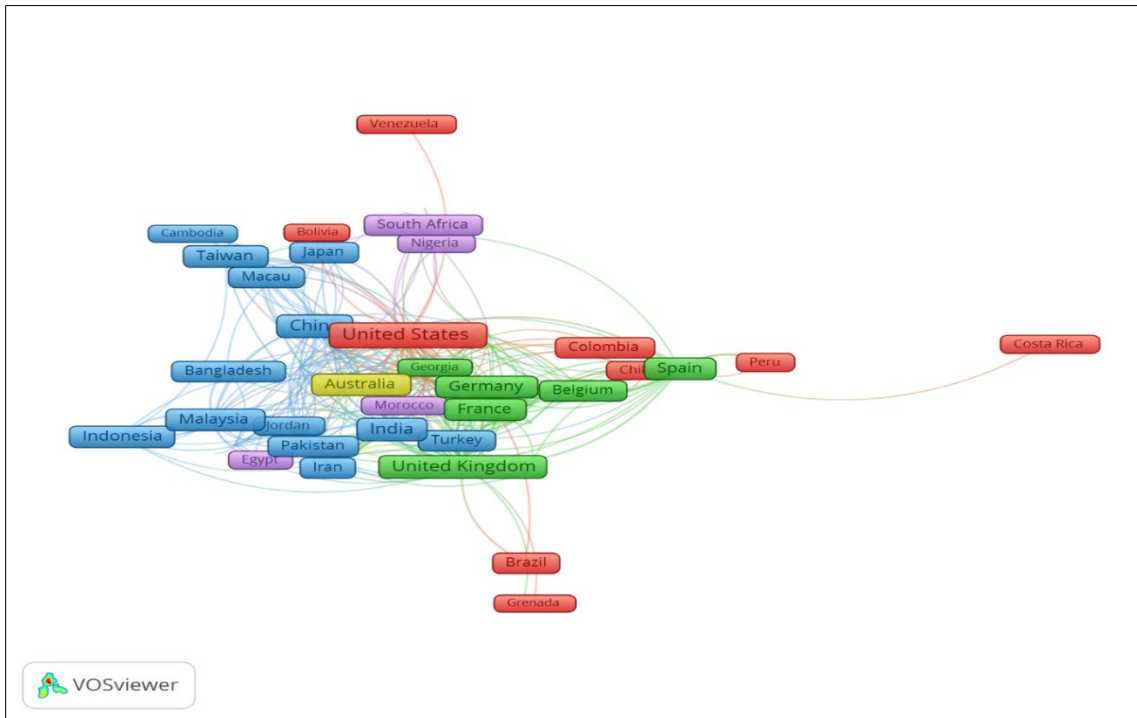


FIGURE 3. Bibliometric map screenshot based on co-authorship and region

AUTHOR KEYWORDS

Our analysis revealed a total of 6,040 author keywords. Among these, 4,852 (80.33%) were used once, 577 keywords (9.55%) were used twice, and 208 (3.44%) were used three times. Approximately 65.51% of the listed countries had joint publications with fewer than 10 other countries. Additionally, we enabled the overlay visualization mode in VOSviewer and set the minimum occurrences of a keyword to 30. After relabeling as synonymous single words and congeneric phrases for mapping, 26 keywords met the condition of having a minimum of 30 occurrences, as shown in Figure 4.

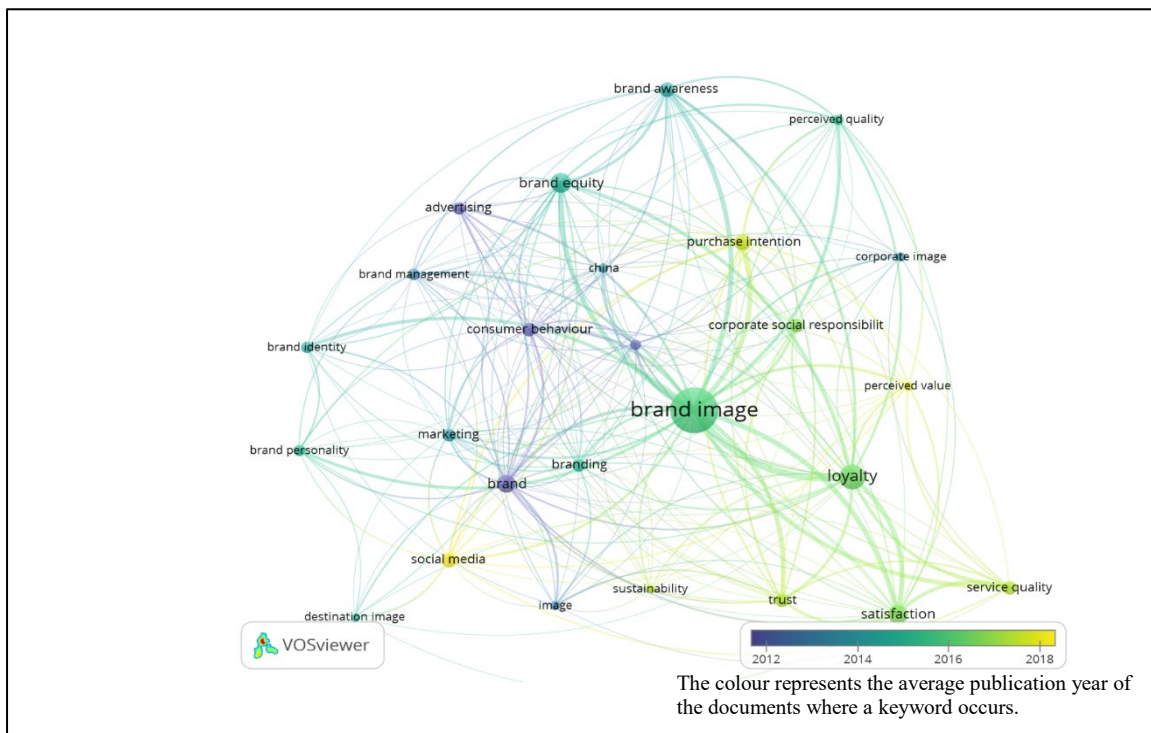


FIGURE 4. Bibliometric map screenshot of author keyword co-occurrence

Terminology and Concept The findings presented in Figure 4 reveal that 'brand image' was the most frequently used term, with 765 occurrences and 25 links to other keywords. Additionally, common phrases such as 'brand' (117 occurrences, 24 links), 'marketing' (63 occurrences, 21 links), 'advertising' (54 occurrences, 18 links), and 'sustainability' (30 occurrences, 12 links) were identified. Brand image was also observed to co-occur with established keywords such as 'loyalty' (222 occurrences), 'satisfaction' (124 occurrences), 'purchase intention' (94 occurrences), and 'trust' (73 occurrences). Furthermore, elements associated with brand image, including 'corporate image' (31 occurrences) and 'destination image' (30 occurrences), were noted. It is also worth exploring the history of specific terms such as "corporate image." Coined by Lesly (1959), the term "corporate image" was promoted by American research groups. Subsequently, the term "corporate brand image" has become increasingly utilized in recent publications. Similarly, various terms have been employed to evaluate the preference for meaningful brands or products, including 'brand identity' (50 occurrences) (Kohli et al. 2005) and 'brand personality' (53 occurrences) (Freling & Forbes 2005). These terms are used in various contexts within brand image publications.

Topics of Interest Identifying findings, implications, and areas of interest in brand image research is crucial as it provides insight into the field's current development stage and serves as a reference point for its future direction. Among the links identified in VOSviewer analysis, 'loyalty' appeared most frequently, with 222 occurrences. Indeed, brand image has been consistently found to have a direct positive relationship with loyalty (Ab Hamid et al. 2020; Da Silva & Syed Alwi 2008; Huo et al. 2021; Twum et al. 2021). For example, Pollay (2000), in an article entitled "Targeting youth and concerned smokers: Evidence from Canadian tobacco industry documents", asserted that companies used cigarette advertising as visual imagery to influence brand loyalty. Moreover, loyalty is clustered with other items such as satisfaction, trust, and service quality, which are popular factors to investigate. Loyalty is also used to determine brand strength (Shen et al. 2007) and is connected to various other concepts like brand equity, perceived value, brand awareness, and perceived quality. In fact, low brand loyalty has caused fierce rivalry among brands in the fashion industry (DeLong et al. 2004).

Scholars have explained the influence of brand image on brand loyalty via diverse brand equity models (i.e., customer-based, destination, halal) (Kumail et al. 2021; Kusumaningrum 2021; Xu et al. 2021; Yulianto et al. 2021), with 30 articles linking the two concepts. Apart from brand loyalty mechanisms, another notable aspect in brand image-loyalty research is the inclusion of a country's name, i.e., China, as an author keyword (35 occurrences, 18 links, average publication year 2014). According to RBC Emerging Markets Equity Team (2020), China is an emerging market with high value for brand investment due to its growth potential, increasing middle-class population, and higher average return on equity.

As an evolving construct, brand image is often evaluated and recognized as crucial in the corporate environment. The keyword "corporate image" (31 occurrences, 12 links) was frequently observed in relation to brand image studies. The term "corporate image" refers to customer responses, encompassing perceptions, concepts, and beliefs, towards a company's overall offerings and quality throughout customer interactions (Rungtornsupattana et al. 2019). Apart from its ability to enhance customer loyalty (Falola et al. 2018; Swimberghe et al. 2014), corporate image has a strong influence on organizational performance (Foroudi et al. 2021; Štreimikienė & Ahmed 2021), customer purchase intention (Lee & Lee 2018; Li et al. 2020; Souiden et al. 2020), and sustainability achievement (Ramos Farroñán & Palomino 2020).

Furthermore, corporate social responsibility is increasingly popular as a means of enhancing a company's image (Shabbir et al. 2018), as demonstrated by the growing body of research on their relationship in recent years (Lee & Lee 2018; Li et al. 2020; Meng-Chan Lau et al. 2021; Olaoye et al. 2019; Štreimikienė & Ahmed 2021). The keyword "corporate social responsibility" appeared 31 times with 12 links to multiple items in the VOSViewer map. The average publication year in 2014 indicates the growing trend of research on the corporate environment.

Other recent prominent research keywords are "social media," "brand personality," "brand identity," and "destination image" (average publication year 2018). Destination image, associated with tourism and place studies, has become particularly relevant due to the significant impact of the Covid-19 pandemic since early 2020. The effects of unprecedented situations such as natural disasters also remain largely unexplored, highlighting a significant research gap. Therefore, these findings should be considered in future studies.

DISTRIBUTION OF BRAND IMAGE PUBLICATIONS BASED ON KEY FUNCTIONS

The searches using the output subthemes indicated conclusive ties with the main theme based on the number of articles and author keyword occurrences. The total articles on loyalty/retention, satisfaction, trust, and purchase intention were computed from 1990 to 2021. Figure 5 illustrates that loyalty/retention was the most popular outcome, with 449 articles in Scopus and 222 occurrences. This was followed by satisfaction, with 305 articles and 124 occurrences; trust with 204 articles and 73 occurrences; and lastly, purchase intention with 238 articles

and 94 occurrences. The first article on loyalty was in 1990, yet it was not well-received. Trust was initially introduced in 2001, then was absent from the literature for four years before being reintroduced. Overall, all four output subthemes have been synchronously related to brand image since 2006.

Moreover, research interest in particular fields was assessed using the link strength of two keywords. Specifically, satisfaction (54 links) and loyalty (24 links) had the most links, representing their connections to 54 and 24 other keywords, respectively. Indeed, both keywords have been studied for many years and appeared the most in articles. In contrast, social media (1 link) and destination image (1 link) had the weakest links, indicating the need for deeper investigation into these concepts.

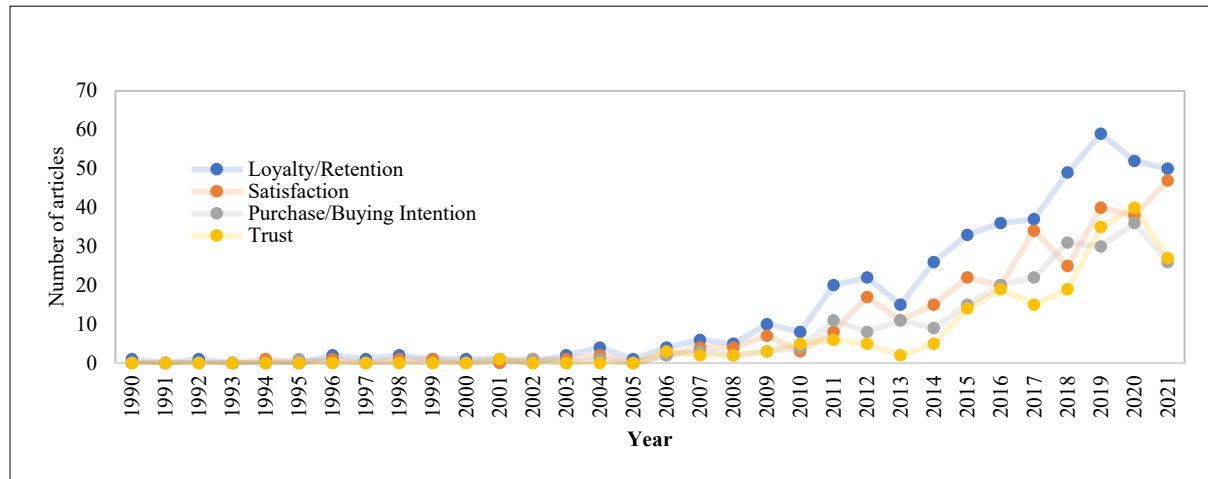


FIGURE 5. Research trends of subthemes under brand image

As presented in Figure 6, the highest number of brand image publications related to loyalty/retention, satisfaction, trust, and purchase intention came from the USA, followed by India and Taiwan. While the USA has focused the most on loyalty/retention, satisfaction, and purchase/buying intention, India has taken the lead in studying satisfaction. In general, Southeast Asian countries (Malaysia, South Korea, and Indonesia) are among the top countries producing excellent papers on brand image.

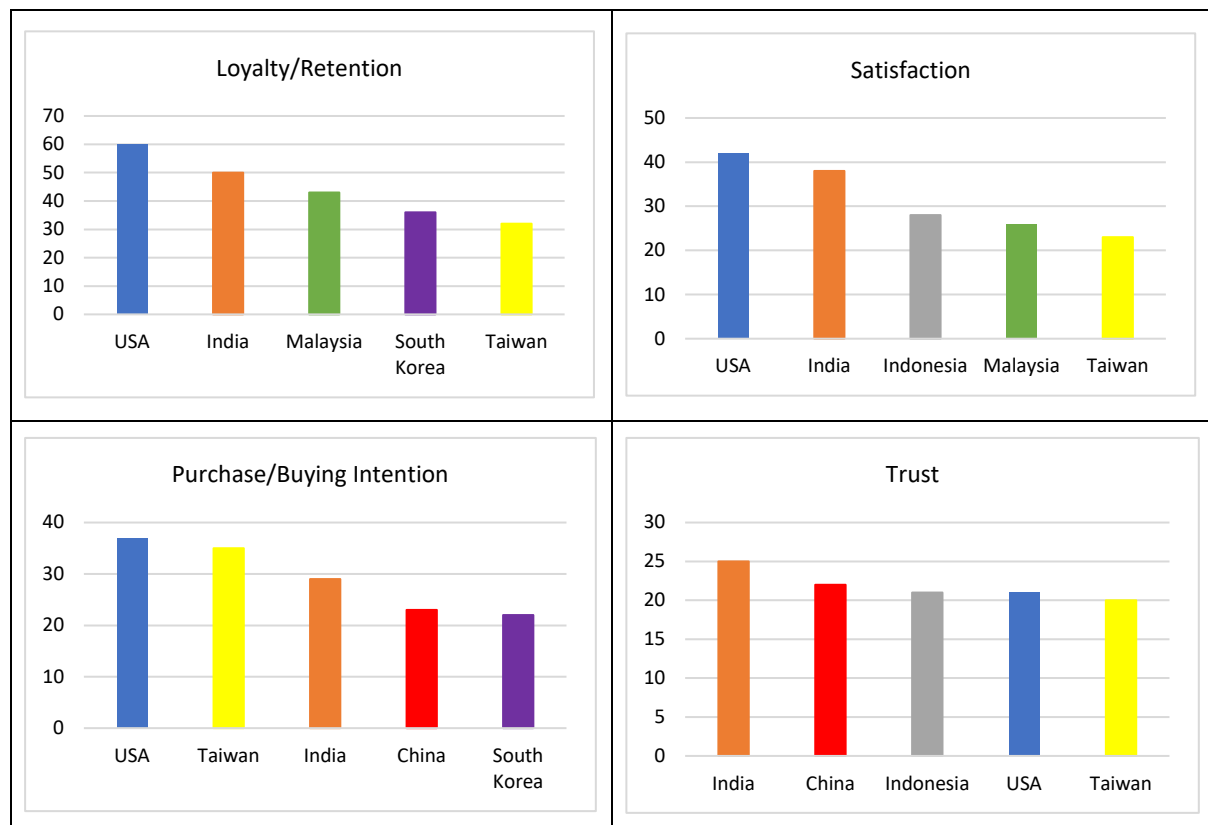


FIGURE 6. Top five countries by publication on brand image subthemes

DISCUSSION AND RECOMMENDATION FOR FUTURE STUDIES

The previous sections of this paper have covered the prominent countries, prolific academic institutions, top keywords, high interest areas, co-authorship patterns, and co-occurrence trends in brand image research publications over the past 50 years. Subsequently, this section seeks to fulfil the second research objective by presenting potential directions and recommendations for future research in this domain.

DESTINATION IMAGE AMID UNPRECEDENTED EVENTS

Based on the bibliometric analysis results, this paper encourages future studies on brand image in tourism and destination settings. Natural disasters and unforeseen events impact tourism businesses, tourist arrivals, and destination choices (Rosselló et al. 2020). For example, the Covid-19 pandemic spread worldwide and brought harmful consequences to the travel sector. As businesses navigate through the endemic and post-pandemic period, the scenario in this industry is uncertain. Destination managers are now compelled to prepare for destination image recovery, which remains a questionable phenomenon. Developing a brand image for a destination is a complex process that demands a thorough examination of various factors that may affect the future success of tourism businesses. However, the influence of brand image during crises or unprecedented events in tourism destinations is an underexplored area which warrants attention. Thus, this paper highlights a significant research gap regarding the influence of brand image on the reputation and performance of tourism destinations or businesses after crises, which requires empirical proof. Future studies could also identify any failures or improvements in destination image after unforeseen events.

BRAND IMAGE IN THE SEQUENTIAL MEDIATION APPROACH

Mediation analysis plays a crucial role in the advancement of social science theory. In this regard, an integrated understanding of the implications of brand image is imperative, as it can function as a mediator, antecedent, or other component in influencing individual responses. This paper posits that brand image's well-established connections with trust and satisfaction could serve as sequential mediators in the relationship between service quality and loyalty. However, a methodological gap exists in the application of the sequential mediation approach to investigate brand image mechanisms. By assessing a series of two or more mediators in an analysis framework (Tofighi & Kelley 2019), sequential models like the Stimulus-Organism-Response model and the Value-Attitude-Behavior theory could elucidate indirect effects (Rasoolimanesh et al. 2021) and potentially bridge this methodological gap.

ROLE OF DESTINATION BRAND IMAGE IN SOCIAL MEDIA

In Figure 4, the keyword "social media" is in yellow, implying its relatively recent average publication year compared to other keywords. This result suggests that there may be numerous unexplored issues pertaining to the online platform, particularly due to the increasing digitalization of business operations. Social media platforms have emerged as the most prominent channels for consumer engagement, a critical focus area in marketing research (Marketing Science Institute 2020). Maintaining competitiveness and visibility in the virtual setting is integral in the sustainability strategy for businesses. This highlights the nascent stage of research on brand image in the social media context, which is characterized by a lack of clarity and understanding. To better comprehend customer responses, this paper advocates for further investigation into brand image within social media, especially within the area of tourism and destination branding.

ROLE OF BRAND IMAGE IN THE ADVANCEMENT OF THEORY

A consistent trend in brand image literature involves the application of the brand equity model, particularly in assessing perceived value factors. Many studies within the service sector have utilized perceived value as either antecedents or mediators. More than a decade ago, Sánchez-Fernández and Iniesta-Bonillo (2007) suggested that studies focusing on perceived value and price-based metrics could benefit from theories such as Mean-End Theory, Consumption-Values Theory, Utilitarian and Hedonic Value Theory, Customer Value Hierarchy, Axiology or Value Theory, and Holbrook's Typology of Consumer Value. Future research could explore the relationship between brand image and perceived value using other relevant theories. Compared to loyalty, behavioral intention has received less attention as a response variable of brand image in the literature. The Service-Dominant Logic Theory, which evolved from the marketing field, may be useful in future research to better elucidate this relationship as it revolves around the fundamental concept of value (Vargo & Lusch 2004). According to this theory, businesses provide value in the form of benefits, service quality, knowledge, and skills (Kuzgun & Asugman 2015). Thus, the theory offers a more comprehensive understanding of brand image as the value co-created by providers and customers.

CONCLUSION

Understanding brand image is crucial as it offers insights into important individual behaviors in specific environments. For example, brand image perception can significantly impact customer expectations, product attractiveness, and customer loyalty. To better understand the research landscape of brand image, this bibliometric study provides an overview of brand image research trends from 1971 to 2021, using 2,605 papers extracted from the Scopus database. The research aimed to achieve two specific objectives: (i) to examine the distribution patterns of brand image journal articles in periodicals and (ii) to provide recommendations for potential directions of future research.

Our results show that since 1996, publications on brand image have experienced fluctuating growth (refer to Figure 5). Figure 6 further highlights countries/institutions with a significant number of publications (USA, UK, and India) and strong international collaborations (e.g., Indonesia, Iran, Taiwan, and India). Researchers from other areas may benefit from expanding their research networks through cooperation with these regions/institutions. Additionally, the concept of corporate image is observed to be complex and continuously evolving, such that understanding its dynamics is crucial for businesses to establish a favorable image in the eyes of their stakeholders. Future research could explore how social media positively and negatively impacts brand image. Moreover, the relationship between brand image and purchase intention warrants further study, as do the brand image dimensions of different firm types. Managing the perceptions of prospective customers under such scenarios is significant, as it can indirectly impact sales and profitability.

The theoretical implications of this study encompass the importance of brand image and its related constructs in influencing consumer behavior. For researchers, this study offers valuable insights into consumer behavior that can help advance the field. The findings can serve as a basis for further investigation, enabling researchers to build upon existing knowledge and expand the scope of their research. In particular, the popularity of brand image and other constructs should be leveraged using diverse theories and sequential mediation frameworks to attain a multifaceted understanding of branding.

Practically, this study has relevant implications for businesses seeking to strengthen their brand image and improve their marketing strategies in today's competitive market environment. The findings of this analysis can help businesses identify factors that influence consumer behavior and tailor their marketing efforts accordingly, ultimately enabling them to build stronger brand equity and achieve sustainable competitive advantage.

However, it is important to note the limitation of this study that articles about brand image published in reputed journals may not necessarily have been included in the Scopus database. We thus propose future research comparing outcomes from two reputable databases, such as WoS and Scopus. Such comparative research may utilize both databases' features, such as the "hot paper" feature exclusive to WoS. This feature automatically displays the most popular publications in the subject area in the search results. These important works receive a high number of citations soon after publication, indicating rapid and considerable recognition. Indeed, utilizing bibliometric analysis techniques from diverse data sources can provide a more thorough examination of the subject matter. Overall, the directions and recommendations contributed by this paper serve as a steppingstone for researchers to expand the body of literature on brand image.

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REFERENCES

- Ab Hamid, S.N., Jusoh, W.J.W. & Maulan, S. 2021. The influence of spiritual brand attributes towards the corporate brand image of Islamic banking institutions in Malaysia. *Jurnal Pengurusan* 61: 31–41.
- Ab Hamid, S.N., Wan Jusoh, W.J. & Maulan, S. 2020. Corporate brand image of Islamic bank in Malaysia: Antecedents and consequence. *International Journal of Management Studies* 27(1): 49–72.
- Abu ElSamen, A.A. 2015. Online service quality and brand equity: The mediational roles of perceived value and customer satisfaction. *Journal of Internet Commerce* 14(4): 509–530.
- Aghaei Chadegani, A., Salehi, H., Md Yunus, M.M., Farhadi, H., Fooladi, M., Farhadi, M. & Ale Ebrahim, N. 2013. A comparison between two main academic literature collections: Web of science and scopus databases. *Asian Social Science* 9(5): 18–26.
- Bianchi, E., Bruno, J.M. & Sarabia-Sanchez, F.J. 2019. The impact of perceived CSR on corporate reputation and purchase intention. *European Journal of Management and Business Economics* 28(3): 206–221.
- Da Silva, R.V. & Syed Alwi, S.F. 2008. Online corporate brand image, satisfaction and loyalty. *Journal of Brand*

Management 16(3): 119–144.

- De Noni, I., Orsi, L. & Zanderighi, L. 2019. Stereotypical versus experiential destination branding: The case of Milan city. *City, Culture and Society* 17: 38–45.
- Delong, M., Bao, M., Wu, J., Chao, H. & Li, M. 2004. Perception of US branded apparel in Shanghai. *Journal of Fashion Marketing and Management* 8(2): 141–153.
- Elouali, A., Alaoui, S.H., Ettahir, N., Khohmimidi, A., Motii, N., Rahali, K. & Kouzer, M. 2020. Touristic's destination brand image: Proposition of a measurement scale for Rabat City (Morocco). *Advances in Science, Technology and Engineering Systems* 5(6): 1750–1758.
- Falola, H.O., Adeniji A.A., Adeyeye, J.O., Osibanjo, A.O., Igbinoba, E.E. & Salau, O.P.P. 2018. Corporate image and customers behavioural outcomes in the ict inclined hospitality industry in Nigeria. *International Journal of Mechanical Engineering and Technology* 9(13): 854–864.
- Foroudi, P., Foroudi, M., Palazzo, M. & Nguyen, B. 2021. Fly me to the moon: From corporate branding orientation to retailer preference and business performance. *International Journal of Contemporary Hospitality Management* 34(1): 78–112.
- Freire, J. & Curvelo, R. 2021. Story creation and the impact of travel journalists on destination brands. *Geojournal of Tourism and Geosites* 37(3): 972–980.
- Goda, N. 2021. The influence of nation branding on tourism – How Slovakia compares to Austria in nation branding. *Romanian Journal of Geography* 65(1): 51–59.
- Hameed, I., Hyder, Z., Imran, M. & Shafiq, K. 2021. Greenwash and green purchase behavior: An environmentally sustainable perspective. *Environment, Development and Sustainability* 23(9): 13113–13134.
- Hosany, S., Ekinci, Y. & Uysal, M. 2006. Destination image and destination personality: An application of branding theories to tourism places. *Journal of Business Research* 59(5): 638–642.
- Huo, C., Hameed, J., Sadiq, M.W., Albasher, G. & Alqahtani, W. 2021. Tourism, environment and hotel management: An innovative perspective to address modern trends in contemporary tourism management. *Business Process Management Journal* 27(7): 2161–2180.
- Jacoby, J., Olson, J.C. & Haddock, R.A. 1971. Price, brand name, and product composition characteristics as determinants of perceived quality. *Journal of Applied Psychology* 55(6): 570–579.
- Jan van Eck, N. & Waltman, L. 2020. *VOSviewer Manual: Manual for VOSviewer Version 1.6.16*.
- Kavaratzis, M. 2009. Cities and their brands: Lessons from corporate branding. *Place Branding and Public Diplomacy* 5(1): 26–37.
- Keller, K.L. 1993. Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing* 57(1): 1–22.
- Kim, H.K. & Lee, T.J. 2018. Brand equity of a tourist destination. *Sustainability (Switzerland)* 10(2): 1–21.
- Kim, S. (Sam), Im, H.H. & King, B.E.M. 2015. Muslim travelers in Asia: The destination preferences and brand perceptions of Malaysian tourists. *Journal of Vacation Marketing* 21(1): 3–21.
- Kohli, C.S., Harich, K.R. & Leuthesser, L. 2005. Creating brand identity: A study of evaluation of new brand names. *Journal of Business Research* 58(11): 1506–1515.
- Kumail, T., Qeed, M.A. Al, Aburumman, A., Abbas, S.M. & Sadiq, F. 2021. How Destination brand equity and destination brand authenticity influence destination visit intention: Evidence from the United Arab Emirates. *Journal of Promotion Management* 28(3): 332–358.
- Kusumaningrum, S.D. 2021. Destination brand equity: A perspective of generation z on a world heritage site in Indonesia. *Journal of Asian Finance, Economics and Business* 8(2): 1071–1078.
- Kuzgun, E. & Asugman, G. 2015. Value in services – A service dominant logic perspective. *Procedia - Social and Behavioral Sciences* 207: 242–251.
- LeBlanc, G. & Nguyen, N. 1996. Cues used by customers evaluating corporate image in service firms: An empirical study in financial institutions. *International Journal of Service Industry Management* 7(2): 44–56.
- Lee, J. & Lee, Y. 2018. Effects of multi-brand company's CSR activities on purchase intention through a mediating role of corporate image and brand image. *Journal of Fashion Marketing and Management* 22(3): 387–403.
- Lesly, P. 1959. 'Corporate Image' and the future leaders of business. *Public Opinion Quarterly* 23(4): 547–553.
- Li, Y., Teng, W., Liao, T.T. & Lin, T.M.Y. 2020. Exploration of patriotic brand image: Its antecedents and impacts on purchase intentions. *Asia Pacific Journal of Marketing and Logistics* 33(6): 1455–1481.
- Lu, Y., Liu, Y., Tao, L. & Ye, S. 2021. Cuteness or coolness—How does different anthropomorphic brand image accelerate consumers' willingness to buy green products? *Frontiers in Psychology* 12: 1–14.
- Mabkhot, H.A. & Shaari, H. Bin. 2015. The influence of brand image and brand personality on brand loyalty. *Australian Journal of Basic and Applied Sciences* 9: 493–497.
- Mandagi, D.W., Centeno, D.D.G. & Indrajit. 2021. Brand gestalt scale development and validation: A takeoff from tourism destination branding. *Journal of Destination Marketing and Management* 19.

- Marketing Science Institute. 2020, May 7. *Research Priorities 2020-2022*. Marketing Science Institute.
- Md Khudzari, J., Kurian, J., Tartakovsky, B. & Raghavan, G.S.V. 2018. Bibliometric analysis of global research trends on microbial fuel cells using Scopus database. *Biochemical Engineering Journal* 136: 51–60.
- Meng-Chan Lau, V., Ren, L. & Yang, F.X. 2021. CSR and casino hotel branding: The joint moderation of CSR misfit and corporate awareness. *Journal of Hospitality and Tourism Management* 49: 375–384.
- Nusairat, N.M., Alroale, M.A., Qeed, M. Al, Al-Gasawneh, J.A., Hammouri, Q., Ahmad, A. & Abdellatif, H. 2021. User-generated content - Consumer buying intentions nexus: The mediating role of brand image. *Academy of Strategic Management Journal* 20(4): 1–12.
- Olaoye, B.G., Iyiola, O.O. & Chinonye, L.M. 2019. Corporate social responsibility for sustainable corporate image, and competitive performance of manufacturing firms in Nigeria. *International Journal of Recent Technology and Engineering* 8(1).
- Pollay, R.W. 2000. Targeting youth and concerned smokers: Evidence from Canadian tobacco industry documents. *Tobacco Control* 9(2): 136–147.
- Rahi, S. & Ghani, M.A. 2016. Customer's perception of public relation in e-commerce and its impact on E-Loyalty with brand image and switching cost. *Journal of Internet Banking and Commerce* 21(3): 1–20.
- Ramos Farroñán, E.V. & Palomino, N.V. 2020. Corporate image management as a sustainability strategy: Path to business change [Gestión de imagen corporativa como estrategia de sostenibilidad: Camino al cambio empresarial]. *Universidad y Sociedad* 12(1): 292–298.
- Rasoolimanesh, S.M., Wang, M., Roldán, J.L. & Kunasekaran, P. 2021. Are we in right path for mediation analysis? Reviewing the literature and proposing robust guidelines. *Journal of Hospitality and Tourism Management* 48: 395–405.
- RBC Emerging Markets Equity Team. 2020, September 8. *The future of emerging markets: Brands*. Global Asset Management.
- Rodriguez-Santos, C., Ganassali, S., Casarin, F., Cerchiello, P., Mau, G., Santos, C.R. & Siebels, A. 2008. How perceived image of a sponsorship event influences on the brand perceptions: An international research of the America'S Cup and Louis Vuitton. *International Journal of Management Cases* 10(3): 261–281.
- Rosselló, J., Becken, S. & Santana-Gallego, M. 2020. The effects of natural disasters on international tourism: A global analysis. *Tourism Management* 79.
- Rungrisawat, S., Namdej, P. & Jermittiparsert, K. 2019. Role of physical environment to create corporate image and customer loyalty of Thai Airline customers: The Moderating role of perceived value. *International Journal of Innovation, Creativity and Change* 8(8): 296–314.
- Sánchez-Fernández, R. & Iniesta-Bonillo, M.Á. 2007. The concept of perceived value: A systematic review of the research. *Marketing Theory* 7(4): 427–451.
- Schade, M., Piehler, R., Müller, A. & Burmann, C. 2018. How cities can attract highly skilled workers as residents: The impact of city brand benefits. *Journal of Product and Brand Management* 27(7): 847–857.
- Shabbir, M.S., Shariff, M.N.M., Bin Yusof, M.S., Salman, R. & Hafeez, S. 2018. Corporate social responsibility and customer loyalty in Islamic banks of Pakistan: A mediating role of brand image. *Academy of Accounting and Financial Studies Journal* 22: 1–6.
- Shen, Y.C., Chi, C.H., & Chen, J.S. 2007. A new perspective on the effects of price promotions in Taiwan: A longitudinal study of a Chinese society. *International Journal of Consumer Studies* 31(4): 385–390.
- Shin, H.R. & Choi, J.G. 2021. The moderating effect of 'generation' on the relations between source credibility of social media contents, hotel brand image and purchase intention. *Sustainability* 13(16): 11–13.
- Souiden, N., Amara, N. & Chaouali, W. 2020. Optimal image mix cues and their impacts on consumers' purchase intention. *Journal of Retailing and Consumer Services* 54.
- Štreimikienė, D. & Ahmed, R.R. 2021. Corporate social responsibility and brand management: Evidence from carroll's pyramid and triple bottom line approaches. *Technological and Economic Development of Economy* 27(4): 852–875.
- Stylos, N., Bellou, V., Andronikidis, A. & Vassiliadis, C.A. 2017. Linking the dots among destination images, place attachment, and revisit intentions: A study among British and Russian tourists. *Tourism Management* 60: 15–29.
- Sung, M. & Yang, S.U. 2008. Toward the model of university image: The influence of brand personality, external prestige, and reputation. *Journal of Public Relations Research* 20(4): 357–376.
- Susanto, R., Widjaja, N.O., Adelia. & Kartono, R. 2021. Relationship of service quality and brand image on customer loyalty on individual internet banking (Klik bca individual): Role of customer trust as mediator. *International Journal of Applied Engineering and Technology (London)* 3(1): 13–22.
- Swimberghe, K.R., Wooldridge, B.R., Ambort-Clark, K.A. & Rutherford, J. 2014. The influence of religious commitment on consumer perceptions of closed-on-Sunday policies: An exploratory study of Chick-fil-A in the southern United States. *International Review of Retail, Distribution and Consumer Research* 24(1): 14–29.
- Syed Alwi, S.F., Nguyen, B., Melewar, T.C., Loh, H.Y. & Liu, M. 2016. Explicating industrial brand equity:

- Integrating brand trust, brand performance and industrial brand. *Industrial Management & Data Systems* 116(5): 858–882.
- Thaichon, P. & Quach, T.N. 2015. From marketing communications to brand management: Factors influencing relationship quality and customer retention. *Journal of Relationship Marketing* 14(3): 197–219.
- Times Higher Education. 2022. *The World University Rankings*. Retrieved from <https://www.timeshighereducation.com/world-university-rankings>
- Tran, V.T., Nguyen, N.P., Tran, P.T.K., Tran, T.N. & Huynh, T.T.P. 2019. Brand equity in a tourism destination: A case study of domestic tourists in Hoi An city, Vietnam. *Tourism Review* 74(3): 704–720.
- Twum, K.K., Yalley, A.A., Agyapong, G.K.Q. & Ofori, D. 2021. The influence of Public University library service quality and library Brand image on user loyalty. *International Review on Public and Nonprofit Marketing* 18(2): 207–227.
- Uppal, M.A., Ali, S. & Gulliver, S.R. 2018. Factors determining e-learning service quality. *British Journal of Educational Technology* 49(3): 412–426.
- Vargo, S.L. & Lusch, R.F. 2004. Evolving to a new dominant logic for marketing. *Journal of Marketing* 68: 1–17.
- Vieira, V.A. 2013. Stimuli-organism-response framework: A meta-analytic review in the store environment. *Journal of Business Research* 66(9): 1420–1426.
- Wang, S. & Xu, H. 2015. Influence of place-based senses of distinctiveness, continuity, self-esteem and self-efficacy on residents’ attitudes toward tourism. *Tourism Management* 47: 241–250.
- Woosnam, K.M., Styliadis, D. & Ivkov, M. 2020. Explaining conative destination image through cognitive and affective destination image and emotional solidarity with residents. *Journal of Sustainable Tourism* 28(6): 917–935.
- Xu, F., Zhan, C., Lu, L., Tan, J., Li, S. & Li, J. 2021. Is the destination brand loyalty mechanism invariable? A comparative study from China. *Journal of Destination Marketing and Management* 22.
- Yulianto, H., Sutomo, Y., Palupiningtyas, D. & Nugraheni, K.S. 2021. Investigating the role of interactive social media and halal brand equity on purchase decision-making: Direct and indirect effects. *Measuring Business Excellence* 26(4): 524–540.
- Zenker, S. & Braun, E. 2017. Questioning a “one size fits all” city brand: Developing a branded house strategy for place brand management. *Journal of Place Management and Development* 10(3): 270–287.
- Zenker, S., Braun, E. & Petersen, S. 2017. Branding the destination versus the place: The effects of brand complexity and identification for residents and visitors. *Tourism Management* 58: 15–27.

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