

CURRENT STATE OF RESEARCH IN THE FIELD OF DIGITAL BRAND EQUITY

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Purpose: In the digital era, the importance of brand and branding is increasing. Therefore, the aim of this study is to determine the current state of development of the research field on digital brand equity (DigBE).

Design/methodology/approach: The five steps of a bibliometric analysis were applied, including design, compilation, analysis, visualization, and interpretation. A complex search of the Scopus database yielded 166 publications in total. Science mapping and performance metrics relating to publications and citations were used in analysed studies.

Findings: Since 2002, when the first article on HBE was released, 166 publications have been published, with 3,487 citations. The primary categories for these publications were accounting, management, and business. The most associated countries included Portugal, China, India, Australia, and the United States. 859 items were found using keyword analysis, and 13 clusters were identified in the science mapping, for example: digital brand-consumer relationships, digital brand management, the importance of social media for online branding, business determinants, customer satisfaction and loyalty social media marketing activities, or shaping user experience using artificial intelligence.

Research limitations/implications: DigBE was analysed in general, indicating digital marketing and social media marketing without indicating specific social media. Secondly, the entire period 2002-2023 was analysed, without identifying sub-periods. Thirdly, the study dealt with brands in general, without pointing product brands, service brands, or other brands, including city brands or tourist destination brands.

Practical implications: Recommendations for managers relate to several aspects. Firstly, attention should be paid to the specificity of digital marketing in the context of shaping the brand-consumer relationship. Secondly, managers should monitor the effects of their activities through social media. Thirdly, managers should pay attention to the coherence of the marketing activities carried out and the interdependence of the different channels.

Originality/value: This study on DigBE conducted using bibliometric analysis fills a research gap, as there were no studies showing the current state of development of this research area. Clusters depicting current research areas in the field of DigBE were identified, and this constitutes the novelty of this study.

Keywords: digital brand equity, digital branding, bibliometric analysis.

Category of the paper: literature review.

1. Introduction

Digital marketing is an increasingly important research area for marketing in recent times (Naim, Al Ghamdi, 2023; Singh, Kaunert, 2024; Tandur et al., 2024). Research addresses, for example, hyper-personalisation in the context of the use of artificial intelligence and positive consumer experiences for planning effective marketing strategies and actions taken to increase brand loyalty (Singh, Kaunert, 2024). The impact of digital marketing on purchase intentions with the moderating effect of brand equity was also analysed (Alwan, Alshurideh, 2022). Furthermore, the impact of digital marketing on brand building, including brand awareness and development (Yuvaraj, Indumathi, 2018), the effectiveness of e-commerce, social media marketing, and brand-consumer communication (Naim, Al Ghamdi, 2023), and business performance, including the increase of sales and size of consumer groups (Tandur et al., 2024) have been studied.

Brand equity is crucial issue in brand marketing (Almestarihi et al., 2021; De Verma, 2021; Rojas-Lamorena et al., 2022; Dropulić et al., 2022). Empirical studies published in the literature refer to different categories of products (Juga et al., 2018; Morrison, Eastburn, 2006; Tong, Hawley, 2009), services (Hazée et al., 2017; Kimpakorn, Tocquer, 2010), brands, companies, and institutions (Pappu et al., 2005; Tong, Hawley, 2009; Yoo, Donthu, 2001). Retail brands (Çifci et al., 2016; Dwivedi, Merrilees, 2013), place brands (Andéhn et al., 2014; Florek, Kavaratzis, 2014), city brands (Florek, 2012; Gómez et al., 2018; Górska-Warsewicz, 2020), university brands (De Heer, 2020), and green brands (Gupta et al., 2019; Konuk et al., 2015; Vijay MallikRaj et al., 2017) have also been analyzed.

A research gap was identified regarding digital brand equity, although there are studies in the form of bibliometric analysis and systematic literature review in this area. For example, they address brand equity in the digital era and analyze the issue in the context of technology. The search path of ‘brand equity’ and ‘technology’ was used. Key research areas such as product and service innovation, integrated marketing communication, and artificial intelligence were pointed out (Dropulić et al., 2022). Consumer-based brand equity for online brands was also investigated using a systematic literature review combined with bibliometric analysis. The search path used the keywords of ‘brand equity’ and ‘online’. It was shown that such brand equity is linked to online consumer behavior, including communication, engagement, and electronic word-of-mouth, among others. It was indicated that digital brand equity is studied analogously to non-digital brand equity (Enes et al., 2024).

Based on the above considerations, the purpose of this study was to examine the present status of DigBE with the use of bibliometric analysis. Three research questions were developed:

1. How is the knowledge field's growth in DigBE advancing?
2. Which authors, countries, and publication sources stand for the progress of DigBE knowledge?
3. What areas of research topics are being examined in relation to DigBE?

2. Literature review

Digital marketing can be defined as the practice of promoting products or services using electronic means (Francis et al., 2023). Utilizing digital media and technologies to advertise goods and services, digital marketing is an essential part of contemporary corporate tactics. It includes a range of strategies and resources meant to interact with customers via digital platforms like social media, email, the internet, and mobile devices (Fernandes, Vidyasagar, 2015; Guarda et al., 2020; Veleva, Tsvetanova, 2020). With a wide range of tools and strategies to efficiently reach and engage customers through a variety of online platforms, digital marketing is a crucial tactic for companies looking to remain competitive (Fernandes, Vidyasagar, 2015; Veleva, Tsvetanova, 2020).

Digital marketing is the process of managing and implementing marketing plans through electronic media, such as websites, emails, interactive television, and wireless media. To customize marketing campaigns and improve consumer relations through mass customization, it uses digital data about client traits and behavior (Fernandes, Vidyasagar, 2015). In this context, digital marketing uses email marketing, search engine optimisation, mobile marketing, and blogging to build and communicate brand positioning. It increases brand awareness in multi-channel brand communication. In this context, digital marketing can be referred to digital branding or digital communication (Yuvaraj, Indumathi, 2018). Digital marketing also uses social media platforms, and content marketing, enabling direct, personalized communication with consumers in real time. This fosters immediate responses to market and customer needs (Baron et al., 2014; Guarda et al., 2020).

Digital marketing is essential for digital branding in relation to consumer interaction, promotion, and brand building. Using several channels, it increases brand exposure and loyalty. These resources assist brands in efficiently communicating their positioning and interacting with customers (Yuvaraj, Indumathi, 2018). In addition, high-impact digital ads, particularly interactive ones, increase likeability and brand connection, which increases virality and retransmission (Baron et al., 2014). This leads to stronger relationships between brands and consumers fostered by the direct and indirect interactions that digital platforms provide. This exchange is essential for increasing brand recognition and loyalty (Aancy et al., 2023).

The issue of brand equity is important in digital branding (AbdGhani et al., 2024). Brand equity has been the subject of numerous studies since the late 1980s (Aaker, 1991; Farquhar, 1989; Keller, 1993). Definitions from 1989-1993 identify brand equity as the value added to a product (Farquhar, 1989), the set of assets and liabilities associated with a brand name (Aaker, 1991), and the consumer response to brand marketing (Keller, 1993). Regarding digital brand equity, social media marketing and other digital branding tactics are crucial for creating solid customer-brand interactions, which in turn greatly increase brand equity. This relationship is essential because it fosters customer loyalty and emotional ties (AbdGhani

et al., 2024). In addition, digital marketing allows brand equity to be managed and influences the growth of small and medium-sized enterprises (Dumitriu et al., 2019). An important element is the issue of trust in shaping digital brands, which is analyzed in the literature through models referring to branding theory and practice (Ozbal et al., 2020).

3. Methodology

The purpose of this study was to examine the present status of DigBE with the use of bibliometric analysis. This approach to analysis is becoming more and more common (Donthu et al., 2021; Ellegaard, 2018; Moral-Muñoz et al., 2020). Bibliometric analysis is a method to determine the current condition of the area of study from a historical viewpoint and forecast future development trends (Gan et al., 2022). The methodology used for the bibliometric analysis was Zupic & Čater (2015). Design, compilation, analysis, visualization, and interpretation are the five steps of this bibliometric process (Zupic, Čater, 2015).

Research topics and the study's design were developed in the first stage. The Scopus database provided bibliometric information in the form of 166 publications for the second step. Under time constraints, the search was carried out on September 10, 2024, using the state as of December 31, 2023. The search path employed was as follows: (TITLE-ABS-KEY ("brand equity") AND TITLE-ABS-KEY (digital) AND (PUBYEAR > 2001 < 2024) (LIMIT-TO (LANGUAGE, "English"))).

The data analysis at the third step included science mapping and performance analysis. Indicators pertaining to publications, such as the quantity of publications and lead authors, as well as citations, such as the total number of citations and the average number of citations per year, were employed (Donthu et al., 2021). By source, the bibliometric study looks at the topics covered in DigBE and Scopus publications. Charts showing the quantity of items and clusters are part of the bibliometric counting method of science mapping. The authors with the most publications were determined. The number of clusters was determined by mapping as bibliometric counting of authors of DigBE articles. The countries with the most affiliations are displayed in this study.

The entire number of keywords and the ranking of the most common terms were revealed via keyword analysis. An examination of co-occurrence was found using mapping techniques. A minimum of five keyword occurrences were covered by a counting approach. To prepare bibliometric counting and co-occurrence analysis, VOSviewer (Nees Jan van Eck and Ludo Waltman, Leiden University, version 1.6.17) was utilized. The discussion section concludes the bibliometric study by providing a summary of the responses to the research questions.

4. Results

4.1. Number of DigBE publications and citations

There were 166 publications on DigBE at the end of 2023. Eight studies were published between 2002 and 2010, 92 studies between 2011 and 2020, and 66 documents between 2021 and 2023, with an average of 7.5 publications each year (Figure 1).

The first publication indexed in the Scopus database is *Proceedings of the International Conference on Information Systems, ICIS 2002* (ICIS 2002 Proceedings, 2002). 93 papers were presented in the conference proceedings, including one paper on determinants of brand equity in e-business. No publication on DigBEs was published for two consecutive years. In contrast, two studies were published in 2005. The first is *An approach to the measurement, analysis, and prediction of brand equity and its sources* in *Management Science* by V. Srinivasan, C.S. Park, and D.R. Chang. A new definition of brand equity was proposed, indicating the incremental contribution in dollars per year achieved by branded products compared to the underlying product (or service) with no brand-building efforts. Three sources of brand equity were analyzed: brand awareness, attribute perception biases, and non-attribute preference in relation to digital phones as a single product category. The second publication was a conference paper *The ability of branded online games to build brand equity: An exploratory study* by D. Deal published in the Proceedings of the DiGRA 2005 Conference. The publication analyzed the importance of advergames, pointing to the brand equity of advergame products.

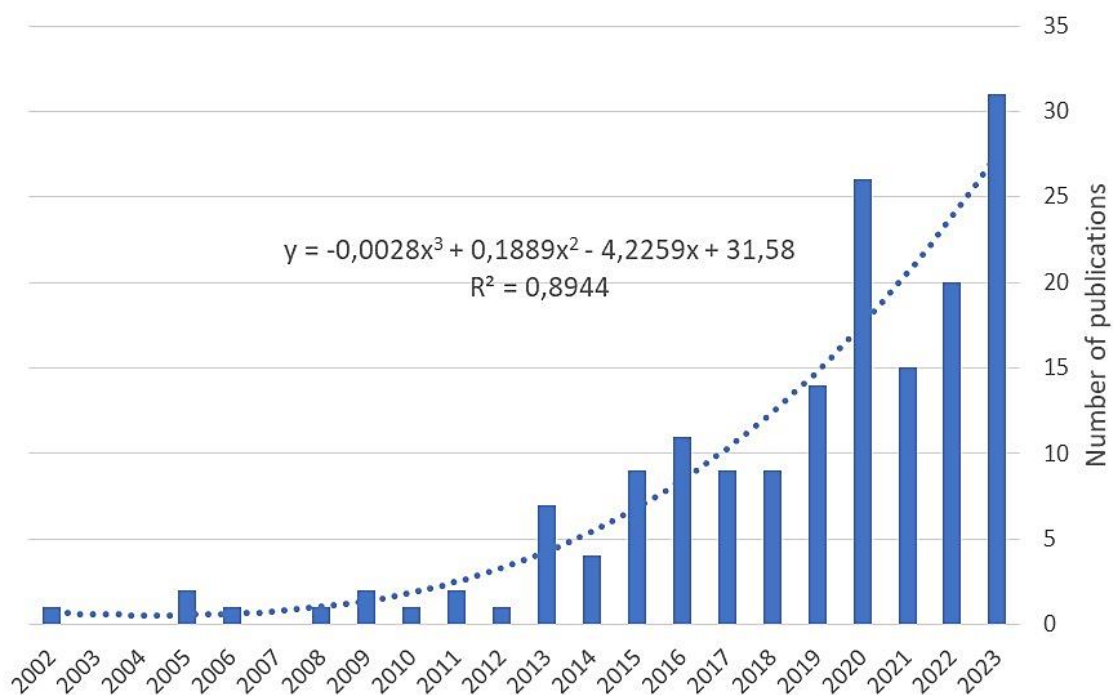


Figure 1. Number of DigBE publications between 2002 and 2023.

Source: Scopus data with trend line, as of 31.12.2023.

The total number of citations of the DigBE studies included in this bibliometric analysis is 3487. The average annual number of citations equals 158.5. Of the 166 DigBE publications, 115 were cited with an h-index of 30. Between 2002 and 2010, the number of citations was 42, and between 2010 and 2020, it was 659 citations. In the 2021-2023 period, the studies received 1818 citations (Figure 2).

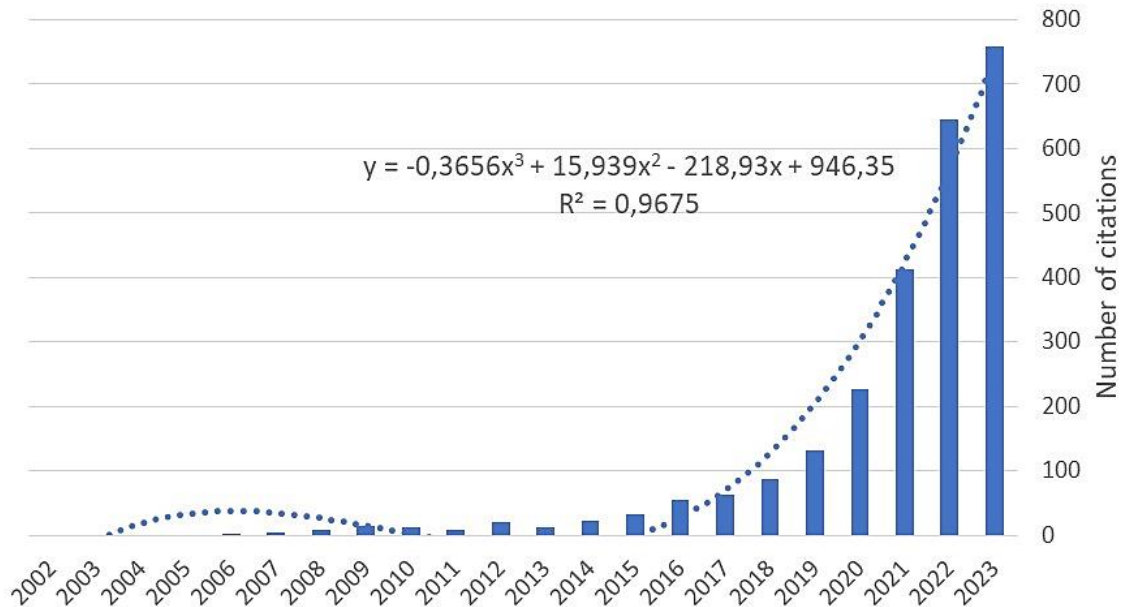


Figure 2. Number of DigBE citations between 2003 and 2023.

Source: Scopus data with trend line, as of 31.12.2023.

The article *Digital content marketing's role in fostering consumer engagement, trust, and value: framework, fundamental propositions, and implications* published in 2019 in the *Journal of Interactive Marketing* received the highest number of citations (Hollebeek, Macky, 2019). By the end of 2023, this article had received 447 citations, which is almost 80% more than the next publication (Table 1). The article defines digital content marketing as the production and distribution of pertinent, value brand-related material on digital platforms to build positive brand engagement, trust, and relationships with present or potential customers. In addition, the determinants of consumer-based digital content marketing were identified, such as functional, hedonistic, and authenticity-based motivations.

Table 1.
Most cited DigBE publications

No.	Title	Authors	Journal	Year	Number of citations
1.	Digital content marketing's role in fostering consumer engagement, trust, and value: framework, fundamental propositions, and implications.	Hollebeek, L.D., Macky, K.	Journal of Interactive Marketing, 45, pp. 27-41	2019	441
2.	Branding in a hyperconnected world: refocusing theories and rethinking boundaries.	Swaminathan, V., Sorescu, A., Steenkamp, J.-B.E.M., O'Guinn, T.C.G., Schmitt, B.	Journal of Marketing, 84(2), pp. 24-46	2020	247
3.	Reflections on customer-based brand equity: perspectives, progress, and priorities.	Keller, K.L.	AMS Review, 6(1-2)	2016	210
4.	Social media and luxury brand management: The case of Burberry.	Phan, M., Thomas, R., Heine, K.	Journal of Global Fashion Marketing, 2(4), pp. 213-222	2011	175
5.	An approach to the measurement, analysis, and prediction of brand equity and its sources.	Srinivasan, V., Park, C.S., Chang, D.R.	Management Science, 51(9), pp. 1433-1448	2005	170
6.	What makes followers loyal? The role of influencer interactivity in building influencer brand equity	Jun, S., Yi, J.	Journal of Product and Brand Management, 29(6), pp. 803-814	2020	150
7.	Customer information resources advantage, marketing strategy and business performance: A market resources based view.	Varadarajan, R.	Industrial Marketing Management, 89, pp. 89-97	2020	146
8.	Social media marketing.	Saravanakumar, M., SuganthaLakshmi, T.	Life Science Journal, 9(4), pp. 4444-4451	2012	131
9.	Antecedent consumer factors, consequential branding outcomes and measures of online consumer engagement: current research and future directions.	Gomez-Trujillo, A.M., Velez-Ocampo, J., Gonzalez-Perez, M.A.	Journal of Research in Interactive Marketing, 14(2), pp. 239-268	2020	107

Publications with the highest number of citations (above 100).

Source: Scopus data, as of 31.12.2023.

4.2. Subject areas and authors of DigBE publications

Business, management, and accounting was the subject area with the greatest number of publications (above 100) (Table 2). The subject areas such as *computer science, social sciences* and *economics, econometrics, and finance* came next with more than 30 articles. Further areas were less important in terms of the number of included publications. These included *engineering, decision sciences, environmental science, arts and humanities, and mathematics*. The remaining subject areas included five or fewer publications.

Table 2.
Subject areas of DigBE publications

Subject areas	Frequencies
Business, management, and accounting	109
Computer science	36
Social sciences	34
Economics, econometrics, and finance	34
Engineering	12
Decision sciences	9
Environmental science	7
Arts and humanities	7
Mathematics	6
Energy	5
Medicine	4
Agricultural and biological sciences	3

Each publication can be classified in the Scopus database into several subject areas.

Source: Scopus data, as of 31.12.2023.

The authors of the DigBE publications were diverse. This is evidenced by the fact that no author has published more than two studies. Among the authors who published two publications were: Akter S., Branco F., Correia R., Das S., Dias P., Erickson G.S., Gonçalves R., Hollebeek L.D., Martins J., Mironova L., Peltier J., Powell S.M., Puriwat W., Rodrigues S., Rothberg H.N., Swaminathan V., and Vilhena E. The other authors each published one study.

4.3. Countries and sources of DigBE publications

The United States has the greatest group of authors, followed by India (Table 3). There were 10-12 authors or co-authors from Australia, China, and Portugal. Other nations, such as France, Italy, and Germany, had less than ten affiliations.

Table 3.
Affiliate countries of DigBE publications

Countries	Frequencies
United States	36
India	20
Australia	12
China	10
Portugal	10
France	7
Italy	6
Germany	6
United Kingdom	5
Switzerland	5
Sweden	5
South Korea	5
Indonesia	5
Canada	5
Taiwan	4
Malaysia	4

Table does not include countries that have been affiliated 3 times or less.

Source: Scopus data, as of 31.12.2023.

The bibliographic coupling identified 61 countries. Using the minimum number of documents at level 2, 34 countries were identified in 7 clusters (Figure 3). Eight countries (Austria, France, Hungary, Italy, New Zealand, Switzerland, Turkey, and the United Kingdom) were classified into the first cluster, seven countries (Greece, Indonesia, Malaysia, Romania, Russian Federation, Taiwan, and Thailand) in cluster No. 2, five countries (Estonia, India, South Africa, South Korea, and the United Arab Emirates) in cluster No. 3, four countries (Australia, Portugal, Spain, and the United States) in clusters No. 4, four countries (Albania, Canada, Iran, and the United States) in cluster No. 5, three countries (Brazil, Germany, and Sweden) in cluster No. 6, and three countries (China, Hong Kong, and Pakistan) in cluster No. 7.

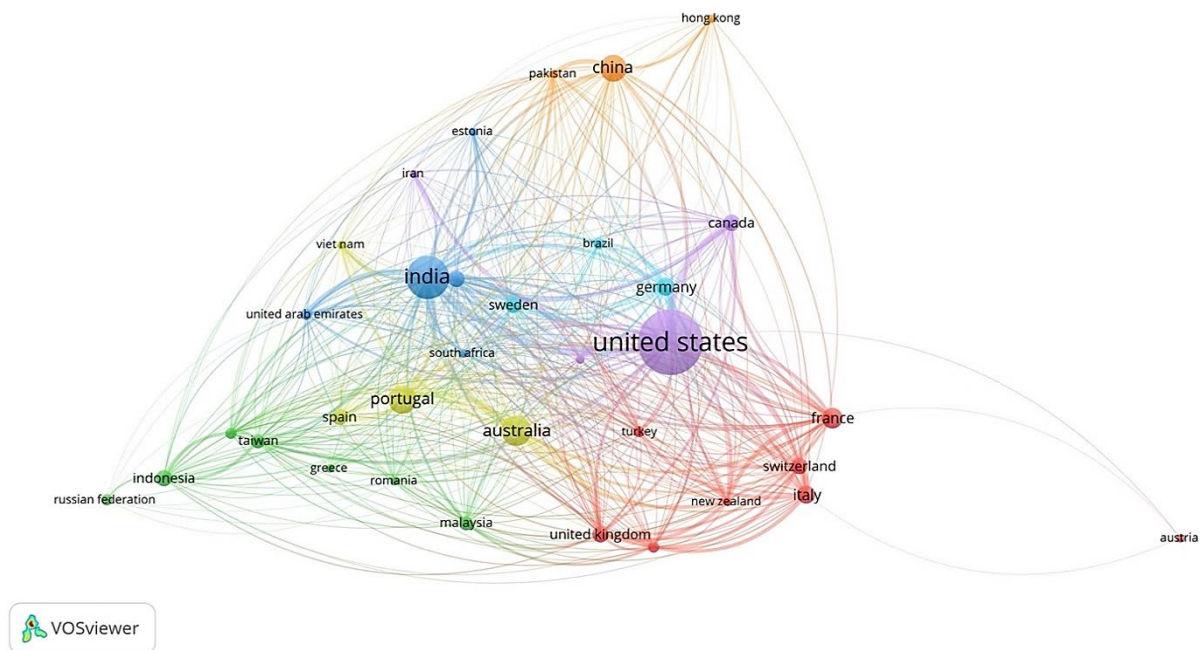


Figure 3. Bibliometric coupling of countries for DigBE publications.

Source: VOSviewer based on Scopus data, as of 31.12.2023.

Publications on DigBE were mainly published as articles in journals (103 documents) and publications in conference proceedings (30). Other publications appeared as book series (21), books (15), and articles in trade journals (1).

In terms of the number of publications, the most numerous were *Developments in Marketing Science Proceedings of the Academy of Marketing Science* (10 documents), *Springer Proceedings in Business and Economics* (5), and *Conference Proceedings of 19th Americas Conference on Information Systems AMCIS 2013 “Hyperconnected World Anything Anywhere Anytime”* (5). Four publications each appeared in *Sustainability* and *AMS Review*, and three publications each were published in *Proceedings of the European Conference on Knowledge Management*, *Management for Professionals*, *Lecture Notes in Computer Science*, *Journal of Research in Interactive Marketing*, *Journal of Global Fashion Marketing*, *Journal of Business Research*, *Journal of Brand Management*, *International Journal of Internet Marketing and Advertising*, *Frontiers in Psychology*, and *European Journal of Marketing*.

4.4. Thematic areas of DigBE publications

The DigBE-related publications indexed in the Scopus database provided 859 keywords. *Brand equity* was the most used term (Table 4). Other keywords such as *social media*, *marketing*, *digital marketing*, and *branding* were far less common. The keywords *sales* and *brand loyalty* appeared in 9 publications. Eight studies featured the keyword *brand image* and seven documents featured keywords such as *social media marketing*, *purchase intention*, and *consumer behaviour*.

Table 4.

The most frequently occurring keywords in DigBE publications

Keywords	Frequencies
Brand equity	79
Social media	22
Marketing	19
Digital marketing	17
Branding	12
Sales	9
Brand loyalty	9
Brand image	8
Social media marketing	7
Purchase intention	7
Consumer behaviour	7
Brand experience	6
Advertising	6
Sustainability	5
Electronic commerce	5
Customer-based brand equity	5
Brand management	5

Table does not include keywords that have been mentioned 4 times or less.

Source: Scopus data, as of 31.12.2023.

Analysis of keyword co-occurrence using the full counting method with minimum number of occurrences of a keyword at the level of two identified 13 clusters (Figure 4).

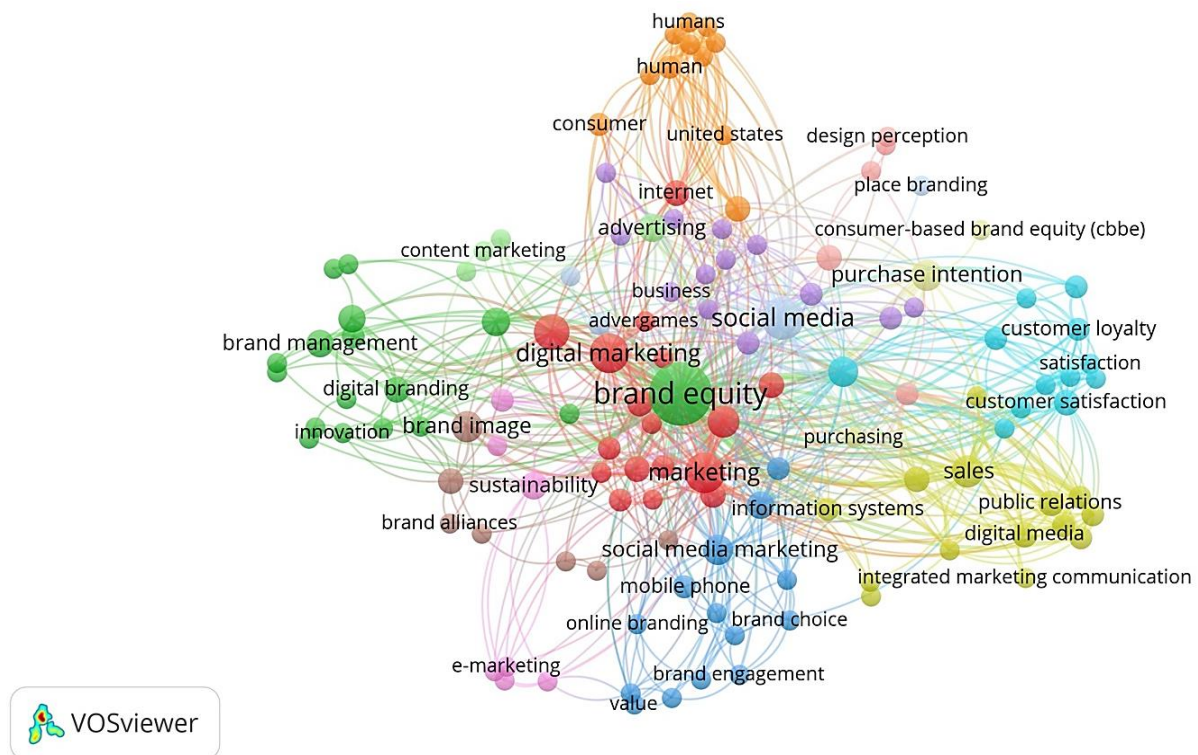


Figure 4. Keyword co-occurrence presentation using bibliometric mapping of DigBE publications.

Source: VOSviewer based on Scopus data, as of 31.12.2023.

Cluster No. 1 can be defined as “Building brand-consumer relationships in the context of the internet and digital marketing”. The cluster contains 17 keywords, examples being *brand trust*, *consumer-based brand equity*, *consumer-brand relationships*, *digital marketing*, *internet marketing*, *interactivity*, *brand value*, and *authenticity*. Shaping consumer-brand relationships is related to taking into account the authenticity and loyalty of the consumers and seeking to build trust and brand value based on the consumer experience. In this aspect, digital and internet marketing for shaping brand trust and brand value are taken into account. The analysis of consumer behavior provides information to personalize experiences and undertake online marketing. In addition, important interactivity is achieved through communication. Advergaming and engagement campaigns are included to increase engagement and strengthen the consumer-brand relationship.

Cluster No. 2 can be named “Brand management in the digital age with brand identity, including corporate branding”. The cluster contains 17 keywords, including *brand equity*, *brand experience*, *brand identity*, *brand management*, *corporate branding*, *customer engagement*, *customer-based brand equity*, *digital age*, *digital branding*, *integrated marketing communication*, *innovation*, *luxury brand*, and *luxury branding*. The publications included in this cluster analyzed the issue of building brand value and identity through consistent customer experience, innovation, and customer engagement. Customer engagement with the brand is realized through integrated marketing communication using digital and traditional channels in the media management process. The issues of brand identity and brand experience are particularly relevant for luxury brands and luxury branding.

Cluster No. 3 can be described as “The importance of social media for online branding, brand engagement and brand choice”. The cluster contains 14 keywords, for example *brand choice*, *brand engagement*, *online branding*, *social media advertising*, *social media marketing*, *social networks*, *social networking sites*, and *value*. Marketing communication carried out on social media centers around online branding. The aim is to drive dialogue with consumers, which is important for understanding consumer preferences. This allows for a personalized experience and consequently shapes brand engagement and leads to brand choice. The value to the consumer offered by the brand determines retention and builds loyalty. This occurs through properly planned social media advertising.

Cluster No. 4 is entitled “Shaping customer relationships with modern technologies, knowledge, information, and intellectual capital management processes”. The cluster contains 14 keywords, including *customer relationships*, *digital media*, *digital storage*, *information management*, *intangible assets*, *information systems*, *integrated marketing*, *communication*, *intellectual capital*, *knowledge management*, *product development*, *public relations* and *relational capital*. The themes of the publications in this cluster point to the imperative of using knowledge and information resources and the right process of managing them to create lasting relationships with customers. To this end, digital media and information systems are used to shape relational capital. Intellectual capital and intangible assets enable product development. At the same time, information systems support information and knowledge management. This influences the quality of customer service, shapes the right relationships, and determines consumer satisfaction. In this aspect, integrated marketing communication, including public relations allows for effective management of intangible assets.

Cluster No. 5 can be described as “Business determinants in the digital age”. This cluster contains 13 keywords, including *business consumption*, *digital behavior*, *content marketing*, *perceived quality*, *engagement*, *small and medium-sized enterprise*, *strategic approach*, and *technology adoption*. The topics of the publication point to a business perspective with a strategic approach, technology adoption. This applies to a variety of businesses, and in this cluster, attention is given to factors that enhance the competitive position of small and medium-sized enterprises. The issue of perceived quality as an important determinant of consumer choice decisions was also analyzed. This determines the competitiveness and sustainability of enterprises.

Cluster No. 6 can be described as “Customer satisfaction and loyalty social media marketing activities”. The cluster contains 12 keywords, including: *customer satisfaction*, *customer loyalty*, *e-wom*, *satisfaction*, *loyalty*, *consumer behavior*, *brand*, *trust*, and *social media marketing activities*. The publications point out that an important element in shaping successful brands is building consumer trust, which leads to increased consumer satisfaction and determines consumer loyalty. Marketing communication activities influence the generation of positive experiences, which is reflected in e-wom.

Cluster No. 7 can be titled “Consumer behavior with gender differences and cross-cultural factors”. The cluster included 11 keywords such as *consumer*, *young adult*, *male*, *female*, *controlled study*, and *young adult*. The impact of gender on consumer behavior was analyzed using a variety of methods, for example a controlled study, as well as different techniques, such as factor analysis. At the same time, the influence of cultural factors related to national culture was noted.

Cluster No 8 can be described as “Foundations of brand strategy in the context of consumer engagement”. This cluster contains 7 keywords, including *brand alliances*, *brand awareness*, *brand extension*, *brand image*, *brand meaning*, *brand personality*, and *consumer engagement*. The publications analyzed brand alliances understood as different forms of cooperation and collaboration between brands to increase the value of the market offer, to improve the image, and to increase brand awareness and market share. Brand awareness was studied as an element of brand equity important for the formation of associations with the brand, its characteristics, attributes, and values. In some publications, brand awareness was combined with image understood through the prism of how brands are perceived. Brand personality was also analyzed in relation to various characteristics and attributes that influence the specific nature of the perceived brand. The importance of the brand in consumer purchasing decisions, in shaping the consumer-brand relationship, and in companies’ decisions, e.g., in the context of brand extensions, was also pointed out as important factor for the introduction of new or modified products. In this context, branding newly introduced products with the same brand allows the use of a familiar image and facilitates the building of trust.

Cluster No. 9 can be described as “E-marketing in tourism”. It contains 7 keywords such as *corporate reputation*, *e-marketing*, *intention to visit*, *rural tourism*, *sustainability*, and *tourist destination*, among others. The publications analyzed digital marketing tools and strategies for tourism branding and the promotion of tourism services online. In this context, corporate reputation was important, particularly for trust building and gaining positive opinions. The willingness of potential tourists to visit a particular destination or a specific tourism enterprise, e.g., a hotel, is a result of marketing, including e-marketing, and the reputation of a place. Sustainability is important in this aspect, as well as in tourism in terms of minimizing the impact on the environment, the local community, and generating economic benefits.

Subsequent clusters contain 5 words or less. Cluster No. 10 can be described as “Shaping user experience in the digital environment using artificial intelligence”. Keywords include *artificial intelligence*, *design perception*, *social networking (online)*, and *user experience*. It was pointed out that the overall user experience can be optimized using artificial intelligence and data derived from social networks. This maximizes user satisfaction and loyalty. Artificial intelligence also allows for insightful data analysis, personalization of experiences, and automation of processes. This influences user engagement, increases interactions, and determines brand perceptions.

Cluster No. 11 with the four keywords *advertising*, *content marketing*, *marketing strategy*, and *storytelling* can be described as the “Key elements of modern marketing strategy”. Storytelling is important for brands to shape the brand-consumer relationship. This allows lasting and authentic bonds to be built. At the same time, using content marketing and communicating compelling and valuable content increases consumer engagement and builds trust in the brand.

Cluster No. 12 also contains 4 keywords, including *customer experience*, *place branding*, *smes*, and *social media*, among others. It can be defined as “Shaping customer experience in small and medium-sized enterprises in the digital world”. Building customer experience in the digital and real world increases the consumer's interaction with the brand. In small and medium-sized enterprises, due to limited resources, building authentic relationships and customer experience in social media achieves additional importance. This is relevant for place branding and brand development in various manufacturing and service sectors.

Cluster No. 13 contains the 3 keywords *customer-based brand equity*, *purchase intention*, and *purchasing*. It can be defined as “The impact of customer-based brand equity on the purchasing process of consumers and customers”. Publications have analyzed the impact of strong and positive brand equity on purchase intention and actual purchases. Companies with high equity brands achieve greater customer interest, which results in higher sales. This in turn influences long-term loyalty, which determines positive recommendations, subsequent purchase intentions, and increased purchases in terms of quantity and frequency.

5. Discussion of results and implications

The aim of this study was to explore the issue of DigBE and to indicate the current state of this research and publication area. The three research questions addressed the current state of knowledge on the topic of DigBE, the identification of key authors, countries, and publication sources, and the identification of thematic areas important for DigBE.

The first question related to determining the degree of growth of the DigBE research area. The first study was published in 2002, and by the end of 2023, 166 studies had been indexed in the Scopus database. The average annual number of publications was 7.5, and the trend line shows further growth. The number of citations of DigBE studies was 3,487 by the end of 2023, with an average annual number of citations of 158.5. There was an upward trend in the number of citations.

The second research question focused on key authors, countries, and sources of DigBE publications. In terms of authors, this theme was fragmented. No author with a dominant number of publications was identified. There were authors or co-authors of a maximum of two publications. There were 17 such authors; the remaining authors published one study.

This demonstrates the thematic diversity of this research area. In terms of authors' countries of affiliation, the United States dominated, followed by India. Still, Australia, China, and Portugal were affiliated with more than 10 publications. The remaining publications were affiliated less frequently. A total of 61 countries were found, and 34 of these formed seven clusters, taking as a criterion the minimum number of documents with a country at level 2. Most publications appeared in Science Proceedings of the Academy of Marketing Science, Springer Proceedings in Business and Economics, and Conference Proceedings of 19th Americas Conference on Information Systems, AMCIS 2013 “Hyperconnected World Anything Anywhere Anytime”. This fact indicates the dynamic development of this research topic.

The thematic analysis conducted as a keyword mapping identified 13 clusters. This is a significant number, indicating the thematic diversity of this research area. The themes of the publications were digital marketing and digital age in the context of building brand-consumer relationships, brand management, importance of social media, and business determinants. An interesting research topic was the use of modern technologies in knowledge, information, and intellectual capital management. Attention was also paid to brand identity, including corporate branding, brand engagement, brand experience, and brand choice. Customer satisfaction and loyalty as the results of social media marketing activities were examined. One topic area referred to shaping user experience in the digital environment via artificial intelligence.

This bibliometric analysis on DigBE fills a research gap since it identifies research areas and thematic topics and draws attention to the specificity of the topic in terms of key authors and publication sources. Recommendations for managers relate to several aspects. Firstly, attention should be paid to the specificity of digital marketing in the context of shaping the brand-consumer relationship. Secondly, carrying out marketing activities through social media influences purchase intentions, actual purchase decisions, and brand evaluation. Managers should monitor the effects of their activities in detail. Thirdly, digital marketing activities are shaped by a compilation of methods and channels. Managers should pay attention to the coherence of these activities and the interdependence of the different channels.

6. Conclusions, limitations, and future research

DigBE is an increasingly important issue in digital marketing and marketing in general. There has been an increase in publication intensity, as demonstrated by a quantitative increase in the number of publications and citations. Thematic areas relating to, for example, building brand-consumer relationships, brand management, or identifying business determinants in the context of internet and digital marketing were identified. Also, important as thematic areas were issues related to shaping consumer satisfaction and loyalty, identifying marketing strategy

assumptions, including marketing communication strategies in social media, and shaping user experience via artificial intelligence.

This study also has limitations. Firstly, DigBE was analysed in general, indicating digital marketing and social media marketing without indicating specific social media. Secondly, the entire period 2002-2023 was analysed, without indicating sub-periods. Thirdly, the study dealt with brands in general, without indicating product brands, service brands, or other brands, including city brands or tourist destination brands.

Directions for future research could address the different types of brands and how they are created using digital marketing and social media marketing. It would also be important to conduct a systematic literature review and a critical literature review to study definitions, determinants, and implications of digital brand equity. It would also be interesting to analyse specific brands from the point of view of the effectiveness of DigBE formation on selected social media sites.

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