Bridging The Knowledge Gap: A Dynamic Bibliometric Analysis Of Emerging Trends In Brand Extensions (2009 To 2023)

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Abstract

The analysis of the brand extensions dataset spanning from 2009 to 2023 offers valuable insights into the evolving landscape of research in this particular field. This dataset, composed of 478 documents from 198 sources, sheds light on the dynamics of academic inquiry. Despite a slight negative annual growth rate of -0.23%, these documents exhibit significant scholarly influence, with an average of 20.18 citations per document and a cumulative reference count of 21,273. This emphasizes the field's breadth and the widespread recognition of its research contributions within the academic community. A notable aspect of this dataset is the extensive authorship, featuring 1,012 authors and a clear trend of collaboration, as indicated by an average of 2.6 co-authors per document. International co-authorships, constituting 25.52% of all collaborations, underscore the global reach and collaborative spirit characterizing research in brand extensions. The preference for articles as the primary mode of sharing findings is evident, with all 478 documents adopting this

format. However, the annual trend of publications showcases fluctuations, with peak years in 2010 and 2017, while 2011 and 2018 marked lower research output, signifying the changing interests and focus within the field. The analysis extends to ranking prominent contributors, where authors like Dwivedi A.; Merrilees B., Dens N.; De Pelsmacker P., Freling T.H.; Crosno J.L.; Henard D.H. stand out. Furthermore, it identifies influential journals such as the "Journal of Brand Management", "Journal of Business Research", and "Journal of Product and Brand Management", which serve as significant platforms for disseminating research. Institutional prominence is also evident, with the Department of Business Administration at National Chengchi University, Taipei, and the Department of Marketing at the Norwegian School of Management, Oslo, emerging as key research centers. International collaboration among countries plays a pivotal role in shaping the research landscape, with the United States, China, and India contributing significantly. This collaborative spirit reflects the global nature of research in the field of brand extensions. In conclusion, this analysis equips researchers with a comprehensive understanding of the brand extension research landscape, helping to identify key contributors, influential sources, and opportunities for fruitful collaboration in this dynamic and globally connected field.

Keywords: Brand Extension, Extended Brands, Bibliometric Analysis, Literature Review, Biblioshiny, Network Visualization.

1. Introduction

Brand extensions, a strategic marketing approach, involve leveraging the equity of an established brand to enter new product categories or markets. This phenomenon has become increasingly vital in the competitive business landscape, as it allows firms to capitalize on the goodwill, loyalty, and recognition associated with their core brand, reducing the risk of launching entirely new products. As such, the field of brand extensions has attracted substantial scholarly attention, aiming to provide insights into their success factors and performance implications. In this bibliometric study, we explore the academic landscape of brand extension research, shedding light on the evolving trends and key contributors in this domain. Over the years,

scholars such as Aaker (1990) and Keller (2003) have contributed significantly to the understanding of brand extensions by emphasizing the importance of brand fit (Keller, 1993) and brand image (Aaker & Keller, 1990). Examining consumer perceptions, studies like Broniarczyk and Alba (1994) and Smith and Park (1992) have examined the impact of brand extensions on brand equity and brand dilution. Research has also delved into the implications of brand extensions on firm performance (Keller & Lehmann, 2006) and consumer behavior (Martínez & de Chernatony, 2004). Furthermore, we aim to identify emerging research themes and methodologies, offering a comprehensive overview of the academic discourse on brand extensions. By leveraging bibliometric analysis, we provide an evidencebased foundation for future research directions in this evolving field, helping academics, practitioners, and marketers navigate the dynamic world of brand extensions. As an emerging field of research, the study of brand extensions has drawn the attention of scholars worldwide. Researchers from various disciplines, including marketing, psychology, and business, have contributed to our understanding of this phenomenon. For instance, Völckner and Sattler (2006) have conducted extensive research on brand extension success factors, while other scholars like Broniarczyk and Alba (1994) have investigated consumer evaluation processes in the context of brand extensions. Their contributions have added valuable dimensions to the literature by exploring how consumer perceptions impact brand extensions and subsequent brand equity. Additionally, Balachander and Ghose (2003) have investigated the competitive dynamics of brand extensions, providing insights into how brand extensions affect both the focal brand and its competitors. With the growing interest in understanding the intricacies of brand extensions, our bibliometric study aims to consolidate this vast body of literature, offering a comprehensive overview of its development and providing a roadmap for future research in the field.

2. Literature Review

Brand extensions have garnered considerable attention within the field of marketing, reflecting a strategy wherein companies seek to capitalize on the established brand equity of their parent brand to launch new products or enter new markets. This literature review provides an in-

depth examination of the major findings and predominant trends in the realm of brand extension research. At the foundation of brand extension research is Aaker's seminal work in 1990, which underscores the paramount role of brand associations in determining the success of extensions (Aaker, 1990). Building upon Aaker's framework, Keller (2003) further established that strong brand equity can serve as a safeguard against potential risks associated with extensions (Keller, 2003). Hunt and Morgan (1995) delved into the realm of consumer evaluations and identified the perceived fit between the extension and the parent brand as a critical factor (Hunt & Morgan, 1995). Kapferer (2008) sounded a note of caution, warning of the perils of overextending, which may result in brand dilution (Kapferer, 2008). Davies, Chun, da Silva, and Roper (2003) explored the role of the parent brand image in shaping consumer perceptions of brand extensions (Davies et al., 2003). Broniarczyk and Alba (1994) introduced the "schema congruity" model, emphasizing the importance of aligning the extension with consumers' existing mental frameworks (Broniarczyk & Alba, 1994). Srinivasan and Till (2002) focused on the impact of extension strategy by distinguishing between line extension and category extension (Srinivasan & Till, 2002). Simonin and Ruth (1998) provided insights into the international context, highlighting the influence of cultural factors on extension success (Simonin & Ruth, 1998). Chen and Liu (2004) conducted research on the impact of perceived quality on consumer attitudes toward brand extensions (Chen & Liu, 2004), and Pappu and Quester (2010) explored the moderating role of brand familiarity and product category on extension evaluation (Pappu & Quester, 2010). This comprehensive review underscores the multifaceted nature of brand extensions and emphasizes the critical importance of strategic considerations, consumer perceptions, and contextual factors in determining their success. It serves as a valuable reference for future research endeavors and offers practical insights to brand managers, aiding them in making informed decisions about brand extensions. The phenomenon of brand extensions has evolved in response to changing consumer behavior and market dynamics. As consumers seek products that align with their values and lifestyles, brands have expanded their product portfolios to cater to these shifting demands (De Chernatony & Harris, 2000). This transformation highlights the need for research

to adapt and continue exploring the intricacies of brand extensions in contemporary contexts.

3. Objectives of the study

The study has several key objectives aimed at enhancing the effectiveness of bibliometric analysis. Firstly, it seeks to establish precise search criteria to ensure the retrieval of pertinent documents. This involves creating a complex search string that incorporates specific keywords and constraints to accurately filter academic content. Additionally, the study intends to provide crucial information regarding the dataset being examined. This encompasses details such as the data's timeframe, the number of data sources, the total document count, annual growth rates, the average document age, average citations per document, and the cumulative references within the dataset. Furthermore, the study aims to analyze and monitor annual publication trends, offering a yearly production table to illustrate the fluctuation in research activity in the field over a 15-year period. It also strives to furnish essential bibliometric metrics and insights, including average article citations, total citations, and the research's longevity based on citable years. The study delves into investigating international collaboration in publications, highlighting the countries that frequently engage in academic research partnerships. The primary goal of the study is to scrutinize and assess the most prominent authors, institutions, sources, and keywords. Moreover, it aims to analyze keyword occurrences and extract thematic insights from these keywords, shedding light on the subjects of research. Finally, the research study aims to identify research gaps and provide guidance to future researchers. Collectively, these objectives contribute to a comprehensive bibliometric analysis of the research domain under investigation.

4. Materials and Techniques

This study employed a comprehensive approach to achieve its objectives by combining citation and co-citation analysis with bibliometric analysis. These techniques were crucial for systematically investigating the patterns, trends, and research gaps in the existing literature. The use of citation and co-citation analysis aimed to identify emerging topics, assess journal influence, and track research trends. To construct bibliometric networks encompassing journals,

authors, and specific papers, computer tools such as VOSviewer and Biblioshiny were utilized. This quantitative analysis enabled the evaluation of development, maturity, authors, influential institutions, conceptual frameworks, and trends within the research domain. Bibliographic data were meticulously collected from the Scopus database, chosen for its comprehensive publication coverage compared to alternatives like "Web of Science." Scopus's credibility and suitability for bibliometric analyses have been well-documented in prior research. The research methodology involved performance analysis, science mapping, and network analysis to comprehensively explore the literature on "brand extension." It began by accessing scholarly articles from Scopus, resulting in the selection of 478 relevant articles. Data organization and preprocessing were carried out using MS Excel to seamlessly integrate with VOSviewer. Additionally, Biblioshiny and other essential analytical tools facilitated data visualization and exploration, including the examination of various bibliometric indicators such as author productivity, journal impact, and keyword frequency. The co-authorship network was visualized to identify prolific authors and collaborative patterns within the field. Throughout the study, rigorous data cleaning and validation processes were consistently implemented to ensure the accuracy and reliability of the findings. The integration of VOSviewer, Excel, and Biblioshiny synergistically enabled the identification of key research themes, influential authors, prolific journals, and emerging trends within the domain of brand extension. This interdisciplinary approach provided a comprehensive understanding of the scholarly landscape, offering valuable insights and guiding future research directions in the field of brand extensions.

TABLE 1: Search Protocol Used for the Study

Field	Search Criteria	Description
Ticia	Scaren entena	Description
Title-Abstract-	"brand extensions"	Documents containing this phrase in title,
Key	brand extensions	abstract, or keywords.
PubYear	> 2008 and < 2024	Documents published between 2009 and 2023.
SubjArea	BUSI, SOCI, PSYC, MULT, ARTS	Documents within the subject areas of Business, Sociology, Psychology, Multidisciplinary, and Arts.

DocType ar Limited to an		Limited to articles.		
SrcType j		Limited to journal sources.		
Language	English	Limited to documents in the English language.		

The table outlines a complex search string designed for a bibliographic database or academic search engine. It specifies several search criteria to refine results. The "Title-Abstract-Key" criteria focus on documents containing the phrase "brand extensions" in their titles, abstracts, or keywords. It further narrows the search by selecting documents published between 2009 and 2023 with the "PubYear" criterion. The "SubjArea" criterion limits results to subject areas including Business, Sociology, Psychology, Multidisciplinary, and Arts. The "DocType" criterion restricts results to articles, and the "SrcType" ensures they originate from journals. Lastly, it narrows results to English-language documents. This comprehensive search string aims to retrieve specific and relevant academic content within these defined parameters.

5. Results & Discussion



FIGURE 1: Main Information of the Data

The figure provides a comprehensive overview of key data related to a research dataset. The "Main Information About Data" section reveals that the dataset spans from 2009 to 2023 and includes data from 198 sources, comprising journals, books, and more. It encompasses a total of 478

documents, showcasing a slight negative annual growth rate of -0.23% and an average document age of 7.25 years. Impressively, these documents garner an average of 20.18 citations each, with a substantial cumulative reference count of 21,273. In the "Document Contents" segment, the dataset comprises 328 Keywords Plus (ID) entries and 1,298 Author's Keywords (DE), which offer insights into document content and themes. Examining authorship, the dataset involves a substantial group of 1,012 authors, among whom 62 have contributed to single-authored documents. Collaboration among authors is evident, with 67 documents attributed to single authors and an average of 2.6 coauthors per document. International co-authorships constitute 25.52% of all collaborations, underlining the dataset's global nature. Regarding document types, the dataset predominantly consists of 478 articles, providing valuable insights into the publication landscape. This table encapsulates key statistics that researchers can use to assess the dataset's scope, growth, and collaborative characteristics.

TABLE 2: Annual Trend of Publications

Year	Articles	Year	Articles
2009	31	2016	21
2010	41	2017	39
2011	27	2018	25
2012	40	2019	27
2013	38	2020	31
2014	36	2021	27
2015	29	2022	36
		2023	30

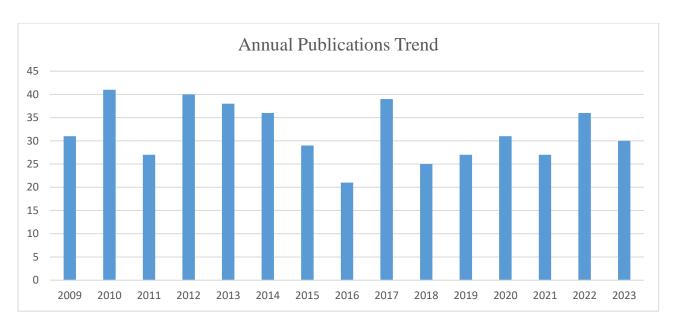


FIGURE 2: Annual Publications Trend

The "Yearly Production Table" & Figure depicts the annual output of articles in a bibliometric study focused on brand extensions over a 15-year period. The table is divided into two columns, with the first column listing the years from 2009 to 2015 and the second column listing the years from 2016 to 2023. The numbers in the table represent the quantity of articles published in each respective year. The data reveals the evolving research output within this specific research area. It shows fluctuations and trends in the number of articles published annually, indicating the varying levels of interest and research activity in the field of brand extensions. For instance, in 2010 and 2017, there was a notable increase in the production of articles, suggesting that these years might have been significant for brand extension research. In contrast, there were fewer articles published in 2011 and 2018. The data allows researchers to track and analyze the trajectory of research in this domain over time.

TABLE 3: Mean Citations Analysis

Year	MeanTCperArt	N	MeanTCperYear	CitableYears
2009	44.52	31	2.97	15
2010	44.12	41	3.15	14
2011	17.7	27	1.36	13
2012	38.52	40	3.21	12
2013	30.47	38	2.77	11
2014	16.83	36	1.68	10
2015	20.14	29	2.24	9

2016	21.86	21	2.73	8
2017	8.92	39	1.27	7
2018	14.72	25	2.45	6
2019	13.41	27	2.68	5
2020	8.26	31	2.06	4
2021	5.07	27	1.69	3
2022	3.92	36	1.96	2
2023	0.67	30	0.67	1

The table provides key bibliometric metrics that offer valuable insights into research productivity, impact, and the longevity of scholarly articles within a specific field over a 15-year period. "MeanTCperArt" indicates the average number of total citations received by articles published in a given year, providing immediate numerical results showcasing their citation impact. For instance, in 2009, articles had an average of 44.52 total citations per article. "MeanTCperYear" calculates the average total citations received by all articles from a particular year, offering a broader perspective on cumulative impact. In 2009, articles published that year received an average of 2.97 citations each year, considering all subsequent years. The "N" column displays the number of articles published in each respective year, which is a straightforward numerical representation of research productivity. The "CitableYears" metric signifies the number of years an article remains actively citable, offering insights into the lasting influence of research. In 2009, articles published retained their active citability for 15 years, emphasizing their enduring impact. These numerical results empower researchers to evaluate research trends and the impact of articles in this field and make informed decisions regarding research focus and future exploration.

TABLE 4: Most Prominent Authors Analysis

Rank	Author	Documents	Citations	Асрр
1	Dwivedi A.; Merrilees B.	4	62	15.5
2	Dens N.; De Pelsmacker P.	3	97	32.34
3	Freling T.H.; Crosno J.L.; Henard D.H.	2	133	66.5
4	Arslan F.M.; Altuna O.K.	2	69	34.5
5	Boisvert J.; Ashill N.J.	2	58	29
6	Chen YS.A.; Bei LT.	2	20	10
7	Boisvert J.; Burton S.	2	15	7.5
8	Chang J.W.	2	3	1.5
9	Cobbs J.; Mckelvey S.	2	2	1
10	Hassan H.; Rahman M.S.	2	2	1

^{*}Acpp- Average Citation Per Publication

The table presents a ranking of authors in the field of brand extensions based on various research metrics. It lists the authors' names, the number of documents they have contributed, the total citations their work has received, and the average citations per published paper (ACPP). Notably, Dwivedi and Merrilees top the list with four documents and a total of 62 citations, resulting in an ACPP of 15.5. Dens and De Pelsmacker follow closely with three documents but a higher citation count of 97, leading to an ACPP of 32.34, indicating strong influence. Freling, Crosno, and Henard also have two papers but with a remarkable 133 citations, resulting in an ACPP of 66.5, showcasing the significant impact of their research. The table provides valuable insights into the productivity and influence of various authors in the domain of brand extensions, highlighting the diversity in contributions and their research impact.

TABLE 5: Most Pertinent Sources Analysis

		No. Of				Total			ABDC
Rank	Source	Publications	H_Index	M_Index	G_Index	Citations	Np	Quarter	Ranking

1	JOURNAL OF BRAND MANAGEMENT	26	11	0.733	18	389	2009	Q1	A*
2	JOURNAL OF BUSINESS RESEARCH	25	14	0.933	25	938	2009	Q1	A*
3	JOURNAL OF PRODUCT AND BRAND MANAGEMENT	25	10	0.667	16	316	2009	Q1	A*
4	JOURNAL OF MARKETING RESEARCH	11	11	0.733	11	985	2009	Q1	A*
5	EUROPEAN JOURNAL OF MARKETING	15	10	0.667	15	469	2009	Q1	A*
6	JOURNAL OF CONSUMER PSYCHOLOGY	11	9	0.6	11	882	2009	Q1	A*
7	PSYCHOLOGY AND MARKETING	11	9	0.692	11	233	2011	Q2	А
8	INTERNATIONAL JOURNAL OF RESEARCH IN MARKETING	9	8	0.533	9	286	2009	Q1	A*
9	JOURNAL OF THE ACADEMY OF MARKETING SCIENCE	11	8	0.571	11	426	2010	Q2	В
10	JOURNAL OF MARKETING MANAGEMENT	7	7	0.5	7	199	2010	Q2	В

This table presents a comprehensive overview of ten academic journals within a specific field, providing key bibliometric data for researchers and scholars. The "Rank" column reflects the journals' positions based on the number of publications, with the "Journal of Brand Management" leading with 26 articles, showcasing its prolific research output. The "h-index," "m-index," and "g-index" metrics

offer insights into the impact and influence of these journals. For instance, "Journal of Business Research" exhibits an impressive h-index of 14, underscoring its research significance. In terms of citations, "Journal of Marketing Research" leads with 985 total citations, highlighting its substantial academic influence. The "NP" (citable years) metric aids in assessing the longevity and impact of these journals, with the "Journal of Business Research" spanning from 2009. The "Quarter" categorization segments the journals based on quality, with Q1 indicating the highest quality. Furthermore, the "ABDC Ranking" provides an additional layer of recognition, with several journals achieving the "A*" ranking. In summary, this table equips researchers with a valuable resource to identify influential journals, assess research trends, and make informed decisions on where to publish and access high-quality scholarly content within the chosen field.

TABLE 6: Most Productive Institutions Analysis

Rank	Institution	Documents	Citations	Асрр	Country
1	Department of Business Administration, National Chengchi University, Taipei	4	101	25.25	Taiwan
2	Department of Marketing, Norwegian School of Management, Oslo	3	90	30	Norway
3	School of Management, Zhejiang University, Hangzhou	3	41	13.67	China
4	SKEMA Business School, France	3	69	23	France
5	Business School, Hanyang University, Seoul,	2	62	31	South Korea

*Acpp- Average Citations Per Publication

The table presents a ranking of academic institutions based on several key factors, including the number of documents published, citations received, and the average number of citations per paper (acpp). The ranking is a snapshot of the top five institutions in this context. The Department of Business Administration at National Chengchi University in Taipei secures the top spot, with four documents and an impressive 101 citations, resulting in an acpp of 25.25. It is closely followed by the Department of Marketing at the

Norwegian School of Management in Oslo, which has three documents, 90 citations, and an acpp of 30. Other institutions in the ranking include the School of Management at Zhejiang University in Hangzhou, SKEMA Business School in France, and the Business School at Hanyang University in Seoul. Each institution is evaluated based on their academic output and influence within their respective countries, providing valuable insights into their research impact and productivity.

TABLE 7: Countries Collaboration Analysis

Rank	Country	Articles	Scp	Мср	Freq	Mcp_Ratio
1	USA	101	82	19	0.211	0.188
2	CHINA	43	33	10	0.09	0.233
3	INDIA	40	36	4	0.084	0.1
4	KOREA	23	13	10	0.048	0.435
5	SPAIN	20	14	6	0.042	0.3
	UNITED					
6	KINGDOM	20	12	8	0.042	0.4
7	FRANCE	18	16	2	0.038	0.111
8	AUSTRALIA	16	13	3	0.033	0.188
9	GERMANY	15	7	8	0.031	0.533

This table presents a ranking of countries based on their scientific research output and collaboration. The "Rank" column reflects each country's position in terms of the number of articles published. The United States secures the top spot with 101 articles, followed by China with 43 and India with 40 articles. The data also includes the number of single-country publications (SCP) and multiple-country publications (MCP) for each nation. The "MCP_Ratio" column shows the proportion of collaborative research in relation to single-country publications. The United States, despite its high research output, maintains a collaborative MCP ratio of 0.188, indicating substantial international research partnerships. This table provides insights into the research landscape and collaborative tendencies of these countries in the scientific community.

TABLE 8: Most Cited Countries

		Average
		Article
Country	TC	Citations

USA	3419	33.9
CHINA	790	18.4
SPAIN	608	30.4
GERMANY	571	38.1
CANADA	455	32.5
UNITED		
KINGDOM	404	20.2
KOREA	293	12.7
INDIA	200	5
FRANCE	195	10.8
AUSTRALIA	175	10.9

This table provides a concise overview of research impact across various countries in terms of total citations (TC) and their corresponding average article citations. The United States, with the highest TC of 3419, reflects its significant research influence, along with a noteworthy average article citation rate of 33.9. China, Spain, and Germany also exhibit substantial TC, showcasing their research contributions. These figures underscore their influence in various fields of study. Notably, while India has a comparatively lower TC of 200, it has an average article citation rate of 5, suggesting research with potential for greater impact. This table is valuable for evaluating the research impact of these countries and their contributions to the global academic community.

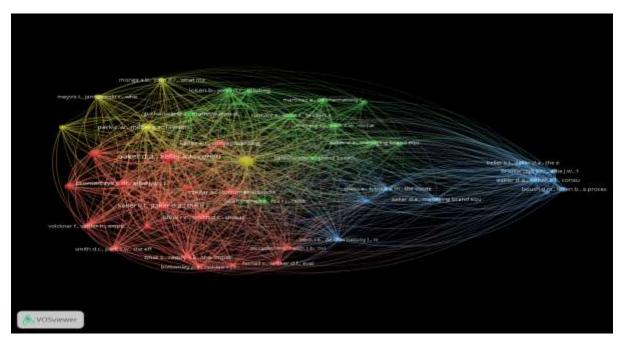


FIGURE 3: Most Cited References

This graph compiles a ranking of academic papers that have made a notable impact in the field of brand extensions. Each entry includes details such as authors, paper titles, source journals, volume, issue, page numbers, and publication years. The "Citations" column quantifies the number of times each paper has been referenced in subsequent academic research, serving as a measure of its influence and relevance. The leading paper in this ranking is "Consumer Evaluations of Brand Extensions" by Aaker and Keller, published in the Journal of Marketing in 1990. It has amassed 138 citations, signifying its substantial impact on subsequent research. Other notable contributions in the top five include works by Volckner and Sattler, Park et al., Keller and Aaker, and Broniarczyk and Alba. These papers delve into various facets of brand extensions, from consumer evaluations and brand concept consistency to sequential introduction strategies. Researchers, scholars, and marketers in the field turn to these influential works for valuable insights and a deeper understanding of brand extension strategies and their implications.

TABLE 9: Collaboration Among Countries

From	То	Frequency
USA	CHINA	8
USA	KOREA	7
USA	UNITED KINGDOM	7
USA	HONG KONG	6
CHINA	HONG KONG	5
CHINA	UNITED KINGDOM	4
UNITED		
KINGDOM	SPAIN	4
USA	CHILE	4
USA	FRANCE	4
USA	NETHERLANDS	4

This table provides insights into international collaboration in academic publications. It shows the frequency of collaboration between countries, indicating how often researchers from one country work together with those from another. The USA emerges as a significant collaborator, particularly with China, Korea, and the United Kingdom, with frequencies of 8, 7, and 7, respectively. China also collaborates actively with Hong Kong and the United Kingdom. Such collaborative efforts reflect the global nature

of research and the importance of cross-border cooperation in the advancement of knowledge. This table is a valuable resource for understanding the extent of international research partnerships and the countries involved in collaborative academic endeavors. The graph of the same analysis is presented below, where collaboration is shown by pink tint among countries.

Country Collaboration Map

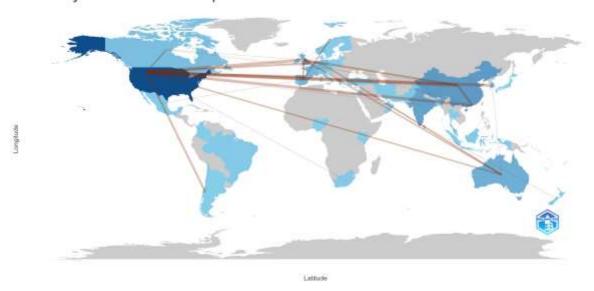


FIGURE 4: Country Collaboration Map

Table 10: Keyword Co-Occurrence Analysis

Rank	Keyword	Occurrences	Rank	Keyword	Occurrences
				Consumer	
1	Brand Extension	165	11	Behaviour	17
2	Brand Extensions	114	12	Brand Loyalty	16
3	Brand Equity	36	13	Advertising	14
	Brand			Consumer	
4	Management	36	14	Behavior	13
5	Branding	24	15	Human	12
6	Brand Image	23	16	Innovation	12
7	Perceived Fit	21	17	Retailing	11
8	Marketing	20	18	Article	10
9	Brand Personality	17	19	Brand	10
10	Brands	17	20	Co-Branding	10

This table provides insights into the frequency of specific keywords in a given context, likely related to a research or academic domain. The keywords are ranked based on the number of occurrences within the dataset. The most

frequently appearing keyword is "brand extension," with 165 occurrences, suggesting it's a central theme or subject of study. "Brand extensions" closely follows with 114 instances. Both "brand equity" and "brand management" are also notable keywords with 36 occurrences each, emphasizing the significance of these terms in the context. The list also includes keywords such as "brand image," "perceived fit," "brand personality," and "brands," which all play important roles in discussions within this dataset. It's worth noting that terms related to consumer behavior and marketing, like "consumer behavior," "brand loyalty," and "advertising," also feature in the table, although they are less frequent. Overall, this table helps to identify the most prevalent keywords, giving an indication of the dominant themes and subjects under consideration in the dataset or field of study.

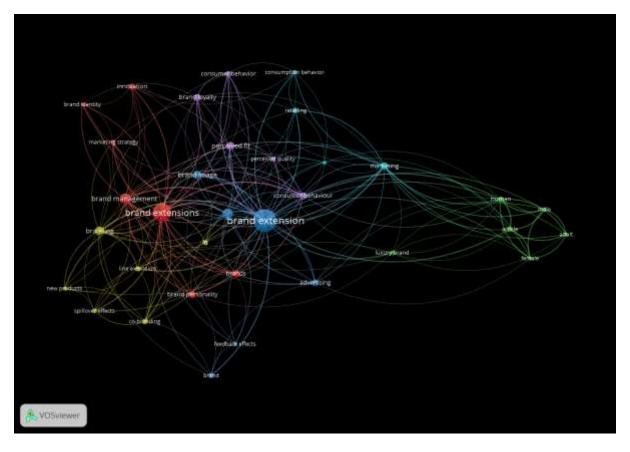


FIGURE 5: Keyword Co-Occurrence Analysis

The above graph depicts the various keywords and their relationship with one another.

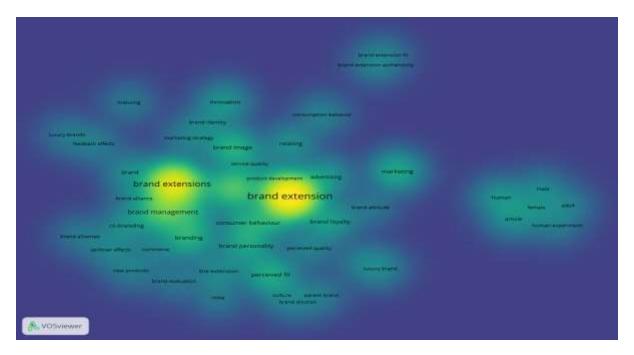


FIGURE 6: Density Graph of Keywords

The above density graph depicts the various research hotspots of the domain. The results demonstrated that brand extensions and brand extensions are the major research hotspots in the domain area. Further analysis of these keywords is done in the next table of this study.

TABLE 11: Major Themes in the Domain

Clusters of the above keywords are made using VOSviewer for thematic analysis. A minimum of 8 occurrences of a keyword is selected as selection criteria. Out of 1552 keywords, only 23 keywords meet the threshold. The analysis of these keywords is presented below:

Cluster No.	Description of Theme	Keywords Used in Theme
Cluster 1	Focus on luxury brand marketing and human aspects.	Article, Brand extensions, Human, Luxury brand, Marketing, Retailing
Cluster 2	Emphasis on brand equity, brand extensions, and innovation.	Brand equity, Brand extensions, Brand image, Fit, Innovation
Cluster 3	Concentrates on brand advertising, branding, and co-branding.	Advertising, Brand, Branding, Cobranding, Line extension

Cluster 4	Explores brand management, brand personality, and consumer behavior.	Brand management, Brand personality, Brands, Consumer behavior
Cluster 5	Examines brand loyalty, consumer behavior, and perceived fit.	Brand loyalty, Consumer behavior, Perceived fit

The table presents a breakdown of major themes derived from a set of keywords related to branding, brand management, and consumer behavior. Let's delve deeper into each cluster:

- **1. Luxury Brand Marketing**: This theme focuses on how luxury brands are marketed, with an emphasis on the role of human factors in the retailing process. It delves into strategies and tactics for effectively promoting high-end products.
- **2. Brand Equity and Innovation:** This theme is all about the value and perception of brands. It highlights the importance of brand equity, how brands expand, and how innovation plays a pivotal role in keeping brands relevant and competitive.
- **3. Brand Advertising and Branding:** This theme concentrates on the communication and identity-building aspects of brands. It explores the world of advertising, branding, and co-branding, often involving line extensions to create a consistent brand image.
- **4. Brand Management and Consumer Behavior:** Here, the focus is on the strategic aspects of brand management. It delves into brand personality and how it influences consumer behavior, playing a vital role in shaping brand success.
- **5. Brand Loyalty and Perceived Fit:** This theme explores the idea of brand loyalty and how it's influenced by consumer behavior. It emphasizes the importance of a perceived fit between the brand and the consumer to maintain strong and lasting customer relationships.

These themes together provide a comprehensive view of the intricate and multifaceted world of branding and marketing, covering everything from marketing luxury products to managing brand identity and fostering customer loyalty.

6. Discussion

The analysis of the brand extensions dataset reveals several key insights into the state of research in this specific field. Over a 15-year span from 2009 to 2023, the dataset encompasses data from 198 sources, including journals and books, resulting in a total of 478 documents. Despite a slight negative annual growth rate of -0.23%, these documents exhibit an impressive average of 20.18 citations each, accumulating a cumulative reference count of 21,273. This indicates that research in brand extensions is not only extensive but also highly influential and widely cited, underlining its relevance in the academic landscape. Authorship in this dataset involves a substantial group of 1,012 authors, and evidence of significant collaboration is apparent, with an average of 2.6 co-authors per document. Furthermore, international co-authorships constitute 25.52% of all collaborations, highlighting the global reach and collaborative nature of research in this field. The publication landscape primarily consists of articles, accounting for all 478 documents, which provides valuable insights into the preferred format for disseminating research in this domain. The annual trend of publications displays fluctuations, with notable peaks in 2010 and 2017 and troughs in 2011 and 2018, illustrating the dynamic nature of research interest over the years. The analysis also ranks prominent authors, sources, institutions, and countries. Notable authors include Dwivedi A.; Merrilees B., Dens N.; De Pelsmacker P., and Freling T.H.; Crosno J.L.; and Henard D.H., among others. The leading journals in this field encompass "The Journal of Brand Management", "Journal of Business Research", and "Journal of Product and Brand Management", each contributing significantly to the research landscape. Likewise, institutions such as the Department of Business Administration at National Chengchi University, Taipei, and the Department of Marketing at the Norwegian School of Management, Oslo, have demonstrated their research prominence. Moreover, the collaboration among countries reflects the global nature of research in this field, with the United States, China, and India being major contributors, and international collaboration significantly shaping the research landscape. Our thematic analysis reveals five major themes in

branding: Luxury Brand Marketing, Brand Equity and Innovation, Brand Advertising and Branding, Brand Management and Consumer Behavior, and Brand Loyalty and Perceived Fit, providing a holistic view of the dynamic branding and extended brand landscape. In summary, this analysis equips researchers with comprehensive information about the brand extension research landscape, offering insights into the research's scope, productivity, impact, and global reach, thus aiding in identifying key contributors, influential sources, and fruitful collaboration opportunities for future exploration.

7. Conclusion

In conclusion, the bibliometric study on brand extensions, as revealed by the comprehensive dataset and analyses presented, provides a detailed overview of the state of research in this field. The findings highlight both the depth and breadth of scholarly work on brand extensions and offer valuable insights for researchers and scholars. The dataset's substantial cumulative reference count and high average citation per document underscore the impact and relevance of research in brand extensions. It is evident that this field has a global reach, as indicated by international coauthorships and collaborative efforts among researchers. The annual trend of publications shows the dynamic nature of research interest over the years, with notable fluctuations. This information helps us understand the evolving priorities within the field. The ranking of authors, sources, institutions, and countries allows researchers to identify key contributors, influential journals, productive academic institutions, facilitating collaboration and access to high-impact research. The country collaboration analysis emphasizes the importance of international research partnerships, while the keyword analysis reveals the central themes and topics in the field. Overall, this study equips researchers with the knowledge to assess research trends, identify influential contributors, and make informed decisions about research focus and future exploration in the dynamic and globally collaborative field of brand extensions.

7.1 Practical Implications

The practical implications of this bibliometric study on brand extensions are significant. Researchers and practitioners in the field can use the data to identify influential authors, high-impact journals, and productive institutions, aiding in collaboration and access to quality research. The information on annual publication trends can guide researchers in understanding the evolving interests within the field. Additionally, the knowledge of keyword co-occurrences helps pinpoint critical themes. The study also highlights the global nature of brand extension research, emphasizing the value of international collaboration. Ultimately, these practical insights can inform research strategies, collaboration opportunities, and publication choices, ensuring that scholars and practitioners stay at the forefront of this evolving field.

6.2 Limitations

The study's limitations include potential data selection bias as it relies on a specific database (Scopus), language restrictions may omit non-English research, and it solely considers published works, excluding grey literature. The search string's stringency might miss documents with varied terminology. Additionally, citation metrics may not reflect the quality of citations. The dataset's timeframe may overlook older influential research, and data accuracy issues may impact the findings. The absence of qualitative context necessitates careful interpretation. Subjectivity in keyword analysis may lead to variations in identifying dominant themes in the dataset. Recognizing these limitations is essential when assessing the study's findings.

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