

Brand Image: A Scientific Publication Positioning using Scientometric Analysis

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Abstract. Brand Image is an important aspect for companies in a competitive global market. There has not been much research on brand image by providing a big picture that is visualized from year to year. This study aims to map research in the field of brand image with data from all international publication researchers. This study conducted a bibliometric method and analyzed data using search results analysis from Scopus and the VOSviewer application. The data obtained in this study were 3,234 academic documents published from 1961 to 2019 globally. The results of research and individual researchers at the global level who are the most productive in publications in the field of brand image are the Hong Kong Polytechnic University and Pina, J.M. Most fields of study are Business, Management and Accounting, there are 6 patterns of collaborative research groups in the field of global brand image. This research consists of the diversity of the convergence axis which consists of the study of brand images to characterize the body of knowledge generated from the last 2 decades, studies: Brand, E-Commerce, Place Branding, Sales, Social Network, Quality, and Marketing, abbreviated as the theme BEPSSQM

1. Introduction

Branding has a very important role in fulfilling the promise of consumer companies in a competitive global market, assuring them of the quality of the product purchased [1]. The market and current environment are affected by globalization [2]. The internet and social media have changed the way consumers engage with brands. While traditionally, media channels are the first step in a long buying process that ends at a physical store [3]. A brand is a name, term, sign, symbol or design, or a combination of both that is intended to identify goods and services of one seller or group of sellers and distinguish them from other sellers. Brand management is a consequent effort to create, maintain, protect and enhance a particular brand to ensure a sustainable competitive advantage [4]. Brand image is defined as ideas, perceptions, expectations, beliefs, and mental representations of products or services in the minds of consumers. Brand image is developed and enhanced through consumer exposure to marketing communications including advertising and promotional content [5] [6]. In order to strengthen consumer trust in the brand [7]. A strong brand can be created and maintained by

strengthening the relationship between identity and image [8]. This has an impact on the achievement of brand performance results such as sales growth, reduction of operating costs in the environment of performance metrics [9] [10].

The growth in demand for foreign brands poses several potential challenges for marketing managers who strive to make brands part of the consumer pool [11]. With advances in science and technology, as well as changes in lifestyle, humans will continue to try and change different consumption patterns. Mobile payment, a new payment mode, which can make our life without cash, check or credit card [12] [13]. This will help companies improve their brand image and awareness but also other brand equity drivers [14] improve their problem-solving abilities, develop new products and processes, improve product quality, enhance image [15] affect the branding effect (brand awareness, attitude brand, brand engagement, and brand loyalty) [16] [17]. Brand loyalty involves developing a unique emotional attachment to a company by using its name, symbol, logo, character, and character [18]. In addition, brand image can also be used to improve the social and ethical dimensions of a company's reputation to ensure bank selection by retail customers [19].

The company (organization) brand is recognized as a key strategic intangible asset that could facilitate a sustainable competitive advantage [20] as well as a corporate communication strategy [21]. As a useful means of creating brand value and achieving a sustainable competitive advantage in today's complex market, the involvement of large companies in sponsorship activities has been well developed [22]. In previous research, namely by Ridwan Adetunji Raji, Sabrina Rashid, Sobhi Ishak, where the findings show that there is a positive and significant relationship between social media advertising content, social media sales promotion content, hedonic brand image, functional brand image and behavioral intention [6]. In general, previous studies related to brand image have been limited to only one research topic, such as the field [23], one country [24] and one affiliation [25]. There has not been much research on Brand Image by providing a big picture visualized from year to year with data from all publications of affiliated researchers at the international level. Also, no research has specifically addressed the relationship between authors, affiliation, and the impact of their research. This study aims to study the research position in the field of brand image by researchers at the global level published internationally indexed by Scopus using a bibliometric perspective. We monitor the growth in the number of academic documents related to the topic of Brand Image by researchers at the global level that have been published and indexed by Scopus from 1961 to December 2019.

2. Research Methods

This study measures the status of publication maps in the field of "Brand Image" at the international level in the last 58 years. The research data were obtained from the Scopus database using the document search service in April 2020 [26], this study used a bibliometric approach. Data analysis and visualization uses the analyze search results feature in the Scopus service and the VOSViewer application [27]. The VOSviewer tool is used to visualize and build bibliometric networks, the visualization of the network can be researchers, countries, academic affiliations, growth in the number of studies, keywords, author collaboration and research are the most cited [28].

This survey identified keywords related to brand image to search for and identify related articles from international researchers globally in the Scopus database, and obtained 3,234 academic documents published from 1961 to 2019. Research limits data collection to 2019 regardless of 2020 (exclude 2020) so that the annual data obtained describes the condition of the research in one whole year from January to December. The query command to apply when mining data at Scopus is TITLE-ABS-KEY ("brand image") AND PUBYEAR <2020.

The study conducted a type of analysis of co-authorship with the unit of analysis of authors and the full counting method using the VOSViewer tool to get a network of author collaboration. The study carries out a type of analysis of co-occurrence with a unit of analysis of keywords and a full count method using VOSViewer to obtain a network of keywords.

3. Result and Discussion

This section will explain the increase in data results based on affiliation, country, subject area, field type, documents per year from sources, documents per year from fields and document cited, co-occurrence and author network in the brand image field.

3.1. Documents based on Higher Education Affiliates from the Brand Image Studies

Figure 1 shows a list of research institutions in the Brand Image publication. The first is Hong Kong Polytechnic University with 38 documents, followed by the University of Valencia with 30 documents, Universidad de Zaragoza with 27 documents, Universiti Utara Malaysia with 22 documents, Griffith University with 19 documents, The University of Manchester with 17 documents, Multimedia University with 17 documents, Bina Nusantara University with 17 documents, Tecnológico de Monterrey with 16 documents, University of Malaya with 16 documents, and Alliance Manchester Business School with 15 documents

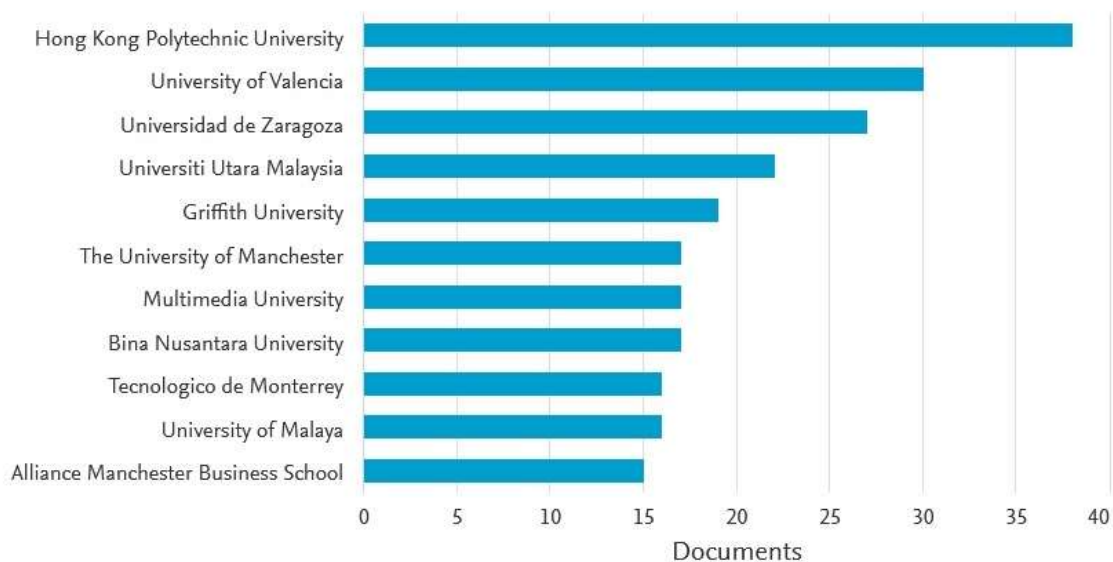


Figure 1. Documents Number based on Higher Education Affiliates from the Brand Image Studies

3.2. Documents based on Authors from the Brand Image Study

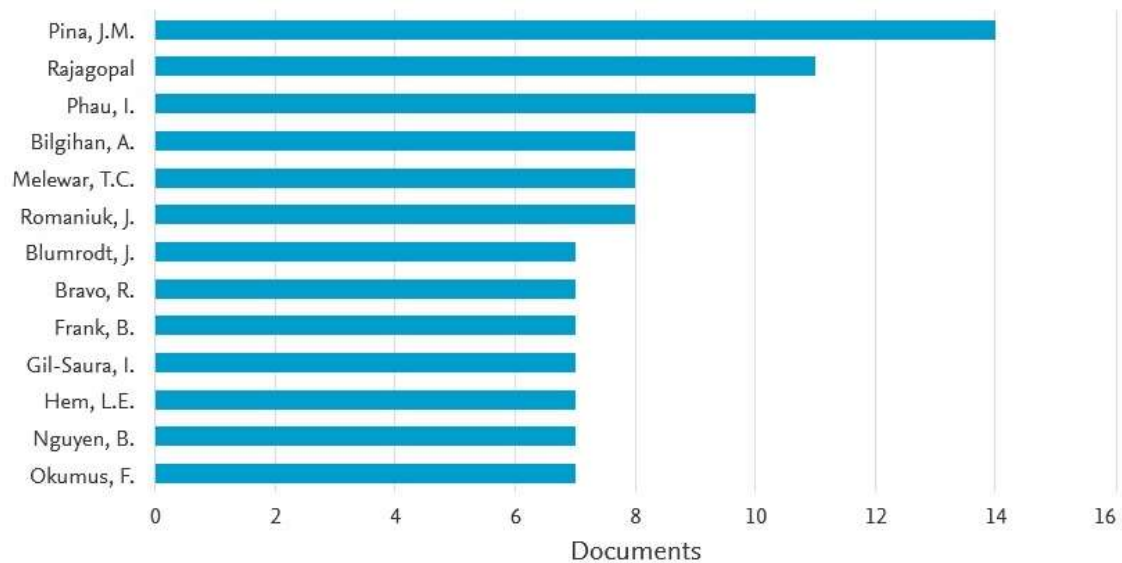


Figure 2. Documents Number based on Authors from the Brand Image Studies

Figure 2 shows the author who has the greatest contribution in publishing in the field of brand image. The author with the most publications in the field of brand image is Pina, J.M. with 14 documents, followed by Rajagopal with 11 documents, Phau, I. with 10 documents, Bilgihan, A. with 8 documents, Melewar, T.C. with 8 documents, Romaniuk, J. with 8 documents, Blumrodt, J. with 7 documents, Bravo, R. with 7 documents, Frank, B. with 7 documents, Gil-Saura, I. with 7 documents, Hem, L.E. with 7 documents, Nguyen, B. with 7 documents, and Okumus, F. with 7 documents

3.3. Country based documents from the Brand Image Studies

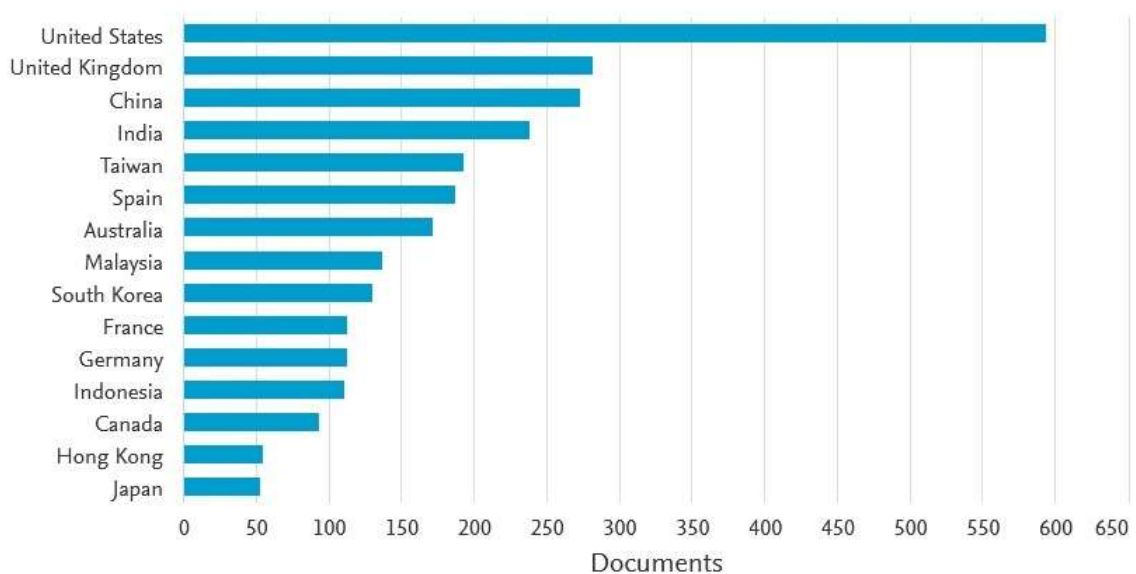


Figure 3. Number of Documents by Country from the Brand Image Studies

Figure 3 shows that the country with the largest contribution to publication in the field of brand image is the United States with 593 documents, followed by the United Kingdom with 281 documents, China with 272 documents, India with 238 documents, Taiwan with 192 documents, Spain with 186 documents. documents, Australia with 171 documents Malaysia with 136 documents, South Korea with 129 documents, France with 112 documents, Germany with 112 documents, Indonesia with 110 documents, Canada with 93 documents, Hong Kong with 54 documents, and Japan with 52 documents

3.4 Documents based on Subject Areas from the Brand Image Studies

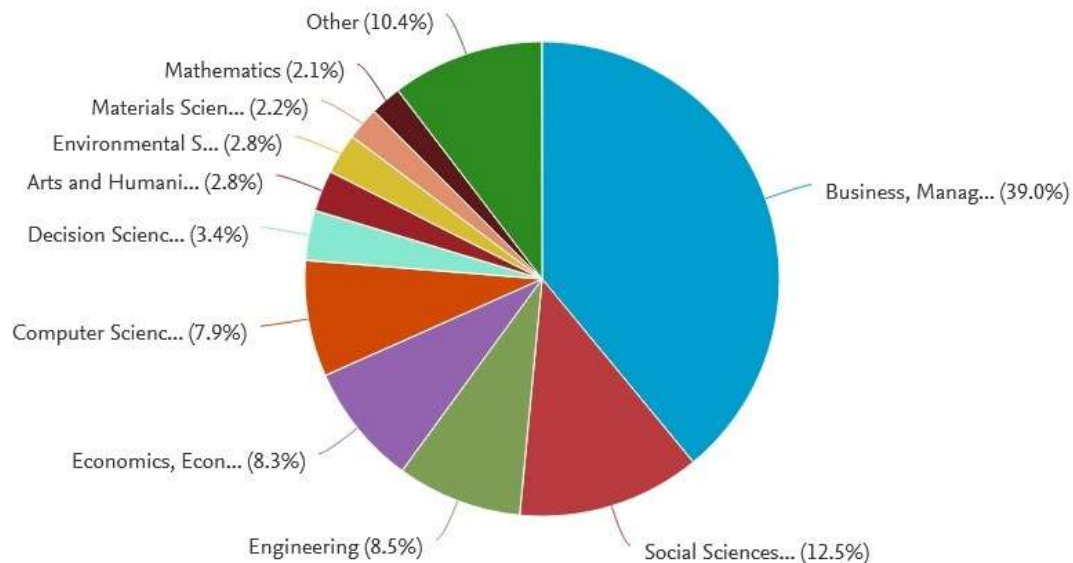


Figure 4. Number of Documents based on Subject Areas from the Brand Image Studies

The most intensive fields of study in publications. The field of brand image is the field of Business, Management and Accounting (39.09%) with 2079 documents; followed by Social Sciences (12.5%) with 666 documents; Engineering (8.5%) with 454 documents; Economics, Econometrics and Finance (8.3%) with 442 documents; Computer Science (7.9%) with 422 documents; Decision Sciences (3.4%) with 182 documents; Arts and Humanities (2.8%) with 149 documents; Environmental Science (2.8%) with 148 documents; Materials Science (2.2%) with 119 documents; Mathematics (2 (.1%) with 114 documents; and others (10.4%) with 553 documents

3.5 Documents Frequent Type Document from Brand Image Studies

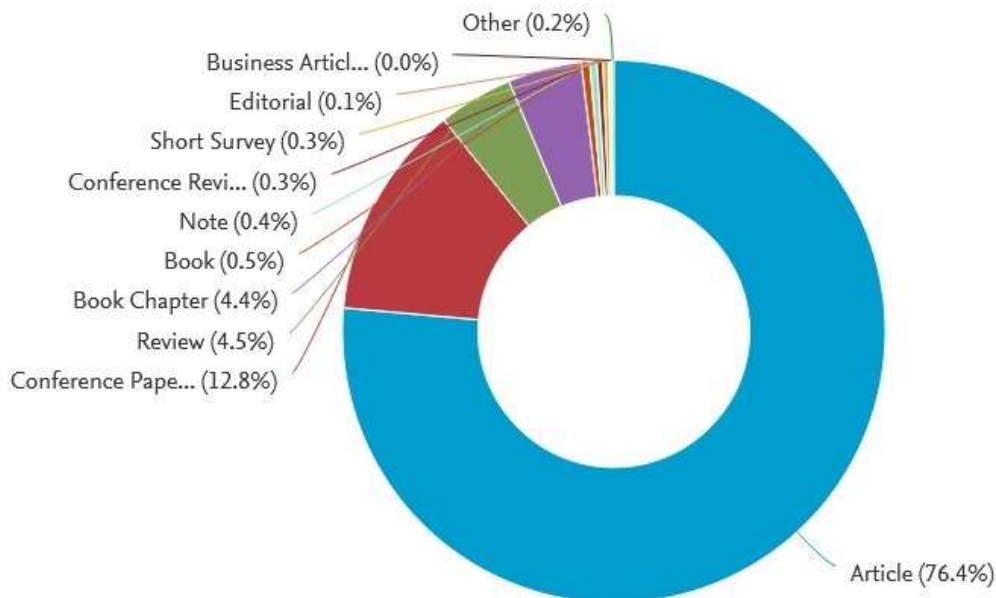


Figure 5. Number of Documents based on Subject Areas from the Brand Image Studies

The most document types in brand image publications are Articles (76.4%) with 2471 documents, followed by Conference Papers (12.8%) with 415 documents, Review (4.5%) with 144 documents, Book Chapter (4.4%) with 142 documents Book (0.5%) with 16 documents, Note (0.4%) with 14 documents, Conference Review (0.3%) with 11 documents, Short Survey (0.3%) with 11 documents, Editorial (0.1%) with 4 documents, and Business Article (0.0%) with 1 document.

3.6 Documents per year based on sources from Brand Image Studies



Figure 6. Number of Documents Per Year Based on Sources from the Brand Image Study

Number of documents per year based on sources in international publications in the field of brand image is the Journal Of Product And Brand Management with 77 documents, followed by the European Journal Of Marketing with 55 documents, Journal Of Business Research with 54 documents, Journal Of Consumer Marketing with 32 documents, Strategic Direction with 32 documents, and International Marketing Review with 28 documents

3.7 Annual documents from the Brand Image Studies

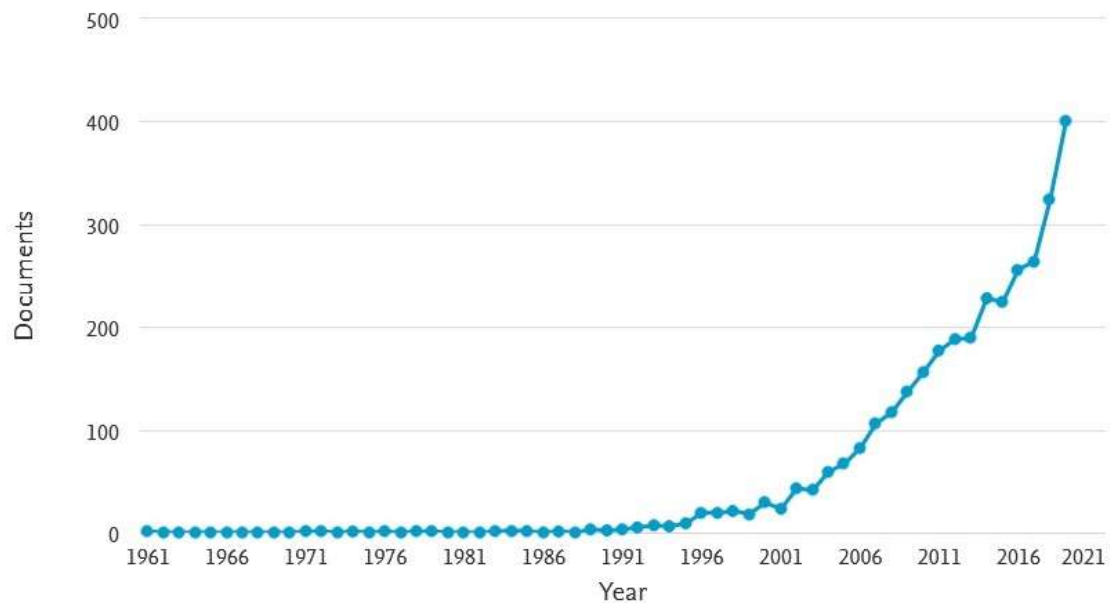


Figure 7. Number of Documents Per Year from the Brand Image Studies

In general, the number of academic document publications on brand image has increased every year. This can be seen in Figure 8, the highest publication peak in 2019 with 400 documents. Research on Brand Image has been started since 1961. The number of international publications on Brand Image has shown an increasing trend every year. This can be seen in Figure 8, the highest publication peak in 2019, and it is also possible that in 2020 there will be an increase in research on Brand Image. The number of documents per year in Brand Image publications is that in 2019 there were 400 documents, in 2018 there were 324 documents, in 2017 there were 264 documents, in 2016 there were 256 documents, in 2015 there were 224 documents and in 2014 there were 228 documents

3.8 Document cited from the Brand Image Studies

The most cited international publication on Brand Image as a form of academic impact is the work of Thompson, C.J. The most cited number was in 1997 entitled Interpreting consumers: A hermeneutical framework for deriving marketing insights from the texts of consumers' consumption, which was cited by 693 documents.

3.9 Map of Study Themes

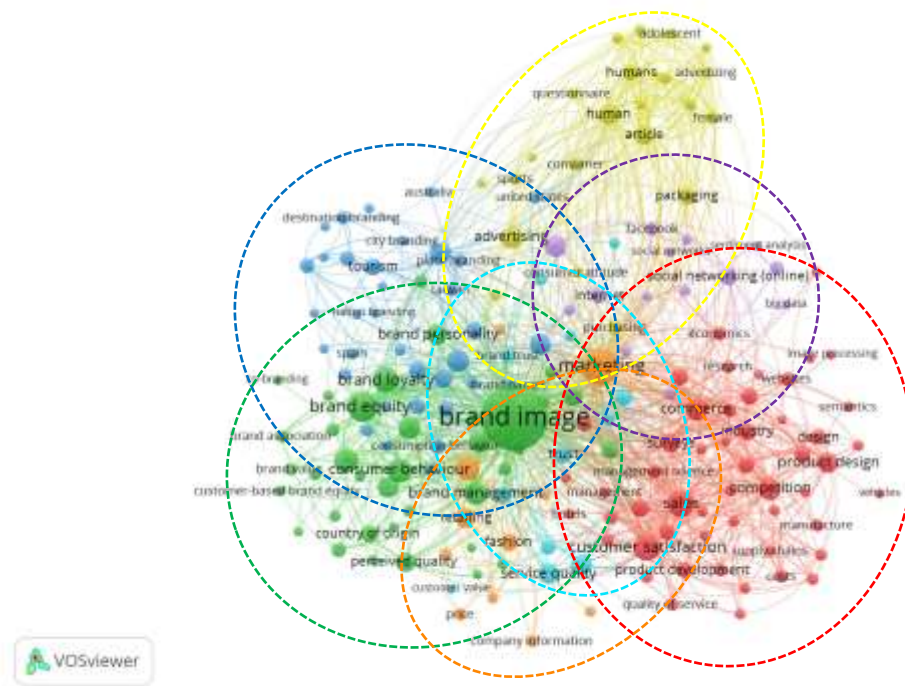


Figure 8. Map of Study Themes

The construction of the Brand Image keyword network for the study theme map is built with the VOSViewer application. The criterion for the minimum number of documents associated with a keyword is thirteen repetitions. So, out of 10005 keywords there are only 184 keywords that meet the threshold. From Figure 8. There are six study theme groups based on research keywords related to the Brand Image study, abbreviated as BEPSSQM theme.

1. Brand Cluster (Green). This cluster dominated by the keywords Brand Image, brand loyalty, brand association, brand value, brand management, co-branding. Most of these keywords relate to Brand themes.
2. E-Commerce cluster (Red). In this cluster, we can find e-commerce themes. This cluster was related by the product development, economics, industry, management, customer satisfaction, and product design.
3. Place Branding cluster (blue). In this cluster, we can find Place branding themes. This cluster was related by the keywords destination branding, city branding, nation branding, Australia, united state, spain, and taiwan.
4. Sales cluster (Yellow). This cluster is dominated by the keywords packaging, advertising, consumer, sports, and humans.
5. Social Network cluster (Purple). In this cluster, we can find social network themes. This cluster was related by the keywords social networking (online), internet, facebook, sentiment analysis, and big data.
6. Quality cluster (Light Blue). In this cluster, we can find quality themes. This cluster was related by the keywords service quality, customer value, and trust
7. Marketing cluster (Orange). This cluster dominated by the keywords marketing, fashion, and retailing.

3.10 Author Collaboration Network

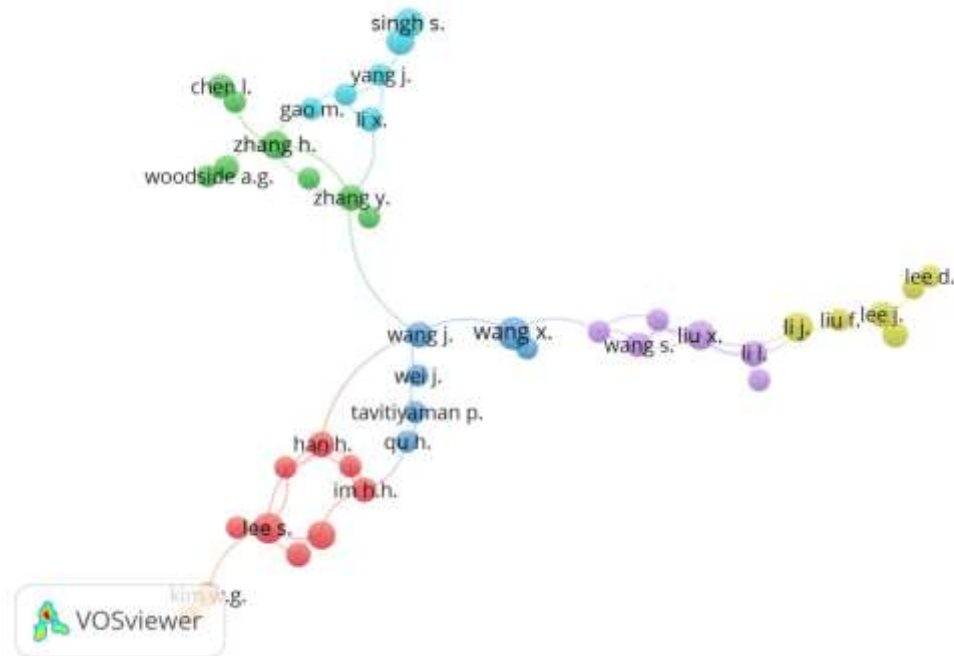


Figure 9. Author Collaboration Network

Figure 9 shows that there were 1 groups of construction patterns in the author's collaboration network in brand image studies compiled with the VOSViewer application. The criteria for the minimum number of documents per author were three documents. Thus, from 6335 writers, 277 writers were found who met the thresholds. There were six groups of collaboration patterns between researchers in brand image studies as shown in Figure 9. Author Collaboration Network.

1. Green Cluster: Zhang, Y., Zhang, H., Woodside, A.G., and Chen, I.
2. Red Cluster: Han, H., Im, H.H., and Lee, S.
3. Blue Cluster: Wang, J., Wang, X., Wei, J., Tavitiyaman, P., and Qu, H.
4. Light Blue Cluster: Gao, M., Li, X., and Yang, J
5. Purple Cluster: Wang, S., Liu, X., and Li, J.
6. Yellow Cluster: Li, J., Liu, F., Lee, J., and Lee, D.

4. Conclusion

The results of this study indicate that there is a map and an increasing trend of the amount of international research in the field of "Brand Image". The affiliated institution that has the largest contribution in the field of brand image is Hong Kong Polytechnic University with 38 documents. Meanwhile, the individual author with the most publications is Pina, J.M. with 14 documents. The country that has the largest contribution in publishing in the field of brand image is the United States with 593 documents. The most fields of study and publication sources in the field of Brand Image are Business, Management and Accounting (39.09%) with 2079 documents. The most document type in brand image publications is Article (76.4%) with 2471 documents. The highest number of documents based on sources in international publications in the field of Brand Image is the Journal of Product and

Brand Management with 77 documents. The highest peak of brand image publications occurred in 2019 with 400 documents. The most cited international publication on brand image is the work of Thompson, C.J. The most cited number was in 1997 entitled *Interpreting consumers: A hermeneutical framework for deriving marketing insights from the texts of consumers' consumption*, which was cited by a 693 document. There are 6 patterns of international collaborative research groups in the field of global brand image.

In terms of contributing implications for knowledge, this study proposes a convergence axis classification consisting of publications in the field of brand image to characterize the collection of knowledge generated from five decades of literature: Brand, E-Commerce, Place Branding, Sales, Social Network, Quality, and Marketing. , the theme for short BEPSSQM. As practical implications, identifying key themes in the area of brand image leads to understanding the development of studies to understand the general topic and context, as well as research gaps. With all this, new studies can be directed towards overcoming the lack of study and advancing knowledge in the field. The most researched themes also show the contribution of research in the field of brand image for technology and financial information.

Researchers expect future researchers to analyze contributions and explain the impact of brand image by measuring citations based on a combination of data obtained from Scopus & Web of Science.

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References

- [1] A. Boukis, "Exploring the implications of blockchain technology for brand–consumer relationships: a future research agenda," *J. Prod. Brand Manag.*, vol. 29, no. 3, pp. 307–320, 2019, doi: 10.1108/JPBM-03-2018-1780.
- [2] H. M. Al Ali, M. M. Ajmal, A. Gunasekaran, and P. T. Helo, "Managing change in constant evolving sustainable energy market: An exploratory study of motivators, enablers, and barriers," *Sustain. Prod. Consum.*, vol. 20, pp. 84–97, 2019, doi: 10.1016/j.spc.2019.05.005.
- [3] J. Anselmsson and B. Tunca, "Exciting on Facebook or competent in the newspaper? Media effects on consumers' perceptions of brands in the fashion category," *J. Mark. Commun.*, vol. 25, no. 7, pp. 720–737, 2019, doi: 10.1080/13527266.2017.1392337.
- [4] M. B. Prados-Peña, M. Lourdes Gutiérrez-Carrillo, and S. Del Barrio-García, "The development of loyalty to earthen defensive heritage as a key factor in sustainable preventive conservation," *Sustain.*, vol. 11, no. 13, 2019, doi: 10.3390/su11133516.
- [5] S. Manohar and V. Rehman, "Brand resurrection in an emerging economy," *J. Mark. Commun.*, vol. 25, no. 7, pp. 783–798, 2019, doi: 10.1080/13527266.2018.1455292.
- [6] R. A. Raji, S. Rashid, and S. Ishak, "The mediating effect of brand image on the relationships between social media advertising content, sales promotion content and behavioural intention," *J. Res. Interact. Mark.*, vol. 13, no. 3, pp. 302–330, 2019, doi: 10.1108/JRIM-01-2018-0004.
- [7] A. de Regt, M. Montecchi, and S. Lord Ferguson, "A false image of health: how fake news and pseudo-facts spread in the health and beauty industry," *J. Prod. Brand Manag.*, vol. 29, no. 2, pp. 168–179, 2019, doi: 10.1108/JPBM-12-2018-2180.
- [8] P. Scorrano, M. Fait, A. Maizza, and D. Vrontis, "Online branding strategy for wine tourism competitiveness," *Int. J. Wine Bus. Res.*, vol. 31, no. 2, pp. 130–150, 2019, doi: 10.1108/IJWBR-06-2017-0043.
- [9] K. Adhikari and R. K. Panda, "The role of consumer-brand engagement towards driving brand loyalty: Mediating effect of relationship quality," *J. Model. Manag.*, vol. 14, no. 4, pp. 987–1005, 2019, doi: 10.1108/JM2-03-2019-0067.
- [10] D. Arli, P. van Esch, G. Northey, M. S. W. Lee, and R. Dimitriu, "Hypocrisy, skepticism, and reputation: the mediating role of corporate social responsibility," *Mark. Intell. Plan.*, vol. 37, no. 6, pp. 706–720, 2019, doi: 10.1108/MIP-10-2018-0434.
- [11] M. A. Khan, R. Ashraf, and A. Malik, "Do identity-based perceptions lead to brand avoidance?"

- A cross-national investigation,” *Asia Pacific J. Mark. Logist.*, vol. 31, no. 4, pp. 1095–1117, 2019, doi: 10.1108/APJML-12-2017-0332.
- [12] C.-W. Lin, S.-S. Lee, K.-Y. Tang, Y.-X. Kang, C. C. Lin, and Y.-S. Lin, “Exploring the users behavior intention on mobile payment by using TAM and IRT,” *ACM Int. Conf. Proceeding Ser.*, pp. 11–15, 2019, doi: 10.1145/3355966.3355986.
- [13] B. Maartens, “Modernizing the military: Promoting a new ‘brand image’ of the british army, navy, and air force in the post-national service era, 1957–63,” *War Hist.*, vol. 26, no. 3, pp. 406–429, 2019, doi: 10.1177/0968344517722814.
- [14] P. Martínez and N. Nishiyama, “Enhancing customer-based brand equity through CSR in the hospitality sector,” *Int. J. Hosp. Tour. Adm.*, vol. 20, no. 3, pp. 329–353, 2019, doi: 10.1080/15256480.2017.1397581.
- [15] G. Puliga, R. Manzini, and P. Batistoni, “An Industry and Public Research Organization joint effort for ITER construction: Evaluating the impact,” *Fusion Eng. Des.*, vol. 146, no. December 2018, pp. 187–193, 2019, doi: 10.1016/j.fusengdes.2018.12.015.
- [16] S. F. Liu, H. H. Liu, J. H. Chang, and H. N. Chou, “Analysis of a new visual marketing craze: The effect of LINE sticker features and user characteristics on download willingness and product purchase intention,” *Asia Pacific Manag. Rev.*, vol. 24, no. 3, pp. 263–277, 2019, doi: 10.1016/j.apmr.2018.10.001.
- [17] M. Šerić and I. Gil-Saura, “Understanding brand equity in hotel firms. What is the role of brand loyalty and satisfaction?,” *Int. J. Contemp. Hosp. Manag.*, vol. 31, no. 9, pp. 3526–3546, 2019, doi: 10.1108/IJCHM-06-2018-0516.
- [18] T. D. Masterson, W. M. Stein, E. Beidler, M. Bermudez, L. K. English, and K. L. Keller, “Brain response to food brands correlates with increased intake from branded meals in children: an fMRI study,” *Brain Imaging Behav.*, vol. 13, no. 4, pp. 1035–1048, 2019, doi: 10.1007/s11682-018-9919-8.
- [19] B. Narteh and M. Braimah, “Corporate reputation and retail bank selection: the moderating role of brand image,” *Int. J. Retail Distrib. Manag.*, vol. 48, no. 2, pp. 109–127, 2019, doi: 10.1108/IJRDM-08-2017-0164.
- [20] S. M’zungu, B. Merrilees, and D. Miller, “Strategic and Operational Perspectives of SME Brand Management: A Typology,” *J. Small Bus. Manag.*, vol. 57, no. 3, pp. 943–965, 2019, doi: 10.1111/jsbm.12387.
- [21] A. Zorio-Grima and P. Carmona, “Narratives of the Big-4 transparency reports: country effects or firm strategy?,” *Manag. Audit. J.*, vol. 34, no. 8, pp. 951–985, 2019, doi: 10.1108/MAJ-09-2018-1994.
- [22] Y. Kim, S. Kim, S. Lee, and S. Cho, “A Structural Validation of Brand Personality Scale: Assessing the Congruence Effects of Sport Sponsorship,” *Meas. Phys. Educ. Exerc. Sci.*, vol. 23, no. 4, pp. 351–363, 2019, doi: 10.1080/1091367X.2018.1523794.
- [23] A. Flostrand, L. Pitt, and J. Kietzmann, “Fake news and brand management: a Delphi study of impact, vulnerability and mitigation,” *J. Prod. Brand Manag.*, vol. 29, no. 2, pp. 246–254, 2019, doi: 10.1108/JPBM-12-2018-2156.
- [24] S. Hamed, “Habiba Community: brand management for a family business,” *Emerald Emerg. Mark. Case Stud.*, vol. 9, no. 2, pp. 1–20, 2019, doi: 10.1108/EEMCS-01-2019-0003.
- [25] X. Zhu, L. Teng, L. Foti, and Y. Yuan, “Using self-congruence theory to explain the interaction effects of brand type and celebrity type on consumer attitude formation,” *J. Bus. Res.*, vol. 103, no. March, pp. 301–309, 2019, doi: 10.1016/j.jbusres.2019.01.055.
- [26] A. Purnomo and A. K. Sari, “Dataset of Brand Image Publication (1961-2019),” *Mendeley Data*, vol. 1, 2020, doi: 10.17632/p6tzwp3zc7.1.
- [27] I. Setyawati, A. Purnomo, D. E. Irawan, M. Tamyiz, and D. U. Sutiksno, “A Visual Trend of Literature on Ecopreneurship Research Overiewed within the Last Two Decades,” *J. Entrep. Educ.*, vol. 21, no. 4, 2018.
- [28] E. K. Natakusumah, “Bibliometric Analysis of the Inkom Journal (Analisis Bibliometrik Jurnal

Inkom),” *Baca J. Dokumentasi Dan Inf.*, vol. 36, no. 1, p. 1, 2016, doi:
10.14203/j.baca.v36i1.199.