

Brands as relationship builders in the virtual world: A bibliometric analysis

Cleopatra Veloutsou^a, Carla Ruiz Mafe^{b,*}

^a University of Glasgow, Glasgow, Scotland

^b University of Valencia, Valencia, Spain



ARTICLE INFO

Keywords:

Bibliometric analysis
Bibliographic coupling
Brand relationships
Keyword co-occurrence
Online brand communities
VOSviewer

ABSTRACT

Given the growing role of brands as relationship partners and relationship facilitators and the pre-eminence of the online environment for consumers, this article contributes to the understanding of virtual brand-centric relationships by presenting the first bibliometric mapping analysis of the academic research into the topic from its conception until 2018. Using *keyword co-occurrence*, it examines 585 records and identifies the most productive countries, journals, influential authors and papers, and research clusters. With 96% of the published records appearing between 2010 and 2018, this analysis revealed that the field is emergent. The research primarily originates from authors based in the USA, China and the UK. It also is highly fragmented, with papers being published in information management and marketing/branding journals, with cross-citations lacking. In addition, its foundations rest on a small number of works published in a handful of journals by just a few academics. The analysis also identified three main clusters of keywords: (a) identity, feelings and relationship outcomes; (b) relational elements; and (c) relationship facilitation. This bibliometric analysis brings insights together from different research streams, adds to the categorization of the literature on the topic, and provides promising future research directions in terms of research areas and strategies.

1. Introduction

In the last two decades the literature has increasingly recognised that brands have moved from being transactional tools to human-like engagement entities, that consumers experience, interact with and co-create via multiple channels (Veloutsou and Guzmán, 2017). The existence of strong brand-centric relationships is a clear indication of brand strength (Fournier and Alvarez, 2013; Alvarez and Fournier, 2016), and that brands aspire to become relationship builders. In principle, consumers form two different types of brand-centric relationships – individual and collective (Veloutsou, 2009). *Consumer brand relationships*, or brand relationships, are individual brand-centric relationships which occur when consumers act as independent entities, and relate to brands and develop links primarily of emotional or even functional natures with brands (Fournier, 1998; Veloutsou, 2007). *Collective brand-centric relationships* are relationships that members/affiliates of brand-focused groups, such as brand communities and brand tribes, develop as individuals with other group members, other individuals associated with the group, or as a collective with the brand (Muñiz and O'Guinn, 2001; Cova and Pace, 2006).

Consumer-brand relationships and group brand-enabled relationships were identified as fields of interest in the literature at about the

same time (Fournier, 1998; Muñiz and O'Guinn, 2001; McAlexander et al., 2002), and they have since attracted much academic interest. There is evidence that the two types of brand-centric relationships are interrelated (Zhou et al., 2012; Brodie et al., 2013; Black and Veloutsou, 2017), and that brand-centric collectives help consumers share, enjoy and express themselves (Cova and Pace, 2006; Wallace et al., 2014), and fuel (Veloutsou and Moutinho, 2009; Palazon et al., 2019; Coelho et al., 2019) their individual passion for the brand. Brand-enabled relationships can be rooted in the offer and functional brand characteristics, but there is increasing evidence that the personification of brands is a more solid relationship enabler (Alvarez and Fournier, 2016; Fernandes and Moreira, 2019). Brands have become relationship builders that enhance the overall consumer hedonic and functional brand experience through brand interactions (Merrilees, 2016), or, at least, enrich the affective and intellectual dimensions of brand experience (Trudeau and Shobeiri, 2016).

The role of brands as relationship builders is evident in a multitude of environments. The consumer-brand relationship concept refers to consumers' internal bonds with brands (Alvarez and Fournier, 2016) and is, therefore, somewhat deep. The literature extensively suggests that brand relationships can be strengthened by information and incidents and can drive consumer behaviours both online and offline or in

* Corresponding author at: Department of Marketing and Market Research, University of Valencia, Valencia 46022, Spain.

E-mail addresses: cleopatra.veloutsou@glasgow.ac.uk (C. Veloutsou), carla.ruiz@uv.es (C. Ruiz Mafe).

settings with both online and offline features, and that brand-centric groups also exist in all these conditions (Black and Veloutsou, 2017). The need to examine brands and the challenges they face in the online environment has long been appreciated (Rowley, 2004). Given the extensive evidence that internet penetration is on the rise in all countries (Statista, 2019), the branding research classifies the online environment and its everchanging characteristics as amongst the most important challenges brands currently confront (Veloutsou and Guzmán, 2017). A lot of research on brands as relationship builders is conducted in online settings. Although online brand-centric relationships are of growing importance, to date a holistic understanding of the nature and focus of the existing body of research in the field is lacking.

Some recent studies have attempted to provide overviews of the complex field of consumer-brand relationships (Fetscherin and Heinrich, 2015; Albert and Thomson, 2018; Fetscherin et al., 2019), making certain methodological choices. The existing work focuses exclusively on individual consumer-brand relationships in different contexts but and does not consider the role of brands as relationship enablers in brand-centric groups. This research identified the interdisciplinary nature of the academic dialogue in the field, recognising work prominent in business and management, psychology and communication journals (Fetscherin and Heinrich, 2015).

Fetscherin and Heinrich (2015) and Fetscherin et al. (2019) based their analyses on one seminal work by Fournier (1998) and selected for their studies 392 and 1129 items for the periods 1998–2009 and 2010–2018, respectively. Given that the Fournier (1998) work was published over 20 years ago, these studies may exclude items that do not cite this particular work or recent papers based on arguments reported in more recent literature. Albert and Thomson (2018, p. 130) did not explain how the “287 articles representing the consumer-brand relationship field from 1999 to 2015” were selected and they also reported that they added to their data set all papers in a specific special issue of which their analysis was a part. The lack of transparent reported criteria used to include or exclude the study’s poll of items suggests that the selection was somewhat subjective and might have ignored influential pieces of work.

The review presented in this study has four drivers originating from the need to holistically understand the field of online brand-centric relationships using a rigorous research approach. First, there is limited understanding of virtual environments as contexts for brand-enabled relationships. Second, existing bibliometric analyses do not incorporate information management journals, although there are indications that work appearing in these outlets contributes to research in the field, primarily in online settings. Third, there has been a rapid increase in the attention paid in the literature to consumer-brand relationships and to relationships in brand-centric consumer groups, but no systematic analysis focuses on brand-enabled relationships in brand-centric groups or incorporates these two interrelated streams. Last, and due to the criteria adopted for the inclusion of records by the existing studies, there is a high probability that some relevant research has been overlooked, even in that part of the domain on which the existing work focuses (consumer-brand relationships).

The purpose of this study is to address the limitations of previous reviews and provide scholars and managers with an appropriate contemporary overview of the state and evolution of the research into brands as relationship builders in virtual environments. It uses specific comprehensive criteria to identify relevant academic outputs and contributes to the literature by reporting the main trends as revealed by the bibliometric analysis and mappings (Van Eck and Waltman, 2010). The discussion builds on the interplay of the objective outputs produced from the analysis of the data and the subjective knowledge and understanding of the area provided by the researchers, who are active participants in the development of brands as relationship builders in the online environment research area.

The present study is organized as follows. The presentation of the role of brands as relationship builders, the virtual context that brands

can initiate relationships and the research focus are followed by the methodology, where the data set construction and the data analysis choices are detailed. The results are then presented and discussed. Finally, limitations are acknowledged and, based on the findings, this work proposes future research lines and promising areas for future contributions and appropriate research strategies for the field.

2. Background

2.1. Brands as relationship builders: individual and collective perspective

The academic engagement with the relationships that consumers form as individuals with brands focuses on the strength of the bonds that unite the two entities, consumers and brands (Fournier, 1998; Veloutsou, 2007; Alvarez and Fournier, 2016). Due to the increasing recognition of brands as relationship partners, their acceptance as indicators of brand strength and the many brand related outcomes that consumer-brand relationships can produce (Fournier and Alvarez, 2013; Alvarez and Fournier, 2016), it is not surprising to find evidence of a growing body of academic research in different fields focusing on the various forms of brand relationships (Fetscherin and Heinrich, 2015; Ruiz-Mafe and Veloutsou, 2017; Fetscherin et al., 2019).

Previous research has shed light on the characteristics and the nature of the individual consumer-brand relationship. Consumers start creating relationships with brands from an early age as a part of their growing and learning processes (Rodhain and Aurier, 2016). These relationships, personal in nature, can be based on functional and emotional characteristics (Bairrada et al., 2018). Depending on whether consumers mostly look for utilitarian value, mainly deriving from product performance, or for symbolic value beyond the purchase, and to through developing psychological bonds, brand relationships can be characterised primarily as functional or emotional (Fernandes and Moreira, 2019).

Brand relationships have valence, and level of passion is an indicator of their strength; relationships can be characterised as “love” and “like” when positive and “hate” and “dislike” when negative, while lack of passion leads to an unwanted outcome for brands, “indifference” (Fetscherin et al., 2019). There are indications that sometimes not all consumers share the same feelings towards a specific brand and they can be loved by some consumers and hated by others (Osuna Ramírez et al., 2019). Most of the existing research, however, focuses on positive and strong consumer-brand relationships, but there is increasing interest in brand relationships with negative valence (Fournier and Alvarez, 2013; Hegner et al., 2017; Zarantonello et al., 2016; Zarantonello et al., 2018). This stream of research responds to the need to better understand negativity towards brands as one of the top research priorities in brand management research (Veloutsou and Guzmán, 2017).

In the last two decades it has been documented that consumers who have strong passion for brands develop other relationships through them. Passionate for the brand consumers, who may or may not own the brand, such as members of groups of high-end luxury or technology brands who admire the brand but do not own the particular car, motorcycle or camera (Kumar and Nayak, 2019a), increasingly join groups where they can find other likeminded individuals with whom to share their brand-related feelings (Muñiz and O’Guinn, 2001; Veloutsou and Moutinho, 2009). These consumers participate in brand-centric collectives operating in the wider society (Badrinarayanan and Sierra, 2018), created and managed by the companies behind the brands or by individuals with strong emotions about the brands (Dholakia and Vianello, 2011).

Groups where members feel part of and a moral responsibility towards the other members are typically named brand communities, while less coherent groupings of consumers are known as brand tribes (Veloutsou and Moutinho, 2009). As in the case of consumer-brand relationships, the literature on brand communities and brand tribes has

primarily focused on supportive communities rather than communities of consumers that are against the brand, commonly called anti-brand communities (Popp et al., 2016). This literature can be organised into two interrelated groups, both engaging with brand community related topics. The first group focuses on the role of participation in brand communities in the creation of brand-related outcomes.

Given the concentration of the literature on brand supportive communities, the literature focuses on outcomes positive for the brands, such as using their members as a source of innovation (Füller et al., 2008), identity co-creation (Black and Veloutsou, 2017), developing brand trust, loyalty and positive word of mouth (Shang et al., 2006; Casaló et al., 2007; Adjei et al., 2010; Laroche et al., 2012; Brodie et al., 2013; Pöyry et al., 2013; Habibi et al., 2014; Ruiz et al., 2014; Coelho et al., 2019; Dessart et al., 2019). This does not mean that consumers that join anti-brand communities do not contribute to the generation of negative brand outcomes, but there is very little research in the field to provide evidence.

The second group in the literature reports on the social interaction in brand communities and drivers to participation in these communities (Kang et al., 2014; Badrinarayanan and Sierra, 2018; Ruiz et al., 2018; Snyder and Newman, 2019), the roles that consumers play in brand communities (Özbölük and Dursun, 2017; Veloutsou and Black, 2019), and practices that can lead to the increase of participation and trust in the community (Casaló et al., 2008; Kang et al., 2014).

These two bodies of literature have similarities in the way they approach brand-related collectives. They appreciate that not all brand-centred group members are behaviourally active (Pöyry et al., 2013; Mousavi et al., 2017; Dessart et al., 2019; Kumar and Nayak, 2019b). The research also recognises that members participate and engage with multiple entities within the brand-centric group boundaries, mainly with other members and with the brand (Gummerus et al., 2012; Brodie et al., 2013; Hollebeek et al., 2014; Dessart et al., 2015; Badrinarayanan and Sierra, 2018), while there are clear attempts to operationalise engagement with both the brand and the other community members (Balduş et al., 2015; Dessart et al., 2016). Therefore, brand-centric group research generally acknowledges individual group members' consumer-brand relationships as a basis for the existence of brand-centric group relationships.

2.2. Brand initiated relationships in the virtual world and research focus

The development and the speed of change of technology, in particular in social media, is one of the key current difficulties and challenges confronting brands (Veloutsou and Guzmán, 2017). Virtual environments provide many opportunities and various contexts for individual and group brand-centric relationships to evolve and the academic research into the topic is booming.

Online brand-enabled relationships emerge in diverse online sub-contexts, including virtual market and other non-market situations. In virtual markets two parties gather to facilitate exchange relations and transactions of offers in online nonphysical and borderless spatial conditions, typically with no direct physical contact between buyer and seller, but with digital interaction supported by communication technologies (Lee et al., 2011). The completion or the facilitation of transactions in an electronic marketplace is the ultimate goal of virtual markets.

Clearly, brands are active relationship contributors in virtual market contexts, as evidenced in sites where one of the main purposes is the initiation of transactions (Dholakia et al., 2009; Nguyen et al., 2015; Azer and Alexander, 2018). However, the virtual worlds provide much wider possibilities to create and advance online brand-centric relationships over time than those offered in virtual markets. Social media users often express their personal relationships with brands in their own virtual spaces, such as their personal blogs or social media pages (Pasternak et al., 2017). Much of the existing research also reports that individuals in virtual spaces may create brand-focused groups where

members interact and develop bonds, without having as a final aim the exchange, or the facilitation of the exchange, of offers (i.e., Kang et al., 2014; Ruiz et al., 2014; Dessart et al., 2015; 2016; Popp et al., 2016; Sanz-Blas et al., 2019). Therefore, brands in the online environment do not exclusively act as relationship contributors or initiators in virtual markets, but in much wider settings.

The virtual world offers many opportunities and means to nurture brand-centric relationships for a variety of brands. Due to their almost ubiquitous online presence, consumers clearly form relationships with online brands, as reported for search-engine brands (Veloutsou and McAlonan, 2012; Morgan-Thomas and Veloutsou, 2013), online service provider brands, such as online games (Badrinarayanan et al., 2014), software brands (Casaló et al., 2007) and online retailers (Roy et al., 2016). However, consumers communicate with and develop relationships online with, or around, all kinds of brands, for example when they join brand communities of products often not even sold online (Dessart et al., 2015; 2016; Popp et al., 2016; Halaszovich and Nel, 2017).

Online brand-enabled relationships can flourish in many platforms, including social media, primarily Facebook – where most online brand-enabled relationship research is conducted, but also on Twitter, Pinterest, and Google+ (Habibi et al., 2014), travel sites as TripAdvisor (Nguyen et al., 2015; Azer and Alexander, 2018; Bigne et al., 2019), trading platforms, such as eBay (Dholakia et al., 2009; Nguyen et al., 2013), general company web pages (Thorbjørnsen et al., 2002), dedicated brand-community websites (Casaló et al., 2007) and online forums (Cova and White, 2010; Cooper et al., 2019).

There is much reported research into online brand-centric individual and group relationships. The research area is growing, with recognised opportunities and challenges. However, there is no systematic organisation of academic engagement in the area and this is a notable gap in the body of knowledge. Through bibliometric analysis of the literature, this article bridges this research gap in online brand-centric relationships by examining the research landscape on the topic. In particular, this work aims to identify: (a) the most influential journals and contributors in terms of the countries in which they are based and research outputs; (b) the key sub-streams of research and specific topics in the area of brand-centric relationships; and (c) patterns in the evolution of research in the area.

3. Research method

3.1. The sampling process

The data were downloaded from Scopus, an academic abstract and citation database launched in 2004 by Elsevier. Scopus has more than 22,600 peer-reviewed titles, more than any other academic database. It uses a specific selection method to choose the titles in its collection, to ensure the quality of its portfolio (Scopus, 2019). The list consists primarily of academic journals, but also includes a small number of conference proceedings and books. Scopus has a fuller record of marketing journals than the ISI Web of Science database used in previous bibliometric analyses on similar topics (Fetscherin and Heinrich, 2015; Albert and Thomson, 2018; Fetscherin et al., 2019), both in terms of years and in terms of number of titles for the data collection period. The researchers relied on Scopus' quality standards and downloaded from the database the research outputs that fitted the selection criteria.

This approach was taken because it allows for a broad assessment of research in the field and not just in a small number of pre-selected sources (journals); this limits the researchers' subjective assessments and selection bias and also ensures the quality of the records/items incorporated into the data set. In addition, this approach forces researchers to leave their comfort zones and identify and assess all available papers, quantitative and/or qualitative, in the citation database to generate a robust, empirically derived representation of the state of the research developments in the field of brands as online relationship builders.

The sampling process searched for papers reporting research into forms of online brand-centric relationships, both individual and group. Specific terms were used to ensure that the literature met the research criteria. A list of terms was initially developed by the authors. This list was then discussed with four research-active academics working and publishing in the area of brand-centric relationships. This process led to the final list of terms used to select the papers.

To capture individual consumer-brand relationships the terms used were “brand relationship”, “brand relationships”, “brand love” and “brand hate”; to capture group brand-centric relationships the term used was “brand communities”; and to ensure that these relationships were reported in online contexts the terms used were “Facebook”, “Twitter”, “social media”, “online”, “internet”, “electronic commerce” and “e-commerce”. Therefore, the final keywords of the search were as follows: “brand relationship” or “brand relationships” or “brand love” or “brand hate” or “brand communities” and “Facebook” or “Twitter” or “social media” or “online” or “internet” or “electronic commerce” or “e-commerce”.

The data were downloaded in mid-2019, and there is a time lag between publication dates and the date that Scopus records the papers for some sources. For other sources many papers are reported soon after acceptance, and before they are officially allocated to a specific journal issue. So it was decided to download only records published from the earliest days of the research up to the end of 2018.

The search and download of the data were performed on 15 June 2019 and returned 591 records. The data were downloaded in tabular form, stored in comma-separated values (.csv), a format compatible with many programmes. It was decided that no items would be excluded from the analysis on the basis of their origin, and therefore journal papers, conference papers and books were all included, with the exception only of incomplete records. After removing these incomplete records, a total of 585 items remained for the analysis.

3.2. Bibliometric analysis

Bibliometric analysis (Ikpaahindi, 1985), one of the most important measures for the evaluation of scientific output, was applied to identify the range of scientific literature on online brand-centric relationships, describing the trends and main topics addressed. Bibliometric analysis identifies the most productive authors, the evolution of publications over time, the most influential articles and authors in a particular set of studies and the subjects most closely related to a specific research field (Milian et al., 2019).

The focus of the analysis was the authors (countries and names), the source (journals) and the keywords. The data were analysed using Microsoft Excel and VOSviewer (www.vosviewer.com), a free software tool that uses suitable mapping techniques that cluster outputs in large bibliometric networks (van Eck and Waltman, 2010). In particular, VOSviewer was used for the bibliographic coupling and co-occurrence of keywords. *Bibliographic coupling* establishes the similarity between documents by identifying items that share the same references. *Co-occurrence of keywords* identifies the number of times that two keywords are used together in the articles in the sample and therefore indicates their proximity. The specific approach taken during the bibliometric analysis is explained in the next section.

4. Findings

4.1. Most productive journals

The field of online brand-centric relationships is new and growing. A very small number of publications appeared before 2010 (Fig. 1), with less than 6% of the output produced up to and including 2009. However, the situation changed from 2010. From then there was a relatively steady growth in the number of research items published each year; the increase was some 110% in 2010 and over 20% in 2015, 2016 and 2018. Academic researchers, thus, were increasing their

engagement with the topic, which was still in its introductory stage, compared to research into individual consumer-brand relationships, which was then in its growth stage (Fetscherin et al., 2019).

A total of 281 sources have published research items on online brand-centric relationships. There are 17 sources with 6 or more papers and 264 sources with 5 or less (Table 1). The seven journals with more than 10 items have published, in total, 113 items, 19.32% of the total number of items in the data set, indicating a high concentration of work appearing in a small number of sources. The journals where the submissions are concentrated are of four different general types: (a) branding, (b) information management, (c) general marketing and (d) marketing and online behaviour.

The two journals specifically related to branding, that is, the *Journal of Product and Brand Management* and the *Journal of Brand Management*, have between them published 34 works, which puts them among the top five journals in terms of number of papers published. Journals on information technology and online issues, *Computers in Human Behavior*, *Internet Research* and *Online Information Review*, as well as a conference on computer science, the *ACM International Conference Proceeding Series*, also feature in the top positions.

In terms of number of outlets, the general marketing journals lead. The *Journal of Business Research*, the *Journal of Marketing Management*, the *Journal of Retailing and Consumer Services*, the *European Journal of Marketing*, *Marketing Intelligence and Planning*, the *International Journal of Information Management* and the *Journal of Consumer Marketing* have all published more than five items. Finally, several specialised journals on marketing and online behaviour also featured among the sources with the highest number of items, including the *International Journal of Web Based Communities*, that clearly focuses on the relationships that members of brand communities form, and other journals, specifically the journal *Electronic Commerce Research and Applications*, the *Journal of Interactive Marketing*, and the *International Journal of Internet Marketing and Advertising*.

In terms of contribution in the field, both the quantity and the relative strengths of the papers were examined. The number of papers in the area is the indicator used to represent the quantity of the contributions, and the average citations per paper per year of a source measures the relative academic impact of each source. To calculate the number of citations per paper per year for each source the average number of citations per year for each paper was first calculated. The average number of citations per paper were averaged based on the number of papers in each source.

The top sources in terms of number of papers did not always contribute the most influential papers in the field, and journals in different general types have contributed influential papers in the field of online brand-centric relationships. The *Journal of Product and Brand Management*, *Computers in Human Behavior*, and the *Journal of Business Research* are the sources that lead in terms of number of papers, all with more than 15, while the *International Journal of Information Management*, the *Journal of Interactive Marketing*, and the *Journal of Business Research*, published the most influential papers on average, all with more than 16 citations per paper per year.

The citations were analysed to cluster the journals. This analysis was based on the premise that authors cite publications they consider important to the development of their studies; therefore, the documents cited with the greatest frequency are probably more influential than those less often cited (Milian et al., 2019). The clustering of the sources with more than 6 papers, in terms of the number of times journals cite each other via VOSviewer (Fig. 2), revealed that there are two clear source clusters that cross-cite each other.

Cluster 1 has 10 sources, primarily in the information management area, and the Cluster 2 has 7, that can be characterised as marketing sources (Table 1). This analysis groups the journals publishing in the area of brand-centric relationships more broadly than the four types of journals observed by the researchers. The *Journal of Business Research* is a multidisciplinary journal that the analysis classifies as belonging to

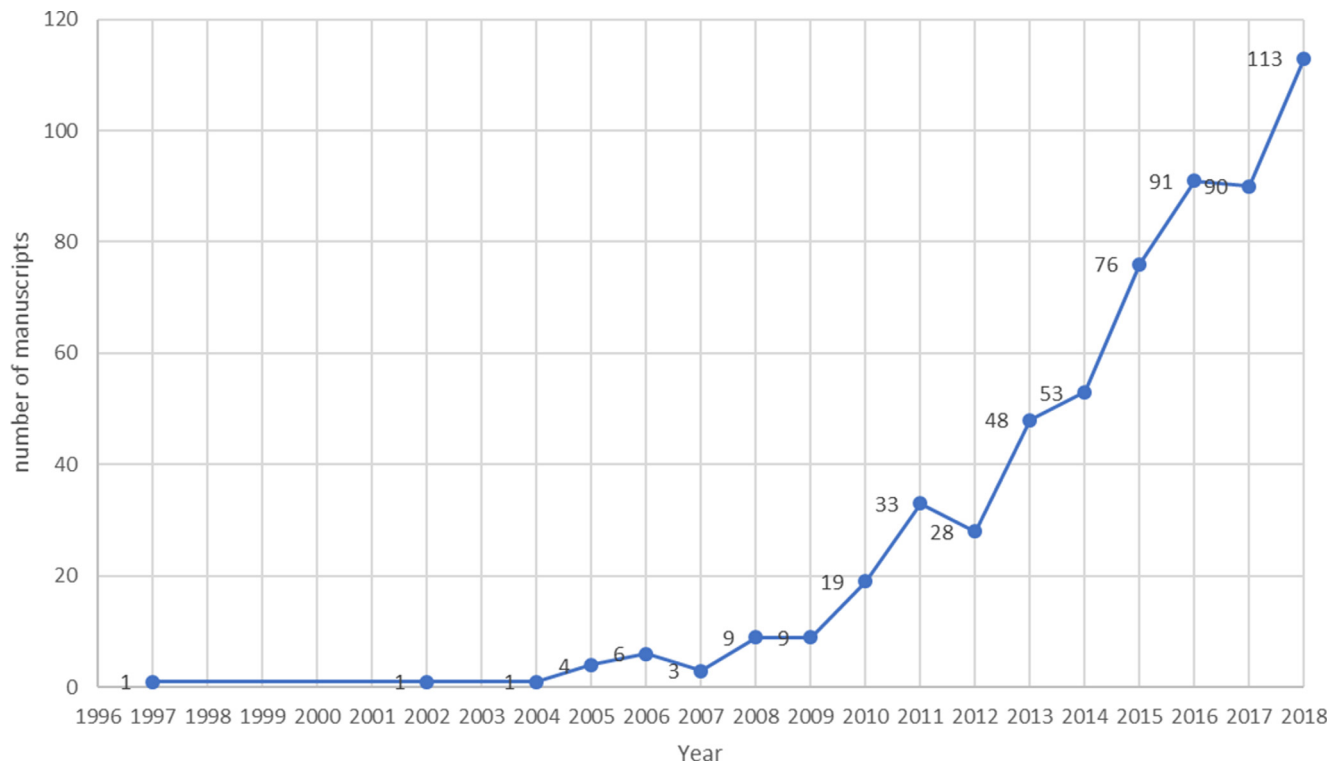


Fig. 1. Number of Publications in Online Brand-Centric Relationships per year.

Table 1
Most Productive Journals in the area of Online Brand-Centric Relationships.

| Source title | papers | Number of citations | Citation per paper per year | 2018 CiteScore | Cluster |
|---|--------|---------------------|-----------------------------|----------------|---------|
| Journal of Product and Brand Management | 21 | 644 | 7.96 | 2.59 | 2 |
| Computers in Human Behavior | 17 | 707 | 9.03 | 6.14 | 1 |
| Journal of Business Research | 16 | 1279 | 16.84 | 5.32 | 1 |
| Internet Research | 13 | 554 | 8.29 | 5.92 | 1 |
| Journal of Brand Management | 13 | 210 | 3.33 | 2.28 | 1 |
| ACM International Conference Proceeding Series | 12 | 4 | 0.10 | N/A | 1 |
| Journal of Marketing Management | 11 | 287 | 7.29 | 2.69 | 2 |
| Online Information Review | 10 | 238 | 3.50 | 2.70 | 1 |
| Journal of Retailing and Consumer Services | 9 | 142 | 6.14 | 4.53 | 1 |
| European Journal of Marketing | 8 | 496 | 8.10 | 2.34 | 2 |
| International Journal of Web Based Communities | 8 | 13 | 0.59 | 0.84 | 1 |
| Electronic Commerce Research and Applications | 7 | 214 | 7.84 | 4.80 | 1 |
| Journal of Interactive Marketing | 7 | 768 | 19.31 | 6.62 | 2 |
| Marketing Intelligence and Planning | 7 | 161 | 2.86 | 2.49 | 2 |
| International Journal of Information Management | 6 | 456 | 22.54 | 8.81 | 1 |
| International Journal of Internet Marketing and Advertising | 6 | 30 | 0.61 | 0.56 | 2 |
| Journal of Consumer Marketing | 6 | 72 | 1.83 | 2.17 | 2 |

Cluster 1. The size of the dots in Fig. 2 indicates the number of citations for each journal. The analysis also revealed that the *Journal of Interactive Marketing* was the source that started publishing papers in the field, while the information management journals that are contributing the most in the literature of online brand-centric relationships are fewer than the marketing journals and have produced less papers in the specific narrow sub-field.

4.2. Key contributors

The works analysed were produced by 774 authors. Of these authors, 21 were not reporting on the country in which they were based. The remaining 753 were based in institutions in 63 countries, but those based in the 17 countries with more than 10 contributions to the literature accounted for 78% of the overall number of publications (Table 2). Authors from the top 3 countries in terms of contribution (the

US, China and the UK) provided 34% of the total literature on online brand-relationships. It should be noted that some of the authors contributed many papers and are therefore counted multiple times.

This concentration of publications from authors in this small number of countries is consistent with the overall research output produced in all scientific fields, as well as the specific, but wider, academic sub-fields from which the papers in this analysis were selected. More specifically, it reflects the Scimago Journal and Country Rank that reports that, for all years, the USA, China and the UK produced the most documents in all scientific fields, including in the categories “Business and International Management”, “Business, Management and Accounting (miscellaneous)” and “Marketing”, and were in the top four in “Information Systems and Management”, with India in third, and the UK in fourth place (Scimago Journal and Country Rank, 2019).

A small number of authors (61) contributed 3 or more papers on online brand-centric relationships (Table 3). When the initials of the

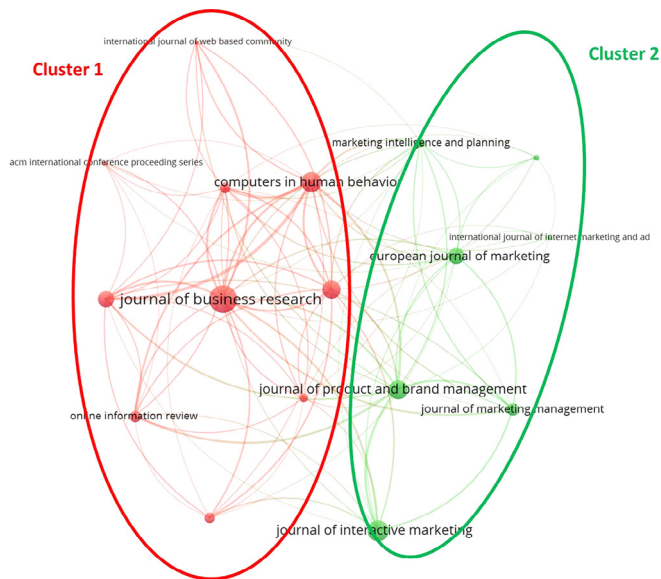


Fig. 2. Sources Clusters Publishing Academic Work on Online Brand-Centric Relationships.

surnames of the authors were similar, the names of these authors were checked to ensure that they were indeed different people and corrections were made where necessary. For example, there are two authors with the surname Wang who share the same initial, but one has the first name Yongjian and the other Yu. More than half of these authors have three outputs, while the most productive author has a total of 9 outputs. When looking for the countries where authors with more than 6 papers published are based, clearly the US is not leading the game. Several of these authors were based in Australasia, in particular New Zealand (Hollebeek), South Asia in particular, India (Rahman, Kamboj) and Taiwan (Ho) and some in Europe, in particular, France (Cova) and the UK (Veloutsou). Three of the most productive authors, each with more than 6 papers, were based in North America, in particular Canada (Habibi, Laroche) and the US (Richard). The total citations per author and the average citations per item per year were also recorded.

The work of some of the most productive authors in terms of number of papers does not attract a lot of citations. Similarly, some of

the authors who have many citations do not have a significant number of citations per year because their first works were published many years ago and, thus, their average number of citations per year is limited. Only a few authors have averages of more than 15 citations per paper per year and they are part of co-authoring teams. The first co-authoring team includes Brodie and Hollebeek, the second includes Laroche, Habibi and Richard and the third includes Morgan-Thomas, Dessart and Veloutsou. Some of these also publish on the topic with other co-authors, such as Hollebeek and Veloutsou. Lin also has a high average number of citations per item per year, but this comes almost exclusively from the very high number of citations for one of the three items authored by this researcher included in the database (Lin, 2007).

Using VOSviewer, the authors with more than 3 papers are organised in specific research areas based on the degree to which they share the same references (Fig. 3). In the visualisation, the number of citations of each author is expressed through the size of the dot representing the author (Fig. 3). Three clusters are presented in the data. The specific sub-topics that these authors worked on and the outlets in which they published seem to influence the composition of the clusters. All clusters had strong elements of consumer interaction in the online context.

As to the composition of the three clusters of authors based on sharing the same references (Table 4), the Cluster 1 had the largest number of authors, with a total of 30, and a concentration of the most cited, such as two co-authors in the Brodie and Hollebeek team and three co-authors in the Veloutsou, Dessart and Morgan-Thomas team. The work of these authors focuses on engagement with the brand and the other brand community members, while their works are primarily published in marketing and branding journals.

Cluster 2 includes 25 authors, the most cited being the two co-authoring teams of Laroche, Richard and Habibi, and Cova and Pace; cited to a lesser extent but still more than others are Adjei and Kandampully. These papers do indeed study brand communities, but they are primarily published in information technology journals.

Cluster 3 includes 12 authors whose work is relatively less cited than the key authors in the other clusters. Key authors in this cluster are the co-authors Flavián and Casaló, and Füller. Most of the output of this cluster is early work in the area, with many items published before 2010. The work of Cluster 3 principally focuses on the use of specific technology features that facilitate consumer interaction on the web, and also some work on co-creation in the online context.

Table 2
Map of authors of Online Brand-Centric Relationships.

| Country | No |
|------------------------|-----|
| USA | 139 |
| China | 64 |
| UK | 62 |
| Taiwan | 43 |
| Spain | 36 |
| Australia | 34 |
| India | 29 |
| South Korea | 27 |
| Germany | 26 |
| Finland | 25 |
| France | 25 |
| Canada | 20 |
| Italy | 19 |
| Hong Kong | 17 |
| New Zealand | 13 |
| Portugal | 12 |
| Norway | 11 |
| 46 countries With > 10 | 151 |
| Unidentified | 21 |

Table 3
 Authors with 3 or more papers on online brand-centric relationships.

| Authors (in alphabetical order) | Papers per author | No of authors |
|---|-------------------|---------------|
| Rahman, Z. (TC = 122, CIY = 7.63) | 9 | 1 |
| Cova, B. (TC = 563, CIY = 8.30); Kamboj, S. (TC = 85, CIY = 10.02); Richard, M.O. (TC = 733, CIY = 19.83) | 7 | 3 |
| Habibi, M.R. (TC = 697, CIY = 20.14); Ho, C.W. (TC = 41, CIY = 1.52); Hollebeek, L.D. (TC = 1305, CIY = 46.18); Laroche, M. (TC = 97, CIY = 20.14); Veloutsou, C. (TC = 406, CIY = 15.94) | 6 | 5 |
| Casaló, L.V. (TC = 294, CIY = 6.13); Flavián, C. (TC = 294, CIY = 6.13); Kandampully, J. (TC = 327, CIY = 11.71); Karjaluoto, H. (TC = 59, CIY = 3.35); Lee, M.K.O. (TC = 123, CIY = 7.45); Munnukka, J. (TC = 53, CIY = 3.03); Sicilia, M. (TC = 107, CIY = 3.22) | 5 | 7 |
| Brodie, R.J. (TC = 1214, CIY = 54.59); Dessart, L. (TC = 279, CIY = 19.79); Ellonen, H.K. (TC = 118, CIY = 2.91); Goh, K.Y. (TC = 407, CIY = 13.62); Kaufmann, H.R. (TC = 11, CIY = 1.13); Kaur, P. (TC = 45, CIY = 4.75); Morgan-Thomas, A. (TC = 390, CIY = 23.33); Popp, B. (TC = 28, CIY = 2.33); Tarkiainen, A. (TC = 118, CIY = 2.91); Wallace, E. (TC = 211, CIY = 11.08); Wu, J. (TC = 38, CIY = 3.49); Zhang, M. (TC = 80, CIY = 6.40); Zhao, J.L. (TC = 38, CIY = 3.49) | 4 | 11 |
| Adjei, M.T. (TC = 249, CIY = 9.58); Bilgram, V. (TC = 4, CIY = 0.44); Buil, I. (TC = 175, CIY = 12.77); Cheung, C.M.K. (TC = 111, CIY = 8.42); de Chernatory, L. (TC = 175, CIY = 12.77); Dhir, A. (TC = 37, CIY = 5.44); Füller, J. (TC = 282, CIY = 8.82); Guinalfu, M. (TC = 282, CIY = 8.21); Hosseini, M. (TC = 0, CIY = 0); Islam, J.U. (TC = 63, CIY = 13.17); Jayasingh, S. (TC = 11, CIY = 0.94); Kuivalainen, O. (TC = 114, CIY = 3.66); Kuo, Y.F. (TC = 75, CIY = 4.94); Lee, H. (TC = 16, CIY = 1.07); Lin, Z. (TC = 405, CIY = 22.48); Loureiro, S.M.C. (TC = 11, CIY = 1.5); Luo, N. (TC = 67, CIY = 6.36); Meek, S. (TC = 3, CIY = 1); Noble, C.H. (TC = 249, CIY = 9.58); Noble, S.M. (TC = 249, CIY = 9.58); Pace, S. (TC = 438, CIY = 14.52); Rowley, J. (TC = 79, CIY = 3.92); Shen, X.L. (TC = 13, CIY = 3.64); Suh, Y. (TC = , CIY =); Sun, Y. (TC = 13, CIY = 3.64); Sung, Y. (TC = 168, CIY = 9.27); Venkatesh, R. (TC = 11, CIY = 0.94); Wang, Y. (TC = 11, CIY = 1.22); Wang, Y.B. (TC = 10, CIY = 0.83); Zheng, X. (TC = 111, CIY = 8.42); Zhou, N. (TC = 234, CIY = 11.17); Zhou, Z. (TC = 234, CIY = 11.17) | 3 | 32 |

TC = total citations.

CIY = citations per item per year.

In bold: authors with more than 15 citations per item per year.

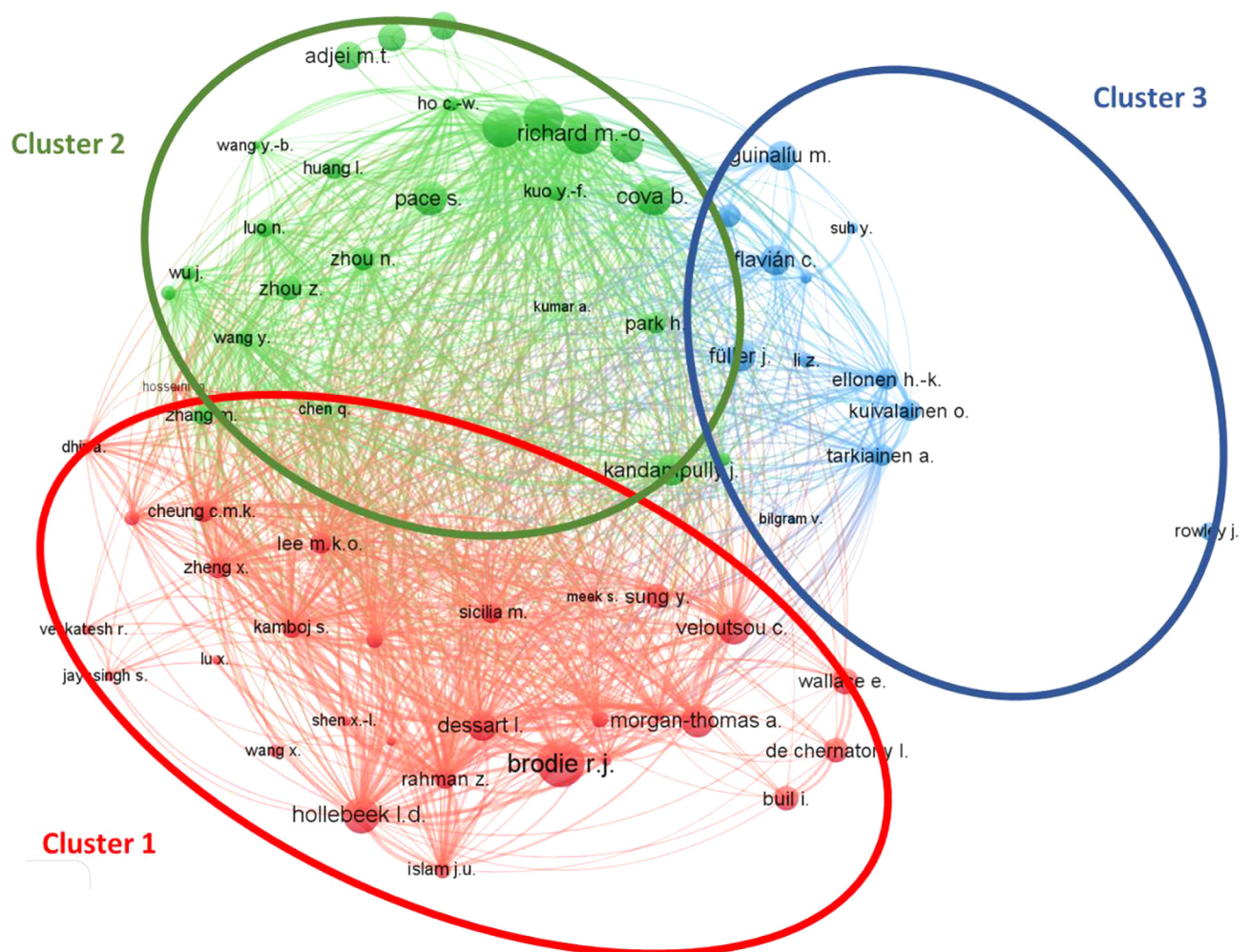


Fig. 3. Clusters of authors of manuscripts on online brand-centric relationships based on the degree to which they share the same references.

Table 4
Cluster of authors based on the degree to which they share the same references.

| | |
|-----------|---|
| Cluster 1 | Brodie, Buil, Cheung, de Chernatony, Dessart, Dhir, Hollebeek, Hosseini, Islam, Jayasingh, Kamboj, Karjaluto, Kaufmann, Kaur, Lee M.K.O., Loureiro, Lu, Meek, Morgan-Thomas, Munnukka, Rahman, Shen, Sicilia, Sun, Sung, Veloutsou, Venkatesh, Wallace, Wang, Zheng |
| Cluster 2 | Adjei, Chen, Cova, Habibi, Ho, Huang, Kandampully, Kumar, Kuo, Laroche, Lin, Luo, Noble C.H., Noble S.M., Pace, Park, Popp, Richard, Wang Y., Wang Y.B., Wu, Zhang, Zhao, Zhou N., Zhou Z. |
| Cluster 3 | Bilgram, Casaló, Ellonen, Flavián, Füller, Guinalfú, Kuivalainen, Lee H., Li, Rowley, Suh, Tarkiainen |

4.3. Most influential papers

To better understand the findings of the analysis of the authors sharing the same references, additional tests were conducted. The density and overlay visualization indicate that the most recent developments in research in the area are reported primarily by authors from Cluster 1, who are publishing new papers that clearly cite recent works, although it should be noted that the time period during which the majority of these outputs have been produced is relatively short and VOSviewer considers five years as a suitable time window for analysis (2012–2016).

In total, 31 items from this sample have more than 100 citations; of these, 30 are academic papers and one is a book (Table 5). Although time influences the number of total citations, the majority of the most cited items were published relatively recently. Only 9 of the most cited items appeared before 2010, and some of these early papers have a very small number of citations per year. In contrast, 7 of the most cited items were published after 2014. The top authors in terms of citations contributed seven of these outputs, with Laroche, Habibi and Richard contributing three, Brodie and Hollebeek two and Morgan-Thomas and Veloutsou a further two. It is noteworthy that Cova wrote two of these papers, with different co-authors, and two were written by Casaló, Flavián and Guinalfú; but these works were all published during or before 2010.

Most of the highly cited papers (Table 5) focus on group brand-centric relationships and primarily on brand communities, rather than on individuals engaging with brands when surfing the Internet. The two most influential papers based on the number of citations and citations per year were authored in 2013 and 2015, respectively, and share two authors, Brodie and Hollebeek (Brodie et al., 2013; Hollebeek et al., 2014), while two more papers with more than 50 citations a year on average published in the same period or even later (Goh et al., 2013; Dessart et al., 2015). All four of these papers focus on relationships formed amongst individuals or between individuals and brands in the context of brand communities.

4.4. Main keywords

Several steps were followed to prepare the data for analysis. First, the data were treated, and words/terms with the same meanings were edited or replaced. More specifically, terms such as “brand communities”, “online brand community(ies)”, “social media brand community(ies)” and “virtual brand community”, were changed to “brand community”; and “consumer-brand relationships” and “brand relationships”, were changed to “brand relationship” and “behaviour” to “behavior” and “word-of-mouth” to “word of mouth” and “social networks” to “social network”. After cleaning the data, a total of 1946 keywords remained. From the keywords, 113 met the threshold of 5 as a minimum number of co-occurrences.

The second step in the data preparation was the control of noise introduced by some of the terms. The researchers critically evaluated the 113 keywords on the basis of their suitability for providing appropriate information about conceptual developments in the field. Using a systematic approach concentrating on theoretical concepts rather than context or broad generic terms, 53 of the keywords were removed from the analysis. The keywords eliminated were chosen through a systematic approach on the basis that they referred to

methods, generic terms, general marketing or information systems or to the online context. More specifically, 13 theory and methodological words/terms (behavioural research, design/methodology/approach, human experiment, major clinical study, netnography, regression analysis, research, social capital, social identity theories, social identity theory, structural equation modelling, surveys and theoretical model) were identified. In addition, there were 16 general words/terms (adult, article, communication, decision-making, economic and social effects, female, human, humans, industry, male, manager, motivation, participation, perception, social commerce and sustainable development). We also obtained 15 general marketing and information technology words/terms (commerce, competition, consumer behaviour, consumers, consumption behaviour, e-commerce, information management, information systems, information use, internet marketing use, marketing, marketing strategy, public relations, retailing and sales). Finally, 8 terms were either very broad or very narrow online context terms (Facebook, human-consumer interaction, Internet, online systems, Twitter, websites, Web 2.0 and World Wide Web). Following this process, 60 words/terms survived for the analysis.

The data were visualised using VOSviewer (Fig. 4). All records in the dataset were analysed based on the full counting of the co-occurrence of all their keywords, with the same weight being given to all co-occurrences. The number of occurrences is represented by the size of the dot for each of the keywords. Three clusters were formed (Table 6). The first consists of 22 keywords, with key nodes being brand loyalty, e-commerce and word of mouth. It comprises primarily online relationship outcomes, such as satisfaction, loyalty and purchase intention, and feelings, such as relationship quality and commitment, and identity and image terms, such as brand image, brand community identity and brand identification; therefore, the cluster is labelled “identity, feelings and relationship outcomes”.

The second cluster consists of 20 keywords. This is the “brand relational cluster”, with the two most frequently used keywords being brand community and brand relationship. This cluster also includes some brand-related terms, such as brand, branding and brand equity. The third is the “relationship facilitation cluster”, consisting of 19 keywords; the most common keywords are social networking and social network. It consists primarily of terms that reflect interaction, such as online systems, virtual reality, but also includes some relationship outcome terms, such as brand love and purchase intentions.

For the five-year period that the VOSviewer considers as a suitable time window for the analysis (2012–2016), the overlay visualisation showed some trends. The analysis revealed that the latest research focuses on specific terms that belong in different clusters. The most commonly used terms were social networking, participation, engagement, user-generated content and social media. Early work in the area of online brand-centric relationships concentrated on more traditional concepts, such as brand equity, loyalty, general brand management and virtual reality. Brand community and brand relationship research features in the middle of the continuum in terms of timing, where brand love seems to be an emerging concept. The term “brand hate” does not feature in the analysis as it did not meet the criteria for inclusion, as only three records were returned in the search. One item referring to “brand dislike” in its abstract was returned.

Table 5
Most cited papers on online brand-centric relationships (papers with more than 100 citations).

| Authors | Year | Title | Source title | Cited | Cites per year |
|--|------|---|---|-------|----------------|
| Brodie, Jlic, Juric and Hollebeck | 2013 | Consumer engagement in a virtual brand community: An exploratory analysis | Journal of Business Research | 759 | 151.80 |
| Hollebeck, Glynn and Brodie. | 2014 | Consumer brand engagement in social media: Conceptualization, scale development and validation | Journal of Interactive Marketing | 448 | 112.00 |
| Goh, Heng and Lin | 2013 | Social media brand community and consumer behavior: Quantifying the relative impact of user- and marketer-generated content | Information Systems Research | 403 | 80.60 |
| Cova and Pace | 2006 | Brand community of convenience products: New forms of customer empowerment – The case “my Nutella The Community” | European Journal of Marketing | 381 | 31.75 |
| Gummerus, Liljander, Weman and Philström | 2012 | Customer engagement in a Facebook brand community | Management Research Review | 285 | 47.50 |
| Füller, Matzler and Hoppe | 2008 | Brand community members as a source of innovation | Journal of Product Innovation Management | 272 | 27.20 |
| Banet-Weiser | 2012 | Authentic™: The politics of ambivalence in a brand culture | Computers in Human Behavior | 255 | 42.50 |
| Laroche, Habibi, Richard and Sankaranarayanan | 2012 | The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty | International Journal of Information Management | 238 | 39.67 |
| Laroche, Habibi and Richard | 2013 | To be or not to be in social media: How brand loyalty is affected by social media? | Management Research Review | 237 | 47.40 |
| Jahn and Kunz | 2012 | How to transform consumers into fans of your brand | Journal of Service Management | 225 | 37.50 |
| Adjei, Noble and Noble | 2010 | The influence of C2C communications in online brand communities on customer purchase behavior | Journal of the Academy of Marketing Science | 215 | 26.88 |
| Wirtz et al. | 2013 | Managing brands and customer engagement in online brand communities | Journal of Service Management | 205 | 41.00 |
| Dessart, Veloutsou and Morgan-Thomas | 2015 | Consumer engagement in online brand communities: A social media perspective | Journal of Product and Brand Management | 194 | 64.67 |
| Shang, Chen and Liao | 2006 | The value of participation in virtual consumer communities on brand loyalty | Internet Research | 166 | 13.83 |
| Anderson | 2005 | Relationship marketing and brand involvement of professionals through web-enhanced brand communities: The case of Coloplax | Industrial Marketing Management | 162 | 12.46 |
| Casaló, Flavián and Guinallu | 2007 | The impact of participation in virtual brand communities on consumer trust and loyalty: The case of free software | Online Information Review | 145 | 13.18 |
| Lin | 2007 | The role of online and offline features in sustaining virtual communities: An empirical study | Internet Research | 134 | 12.18 |
| Labrecque | 2014 | Fostering consumer-brand relationships in social media environments: The role of parasocial interaction | Journal of Interactive Marketing | 133 | 33.25 |
| Casaló, Flavián and Guinallu | 2008 | Promoting consumer's participation in virtual brand communities: A new paradigm in branding strategy | Journal of Marketing Communications | 132 | 13.20 |
| Pongsakornrungsilp and Schroeder | 2011 | Understanding value co-creation in a co-consuming brand community | Marketing Theory | 131 | 18.71 |
| Baldus, Voorhees and Calantone | 2015 | Online brand community engagement: Scale development and validation | Journal of Business Research | 124 | 41.33 |
| Morgan-Thomas and Veloutsou | 2013 | Beyond technology acceptance: Brand relationships and online brand experience | Journal of Business Research | 124 | 24.80 |
| Thorbjørnsen, Supphellen, Nysveen and Pedersen | 2002 | Building brand relationship online: A comparison of two interactive applications | Journal of Interactive Marketing | 119 | 7.44 |
| Zhou, Zhang, Su and Zhou | 2012 | How do brand communities generate brand relationships? Intermediate mechanisms | Journal of Business Research | 115 | 19.17 |
| Stokburger-Sauer | 2010 | Brand community: Drivers and outcomes | Psychology and Marketing | 114 | 14.25 |
| Habibi, Laroche and Richard | 2014 | The roles of brand community and community engagement in building brand trust on social media | Computers in Human Behavior | 113 | 28.25 |
| Pöyry, Parvinen and Malmivaara | 2013 | Can we get from liking to buying? Behavioral differences in hedonic and utilitarian Facebook usage | Electronic Commerce Research and Applications | 112 | 22.40 |
| Wallace, Bull and de Chernatony | 2014 | Consumer engagement with self-expressive brands: Brand love and WOM outcomes | Journal of Product and Brand Management | 109 | 27.25 |
| Cova and White | 2010 | Counter-brand and alter-brand communities: The impact of Web 2.0 on tribal marketing approaches | Journal of Marketing Management | 109 | 13.63 |
| Kang, Tang and Fiore | 2014 | Enhancing consumer-brand relationships on restaurant Facebook fan pages: Maximizing consumer benefits and increasing active participation | International Journal of Hospitality Management | 106 | 26.50 |
| Dholakia, Blazevic, Wiertz and Algesheimer | 2009 | Communal service delivery: How customers benefit from Participation in Firm-hosted virtual P3 communities | Journal of Service Research | 104 | 11.56 |

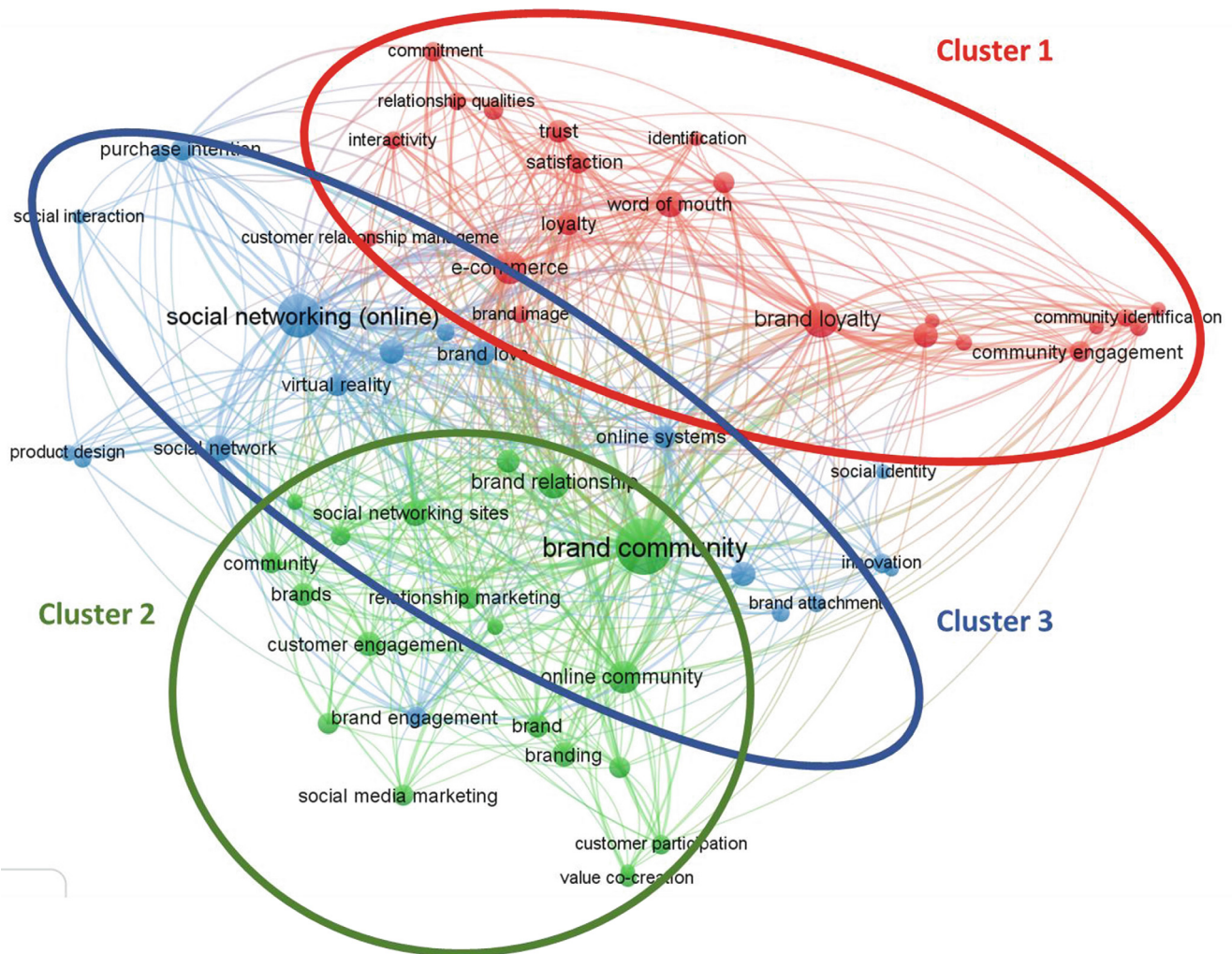


Fig. 4. Clusters of keywords: manuscript on online brand-centric relationships.

5. Discussion and conclusions

The goal of the present study is to provide a holistic understanding and map the current state of research in the field of brands as online relationship enablers by identifying key authors, journals, specific works, developments, trends, and to discern areas and questions for future research. This was achieved by a systematic analysis of studies, using a bibliometric approach with the VOSviewer, published and indexed in Scopus from when the first works appeared until the end of 2018.

The bibliographic analysis offers valuable insights into the state of the research into brands as relationship builders in the virtual world. The findings first highlight that the field of online brand-centric relationships is still emerging. Research into the area began about a

decade ago; the number of items published in various outlets on the topic in the last few years demonstrates a sharp and constant increase, suggesting that the area is in its late introductory phase or is entering its early development phase. This is further supported by the nature of the most cited items. The most recently published items in the data set are contributing significantly to the ongoing discussion on the subject, with some of those published in the last six years being in the top places in terms of overall citations and citations per year (Brodie et al., 2013; Hollebeek et al., 2014; Baldus et al., 2015; Dessart et al., 2015). Given that the research into consumer-brand relationships was introduced in the late 1990s, with the work of Fournier (1998), which was followed by research into brand-centred groups (brand communities and brand tribes) in the early 2000s with work by authors such as Muñiz and O'Guinn (2001) and McAlexander et al., (2002), this finding also

Table 6
Clusters of keywords of manuscripts on online brand-centric relationships.

| | |
|--|---|
| Cluster 1 Identity, feelings and relationship outcomes | Brand commitment, brand community identity, brand identification, brand image, brand loyalty, brand, relationship quality, brand trust, commitment, community engagement, community identification, community participation, customer relationship management, e-commerce, engagement, identification, interactivity, loyalty, relationship qualities, repurchase intention, satisfaction, trust, word of mouth |
| Cluster 2 Relational elements | Brand, Brand community, Brand equity, Brand management, Brand relationship, Branding, Brands, Co-creation, Community, Customer engagement, Customer experience, Customer loyalty, Customer participation, Customer satisfaction, Online community, Relationship marketing, Social media marketing, Social network sites, Value co-creation, Value creation |
| Cluster 3 Relationship facilitation | Brand attachment, Brand engagement, Brand experience, Brand identity, Brand love, Consumer engagement, Innovation, Online systems, Open innovation, Product design, Purchase intention, Purchasing, Social identity, Social interaction, Social network, Social networking (online), User-generated content, Virtual community, Virtual reality |

indicates that the examination of the role of brands as relationship enablers in the virtual world follows the general research in the area of brands as relationship enablers.

The field of online brand-centric relationships has attracted the interest of a relatively small number of specialised academic outlets. Of the 585 items in the data set, only eight journals have published more than 10 papers on the topic, representing almost 20% of the total production of research items. These journals represent a mixture of marketing, branding and information management outlets. The contribution of information management journals to the research into consumer-brand relationships was not appreciated in previous studies (Fetscherin and Heinrich, 2015), but they are heavily contributing to the research into online brand-centric relationships. The analysis presented here also supports that the research is fragmented, by revealing the existence of two groups of sources. Information technology focused journals and marketing journals primarily cross-cite items in journals in the same discipline. The two disciplines seem to look at similar questions, but differentiate, specialise and develop their own perspectives and use somewhat different methodological toolkits and assumptions in approaching brands as relationship builders.

The existing research on brands as relationship enablers in online contexts concentrates primarily on brands as relationship initiators in consumer collectives in the form of brand-centred groups. Although the interaction possibilities of the virtual environment and the facilitation of identification of other likeminded individuals, which was one of the main and most well-documented characteristics of brand communities noted early in the literature (Muñiz and O'Guinn, 2001; McAlexander et al., 2002), social media also offers many possibilities for self-expression. It is interesting to see that there are no clusters dedicated to individual or collective relationships, although the relational terms are used in all the literature, both for the individual and the collective relationships.

The field of online brand-centric relationships is still in its development phase and much more work is needed. The need for more research is driven primarily by three factors. First, there is still much to be explored in brand-centric relationships in all contexts and academics should give more attention to the area. Second, the dynamic nature of the online environment, which offers everchanging possibilities to evolve the nature of the possible interactions that can emerge online. Finally, the increasing engagement of individuals in the developing world who are connecting via social media, which is changing their daily routines and communication practices.

The limitations of the study are related to choices in the design and the execution of this bibliographic analysis. In terms of the study design, as with any bibliographic analysis, it is data driven, relies heavily on computer algorithms and visualization techniques and provides a simplified representation of reality. The findings of the present study are based on items recorded in the Scopus academic database and the analysis is based on a set of academic items wider than other bibliometric studies that focus their analysis on just a few pre-selected journals, or items downloaded from other databases that have fewer journals in their collections, primarily the Clarivate Analytics (Web of Science Service), that features a much narrower list of marketing academic journals. In terms of execution, because of the number and the multidisciplinary nature of the items, which introduced complexity and diversity into the data set, the information used in the analysis was based on keywords provided by the authors. The analysis was conducted using the VOSviewer software tool.

Despite these limitations, this article provides a valid overview of the most influential research into brands as relationship builders in the online environment. The results of this bibliometric analysis provide relevant and useful insights and directions for future research that can inform the design of studies, both in terms of methodological choices and in relation to the areas that might be further developed.

Future bibliographic research on the topic might build on this study and try to overcome its methodological choice limitations. Researchers

may decide to use different objective criteria to include or exclude items in the analysis or to extend the analysis to the information available in the abstracts or in the full text of the items. The results of studies that use these suggested different methods can be contrasted. Furthermore, future studies might also compare and contrast different software tools and their underlying techniques with respect to their potential to inform the theorising process.

6. Directions for future research

6.1. Research approaches

In terms of research approaches, several issues related to the interaction of scientific communities working on online brand-centric relationships, big data and use of a more varied set of data sources can be considered.

The first message from researchers in the area is that there is scope to bring together research presented in information technology and marketing journals. The current fragmentation of the research develops boundaries and may lead to replication of work that has previously been carried out in the other research cluster. The current approach does not help in the development of an integrated and complete body of knowledge that can reach a wider audience and provide a fuller understanding of the area; and the integration of the literature in the two research streams can provide many benefits to researchers. Another research approach opportunity is the utilization of big data. Most of the existing research in the area is based on qualitative data or data collected through surveys. New methods that use big data collected online can provide many opportunities.

Some research captures behaviours, such as brand pages' "likes" or the number or content of comments (i.e., Thompson et al., 2019). However, it should be noted that big data primarily reports behaviours and makes assumptions about motivations behind statements shared online. Relationships are deeply rooted in emotions, and capturing emotional drivers that trigger observed behaviours through big data can be challenging. Technology and the use of internet-connected screens are also providing opportunities to use other objective methods of analysis that might be combined with more traditional methods, such as the use of eye tracking and questionnaire data.

6.2. Research areas

In terms of the research areas, there are several interesting and emerging themes. The research into online brand-enabled relationships is not as developed as the research on the topic in non-virtual contexts. The nature of the online environment, and the opportunities it provides for relationships to flourish, provide an opportunity to examine the nature of these relationships; this is an area as yet under-researched. Future research may focus on online consumer-brand relationships, on negative online brand-centric relationships and should provide more insights into the idiosyncratic aspects of the online context and their effect on virtual brand-centric relationships.

Given the limited work on the relationships that consumers build with brands as individuals, compared to the work done on brands acting as facilitators in building relationships in collectives, further research might focus on the online behaviours that can be caused by the deep relationship that consumers have with brands. This research should incorporate the strength of the relationship as a key indicator of the relationship, as consumers are passionate about strong brands, while they lack passion for indifferent and weak brands (Fetscherin et al., 2019). Research should examine ways that companies can fuel brand-related passion online and what online actions consumers with different levels of passion are willing to perform.

In addition, and although negative-valenced brand-related issues are one of the key priorities in branding research (Veloutsou and Guzmán, 2017), there is still very limited engagement with negativity

in online brand-enabled relationships. The sub-areas of negative brand relationships and brand hate (Fournier and Alvarez, 2013; Hegner et al., 2017; Zarantonello et al., 2016, 2018) and anti-brand communities (Popp et al., 2016) are emerging in all contexts, and there is scope for more output that can increase the understanding of the nature of the phenomenon and which may provide directions for the brands that experience it.

In terms of the specific characteristics of brand-centric relationships in the virtual world, research may focus on relationships in emerging online contexts. New contexts give different functionalities that provide numberless and novel ways to engage online. Technological advancements allow inexhaustible new opportunities that facilitate and enrich the development and the expression of relationships. Relationship outcomes in terms of online enabled behaviours, impossible offline, such as the production of visual or video content, could also be another avenue for future research.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

The authors would like to thank Robert Kauffman, Maurizio Naldi, two anonymous reviewers of this paper and 5 PhD students for their valuable contribution in the development of this paper. The authors also acknowledge University of Valencia (Grant number UV-INV_EPDI17-548877).

References

- Adjei, M.T., Noble, S.M., Noble, C.H., 2010. The influence of C2C communications in online brand communities on customer purchase behaviour. *J. Acad. Mark. Sci.* 38 (5), 634–653. <https://doi.org/10.1007/s11747-009-0178-5>.
- Albert, N., Thomson, M., 2018. A synthesis of the consumer-brand relationship domain: using text mining to track research streams, describe their emotional associations, and identify future research priorities. *J. Assoc. Consum. Res.* 3 (2), 130–146. <https://doi.org/10.1086/69682>.
- Alvarez, C., Fournier, S., 2016. Consumers' relationships with brands. *Curr. Opin. Psychol.* 10, 129–135. <https://doi.org/10.1016/j.copsyc.2015.12.017>.
- Anderson, P.H., 2005. Relationship marketing and brand involvement of professionals through web-enhanced brand communities: the case of Coloplast. *Ind. Mark. Manage.* 34 (1), 39–51. <https://doi.org/10.1016/j.indmarman.2004.07.002>.
- Azer, J., Alexander, M.J., 2018. Conceptualizing negatively valenced influencing behavior: forms and triggers. *J. Serv. Manage.* 29 (3), 468–490. <https://doi.org/10.1108/JOSM-12-2016-0326>.
- Badrinarayanan, V.A., Sierra, J.J., Taute, H.A., 2014. Determinants and outcomes of online Brand tribalism: exploring communities of massively multiplayer online role playing games (MMORPGs). *Psychol. Mark.* 31 (10), 853–870. <https://doi.org/10.1002/mar.20739>.
- Badrinarayanan, V., Sierra, J.J., 2018. Inferred social approval and brand tribalism: a tale of two communities. *J. Prod. Brand Manage.* 27 (4), 363–374. <https://doi.org/10.1108/JPBM-10-2017-1597>.
- Bairrada, C., Coelho, F., Coelho, A., 2018. Antecedents and outcomes of brand love: utilitarian and symbolic brand qualities. *Eur. J. Mark.* 52 (3/4), 656–682. <https://doi.org/10.1108/EJM-02-2016-0081>.
- Baldus, B.J., Voorhees, C., Calantone, R., 2015. Online brand community engagement: Scale development and validation. *J. Bus. Res.* 68 (5), 978–985. <https://doi.org/10.1016/j.jbusres.2014.09.035>.
- Banet-Weiser, S., 2012. Authentic™: The Politics of Ambivalence in a Brand Culture. NYU Press. <https://www.jstor.org/stable/j.ctt9qfmw0>.
- Bigne, E., Ruiz, C., Curras-Perez, R., 2019. Destination appeal through digitalized comments. *J. Bus. Res.* 101, 447–453. <https://doi.org/10.1016/j.jbusres.2019.01.020>.
- Black, I., Veloutsou, C., 2017. Working consumers: co-creation of brand identity, consumer identity and brand community identity. *J. Bus. Res.* 70, 416–429. <https://doi.org/10.1016/j.jbusres.2016.07.012>.
- Brodie, R.J., Ilic, A., Juric, B., Hollebeck, L.D., 2013. Consumer engagement in a virtual brand community: an exploratory analysis. *J. Bus. Res.* 66 (1), 105–114. <https://doi.org/10.1016/j.jbusres.2011.07.029>.
- Casaló, L., Flavián, C., Guinalíu, M., 2007. The impact of participation in virtual brand communities on consumer trust and loyalty: the case of free software. *Online Inf. Rev.* 31 (6), 775–792. <https://doi.org/10.1108/14684520710841766>.
- Casaló, L.V., Flavián, C., Guinalíu, M., 2008. Promoting consumer's participation in virtual brand communities: a new paradigm in branding strategy. *J. Marketing Commun.* 14 (1), 19–36. <https://doi.org/10.1080/13527260701535236>.
- Coelho, A., Bairrada, C., Peres, F., 2019. Brand communities' relational outcomes, through brand love. *J. Prod. Brand Manage.* 28 (2), 154–165. <https://doi.org/10.1108/JPBM-09-2017-1593>.
- Cooper, T., Stavros, C., Dobeles, A.R., 2019. The levers of engagement: an exploration of governance in an online brand community. *J. Brand Manage.* 26 (3), 240–254. <https://doi.org/10.1057/s41262-018-0132-2>.
- Cova, B., Pace, S., 2006. Brand community of convenience products: new forms of customer empowerment - the case "My Nutella The Community". *Eur. J. Mark.* 40, 1087–1105. <https://doi.org/10.1108/03090560610681023>.
- Cova, B., White, T., 2010. Counter-brand and alter-brand communities: the impact of Web 2.0 on tribal marketing approaches. *J. Marketing Manage.* 26, 256–270. <https://doi.org/10.1080/02672570903566276>.
- Dessart, L., Veloutsou, C., Morgan-Thomas, A., 2015. Consumer engagement in online brand communities: a social media perspective. *J. Prod. Brand Manage.* 24 (1), 28–42. <https://doi.org/10.1108/JPBM-06-2014-0635>.
- Dessart, L., Veloutsou, C., Morgan-Thomas, A., 2016. Capturing consumer engagement: duality, dimensionality and measurement. *J. Marketing Manage.* 32 (5/6), 399–426. <https://doi.org/10.1080/0267257X.2015.1130738>.
- Dessart, L., Aldás-Manzano, J., Veloutsou, C., 2019. Unveiling heterogeneous engagement-based loyalty in brand communities. *Eur. J. Mark.* <https://doi.org/10.1108/EJM-11-2017-0818>.
- Dholakia, U.M., Blazevic, V., Wiertz, C., Algesheimer, R., 2009. Communal service delivery: how customers benefit from participation in firm-hosted virtual P3 communities. *J. Serv. Res.* 12 (2), 208–226. <https://doi.org/10.1177/1094670509338618>.
- Dholakia, U., Vianello, S., 2011. Effective brand community management: lessons from customer enthusiasts. *IUP J. Brand Manage.* 8 (1), 7–21.
- Fernandes, T., Moreira, M., 2019. Consumer brand engagement, satisfaction and brand loyalty: a comparative study between functional and emotional brand relationships. *J. Prod. Brand Manage.* <https://doi.org/10.1108/JPBM-08-2017-1545>.
- Fetscherin, M., Guzmán, F., Veloutsou, C., Roseira Cayolla, R., 2019. Latest research on brand relationships: introduction to the special issue. *J. Prod. Brand Manage.* 28 (2), 133–139. <https://doi.org/10.1108/JPBM-12-2018-2167>.
- Fetscherin, M., Heinrich, D., 2015. Consumer brand relationships research: a bibliometric citation meta-analysis. *J. Bus. Res.* 68 (2), 380–390. <https://doi.org/10.1016/j.jbusres.2014.06.010>.
- Fournier, S., 1998. Consumers and their brands: developing relationship theory in consumer research. *J. Consum. Res.* 24 (4), 343–353. <https://www.jstor.org/stable/10.1086/209515>.
- Fournier, S., Alvarez, C., 2013. Relating badly to brands. *J. Consum. Psychol.* 23 (2), 253–264. <https://doi.org/10.1016/j.jcps.2013.01.004>.
- Füller, J., Matzler, K., Hoppe, M., 2008. Brand community members as a source of innovation. *J. Prod. Innov. Manage.* 25 (6), 608–619. <https://doi.org/10.1111/j.1540-5885.2008.00325.x>.
- Goh, K.-Y., Heng, C.-S., Lin, Z., 2013. Social media brand community and consumer behavior: quantifying the relative impact of user- and marketer-generated content. *Inf. Syst. Res.* 24 (1), 88–107. <https://doi.org/10.2139/ssrn.2048614>.
- Gummerus, J., Liljander, V., Weman, E., Pihlström, M., 2012. Customer engagement in a Facebook brand community. *Manage. Res. Rev.* 35 (9), 857–877. <https://doi.org/10.1108/01409171211256578>.
- Habibi, M.R., Laroche, M., Richard, M.O., 2014. The roles of brand community and community engagement in building brand trust on social media. *Comput. Hum. Behav.* 37, 152–161. <https://doi.org/10.1016/j.chb.2014.04.016>.
- Halaszovich, T., Nel, J., 2017. Customer-brand engagement and Facebook fan-page "Like"-intention. *J. Prod. Brand Manage.* 26 (2), 120–134. <https://doi.org/10.1108/JPBM-02-2016-1102>.
- Hegner, S.M., Fetscherin, M., van Delzen, M., 2017. Determinants and outcomes of brand hate. *J. Prod. Brand Manage.* 26 (1), 13–25. <https://doi.org/10.1108/JPBM-01-2016-1070>.
- Hollebeck, L.D., Glynn, M.S., Brodie, R.J., 2014. Consumer brand engagement in social media: conceptualization, scale development and validation. *J. Interact. Marketing* 28 (2), 149–165. <https://doi.org/10.1016/j.intmar.2013.12.002>.
- Ikpaahindi, L., 1985. An overview of bibliometrics: its measurements, laws and their applications. *Libraries*, 35 (2), 163–177.
- Jahn, B., Kunz, W., 2012. How to transform consumers into fans of your brand. *J. Serv. Manage.* 23 (3), 344–361. <https://doi.org/10.1108/09564231211248444>.
- Kang, J., Tang, L., Fiore, A.M., 2014. Enhancing consumer-brand relationships on restaurant Facebook fan pages: maximizing consumer benefits and increasing active participation. *Int. J. Hosp. Manage.* 36, 145–155. <https://doi.org/10.1016/j.ijhm.2013.08.015>.
- Kumar, J., Nayak, K.J., 2019a. Brand engagement without brand ownership: a case of non-brand owner community members. *J. Prod. Brand Manage.* 28 (2), 216–230. <https://doi.org/10.1108/JPBM-04-2018-1840>.
- Kumar, J., Nayak, K.J., 2019b. Understanding the participation of passive members in online brand communities through the lens of psychological ownership theory. *Electron. Commerce Res. Appl.* 36. <https://doi.org/10.1016/j.elerap.2019.100859>.
- Labrecque, L.L., 2014. Fostering consumer-brand relationships in social media environments: the role of parasocial interaction. *J. Interact. Marketing* 28 (2), 134–148. <https://doi.org/10.1016/j.intmar.2013.12.003>.
- Laroche, M., Habibi, M.R., Richard, M.O., Sankaranarayanan, R., 2012. The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty. *Comput. Hum. Behav.* 28 (5), 1755–1767. <https://doi.org/10.1016/j.chb.2012.04.016>.
- Laroche, M., Habibi, M.R., Richard, M.O., 2013. To be or not to be in social media: how brand loyalty is affected by social media? *Int. J. Inf. Manage.* 33 (1), 76–82. <https://doi.org/10.1016/j.jbusres.2011.07.029>.

- doi.org/10.1016/j.ijinfomgt.2012.07.003.
- Lee, K.-W., Tsai, M.-T., Lanting, M.C.L., 2011. From marketplace to marketpace: investigating the consumer switch to online banking. *Electron. Commerce Res. Appl.* 10 (1), 115–125. <https://doi.org/10.1016/j.elerap.2010.08.005>.
- Lin, H.F., 2007. The role of online and offline features in sustaining virtual communities: an empirical study. *Internet Res.* 17 (2), 119–138. <https://doi.org/10.1108/10662240710736997>.
- McAlexander, J.H., Schouten, J.W., Koenig, H.F., 2002. Building brand community. *J. Marketing* 66 (1), 38–54. <https://doi.org/10.1509/jmkg.66.1.38.18451>.
- Merrilees, B., 2016. Interactive brand experience pathways to customer-brand engagement and value co-creation. *J. Prod. Brand Manage.* 25 (5), 402–408. <https://doi.org/10.1108/JPBM-04-2016-1151>.
- Milian, E.Z., Spinola, M.D.M., de Carvalho, M.M., 2019. Fintechs: a literature review and research agenda. *Electron. Commer. Res. Appl.* 34. <https://doi.org/10.1016/j.elerap.2019.100833>.
- Morgan-Thomas, A., Veloutsou, C., 2013. Beyond technology acceptance: brand relationships and online brand experience. *J. Bus. Res.* 66 (1), 21–27. <https://doi.org/10.1016/j.jbusres.2011.07.019>.
- Mousavi, S., Roper, S., Keeling, K., 2017. Interpreting social identity in online brand communities: considering posters and lurkers. *Psychol. Marketing* 34 (4), 376–393. <https://doi.org/10.1002/mar.20995>.
- Muñiz, A.M., O'Guinn, T.C., 2001. Brand community. *J. Consum. Res.* 27 (4), 412–432. <https://doi.org/10.1086/319618>.
- Nguyen, L.T.V., Conduit, J., Lu, V.N., Hill, S.R., 2015. Engagement in online communities: implications for consumer price perceptions. *J. Strat. Marketing* 24 (3–4), 241–260. <https://doi.org/10.1080/0965254X.2015.1095224>.
- Nguyen, B., Melewar, T.C., Chen, J., 2013. A framework of brand likeability: an exploratory study of likeability in firm-level brands. *J. Strat. Marketing* 21 (4), 368–390. <https://doi.org/10.1080/0965254X.2013.790472>.
- Osuna Ramírez, S.A., Veloutsou, C., Morgan-Thomas, A., 2019. I hate what you love: brand polarization and negativity towards brands as an opportunity for brand management. *J. Prod. Brand Manage.* <https://doi.org/10.1108/JPBM-03-2018-1811>.
- Özbölük, T., Dursun, Y., 2017. Online brand communities as heterogeneous gatherings: a netnographic exploration of Apple users. *J. Prod. Brand Manage.* 26 (4), 375–385. <https://doi.org/10.1108/JPBM-10-2015-1018>.
- Palazon, M., Delgado-Ballester, E., Sicilia, M., 2019. Fostering brand love in Facebook brand pages. *Online Inform. Rev.* 43 (5), 710–727. <https://doi.org/10.1108/OIR-05-2017-0175>.
- Pasternak, O., Veloutsou, C., Morgan-Thomas, A., 2017. Self-presentation, Privacy and EWOM in Social Media. *J. Prod. Brand Manage.* 26 (4), 415–428. <https://doi.org/10.1108/JPBM-04-2016-1150>.
- Pongsakornrungrungsilp, S., Schroeder, J.E., 2011. Understanding value co-creation in a co-consuming brand community. *Marketing Theory* 11 (3), 303–324. <https://doi.org/10.1177/1470593111408178>.
- Popp, B., Germelmann, C.C., Jung, B., 2016. We love to hate them! Social media-based anti-brand communities in professional football. *Int. J. Sports Marketing Sponsorship* 17 (4), 349–367. <https://doi.org/10.1108/IJSMS-11-2016-018>.
- Pöyry, E., Parvinen, P., Malmivaara, T., 2013. Can we get from liking to buying? Behavioral differences in hedonic and utilitarian Facebook usage. *Electron. Commer. Res. Appl.* 12 (4), 224–235. <https://doi.org/10.1016/j.elerap.2013.01.003>.
- Rodhain, A., Aurier, P., 2016. The child-brand relationship: social interactions matter. *J. Prod. Brand Manage.* 25 (1), 84–97. <https://doi.org/10.1108/JPBM-03-2015-0835>.
- Rowley, J., 2004. Online branding. *Online Inf. Rev.* 28 (2), 131–138. <https://doi.org/10.1108/14684520410531637>.
- Roy, P., Khandeparkar, K., Motiani, M., 2016. A lovable personality: the effect of brand personality on brand love. *J. Brand Manage.* 23 (5), 97–113. <https://doi.org/10.1057/s41262-016-0005-5>.
- Ruiz-Mafe, C., Veloutsou, C., 2017. Information flow and WOM in social media and online communities. *Online Inf. Rev.* 41 (7), 902–904. <https://doi.org/10.1108/OIR-09-2017-0255>.
- Ruiz-Mafe, C., Martí-Parreño, J., Sanz-Blas, S., 2014. Key drivers of consumer loyalty to Facebook fan pages. *Online Inf. Rev.* 38 (3), 362–380. <https://doi.org/10.1108/OIR-05-2013-0101>.
- Ruiz-Mafe, C., Bigne-Alcañiz, E., Sanz-Blas, S., Tronch, J., 2018. Does social climate influence positive eWOM? A study of heavy-users of online communities. *BRQ Bus. Res. Q.* 21 (1), 26–38. <https://doi.org/10.1016/j.brq.2017.12.001>.
- Sanz-Blas, S., Bigné, E., Buzova, D., 2019. Facebook brand community bonding: the direct and moderating effect of value creation behaviour. *Electron. Commer. Res. Appl.* <https://doi.org/10.1016/j.elerap.2019.100850>.
- Scimago Journal & Country Rank, (2019). < <https://www.scimagojr.com/countryrank.php> > (visited 20/06/2019).
- Scopus, (2019). < <https://www.elsevier.com/en-gb/solutions/scopus> > (visited 20/06/2019).
- Shang, R.-A., Chen, Y.C., Liao, H.J., 2006. The value of participation in virtual consumer communities on brand loyalty. *Internet Res.* 16 (4), 398–418. <https://doi.org/10.1108/10662240610690025>.
- Snyder, D.G., Newman, K.P., 2019. Reducing consumer loneliness through brand communities. *J. Consum. Marketing* 36 (2), 337–347. <https://doi.org/10.1108/JCM-04-2018-2657>.
- Statista, 2019. Global internet penetration rate as of January 2019, by region < <https://www.statista.com/statistics/269329/penetration-rate-of-the-internet-by-region/> > (accessed 20.06.19).
- Stokburger-Sauer, N., 2010. Brand community: drivers and outcomes. *Psychol. Marketing* 27 (4), 347–368. <https://doi.org/10.1002/mar.20335>.
- Thompson, S.A., Loveland, J.M., Loveland, K.E., 2019. The impact of switching costs and brand communities on new product adoption: served-market tyranny or friendship with benefits. *J. Prod. Brand Manage.* 28 (2), 140–153. <https://doi.org/10.1108/JPBM-10-2017-1604>.
- Thorbjørnsen, H., Supphellen, M., Nysveen, H., Pedersen, P.E., 2002. Building brand relationship online: a comparison of two interactive applications. *J. Interact. Marketing* 16 (3), 17–34. <https://doi.org/10.1002/dir.10034>.
- Trudeau, S.H., Shobeiri, S., 2016. The relative impacts of experiential and transformational benefits on consumer-brand relationship. *J. Prod. Brand Manage.* 25 (6), 586–599. <https://doi.org/10.1108/JPBM-07-2015-0925>.
- Van Eck, N.J., Waltman, L., 2010. Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics* 84, 523–538. <https://doi.org/10.1007/s11192-009-0146-3>.
- Veloutsou, C., 2007. Identifying the dimensions of the product-brand and consumer relationship. *J. Marketing Manage.* 23 (1/2), 7–26. <https://doi.org/10.1362/026725707X177892>.
- Veloutsou, C., 2009. Brands as relationship facilitators in consumer markets. *Marketing Theory* 9 (1), 127–130. <https://doi.org/10.1177/1470593108100006>.
- Veloutsou, C., Black, I., 2019. Creating and managing participative brand communities: the roles members perform. *J. Bus. Res.* (forthcoming).
- Veloutsou, C., Guzmán, F., 2017. The evolution of brand management thinking over the last 25 years as recorded in the Journal of Product & Brand Management. *J. Prod. Brand Manage.* 26 (1), 2–12. <https://doi.org/10.1108/JPBM-01-2017-1398>.
- Veloutsou, C., McAlonan, A., 2012. Loyalty and or disloyalty to a search engine: the case of young Millennials. *J. Consum. Marketing* 29 (2), 125–135. <https://doi.org/10.1108/07363761211206375>.
- Veloutsou, C., Moutinho, L., 2009. Brand relationships through brand reputation and brand tribalism. *J. Bus. Res.* 62 (3), 314–322. <https://doi.org/10.1016/j.jbusres.2008.05.010>.
- Wallace, E., Buil, I., de Chernatony, L., 2014. Consumer engagement with self-expressive brands: brand love and WOM outcomes. *J. Prod. Brand Manage.* 23 (1), 33–42. <https://doi.org/10.1108/JPBM-06-2013-0326>.
- Wirtz, J., den Ambtman, A., Bloemer, J., Horváth, C., Ramaseshan, B., van de Klundert, J., Canli, Z.G., Kandampully, J., 2013. Managing brands and customer engagement in online brand communities. *J. Serv. Manage.* 24 (3), 223–244. <https://doi.org/10.1108/09564231311326978>.
- Zarantonello, L., Romani, S., Grappi, S., Bagozzi, R.P., 2016. Brand hate. *J. Prod. Brand Manage.* 25(1), 11–25. doi:10.1108/k/JPBM-01-2015-0799.
- Zarantonello, L., Romani, S., Grappi, S., Fetscherin, M., 2018. Trajectories of brand hate. *J. Brand Manage.* 25 (6), 549–560. <https://doi.org/10.1057/s41262-018-0105-5>.
- Zhou, Z., Zhang, Q., Su, C., Zhou, N., 2012. How do brand communities generate brand relationships? Intermediate mechanisms. *J. Bus. Res.* 65 (7), 890–895. <https://doi.org/10.1016/j.jbusres.2011.06.034>.