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BRAND EQUITY IN A DIGITAL AGE: SYSTEMATIC LITERATURE REVIEW

Abstract

Keller's seminal paper on "Conceptualizing, Measuring and Managing Customer-Based Brand Equity" published in 1993 in the Journal of Marketing represents a starting point for researching the brand equity construct. However, in the last 10 years, with tremendous development of (communication) technology and, lately, with COVID-19 pandemic, things have changed and most brands moved their businesses to the on-line environment. Because of that, the concept of brand equity should be reconsidered. This paper reviews literature on brand equity in digital era by spotting gaps and finding fruitful areas for future research. To that end, bibliometric analysis followed by a narrative review of articles published in the Web of Science database is conducted. The paper will contribute to the brand management literature by offering streams for new research.

***Keywords:** brand equity, digital age, customer-based brand equity, digital marketing, literature review.*

1.   INTRODUCTION

The importance of branding arises from the fact that brands act as facilitators in consumers' decision making, have strong symbolic value and present important financial assets to companies (Oh *et al*, 2020). They are deeply rooted in everyday life and vocabulary of consumers while branding is incorporated in all kinds of organizations. Initially brands were important in domains of products and services, but today new branded entities arise at a very fast pace (e.g., platform brands, smart brands, idea brands) (Swaminathan *et al*, 2020). Their complexity, versatility, and richness of meanings for decades have sparked interests from both researchers and marketers (Oh *et al*, 2020).

The idea of measuring the differential effects of brands in relation to the unbranded goods has created one of the most popular fields in branding research – brand equity (BE). Motivation for studying BE mainly comes from the need to estimate financial value of the brand, to improve marketing productivity in terms of business strategy and to better understand consumer behaviour (Keller, 1993). Strong brands are associated with high levels of differentiation, loyalty, positive word-of-mouth, and long-term relationships with consumers (Feiz and Moradi, 2020).

At the beginning, the research on BE was focused on financial value in terms of revenue and market shares (Farquhar, 1989). Later, the notion that brand value exists in the minds of consumers created the most widely research field of consumer-based brand equity (CBBE) (Keller, 1993). Consumer is still a central topic of branding, but new technologies radically change dynamics of branding, facilitate broader reach and Internet allows marketers to gain deeper insights into human needs and create new marketplace (Rejeb *et al*, 2020). In addition to technology, the pandemic provoked by COVID-19 has changed human behaviour in unprecedented ways as brands and humans increasingly rely on technology in every aspect of their lives. Having in mind aforementioned changes, the main goal of this paper is to reconsider the topic of BE and investigate in what ways has it been, as one of the fundamental topics in marketing, transformed by the latest technological trends.

To reach that goal and uncover future research directions, bibliometric analysis based on keywords co-occurrence and narrative review have been conducted. The review is based on articles published in Web of Science database from 2011 to 2022. As a result, the most fruitful areas of research are positioned at the intersection of brand equity and product and service innovation, integrated marketing communication (IMC), and artificial intelligence (AI).

2.   METHODOLOGY

A structured literature review in four phases was performed on the impact of technology on BE over the last decade. Focus on the last decade is due to tremendous changes in the marketing landscape and macro trends that shaped and

changed customer behaviour (Brinker, 2020). The first phase involved search of papers based on keywords in Web of Science database: TS = ''brand equity'' OR ''BE'' AND TS = ''technology''. The rationale behind choosing 'technology' for a keyword combination is because it encompasses digital changes as well but gives more profound insight in how changes in marketing emerge due to technological advances. The initial search query at the intersection of BE and technology initially resulted with 227 papers. The second phase involved revision of results based on paper type (articles and review articles), language (English) and time of publication from 2011 to 2021. In the third phase papers were revised based on direct relevance to the topic and the total of 82 articled were selected for the review. The search was completed on the 27th of January 2022. The last phase involved analysis based on keywords co-occurrence and application of the narrative review (Sylvester, 2013) as a traditional way to review the current state of the knowledge in the field. The overview of methodological approach is shown in Table 1.

Table 1

The methodological approach overview

Type of Analysis	Qualitative
Database	Web of Science
Years of publication	2011-2021
Search query	''brand equity'' OR ''BE'' AND ''technology''
Language	English
Paper Type	articles, review articles

For visualization of keyword co-occurrence VOSviewer 1.6.11 software was used, and keyword coupling is shown in Figure 1. The choice of main topics and subtopics covered in the paper was based on keyword clusters and having the three important perspectives in mind: the customer, the firm, and the society perspective.

Figure 1 Cluster of authors' keywords on topics BE and technology

Source: Authors' research (VOSviever 1.6.11 software)

Based on clusters of keywords and holistic view on the topic, the paper structure is organized as follows. First, the main trajectories of change in digital and technology-enabled era of marketing are described. This is followed by different approaches to the construct of BE and its development over time. The central part of the paper covers emerging topics of the field: product and service innovation, IMC, and AI. Finally, the concluding remarks, future research directions and research limitations are presented.

3.   DIGITAL AGE OF MARKETING

One of the major changes affecting brands comes from advances in technology and its impact on how consumers interact with brands. Namely, the Internet of Things (IoT), AI, augmented reality (AR), and virtual reality (VR) are adopted by online platforms and inevitably change how consumers connect with brands, products and services (Oh *et al*, 2020). Given the worldwide availability of internet, the online environment and its dynamic nature is one of the most important challenges brands face today (Veloutsou and Guzman, 2017).

Marketing technology landscape has shown exponential growth from 2011 until 2020. According to the data from Chief Marketing Technology Blog, which monitors trends in marketing technology, martech landscape has grown 5,233% since 2011 (Brinker, 2020). One of the consequences of these changes is hyper-connectivity. It is defined as ''proliferation of networks of people, devices, and other entities as well as the continuous access to other people, machines, and organizations, regardless of time and location" (Swaminathan, 2020, p. 1). Hyper-connectivity has three aspects:

a)   information availability and speed of information dissemination,
b)   networks of people and devices, and growth of platforms, and
c)   device-to-device connectivity.

The COVID-19 pandemic has acted as a catalyst for many changes as traditional interaction between consumers and brands has become impossible. These obstacles have forced brands across industries to adopt new digital technologies and consequently made consumers more open to them (Kim *et al*, 2021). Companies today have an unprecedented ability to collect and analyse customer data in real-time, create personalized offers, build customer knowledge, and strengthen relationships (Rust *et al*, 2015). In their research on the past, present and future of branding, Oh *et al* (2020) delineate three areas to be relevant for the future of brand research:

1)   progress in technology and its impact on the role of brands,
2)   wider scope of brand research, beyond products and companies, and
3)   Big Data leading to changes of branding strategies.

All the above, together with the constant rise in social media use, development, and application of AI in marketing (Puntoni *et al*, 2020) has led to need to examine the role of BE in this fast-changing environment. AI is a game-changer as brands implement new algorithms to make better decisions, deliver better services and communicate more efficiently with their target audience (Varsha *et al*, 2021).

4.   DIFFERENT APPROACHES TO BRAND EQUITY

Brands have been effective carriers of functional and symbolic meaning for ages. They manage to constantly influence consumer behaviour and thoughts, shape experiences and assist in connecting consumer's personal meaning to company's products (Oh *et al*, 2020). For businesses, brands are valuable assets, so it does not surprise that the BE has attracted so much attention from both researchers and practitioners (Rojas-Lamorena *et al*, 2022).

Despite the consensus on importance of BE, there is still an ongoing debate on its definition, conceptualization, and measurement. Since the early 90s when this topic emerged there have been several attempts to define BE (Aaker, 1991; Ailawadi *et al*, 2003; Allaway *et al*, 2011; Farquhar, 1989; Keller, 1993). The common thread among these definitions is that brand name offers something more compared to the unbranded product and that BE affects brand volume, market

share and other quantitative outcomes. In the broadest sense, BE is an added value that a brand brings to a company's products (Yoo *et al*, 2000).

BE has mainly been studied from two perspectives: the firm and consumer perspective. Firm-based brand equity (FBBE) focuses on financial value created by brands which is the outcome of consumers' perceptions and responses to a brand name (Christodoulides and de Chernatony, 2010). Financial perspective measures the effects of marketing actions on stock market value, brand acquisitions and other financial outcomes (Keller and Lehman, 2006).

The most influential work in academic research on BE from the consumer perspective has been done by Aaker (1991) and Keller (1993). Aaker's model proposes five dimensions of CBBE - brand loyalty, brand awareness, perceived quality, brand associations, and other propriety brand assets. On the other hand, Keller (1993) focus is on brand knowledge as a main antecedent of CBBE consisting of brand awareness (recall and recognition) and brand image (types, favourability, strength, and uniqueness of brand associations). This view is in line with the psychological approach to BE ''consumer-psychology-of-brands'' model which proposes that BE resides in the minds of customers (Schmitt, 2012).

With the rise of service-dominant logic and customer-centric approach, Rust *et al* (2015) conceptualized customer equity as the sum of value equity, BE and relationship equity. Value equity is perception of objective value based on quality, price, and convenience while BE comes from subjective attributes given to a brand by consumer such as associations and emotional attachment. Relationship equity refers to the customers' intention to maintain relationship with a brand over time. Another popular conceptualization of BE if offered by Keller and Lehman (2003) according to which BE consists of three categories:

1) customer mindset measures - awareness, associations, loyalty, and perceived quality;
2) product market measures – brand's market performance (price premium, market share, revenue); and
3) financial market measures – value of a brand as a financial asset.

For a long time, BE as a concept has been neglected in the business-to-business sector since marketers in these sectors have been sceptical about branding and primarily focused on the functional aspect of their offerings (Leek and Christodoulides, 2011). However, it has created a new area at the intersection of marketing and human resources as employees are playing increasingly important role by representing brands in interactions with actual and potential customers. Hence, internal branding has emerged a trending topic for industrial markets and employees' brand commitment and brand-oriented corporate culture are significant requirements for building a strong corporate brand (Baumgarth and Schmidt, 2010; Schmidt and Baumgarth, 2018). From employees' perspective it is about what they do (brand consistent behaviour), what they say (brand endorsement) and what they intend to do in the future concerning the brand (brand allegiance) (King *et al*,

2011). It is an intangible asset that brings value to a firm through attitudes and behaviour of its employees (Tavassoli *et al*, 2014).

With the rise of environmental concerns, research on green BE attracted more attention. It is conceptualized as a set of brand assets and liabilities about green commitments and environmental concerns linked to a brand, its name and symbol that add to or subtract from the value provided by the product or service (Chen, 2010). It consists of green brand name, green satisfaction, and trust. Green BE delivers value for firms, consumers, and society as a whole in terms of increasing environmental awareness and creating competitive advantage (Delafrooz and Goli, 2015).

Table 2 summarizes different concepts of BE in marketing literature.

Table 2

Different conceptualizations of brand equity

BRAND EQUITY CONCEPTUALIZATION	Definition	Dimensions	Authors
Firm-Based Brand Equity	The added value endowed by the brand to a product.	revenue premium measure	Farquhar (1989)
Financial-Based Brand Equity	The marketing effects or outcomes that accrue to a product with its brand name compared with those that would accrue if the same product would not have the brand name.	revenue premium measure over a private label product	Ailawadi and Lehmann (2003)
	The incremental cash flows which accrue to branded products over unbranded products.	estimation technique to extract BE from firm's other assets	Simon and Sullivan (1993)
Consumer-based Brand Equity	The differential effect of brand knowledge on consumer response to the marketing of the brand.	brand awareness (recall and recognition) and brand image (types, favourability, strength, and uniqueness of brand associations	Keller (1993)
	A set of brand assets or liabilities that add or subtract from the value provided by a product or a service.	brand loyalty, brand awareness, perceived quality, brand associations and other propriety brand assets	Aaker (1991)
	The total of the discounted lifetime values summed over all the firm's current and potential customer.	value equity, BE and relationship equity	Rust *et al* (2015)
Green Brand Equity	A set of brand assets and liabilities about green commitments and environmental concerns linked to a brand, its name and symbol that add to or subtract from the value provided by the product or service.	green brand name, green satisfaction, and green trust	Chen (2010)
Employee-Based Brand Equity / Internal Brand Equity	From employees' perspective it is about what they do (brand consistent behaviour), what they say (brand endorsement) and what they intend to do in the future concerning the brand (brand allegiance)	brand endorsement, brand allegiance and brand-consistent behaviour	King *et al* (2011)
Retailer Brand Equity	It refers to values that arise in consumers' minds when they encounter the name of a particular retailer.	retailer awareness, retailer associations, perceived retailer quality, retailer loyalty and retailer reputation	Chen (2010)

Source: Authors' research

The first part of the paper summarizes the development of BE in marketing literature and sets foundations for explaining the technological trends that affects this concept over the last ten years.

5.   EMERGING TOPICS ON THE IMPACT OF TECHNOLOGY ON BRAND EQUITY

Having analysed the current state of the filed on technological impact on BE available in Web of Science database, the following domains of research (as shown in Figure 2) were distinguished: product and service innovation, IMC and AI. Each topic covers several subtopics emerging in the field. Namely, product and service innovation are analysed within different industries: hospitality and banking industry, retail and e-commerce, technology-based companies, and use of AR. Within the IMC, the paper is focused on social media, the use of social media for luxury brands and online brand communities. The third field, AI encompasses use of robots, chatbots and interactive agents, customer experience and blockchain technology.

Figure 2 Key topics over the last decade of research on BE and technology

Source: Authors' research

5.1.   Product and service innovation

Taking into consideration service-oriented economy and rising importance of technology in times of pandemic; information and communication technologies are of the most prominent industries today (Wu, 2014; El Samen, 2015). Service innovation is defined as "a new process or offering that is put into practice and is adopted by and creates value for one or more stakeholders" (Gustafsson *et al*, 2020, p. 114). To succeed in a highly competitive marketplace,

companies must innovate and deploy technological advancements to track customers' purchase histories and recognize their consumption patterns. Using customer recognition is one of the ways which helps companies to segment their customer in past and new ones and align their pricing strategies with consumer behaviour (Li, 2021). Same research has shown that brands with higher level of BE, i.e. stronger brands have higher chance of innovation success and have more incentives to invest in innovation. Brands that score higher on BE are less affected when a failure in implementation occurs (Liao and Cheng, 2013).

Hospitality industry. The customer experience in hospitality industry has been fundamentally changed since the COVID-19 pandemic (Hao and Chon, 2021). Due to health concerns and new behavioural norms, wide range of contactless services has been added to the customer experience like voice control, motion-sensing, mobile control, robotic service, thermal sensing, facial recognition, temperature measurement camera, 5G network and IoT (Hao, 2021). Hao and Chon (2021) have shown that customer experience and customer delight play are important antecedents of customer equity which consequently impacts brand trust. Travel application attributes like perceived usefulness, price advantage and user interface attractiveness directly enhance customer engagement which, in turn, increases BE (Tian *et al*, 2021).

Measuring branding effectiveness for tourism destinations meets its own set of challenges since destination brand is related to different types of tourists with different expectations having the same experience at the same time. For successful management of destination as a brand, BE, customer satisfaction and cultural distance have emerged as important factors (Tran *et al*, 2021).

Han *et al* (2021) explored how travellers' engagement on social media, attitude, awareness, attachment, and trust relate to loyalty towards hotel brands. What they found is that given the same level of social media engagement, older customers tend to show higher level of brand awareness and loyalty. Research done in luxury hotel industry showed that advanced technology has direct impact on perceived quality and image of a hotel (two out of three BE dimensions) (Šerić *et al*, 2016).

Cultural attractions like museums and galleries are also under the rising pressure to implement new technologies like mixed reality, AR and VR to enrich customer experience and attract new visitors (Rahaman *et al*, 2019). Bae *et al* (2020) have shown that integration of mixed reality in cultural sites with special attention to interactivity and vividness influences customer satisfaction and loyalty thus enhancing BE. Given the experiential nature of hospitality industry and growing integration of new technologies into customer experience, the following research direction arises:

RESEARCH DIRECTION 1: Comparison of overall satisfaction with customer experiences based on number of touchpoints delivered by humans versus technology-based touchpoints.

Technology-based companies. In terms of mobile value-added services, service attributes of personalization, identifiability, and perceived enjoyment have a significant positive influence on BE elements (brand loyalty, perceived quality, brand awareness and brand associations) (Wang and Li, 2012). Smartphone usage is one of the most powerful tools used for work, communication, and shopping today and users do not consider just usefulness and compatibility with their lifestyle but also estimate BE (especially in terms of cost effectiveness) and social influence when choosing a smartphone brand (Hsu and Lin, 2015). Repurchase intention for smartphone users are significantly determined by brand experience, BE and customer satisfaction (Hussain and Ahmed, 2020). Important factors of BE and loyalty in information and communication technology service providers is service leadership and customization-personalization control (Xu *et al*, 2014). With the rising demand of new and innovative technological solutions, BE in the context of tech-based companies deserves additional research, thus, the second research direction arises:

RESEARCH DIRECTION 2: What kind of organizational culture within technology-based companies fosters both technical innovation and consumer focus to maintain long-term customer relationships and BE?

Banking industry. A decade ago, m-banking was recognized as one of the most prominent fields in banking service industry (Lin, 2011). To attract and maintain customer base, m-banking must create unique and interactive experiences which present an opportunity for banks to engage with customers on a deeper level (Jamshidi *et al*, 2018). The authors examined users of m-banking apps and found out that flow experience has significant impact on brand trust and BE. In banking sector, BE formed through social media and brand personality in terms of responsibility and activeness positively affects brand loyalty (Garanti and Kissi, 2019). Considering the nature of banking industry and customers' security concerns the next research direction arises:

RESEARCH DIRECTION 3: The research on the trade-off between perceived risk of m-banking app usage (e.g., data privacy, account security) and perceived usefulness across different age groups should be examined.

Retail and e-commerce. Retailers and markets are increasingly trying to reach consumers through e-commerce platforms (Parker and Kuo, 2021). Retail industry has undergone major changes caused by new digital channels (e.g., social media and mobile applications) that altered both consumer shopping behaviour and retail business models (Razaei and Valaei, 2017; Verhoef *et al*, 2015). Considering substantial technological changes, shift in consumer behaviour and increased competition, offering products through multiple channels has become indispensable (Bilgicer *et al*, 2015). Consequently, it is necessary for brands to incorporate customer experience in their strategies to establish strong online brands (Chen and Mathews, 2013).

In the wake of COVID-19 pandemic, most brands have moved their stores to online environment and directed investments into enhancing e-platform features

(Carroll, 2020). Parker and Kuo (2021) present results of a research conducted on a female sample belonging to the generation Y in attempt to uncover important aspects of e-commerce platforms when it comes to fashion. The results showed that e-commerce platforms are seen primarily as utilitarian instead of hedonic and find that there is a significant degree of reluctance to buy expensive items online.

Pena-Garcia *et al* (2018) have done cross-cultural research among Spanish and Colombian online shoppers to uncover the antecedents in loyalty formation and found out that the more experienced online shopper is, the more he/she demands hedonic elements in his/her online shopping experience. In a highly competitive retail environment, store equity is a strong point of differentiation (Gil-Saura *et al*, 2016). Technical innovation together with store image have the most significant impact on store BE (Fuentes-Blasco *et al*, 2017).

Transition from brick-and-mortar to click-and-mortar store for food products has been lagging behind other product categories (Badenhop and Frasquet, 2021). However, latest data show that social distancing provoked by the COVID-19 pandemic has accelerated the change in consumer behaviour in this area and now 63% of consumers globally by groceries online compared to average before the pandemic which was 9% (Global consumer insights survey, 2020). The latter trends have sparked interest in academic research to take a closer look into dimensions of retailer BE consisting of retailer awareness, retailer associations, perceived retailer quality, retailer loyalty and retailer reputation (Lee and Lee, 2018). Study conducted in Germany by Badenhop and Frasquet (2021) has showed that key attributes defining retailer BE for multichannel supermarkets are retailer awareness, retailer associations, perceived retailer quality, retailer loyalty retailer associations, perceived retailer quality, retailer loyalty together with perceived usefulness. Based on differences among industries when it comes to success factors of their e-commerce platforms, it would be useful to:

RESEARCH DIRECTION 4: Clearly distinguish factors that influence formation of online retail BE compared retail equity of physical stores.

Augmented reality. One of the key trends in marketing digitalization is usage of AR which is immersive technology visually integrating virtual elements into physical environment with real-time interactivity (Javornik, 2016). For brands, AR contributes to the customer experience and customer journey through creating new touchpoints and opportunities for personalized experience (Javornik *et al*, 2021). Service innovation like AR provide additional value for customers by enhancing customer engagement which, in turn, influences customer equity (i.e., value, relationship, and BE) (Kim *et al*, 2021). Even though the use of AR can bring many benefits for the marketers, there are possible pitfalls of this technology given that most AR apps present short-term entertainment. From this arises the following research direction:

RESEARCH DIRECTION 5: What are the best content strategies for AR app development in order to maintain long-term interest of the target audience?

5.2. Integrated marketing communications

Today, IMC is a customer-oriented process fostered by technology that aims at creating a strong BE by coordinating different marketing tools and channels (Šerić *et al*, 2014). For marketing communication to positively contribute to BE, it must be integrated across different channels and consistent over time (Delgado-Ballester *et al*, 2012). In hospitality industry there is a strong, positive relationship between social Web and IMC on one hand, and BE and IMC on the other hand (Šerić, 2017). Also, IMC positively impacts all dimensions of hotel BE - brand image, perceived quality, and brand loyalty (Šerić and Gil-Saura, 2012). In addition to IMC, another important element affecting consumers' perceptions of hotel brands is communication consistency (Šerić *et al*, 2016).

Elements of social media marketing, namely clear website, website security, online interactivity and collaboration with other related websites have positive effect on brand trust and brand loyalty in the context of hotels (Tatar and Eren-Erdogmus, 2016). BE of a company's website as a platform that present company's identity can also be deciding factor in formation of brand trust and purchase intentions (Chang *et al*, 2019). Deepa and Baral (2021) have examined the antecedents of employee-based BE and found out that IMC helps companies to fulfil employer value proposition and create employee-based BE.

Social media. Consumers increasingly connect online using social media which changes their daily routines and ways of communication (Veloutsou and Guzman, 2017). New forms of social media are constantly emerging and creating new opportunities for companies to connect with their target audience and communicate their message (Rojas-Lamorena *et al*, 2022). Social media does not just change the ways of interaction between consumers and brands, but data collected through social media present an important source of information and insight for companies (Luo and Zhang, 2013). Nearly half of the world's population (3.6 billion in 2020) are social media users and it is estimated that by 2025 this number will rise to 4.41 billion (Statista, 2022).

Study by Nunez-Gomez *et* al (2020) conducted on a sample of kids aged 8 to 14 in Spain showed that kids' interaction on social media positively affects brand preferences and loyalty. Technology has also changed media information systems and the way news are consumed, distributed, and monetized (Klass, forthcoming). Customer social participation in general has shown significant positive impact on BE formation (Chae and Ko, 2016). Wagner Mainardes and Vieira Cardoso (2019) draw attention to the connection between social media usage and shopping behaviour in physical stores. The authors concluded that the use of social media, together with both firm and user-generated content positively influence trust of the physical store.

There are two main types of content related to social media: user-generated content created by consumers and firm-generated content created through official brand social media channels (Colicev *et al*, 2018). The recent research focused on how user-generated content affects brand image and sales to

build BE Goh *et al*, 2013; Kuksov *et al*, 2013). More advanced research should encompass both user-generated content and firm-generated content in formation of social media equity and its impact on overall BE. However, not all generations of consumer approach social media use in the same manner. Hence, the next research direction is the research on:

RESEARCH DIRECTION 6: Cross-generational differences (e.g. generation X, generation Y – millennials, and generation Alpha) on factors that foster user-generated content and shape social media platform preferences.

Luxury brands and social media*.* Luxury brands are one of the fastest growing segments among global brands partially due to the utilization of the latest trends in digital marketing (Conti, 2018). They are distinctive due to their high quality and premium prices, high level of symbolic and hedonic values, heritage, and uniqueness (Kastanakis and Balabanis, 2014). Given the differences relative to non-luxury brands, luxury brands require special approach when it comes to strategy, building BE and maintaining relationships with consumers (Godey *et al*, 2016).

According to the global consulting company Bain & Co. (2019), by 2025 digital purchases will represent a quarter of the luxury market's value. Javornik *et* al (2021) showed that AR in the context of luxury brands can support their uniqueness and attributes which indirectly builds BE through brand experience and customer journey. Brand experience is shown to be of strategic importance when it comes to luxury brands (Dion and Borraz, 2017). In investigating motives for engagement with luxury brands on social media, Bazi *et al* (2020) identified six groups of motives: perceived content relevancy, brand-customer relationship, hedonic, aesthetic, socio-psychological motives, BE and technology factors. Review of literature on social media use and luxury brands by Creevey *et al* (2019) directs to five fruitful areas of future research: luxury brand strategy and services, user-generated content, young consumers, moments of luxury and storytelling. As young consumers' behaviour is increasingly shaped by influencers it would be useful to:

RESEARCH DIRECTION 7: Measure person BE and how the use of influencers based on their person BE affects overall BE they represent in terms of luxury brands.

Online brand communities*.* Customers tend to buy from companies that gather strong communities of enthusiasts and provide a sense of belonging (Rust *et al*, 2015). They also tend to base their societal identity on consumption and relate with other like-minded consumers (Capece and Campisi, 2013). Social media has facilitated the interaction between consumers and formation of groups with shared identities around brands (Nunez-Gomez *et* al, 2020; Wirtz *et* al, 2013). Online brand communities are specialized communities with no geographical boundaries gathered based on admiration towards a brand with the shared understanding of brand meaning. They have three characteristics in common: a shared consciousness (so called ''we-ness''), rituals and traditions that bind them and a sense of moral responsibility to a community as a whole (Muniz and O'Guinn, 2001). For online brand communities, Wirtz *et al* (2013) have focused the following dimensions that

shape their behaviour: brand orientation, internet-use, funding, and governance. These virtual communities are of special interest for marketers as they serve as valuable source of information and trust for consumers (Ho and Dempsey, 2010). Investigating online brand communities in the luxury fashion, Brogi *et* al (2013) have found out that communities' dynamic in terms of brand community participation, generated content, members' perception of brand quality positively influence BE.

As they constantly grow in number of members, online brand communities are becoming important platform for facilitation of consumer-brand relationships. Social capital consisting of shared language, shared vision, social trust, and reciprocity are all vital elements in formation of strong network which result in loyalty and BE (Meek *et al*, 2019). Members of online brand communities are important market segment since they represent those consumers who identify and engage more strongly with the brand (Alden *et al*, 2016). They are more loyal and surpass the role passive message receivers but act as co-creators of brand message (Mahrous and Abdelmaaboud, 2017).

BE has mainly been measured in the post-launch context and missed the opportunity to correct possible negative outcomes of marketing activities. Hence, Divakaran and Kumar (2018) used community-based BE to examine pre-launch favourability of post-launch decisions. They showed that community-based BE can be useful in predicting new products success, customer satisfaction and helping companies to better predict possible pitfalls in new product launch. However, the antecedents of community-based BE remain under researched:

RESEARCH DIRECTION 8: Which factors are vital in formation of strong online brand communities and what is their power to mitigate brand mistakes (foster brand forgiveness)?

5.3. Artificial intelligence

Another topic of interest for both marketers and researchers is the use of AI in marketing since there is virtually no industry that is not affected by AI. Driverless cars, AI-assisted sales agents, companion robots, emotional and spiritual support AI, algorithms predicting consumer behaviour in retail are just some of the transformative examples of AI use (Davenport *et al*, 2020). E-Brands like Amazon, Netflix and eBay are fostered by the rise of AI and use of new technologies to deliver value-based services and build BE (Varsha *et al*, 2021). Companies like Google, Spotify and Under Armour are just some of the world-renowned companies that use AI solutions like Microsoft Cognitive Services, Amazon Lex or IBM Watson to improve their performance (Vlačić *et al*, 2021).

AI relies on technologies such as machine learning and deep learning, natural language processing, neural networks, rule-based expert systems and robots (Davenport, 2021). It is set to provide unprecedented access to advanced systems that offer highly personalized and accurate information across devices and data sets (Bock *et al*, 2020).

Marketing AI is defined as ''the development of artificial agents that, given the information they have about consumers, competitors, and the focal company, suggest and/or take marketing actions to achieve the best marketing outcome'' (Overgoor *et al*, 2019, p. 2]. As presented in figure 3, it is closely aligned with analysis of micro and macro environment, the process of segmenting, targeting, and positioning, strategic planning, new product development, pricing decisions, distribution channels and IMC (Varsha *et al*, 2021).
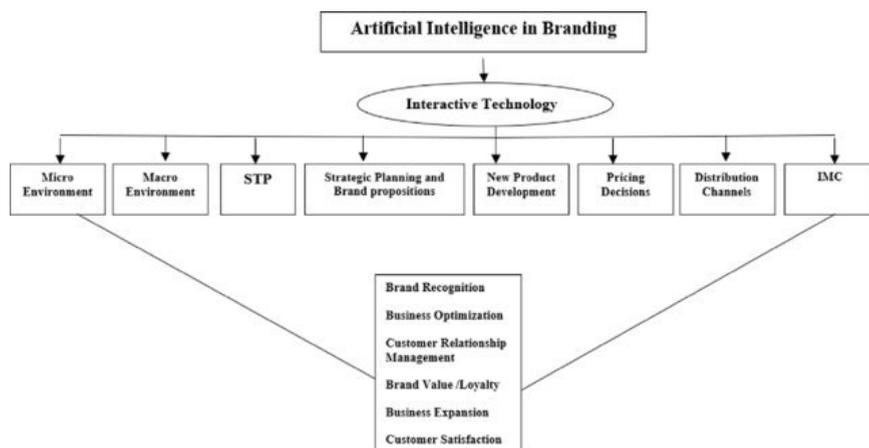
Figure 3 Framework of AI in branding

Source: Varsha et al (2021, p. 225)

Robots, chatbots, and interactive agents. Natural language processing has enabled the development of chatbots or Machine Talk that assist consumers in making decisions, buying products and facilitate communication between consumers and companies (Dale, 2016). This new way of communication is transforming customer experiences and shaping brand preferences (Suri *et al*, 2017).

Interactive agents use algorithmic structures to communicate with users, predict solutions to different queries and enhance communication between users of the same application (Etlinger, 2017). Influenced by the latest advancements in AI technologies, use of robots in customer service has gained momentum (Xiao and Kumar, 2021). However, it a challenging task for many companies to successfully incorporate robotics into customer services (Ackerman, 2016). The use of robots, chatbots and interactive agents is mainly researched from the firm perspective, hence the next research direction is found:

RESEARCH DIRECTION 9: When bots and interactive agents have the role of customer or intermediary in purchase process what is the suitable approach to measure its CBBE?

Customer experience and AI. In the service industry, customer experience is a source of long-term differentiation and has an important impact on BE affecting customer satisfaction, loyalty, and brand identification. Customers with positive brand experience use brands to create their social identity, sense of value and uniqueness (Feiz and Moradi, 2020).

Customer experience encompasses number of interactions between consumers and brand along the customer journey and consists of emotional, cognitive, behavioural, sensorial, and social dimensions (Lemon and Verhoef, 2016). Based on this view, Puntoni *et al* (2020) build a framework that reflects consumers' interaction with AI comprising of data capture, classification, delegation, and social aspect. It is argued that AI may as well be powerful in building trust and human perceptions since robots are more objective and not subject to fatigue and other human errors. Some chatbot and virtual assistant developers devote special attention to building the cognitive trust by offering quick and precise solutions, but without the social element. On the other hand, some are devoted to building socially assistive robots with strong affective component (Bock *et al*, 2020). Given the importance of trust in formation of BE, the following research direction arises:

RESEARCH DIRECTION 10: Who is the main source of trust in customer experience that incorporates AI agents?

Blockchain technology. One of the technologies that helps brands to better understand their target audience and consumers to have more control over their personal data is blockchain technology. It was initially created as a support for cryptocurrencies and intended to eliminate third parties in transactions (Rajeb *et al*, 2020). Blockchain is defined as a ''digital, decentralized, and distributed ledger in which transactions are logged and added in chronological order with the goal of creating permanent and tamperproof records (Treiblmaier, 2018, p. 574). In the marketing landscape, blockchain empowers consumer-centric paradigm and fosters disintermediation, privacy protection, security and enables loyalty programs (Rajeb *et al*, 2020). The future research on blockchain should be undertaken from the society perspective and as the following research direction suggests:

RESEARCH DIRECTION 11: Investigate the environmental impact of blockchain technologies and green BE of blockchain companies.

6.   CONCLUSION AND FUTURE RESEARCH DIRECTIONS

It would be almost impossible to imagine today's society and consumer decision-making without brands. They are valuable in terms of bringing financial value to the companies, but more importantly, when clearly positioned in the minds of consumers they facilitate choice, build loyalty, and foster long-term relationships. Since the beginning of the research on BE in the early 90s, the

research was mainly focused on easily measurable outcomes of strong brands such as revenue or market share. With the rising need for differentiation and clear distinctiveness in the marketplace, companies realized that their true value resides in the minds of the consumers. CBBE is one of the most widely researched areas of branding and over time, it has been adopted across almost all industries as a measure of differential effect a brand has in relation to the unbranded goods.

However, technological revolution that has taken place during the last decade has dramatically changed both consumer behaviour and companies' strategies. The main goal of this paper was to investigate how the latest changed in technology and those provoked by the COVID-19 pandemic affected BE as a measure of brand value in the fast-changing environment. To this end, the total of 82 articles in the Web of Science database were reviewed and the following research streams delineated: service and product innovation, IMC and AI. Within each area, the focus was to find research directions that would complement the extant research by offering the new perspective on the field whether it is consumer, firm, or society perspective. All research directions are showed in table 3.

Table 3

Future research directions

RESEARCH TOPIC	Future research directions
Product and Service Innovation	
hospitality industry	Comparison of overall satisfaction with customer experiences based on number of touchpoints delivered by humans versus contactless, tech-based touchpoints.
technology-based companies	What kind of organizational culture within technology-based companies fosters both technical innovation and consumer focus to maintain long-term customer relationships and BE?
banking industry	The research on the trade-off between perceived risk of m-banking app usage (e.g., data privacy, account security) and perceived usefulness across different age groups should be examined.
retail and e-commerce	Clearly distinguish factors that influence formation of online retail BE compared retail equity of physical stores.
augmented reality	What are the best content strategies for AR app development in order to maintain long-term interest of the target audience?
Integrated Marketing Communication	
social media	Cross-generational differences (e.g., generation X, generation Y – millennials, and generation Alpha) on factors that foster user-generated content and shape social media platform preferences.
luxury brands and social media	Person BE and how the use of influencers based on their person BE affects overall BE they represent in terms of luxury brands.
online brand communities	Which factors are vital in formation of strong online brand communities and what is their power to mitigate brand mistakes (foster brand forgiveness)?
Artificial Intelligence	
robots, chatbots and interactive agents	When bots and interactive agents have the role of customer or intermediary in purchase process what is the suitable approach to measure its CBBE?
customer experience and AI	Who is the main source of trust in customer experience that incorporates AI agents?
blockchain technology	The environmental impact of blockchain technologies and green BE of blockchain companies.

Considering the richness of research on BE and the intense dynamics of the field, one of the main limitations of this research refers to the relatively narrow timeframe focused on the last decade of research. In a similar vein, focus only on papers published in one database (Web of Science) and papers published in English may have led to omitting some important papers.

REFERENCES

Aaker, D.A. (1991) Managing brand equity capitalizing on the value of brand name. New York, NY: The Free Press.

Ackerman, E. (2016) Walmart and five elements robotics working on robotic shopping cart. https://spectrum.ieee.org/walmart-and-five-elements-robotics-working-on-robotic-shopping-cart, accessed January 25th, 2022.

Ailawadi, K.L., Lehmann, D.R. & Neslin, S.A. (2003) Revenue premium as an outcome measure of brand equity. Journal of Marketing 67: 1-17. https://doi.org/10.1509/jmkg.67.4.1.18688

Alden, D.L., Kelley, J.B., Youn, J.B. & Chen, Q. (2016) Understanding consumer motivations to interact on brand websites in the international marketplace: Evidence from the US, China and South Korea. Journal of Business Research 69: 5909. https://doi.org/10.1016/j.jbusres.2016.04.108

Allaway, A.W., Huddleston, P., Whipple, J. & Ellinger, A.E. (2011) Customer-based brand equity, equity drivers, and customer loyalty in the supermarket industry. Journal of Product & Brand Management 20: 190-204. https://doi.org/10.1108/10610421111134923

Badenhop, A. &Frasquet, M. (2021) Online grocery shopping at multichannel supermarkets: the impact of retailer brand equity. Journal of Food Products Marketing 27: 89-104. https://doi.org/10.1080/10454446.2021.1894296

Bae, S., Jung, T.H., Moorhouse, N., Suh, M. & Kwon, O. (2020) The influence of mixed reality on satisfaction and brand loyalty in cultural heritage attractions: a brand equity perspective. Sustainability 12: 1-22. https://doi.org/10.3390/su12072956

Bain & Co. (2019) Luxury goods worldwide market study, fall-winter 2018. https://www.bain.com/contentassets/8df501b9f8d6442eba00040246c6b4f9/bain_digest__luxury_goods_worldwide_market_study_fall_winter_2018.pdf, accessed January 25th, 2022.

Baumgarth, C. & Schmidt, M. (2010) How strong is the business-to-business brand in the workforce? An empirically tested model of 'internal brand equity' in a business-to-business setting. Industrial Marketing Management 39: 1250-1260. https://doi.org/10.1016/j.indmarman.2010.02.022

Bazi, S., Filieri, R. & Gorton, M. (2020) Customers' motivation to engage with luxury brands on social media. Journal of Business Research 112: 223-235. https://doi.org/10.1016/j.jbusres.2020.02.032

Bilgicer, T., Jedidi, K., Lehmann, D.R. & Neslin, S.A. (2015) Social contagion and customer adoption of new sales channels. Journal of Retailing 91: 254-271. https://doi.org/10.1016/j.jretai.2014.12.006

Bock, D.E., Wolter, J.S. & Ferrell, O.C. (2020) Artificial intelligence: disrupting what we know about services. Journal of Services Marketing 34: 317-334. https://doi.org/10.1108/JSM-01-2019-0047

Brinker, S. (2020) Marketing Technology Landscape Supergraphic: Martech 5000 - really 8,000, but who's counting? https://chiefmartec.com/2020/04/marketing-technology-landscape-2020-martech-5000/, accessed January 25th, 2022.

Brogi, S., Calabrese, A., Campisi, D., Capece, G., Costa, R. & Di Pillo, F. (2013) The effects of online brand communities on brand equity in the luxury fashion industry. International Journal of Engineering Business Management 32. https://doi.org/10.5772/56854

Capece, G. & Campisi, D. (2013) User satisfaction affecting the acceptance of an e-learning platform as a mean for the development of the human capital. Behaviour & Information Technology 32: 335-343. https://doi.org/10.1080/0144929X.2011.630417

Carroll, N. (2020) The impact of COVID-19 on retail and ecommerce - UK. Mintel. https://store.mintel.com/report/the-impact-of-covid-19-on-retail-and-ecommerce-uk-june-2020, accessed January 25th, 2022.

Chae, H. & Ko, E. (2016) Customer social participation in the social networking services and its impact upon the customer equity of global fashion brands. Journal of Business Research 69: 3804-3812. https://doi.org/10.1016/j.jbusres.2015.12.072

Chang, K.C., Hsu, C.L., Chen, M.C. & Kuo, N.T. (2019) How branded website creates customer purchase intentions. Total Quality Management 30: 422-446. https://doi.org/10.1080/14783363.2017.1308819

Chen, H.L. & Mathews, S. (2013) The effects of portal website attitude and e-services on branding of e-stores. Australasian Marketing Journal 21: 155-160. https://doi.org/10.1016/j.ausmj.2013.03.001

Chen, Y.S. (2010) The drivers of green brand equity: green brand image, green satisfaction, and green trust. Journal of Business Ethics 93: 307-319. https://doi.org/10.1007/s10551-009-0223-9

Christodoulides, G. & de Chernatony, L. (2010) Consumer-based brand equity conceptualization and measurement - a literature review. International Journal of Market Research 52: 43-66. https://doi.org/10.2501/S1470785310201053

Colicev, A., Malshe, A., Pauwels, K. & O'Connor, P. (2018) Improving consumer mindset metrics and stakeholder through social media: the different roles of owned and earned media. Journal of Marketing 82: 37-56. https://doi.org/10.1509/jm.16.0055

Conti, S. (2018) Digital giants dominate Interbrand's 2018 ranking, luxury leads growth. https://wwd.com/business-news/business-features/digital-giants-interbrands-2018-ranking-luxury-growth-1202867368/, accessed January 25th, 2022.

Creevey, D., Coughlan, J. & O'Connor, C. (2019) Social media and luxury. International Journal of Management Reviews 26: 1-31.

Dale, R. (2016) The return of the chatbots. Natural Language Engineering 22: 811-817. https://doi.org/10.1017/S1351324916000243

Davenport, T.H. (2021) The AI advantage: how to put the artificial intelligence revolution to work. Boston, MA: MIT Press.

Davenport, T.H., Guha, A., Grewal, D. & Bressgott, T. (2020) How artificial intelligence will change the future of marketing, Journal of Academy of Marketing Science 48: 24-42. https://doi.org/10.1007/s11747-019-00696-0

Deepa, R. & Baral, R. (2021) Relationship between integrated communication effectiveness and employee-based brand equity - mediating role of psychological contract fulfilment. Journal of Product & Brand Management 30: 883-897. https://doi.org/10.1108/JPBM-01-2019-2212

Delafrooz, N. & Goli, A. (2015) The factors affecting the green brand equity of electronic products: Green marketing. Cogent Business & Management 2: 1-12. https://doi.org/10.1080/23311975.2015.1079351

Delgado-Ballester, E., Navarro, A. & Sicilia, M. (2012) Revitalising brands through communication messages: the role of brand familiarity. European Journal of Marketing 46: 31-51. https://doi.org/10.1108/03090561211189220

Dion, D. & Borraz, S. (2017) Managing status: how luxury brands shape class subjectivities in the service encounter. Journal of Marketing 81: 67-85. https://doi.org/10.1509/jm.15.0291

Divakaran, P. & Kumar, P. (2018) Technology-enabled community data for gaining pre-release brand insights. Technological Forecasting and Social Change 127: 217-226. https://doi.org/10.1016/j.techfore.2017.09.024

El Samen, A.A.A. (2015) Online service quality and brand equity: the mediational roles of perceived value and customer satisfaction. Journal of Internet Commerce 14: 509-530. https://doi.org/10.1080/15332861.2015.1109987

Etlinger, S. (2017) The conversational business: How chatbots will reshape digital experiences. Altimeter Group Research Reports :1-29.

Farquhar, P.H. (1989) Managing brand equity. Marketing Research 1: 24-33.

Feiz, D. & Moradi, H. (2020) Creating consumer-based brand equity for customers by brand experience - evidence from Iran banking industry. Journal of Islamic Marketing 11: 1443-1464. https://doi.org/10.1108/JIMA-03-2019-0055

Fuentes-Blasco, M., Moliner-Velazquez, B., Servera-Frances, D. & Gil-Saura, I. (2017) Role of marketing and technological innovation on store equity, satisfaction and word-of-mouth in retailing. Journal of Product and Brand Management 26: 650-666. https://doi.org/10.1108/JPBM-07-2016-1279

Garanti, Z. & Kissi, P.S. (2019) The effects of social media brand personality on brand loyalty in Latvian banking industry. International Journal of Bank Marketing 37: 1480-1503. https://doi.org/10.1108/IJBM-09-2018-0257

Gil-Saura, I., Ruiz Molina, M.E. & Berenguer-Contri, G. (2016) Store equity and behavioral intentions: the moderating role of the retailer's technology. Journal of Product & Brand Management 2: 642-650. https://doi.org/10.1108/JPBM-11-2015-1035

Global consumer insights survey 2020 (2020) The consumer transformed, PwC. https://www.pwc.com/gx/en/consumer-markets/consumer-insights-survey/2020/pwc-consumer-insights-survey-2020.pdf, accessed January 25th, 2022.

Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R. & Singh, R. (2016) Social media marketing efforts of luxury brands: Influence on brand equity and consumer behaviour. Journal of Business Research 69: 1-9. https://doi.org/10.1016/j.jbusres.2016.04.181

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. Information Systems Research 24: 88-107. https://doi.org/10.1287/isre.1120.0469

Gustafsson, A., Snyder, H. & Witell, L. (2020) Service innovation: a new conceptualization and path forward. Journal of Service Research 23: 111-115. https://doi.org/10.1177/1094670520908929

Han, H., Lho, L.H., Jung, H., Ariza-Montes, A. & Araya-Castillo, L. (2021) Social networking service as s marketing technology tool and sustainable business in the lodging

industry: investigating the difference across older and younger age groups among tourists. Sustainability 13: 1-14. https://doi.org/10.3390/su13105673

Hao, F. (2021) Acceptance of contactless technology in the hospitality industry: Extending the unified theory of acceptance and use of technology 2. Asia Pacific Journal of Tourism Research 26: 1386-1401. https://doi.org/10.1080/10941665.2021.1984264

Hao, F. & Chon, K. (2021) Are you ready for a contactless future? A multi-group analysis of experience, delight, customer equity, and trust based on the technology. Journal of Travel & Tourism Marketing 38: 900-916. https://doi.org/10.1080/10548408.2021.1997878

Ho, J.Y.C. & Dempsey, M. (2010= Viral marketing: motivations to forward online content. Journal of Business Research 63: 1000-1006. https://doi.org/10.1016/j.jbusres.2008.08.010

Hsu, C.L. & Lin, J.C. (2015) An empirical study of smartphone user behaviour: the effect of innovation characteristics, brand equity and social influence. International Journal of Mobile Human Computer Interaction 7: 1-24. https://doi.org/10.4018/ijmhci.2015010101

Hussain, S. & Ahmed, R.R. (2020) Smartphone buying behaviours in a framework of brand experience and brand equity. Transformations in Business & Economics 19: 220-242.

Jamshidi, D., Keshavarz, Y., Kazemi, F. & Mohammadian, M. (2018) Mobile banking behaviour and flow experience: an integration of utilitarian features, hedonic features and trust. International Journal of Social Economics 45: 57-81. https://doi.org/10.1108/IJSE-10-2016-0283

Javornik, A. (2016) Augmented reality: research agenda for studying the impact of its media characteristics on consumer behaviour. Journal of Retailing and Consumer Services 30: 252-261. https://doi.org/10.1016/j.jretconser.2016.02.004

Javornik, A., Duffy, K., Rokka, J., Scholz, J., Nobbs, K., Motala, A. & Goldenberg, A. (2021) Strategic approaches to augmented reality deployment by luxury brands. Journal of Business Research 136: 284-292. https://doi.org/10.1016/j.jbusres.2021.07.040

Kastanakis, M.N. & Balabanis, G. (2014) Explaining variation in conspicuous luxury consumption: An individual differences' perspective. Journal of Business Research 67: 2147-2154. https://doi.org/10.1016/j.jbusres.2014.04.024

Keller, K.L. (1993) Conceptualizing, measuring and managing customer-based brand equity. Journal of Marketing 57: 1-22. https://doi.org/10.1177/002224299305700101; https://doi.org/10.2307/1252054

Keller, K.L. & Lehman, D.R. (2003) How do brands create value. Marketing Management 12: 26-31.

Keller, K.L. & Lehman, D.R. (2006) Brands and branding: research findings and future priorities. Marketing Science 25: 740-759. https://doi.org/10.1287/mksc.1050.0153

Kim, K.H., Ko, E., Kim, S.J. & Jiang, Q. (2021) Digital service innovation, customer engagement, and customer equity in AR marketing. Journal of Global Scholars of Marketing Science 31: 453-466. https://doi.org/10.1080/21639159.2021.1923054

King, C., Grace, D. & Funk, D.C. (2011) Employee brand equity: scale development and validation. Journal of Brand Management 19: 268-288. https://doi.org/10.1057/bm.2011.44

Klass, N. (forthcoming) Technology builds the journalist star? An experiment on the effects of human star power and content exclusiveness on reading, sharing and paying intentions for online news. Journal of Media Business Studies. In press.

Kuksov, D., Shachar, R. & Wang, K. (2013) Advertising and consumers' communications. Marketing Science 32: 294-309. https://doi.org/10.1287/mksc.1120.0753

Lee, S.H. & Lee, S-H. (2014) A scale development of retailer equity. Sustainability 10: 3924. https://doi.org/10.3390/su10113924

Leek, S. & Christodoulides, G. (2011) A framework of brand value in B2B markets: The contributing role of functional and emotional components. Industrial Marketing Management 41: 106-114. https://doi.org/10.1016/j.indmarman.2011.11.009

Lemon, K.N. & Verhoef, P.C. (2016) Understanding customer experience throughout the customer journey. Journal of Marketing 80: 69-96. https://doi.org/10.1509/jm.15.0420

Li, K.J. (2021) Product innovation with customer recognition. https://ssrn.com/abstract=3879129, accessed January 25th, 2022. https://doi.org/10.2139/ssrn.3879129

Liao, S. & Cheng, C.C. (2013) Consumer evaluation of self-service innovation failure: the effect of brand equity and attribution. The Service Industries Journal 33: 467-485. https://doi.org/10.1080/02642069.2011.614339

Lin, H.F. (2011) An empirical investigation of mobile banking adoption: the effect of innovation attributes and knowledge-based trust. International Journal of Information Management 31: 252-260. https://doi.org/10.1016/j.ijinfomgt.2010.07.006

Luo, X. & Zhang, J. (2013) How do consumer buzz and traffic in social media marketing predict the value of the firm? Journal of Management Information Systems 30: 213-238. https://doi.org/10.2753/MIS0742-1222300208

Mahrous, A. & Abdelmaaboud, A. (2017) Antecedents of participation in online brand communities and their purchasing behaviour consequences. Service Business 11: 229-251. https://doi.org/10.1007/s11628-016-0306-5

Meek, S., Ogilvie, M., Lambert, C. and Ryan, M.M. (2019) Contextualising social capital in online brand communities. Journal of Brand Management 26: 426-444. https://doi.org/10.1057/s41262-018-00145-3

Muniz, A.M. & O'Guinn, T.C. (2011) Brand community. Journal of Consumer Research 27: 412-423. https://doi.org/10.1086/319618

Nunez-Gomez, P., Sanchez-Herrera, J. & Pintado-Blanco, T. (2020) Children's engagement with brands: from social media consumption to brand preference and loyalty. Sustainability 12: 1-16. https://doi.org/10.3390/su12229337

Oh, T.T., Keller, K.L., Neslin, S.A., Reibstein, D.J. & Lehmann, D.R. (2020) The past, present, and future of brand research. Marketing Letters 31: 151-162. https://doi.org/10.1007/s11002-020-09524-w

Overgoor, G., Chica, M., Rand, W. & Weishampel, A. (2019) Letting the computers take over: using AI to solve marketing problems. California Management Review 61: 156-185. https://doi.org/10.1177/0008125619859318

Parker, C.J. & Kuo, H. (2021) What drives generation-y women to buy fashion items online? Journal of Marketing Theory and Practice 3: 1-16. https://doi.org/10.1080/10696679.2021.1934877

Pena-Garcia, N., Gil-Saura, I. & Rodriguez-Orejuela, A. (2018) E-loyalty formation: a cross cultural comparison of Spain and Colombia. Journal of Electronic Commerce Research 19: 336-356.

Puntoni, S., Reczek, R., Giesler, M. & Botti, S. (2020) Consumers and Artificial Intelligence: An Experiential Perspective. Journal of Marketing 85: 131-151. https://doi.org/10.1177/0022242920953847

Rahaman, H., Champion, E. & Bekele, M. (2019) From photo to 3D to mixed reality: a complete workflow for cultural heritage visualization and experience. Digital Applications in Archaeology and Cultural Heritage 13. https://doi.org/10.1016/j.daach.2019.e00102

Razaei, S. & Valaei, N. (2017) Branding in a multichannel retail environment: online stores vs app stores and the effect of product type. Information Technology & People 30: 1-30. https://doi.org/10.1108/ITP-12-2015-0308

Rejeb, A., Keogh, J.G. & Treiblmaier, H. (2020) How blockchain technology can benefit marketing: six pending research areas. Frontiers in Blockchain 3: 1-12. https://doi.org/10.3389/fbloc.2020.00003

Rojas-Lamorena, A., Del Barrio-Garcia, S. & Alcantara-Pilar, J.M. (2022) A review of three decades of academic research on brand equity: A bibliometric approach using co-word analysis and bibliographic coupling. Journal of Business Research 139: 1067-1083. https://doi.org/10.1016/j.jbusres.2021.10.025

Rust, R.T., Kim, J., Dong, Y., Kim, T.J. & Lee, S. (2015) Handbook of Research on Customer Equity in Marketing. Cheltenham: Edward Elgar Publishing.

Schmidt, H.J. & Baumgarth, C. (2018) Strengthening internal brand equity with brand ambassador programs: development and testing of a success factor model. Journal of Brand Management 25: 250-265. https://doi.org/10.1057/s41262-018-0101-9

Schmitt, B. (2012) The consumer psychology of brands. Journal of Consumer Psychology 22: 7-17. https://doi.org/10.1016/j.jcps.2011.09.005

Šerić, M. (2017) Relationships between social Web, IMC and overall brand equity. European Journal of Marketing 51: 646-667. https://doi.org/10.1108/EJM-08-2015-0613

Šerić, M. & Gil-Saura, I. (2012) ICT, IMC, and Brand Equity in high-quality hotels of Dalmatia: an analysis from guest perceptions. Journal of Hospitality Marketing & Management 21: 821-851. https://doi.org/10.1080/19368623.2012.633211

Šerić, M., Gil-Saura, I. & Garbin Praničević, D. (2016) Latest technology and communication consistency in hospitality: a comparison between two Mediterranean countries. Economic Research-Ekonomska istraživanja 29: 1091-1108. https://doi.org/10.1080/1331677X.2016.1211949

Šerić, M., Gil-Saura, I. & Molla-Descals, A. (2016) Can advanced technology affect customer-based brand equity in service firms? An empirical study in upscale hotels. Journal of Service Theory and Practice 26: 2-27. https://doi.org/10.1108/JSTP-10-2014-0239

Šerić, M., Gil-Saura, I. & Ruiz-Molina, M.E. (2014) How can integrated marketing communications and advanced technology influence the creation of customer-based brand equity? Evidence from the hospitality industry. International Journal of Hospitality Management 39: 144-156. https://doi.org/10.1016/j.ijhm.2014.02.008

Simon, C.J. & Sullivan, M.J. (1993) The Measurement and Determinants of Brand Equity: A Financial Approach. Marketing Science 12: 28-52. https://doi.org/10.1287/mksc.12.1.28

Statista (2022) Number of social network users worldwide from 2017 to 2025. https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/, accessed January 25th, 2022.

Suri, V.K., Elia, M. & van Hillegersberg, J. (2017) Software bots - the next frontier for shared services and functional excellence. International Workshop on Global Sourcing of Information Technology and Business Processes :81-94. https://doi.org/10.1007/978-3-319-70305-3_5

Swaminathan, V., Sorescu, A., Steenkamp, J.E.M., Gibson O'Guinn, T.C. & Schmitt, B. (2020) Branding in a Hyperconnected World: Refocusing Theories and Rethinking Boundaries. Journal of Marketing 84: 24-46. https://doi.org/10.1177/0022242919899905

Sylvester, A., Tate, M. & Johnstone, D. (2013) Beyond synthesis: representing heterogeneous research literature. Behaviour & Information Technology 32: 1199-1215. https://doi.org/10.1080/0144929X.2011.624633

Tatar, S.B. & Eren-Erdogmus, I. (2016) The effect of social media marketing on brand trust and brand loyalty for hotels. Information Technology in Tourism 16: 249-263. https://doi.org/10.1007/s40558-015-0048-6

Tavassoli, N.T., Sorescu, A. & Chandy, R. (2014) Employee-based brand equity: why firms with strong brands pay their executives less. Journal of Marketing Research 51: 676-690. https://doi.org/10.1509/jmr.13.0435

Tian, Z., Lu, M. & Cheng, Q. (2021) The relationships among mobile travel application attributes, customer engagement, and brand equity. Social Behaviour and Personality 49. https://doi.org/10.2224/sbp.10353

Tran, T.P.K., Nguyen, V.K. & Tran, V.T. (2021) Brand equity and customer satisfaction: a comparative analysis of international and domestic tourists in Vietnam. Journal of Product & Brand Management 30: 180-194. https://doi.org/10.1108/JPBM-08-2019-2540

Treiblmaier, H. (2018) The impact of the blockchain on the supply chain: a theory-based research framework and a call for action. Supply Chain Management: An International Journal 23: 545-559. https://doi.org/10.1108/SCM-01-2018-0029

Varsha, P.S., Kumar, A., Gochhait, S. & Patagundi, B. (2021) The impact of artificial intelligence on branding: a bibliometric analysis (1982-2019). Journal of Global Information Management 29: 221-246. https://doi.org/10.4018/JGIM.20210701.oa10

Veloutsou, C. & Guzman, F. (2017) The evolution of brand management thinking over the last 25 years as recorded in the Journal of Product & Brand Management. Journal of Product & Brand Management 26: 1-12. https://doi.org/10.1108/JPBM-01-2017-1397; https://doi.org/10.1108/JPBM-01-2017-1398

Verhoef, P.C., Kannan, P.K. & Inman, J.J. (2015) From multi-channel retailing to omni-channel retailing: Introduction to the Special Issue on multi-channel retailing. Journal of Retailing 91: 174-181. https://doi.org/10.1016/j.jretai.2015.02.005

Vlačić, B., Corbo, L., Costa de Silva, S. & Dabić, M. (2021) The evolving role of artificial intelligence in marketing: A review and research agenda. Journal of Business Research 128: 187-203. https://doi.org/10.1016/j.jbusres.2021.01.055

Wagner Mainardes, E. & Vieira Cardoso, M. (2019) Effect of the use of social media in trust, loyalty and purchase intention in physical stores. The International Review of Retail, Distribution and Consumer Research 29: 456-477. https://doi.org/10.1080/09593969.2019.1583593

Wang, W.T. & Li, H.M. (2012) Factors influencing mobile services adoption: a brand-equity perspective. Internet Research 22: 142-179. https://doi.org/10.1108/10662241211214548

Wirtz, J., den Ambtman, A., Bloemer, J., Horvath, C., Ramaseshan, B., van de Klundert, J., Canli, Z.G. & Kandampully, J. (2013) Managing brands and customer engagement in online brand communities. Journal of Service Management 24: 223-244. https://doi.org/10.1108/09564231311326978

Wu, C.W. (2014) The study of service innovation for digiservice on loyalty. Journal of Business Research 67: 819-824. https://doi.org/10.1016/j.jbusres.2013.11.051

Xiao, L. & Kumar, V. (2021) Robotics for customer service: a useful complement or an ultimate substitute? Journal of Service Research 4: 9-29. https://doi.org/10.1177/1094670519878881

Xu, X., Thong, J.Y.L. & Venkatesh, V. (2014) Effects of ICT service innovation and complementary strategies on brand equity and customer loyalty in a consumer technology market. Information Systems Research 25: 710-729. https://doi.org/10.1287/isre.2014.0540

Yoo, B., Donthu, N. & Lee, S. (2000) An examination of selected marketing mix elements and brand equity. Journal of the Academy of Marketing Science 28: 195-211. https://doi.org/10.1177/0092070300282002

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TRŽIŠNA VRIJEDNOST MARKE U DIGITALNOM DOBU: PREGLED LITERATURE

Sažetak

Kellerov rad Conceptualizing, Measuring and Managing Customer-Based Brand Equity, objavljen 1993. godine u Journal of Marketing, predstavlja polaznu točku u istraživanju koncepta tržišne vrijednosti marke. Međutim, u posljednjih 10 godina, sa snažnim razvojem (komunikacijske) tehnologije i, u posljednje vrijeme, s pandemijom COVID-19, stvari su se promijenile i većina marki je svoje poslovanje preselila u online okruženje. Zbog toga je potrebno preispitati koncept tržišne vrijednosti marke. Ovaj rad daje pregled literature o tržišnoj vrijednosti marke u digitalnom dobu uočavanjem praznina na tržištu i predlaže smjerove za buduća istraživanja. U tu svrhu provedena je bibliometrijska analiza popraćena opisom članaka objavljenih u Web of Science bazi podataka. Rad pridonosi literaturi o upravljanju markama predlažući smjerove budućih istraživanja u području tržišne vrijednosti marke.

Ključne riječi: tržišna vrijednost marke, digitalno doba, tržišna vrijednost marke temeljena na potrošačima, digitalni marketing, pregled literature.

JEL klasifikacija: M31, M37, L86.