Bibliometric analysis of the customer experience literature


To cite this article: Javier Gallardo-Garcia, Esther Pagán-Castaño, Javier Sánchez-Garcia & María Guijarro-García (2023) Bibliometric analysis of the customer experience literature, Economic Research-Ekonomska Istraživanja, 36:2, 2137822, DOI: 10.1080/1331677X.2022.2137822

To link to this article: https://doi.org/10.1080/1331677X.2022.2137822
Bibliometric analysis of the customer experience literature


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ABSTRACT
This article provides an extensive review and analysis of the customer experience (CX) literature. This growing, highly topical research area draws on contributions from multiple disciplines, including marketing, philosophy, management and psychology. The present analysis was performed using 1,358 articles published between 1996 and 2021 and indexed in the Web of Science (WoS) database. These articles were analysed using bibliometric methods. The analysis provides insights into the volume of publications, most cited articles and authors, most prolific institutions and countries, and keywords in CX research. The findings provide an up-to-date picture of CX as an academic concept. They also help identify new lines of research on CX and other associated concepts.

ARTICLE HISTORY
Received 12 May 2022
Accepted 14 October 2022

KEYWORDS
Customer experience; customer journey; customer persona; customer experience management; net promoter score; bibliometrics

JEL CODES
M31; M38; M39

1. Introduction

Behavioural economics is based on the idea that human emotions influence economic decision-making processes (Kahneman, 2003; Mullainathan & Thaler, 2000). In recent years, this field has experienced a surge in the output of scientific and professional literature analysing the emotional aspects of many of our daily customer decisions (Baumeister et al., 2007; Lee et al., 2009). Much research has also sought to explain customer behaviour using memories of emotions (Cornescu & Adam, 2015). Against this backdrop, the so-called experience economy (Pine & Gilmore, 1998) is gaining ground. At the business level, this idea is discussed in terms of the concept of customer experience management (CEM) (Homburg et al., 2017; Schmitt, 2010). The fundamental aim of CEM is to pinpoint the concept of customer experience (CX) in companies, creating an umbrella term covering all research endeavours in this area and enabling organisations to achieve a competitive advantage through a better understanding of consumer behaviour (Mishra et al., 2021). Firms can thus
differentiate themselves from competitors through the experiences they deliver to their customers (Shaw & Ivens, 2002), forging greater customer loyalty (Biedenbach & Marell, 2010; Cuong et al., 2020) and stronger brand relationships (de Kerviler & Rodriguez, 2019). Accordingly, the importance of the customer for the organisation and the search for customer satisfaction are central to the purpose of all organisations. The concept of CX can be understood as the evolution of the concepts, practices and disciplines that have historically centred on the importance of the customer for companies.

This paper offers quantitative and qualitative analysis of the scientific literature on CX. It is hoped that its findings will provide a basis for a better understanding of this field and will highlight future lines of CX research. The paper is structured as follows. Section 2 briefly outlines a theoretical framework describing the evolution of the concept of CX. Section 3 explains the method for the bibliometric analysis. Section 4 shows the main results of the analysis. Finally, Section 5 provides a discussion and states the conclusions of the principal results, indicating both the limitations and future lines of research.

### 2. Theorical framework

The roots of CX date back to the 1960s, when theories of customer behaviour in relation to marketing strategies were first studied. Philip Kotler (1967), John Howard and Jagdish Sheth (1969) performed seminal work in this area. From then on, the customer has become an increasingly important figure in the scientific business literature, with several stages in the evolution of this concept (Lemon & Verhoef, 2016). These stages are discussed in the following paragraph.

From 1960 to 1970, early research on customer buying behaviour started to emerge, conceptualising this phenomenon as a systematic process (Howard & Sheth, 1969; Lavidge & Steiner, 1961). In the 1970s, research on the concept of customer satisfaction and its linkages with customer loyalty and retention began to develop (Bolton & Drew, 1991; Gupta & Zeithaml, 2006; Oliver, 1980; Zeithaml, 1988). In the 1980s, the concept of quality of service was born (Bitner, 1990, 1992; Bitner et al., 2008; Parasuraman et al., 1988; Rust & Chung, 2006). This concept incorporated intangible elements and the environment into the perceptions of customers. Research was also conducted on the use of tools similar to the blueprint to map the relationship between the company and its customers in relation to the service provided. In the 1990s, research on relationship marketing began to emerge (Berry, 1995; Dwyer et al., 1987; Morgan & Hunt, 1994), and the concept of satisfaction was expanded to include B2B customers. In the 2000s, the concept of customer relationship management (CRM) was created (Bolton et al., 2004; Kumar & Reinartz, 2006; Kumar & Shah, 2009; Neslin et al., 2006; Payne & Frow, 2005; Reinartz et al., 2004; Reinartz & Kumar, 2000; Rust et al., 2004; Verhoef, 2003). During this stage, the customer relationship was operationalised using data from different channels and different milestones that ensure a return on investment. The period from 2000 to 2010 saw the emergence and development of the concepts of customer centricity and customer focus (Gulati & Oldroyd, 2005; Kumar & Reinartz, 2006; Sheth et al., 2000). Under
this approach, all functions and people within an organisation are central to the delivery of CX. The research also began to explore the design of the perceived CX from the customer’s perspective. In the 2010s, the concept of customer engagement appeared (Brodie et al., 2011; Hollebeek et al., 2014; Kumar et al., 2010; Libai et al., 2010; Van Doorn et al., 2010). Research in this area considers how interactions that are not directly purchase related, including intangible concepts such as the emotions experienced by customers, can influence CX.

2.1. The birth of customer experience (CX) as a concept

Despite the different meanings of the term ‘customer experience’ (CX) in the scientific literature, all are based on the original idea first presented by Abbot (1955). That is, what people really want is not products but satisfying experiences. The scientific literature on this concept spans a wide range of fields, including marketing, philosophy, cognitive science, psychology and business management. This multidisciplinary nature of the literature reflects the scope and multidimensionality of the term. In recent years, various definitions have attempted to provide greater insight into this concept. For instance, ‘An experience occurs when a customer has some sensation or knowledge acquisition as a result of some level of interaction with the different elements of a context created by the service provider’ (Gupta & Vajic, 2000, p. 34). Thus, CX is viewed from a holistic perspective of the customer-business relationship, in which customers combine cognitive, emotional, sensory, social and spiritual aspects in their interactions with the company (Bolton et al., 2014; Gentile et al., 2007; Lemke et al., 2011; Verhoef et al., 2009). Thus, in addition to considering irrational factors in decision making, the CX approach emphasises the importance of all contact between the consumer and the organisation, making CX an eminently holistic concept (Meyer & Schwager, 2007).

Taken together, this review indicates that the concept of CX extends the approach of customer satisfaction, providing a richer viewpoint and incorporating two key concepts. The first is interaction, which refers to any point of contact between an organisation and its customers. Such a point of contact can be understood as any verbal (e.g., advertising) or non-verbal (e.g., use of products) event perceived by an individual and from which that individual consciously relates to a certain company or brand (Duncan & Moriarty, 2006). From this point of view, relationships between customers and companies occur at different moments: from evaluation, through purchase, to the use of products and services (Bascur & Rusu, 2020; Jantsch, 2011). The second additional concept that forms part of CX refers to the emotions and knowledge about the organisation acquired by customers, based on their perceptions. This idea means that the same stimulus can be perceived differently by customers depending on sociocultural, situational and customer factors (Becker & Jaakkola, 2020). Considering these two concepts at the business level, CX can be defined simply as ‘all thoughts, emotions and appraisals that occur during or as a result of an event’ (Goode et al., 2010, p. 276). This definition includes the two key terms that make CX novel in terms of the importance of customers in relation to this concept. The first of these refers to emotions. Specifically, the focus is on how emotions influence customer
perceptions and behaviour (Kwortnik & Ross, 2007). The second refers to interactions and understanding that customers’ relationships with an organisation consist, in essence, of a sequence of interactions with customers. Therefore, from the perspective of CX and CEM, the goal of organisations is to manage the emotions of customers when they interact with the organisation.

2.2. The growing importance of customer experience (CX)

The importance of CX and its rise as a strategic consideration for most companies are the consequence of the number and complexity of contact points, channels and media that organisations now offer their customers (Verhoef et al., 2009). This richness in offerings results in more complex customer journeys (Brynjolfsson et al., 2013; Verhoef et al., 2015). Organisations also lose some of their control over their proposal. In addition, the explosion of social networks is creating challenges as well as opportunities for companies as the experiences of consumers are turned into content for social interaction (Leeflang et al., 2013). Companies also need to provide a positive, well-differentiated experience to create a mark of identity that reflects their offering (Bascur & Rusu, 2020).

In addition, from a CX viewpoint, the emotions experienced in each of these interactions form the basis for measuring how good each one actually is. These emotions are then associated with the customer’s memory and behaviour towards the organisation (Gentile et al., 2007). In CEM, this memory is believed to influence customers’ loyalty to and recommendations of a brand, product or service. Thus, CEM has a direct impact on profitability and customer lifetime value and therefore on overall organisational performance (Bloemer & De Ruyter, 1999; Bolton, 1998; Bolton et al., 2004; Verhoef, 2003), hence the relevance of CEM today.

Online recommendations to other users (i.e., word of mouth), regardless of whether they are acquaintances or strangers, has become a key factor in decisions (Gildin, 2003; Martensen & Mouritsen, 2016). For example, Nielsen (2022) cited recommendations as the most relevant factor when choosing a brand.

The ‘zero moment of truth’ (ZMOT) is a term coined by Google (Lecinski, 2011) to describe the path followed by a customer in the evaluation phase or moment in which the customer of an organisation is not yet a customer. Overall, the importance of recommendations from other users, be they acquaintances or strangers, at the ZMOT is important when choosing a particular product or service. Messages, campaigns and actions by the brands themselves play only a secondary role at this stage.

In the ‘ROI of Customer Experience 2020’ study by Qualtrics (XM Institute), 10,000 customers from different industries were questioned about the connections between CX and organisational performance. The results of the study imply that CX is highly correlated with loyalty and additional purchases by customers (Molinillo et al., 2022). More specifically, in relation to commercial performance indicators, there were also some interesting results. For example, regarding additional purchases (cross-selling), there was a strong positive relationship between the probability of buying more and customers’ ratings of the experience (correlation coefficient = 0.91). Moreover, regarding additional recommendations, there was a strong positive
correlation between CX and the net promoter score or ‘NPS’ (correlation coefficient $= 0.88$). Accordingly, CEM is now high on the agenda of CEOs (IBM Institute for Business Value: The 2021 CEO Study). CX is considered a key discipline to achieve a sustainable competitive advantage over competitors given the fierce competition in mature markets, where the fleeting expectations of customers can change rapidly (Chandler & Lusch, 2015; Wiggins & Ruefli, 2005). This concern is reflected by the high share of marketing budgets, with between 21% and 50% reserved for enhancing experiences (Pyle et al., 2021). The data also show that 60% of large organisations plan to increase efforts to improve CX with respects to those made in the previous year (XM institute report, 2020). In support of this idea, studies have shown that CX leaders grow faster than average in their markets (CX Champions Report, Zendesk). Likewise, in recent years, CX executives have joined the management committees of large companies such as Amazon, Google, Cisco, KPMG and Airbnb (Lemon & Verhoef, 2016). Numerous associations that promote this discipline in the business world have also appeared (CXPA, CXL A, DEC, etc.).

3. Method

3.1. Data collection

The data used in this study were gathered from the Web of Science (WoS) by Clarivate Analytics. WoS is one of the most widely used databases for the dissemination of scientific publications and has provided the data source for many bibliometric studies. WoS is widely considered one of the most reliable scholarly research databases (Merigó et al., 2015a; Yang & Chang, 2013) because it includes publications from 1900 to the present day. It covers more than 21,100 peer-reviewed journals and conference proceedings, as well as more than 80,000 books in more than 250 categories and 150 research areas. In addition, it has certain advantages over other scientific databases such as Scopus with regard to keyword selection (Krämer et al., 2017). Its creator, Eugene Garfield, is considered the father of citation indexing in the scientific literature. This concept was commercially exploited by Thomson Reuters.

3.2. Bibliometric analysis

Bibliometric analysis is the discipline concerned with the quantitative analysis of bibliographic material (Merigó et al., 2015b). This analysis is conducted following a systematic method of identification, evaluation and monitoring of published scientific works (Small, 1973). Common units of analysis in this type of study are citations, authors, journals, documents, institutions and countries. The assumption behind citation analysis is that authors cite the works that they consider most important (van Raan, 1996, 2003).

3.3. Performance analysis

A range of quantitative and qualitative indicators were used to analyse the data. For example, the total number of articles on the term ‘customer experience’ (CX) provides a quantitative indicator that reflects the amount of scientific research published
on this topic. An example of a qualitative indicator is the total number of citations, which measures the degree of interest in this concept.

The h-index was also used. The h-index combines quantitative and qualitative measures by indicating the number of publications, $h$, with at least $h$ or more citations. Common thresholds are more than 100, 50, 20, 10, 5 and 1 citation. They are used in this study to infer the quality of the documents under analysis. The classification of studies using different thresholds enables the comparative study of the quality of CX research. The total number of citations was also included to provide a list of the 10 best publications on this subject.

### 3.4. Mapping

In this study, VOSviewer software version 1.6.15 (Van Eck et al., 2010) was used to provide a graphical visualisation of some key aspects and thus aid the analysis of the results. The measures that were mapped using VOSviewer are co-authorship, co-citations (Small, 1973) and co-occurrence of keywords.

The relevance of each theme is visually represented by the size of the associated circle. The links between items are represented as connecting lines.

### 4. Results

To begin this study, a search of the WoS Core Collection was performed to retrieve articles on ‘customer experience’ (CX). This search returned 2,066 documents as of May 2021. Following the standard approach to bibliometric analysis, the search was restricted to articles, reviews, notes and letters (López-Rubio et al., 2022; Merigó et al., 2015a; 2015b), resulting in 1,358 documents for our study (see Figure 1).

#### 4.1. Publication and citation structure

This section describes the evolution of the number of publications and citations on ‘customer experience’ (CX) during the reference period of the study. Figure 2 shows
the number of scientific articles published each year from 1996 to 2021. Between the publication of the first article on CX and 2015, fewer than 40 articles per year were published. Fewer than 10 articles were published each year until 2004. From this year onwards, however, there has been a notable increase in the number of articles on CX. In the year 2020, 272 articles were published on the subject. As of May 2021, 88 articles on this topic had already been published in 2021.

4.2. Influential papers

Table 1 lists the 10 most influential publications on CX in the scientific literature. They are ordered by number of citations. The table displays the reference, number of citations (overall and per year), a brief summary of the main topic of the article and a classification of the article based on the five core competencies defined by the American Customer Experience Professionals Association (CXPA) to describe efforts by organisations in implementing a CX programme.

The article ‘Brand experience: What is it? How is it measured? Does it Affect Loyalty?’ by Brakus et al. (2009) tops the ranking with 1,333 citations and 102.5 citations per year. According to Google Scholar, this document has 4,687 citations. The next paper in the ranking is ‘Measuring the Customer Experience in Online Environments: A Structural Modeling Approach’ by Novak et al. (2000). This paper has 1,288 citations and 58.55 citations per year. According to Google Scholar, this document has 4,200 citations.

To avoid problems when interpreting the data on the number of citations, the citations per year measure was used given the direct relationship between the number of citations and the publication date. The article ‘Understanding Customer Experience Throughout the Customer Journey’ by Lemon and Verhoef (2016) has the most citations per year with 136.5. On Google Scholar, this article has 2,502 citations.

The CXPA is one of the leading CX-related associations. It brings together thousands of professionals from around the world. Its core activities include the training and certification of CX professionals. For this purpose, the CXPA uses five core
<table>
<thead>
<tr>
<th>R</th>
<th>Reference</th>
<th>Summary</th>
<th>CXPA core competencies</th>
<th>TC</th>
<th>CY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brakus, J. J., Schmitt, B. H., &amp; Zarantonello, L. (2009).</td>
<td>This paper provides an overall definition of the concept of CX and its effect on brand experience. It includes a study in which brand experience is conceptualised from different dimensions: sensory, affective, intellectual, behavioural and social. The validity of the model is found to complement other brand measurement tools, including achievements related to the participation of the brand in brand attachment, satisfaction and personality.</td>
<td>Customer Experience Strategy</td>
<td>1333</td>
<td>102.54</td>
</tr>
<tr>
<td>2</td>
<td>Novak, T. P., Hoffman, D. L., &amp; Yung, Y. F. (2000).</td>
<td>Based on quantitative modelling, this paper describes the importance for customers of having an attractive online environment, linking improvements in this area to an increase in performance associated with consumer behaviour.</td>
<td>Metrics, Measurement and ROI</td>
<td>1288</td>
<td>58.55</td>
</tr>
<tr>
<td>3</td>
<td>Brodie, R. J., Hollebeek, L. D., Jurić, B., &amp; Ilić, A. (2011).</td>
<td>This paper develops the concept of CX from the point of view of achieving customer engagement with organisations, including the evolution of this key concept in the scientific literature. It also discusses ideas for future lines of research.</td>
<td>Customer Insight and Understanding</td>
<td>1110</td>
<td>100.91</td>
</tr>
<tr>
<td>5</td>
<td>Lemon, K. N., &amp; Verhoef, P. C. (2016).</td>
<td>This paper presents a conceptual model of customer experience to explain its effects. It includes a review of the scientific literature and its classification into different drivers of the customer experience (price, service, atmosphere, past experiences, etc.).</td>
<td>Experience Design, Implementation and Innovation</td>
<td>819</td>
<td>136.5</td>
</tr>
<tr>
<td>7</td>
<td>Meyer, C., &amp; Schwager, A. (2007).</td>
<td>This paper describes the evolution of the concept of CX. It explains the concepts of the customer journey, touch points and types. It outlines how to measure CX and proposes a future research agenda.</td>
<td>Experience Design, Implementation and Innovation</td>
<td>472</td>
<td>31.47</td>
</tr>
<tr>
<td>R</td>
<td>Reference</td>
<td>Summary</td>
<td>CXPA core competencies</td>
<td>TC</td>
<td>C/Y</td>
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<tr>
<td>8</td>
<td>Grewal, D., Levy, M., &amp; Kumar, V. (2009).</td>
<td>This paper gives a definition of CX and touch points. It introduces the concept of organisational silos, as well as the importance of all functions in delivering CX. It explains the difference between CRM and CEM, and it models past, present and future patterns related to CX information for decision making. It discusses the concept of employee experience.</td>
<td>Culture and Accountability</td>
<td>411</td>
<td>31.62</td>
</tr>
<tr>
<td>9</td>
<td>Puccinelli, NM, Goodstein, RC, Grewal, D., Price, R., Raghubir, P., &amp; Stewart, D. (2009), 85(1), 15-30.</td>
<td>This paper includes the main stages of CX management, citing the voice of the customer, experience design and experience auditing as key aspects of experience improvement. It provides a proto-model of the frameworks that emerged later.</td>
<td>Customer Experience Strategy</td>
<td>386</td>
<td>29.69</td>
</tr>
<tr>
<td>10</td>
<td>Rose, S., Clark, M., Samouel, P., &amp; Hair, N. (2012).</td>
<td>This paper presents a model of the impact of retail variables such as price, promotion, merchandise, supply chain and location on CX.</td>
<td>Metrics, Measurement and ROI</td>
<td>343</td>
<td>34.3</td>
</tr>
</tbody>
</table>

TC = total citations; C/Y = citations per year.
Source: Own elaboration.
competencies, which are required for any organisation to implement a CX strategy. These five core competencies are listed in Table 2.

In terms of the main topic of the 10 articles with the most citations and their relationship with the five core competencies of the CXPA, most of the research output is related to the concepts of CX design, improvement and innovation (30%) and CX metrics and monitoring (30%). These topics are followed by scientific production related to CX strategy (20%) and Customer Insights and Culture and Accountability (both with 10%). Table 3 shows the top 3 scientific articles, in terms of citations, related to each of the five core competencies of the CXPA framework.

### 4.3. Authors, institutions and countries

Table 4 shows the 10 most prolific authors in terms of the number of publications on CX, number of citations of these articles, h-index, citations per year and citations per publication. This bibliometric analysis shows that, with 23 publications, the author with the most publications on CX is Phil Klaus, Professor of Customer Experience and Marketing at the International University of Monaco INSEEC Research. Professor Klaus leads this ranking by some distance with respect to other prolific authors. The second most prolific author is Janet McColl-Kennedy, Professor of Marketing at the University of Queensland, with 11 publications, followed by Bo Edvardsson, Professor of Business Administration at the CTF Service Research Centre, Karlstad University, with 10 publications. In terms of total citations, Dhruv Grewal, Professor of Marketing and Toyota Chair of E-commerce and E-business at Babson College, has 7 articles with a total of 1,024 citations. The only author in this ranking with a paper amongst the top 10 most cited publications (8th and 9th most cited), is Professor Dhruv Grewal.

Table 5 shows the top 10 university affiliations of CX authors sorted by total publications. The State University System of Florida has the most publications (41), followed by Karlstad University (25). The dominant universities in this subject are located in the United States, which is home to five of the top 10 most productive universities.

Figure 3 shows the distribution of publications by country. This distribution is consistent with the previous table on the affiliations of authors in this field. With 358 publications, the United States is responsible for more publications than anywhere else. The United States is followed by the United Kingdom, with 190 publications.

Table 6 shows the most relevant journals in terms of the number of papers on this concept. The table also shows the total number of citations, h-index, citations per publication and citations per year.

All publications in this classification are related to business management. The main topic is linked to both services (in the case of four studies) and the application of CX in retail (two studies) and hospitality (two studies). The data confirm that, although CX is a holistic concept (Schmitt, 2010) involving various areas of knowledge, most of the publications are framed within the area of business administration (55%), followed by other topics within the social sciences (12.2%) and computer science (9.7%). All other areas have a small share of less than 5%. The Journal of Service...
<table>
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<tr>
<th>CXPA core competency</th>
<th>Purpose</th>
<th>Key elements</th>
</tr>
</thead>
</table>
| Customer Experience Strategy | To align, define and promote a strategy that reflects the positioning with respect to the experience that the organisation wishes to offer its customers. This experience should be aligned with the brand’s attributes (Schmitt, 2010). The strategy should help prioritise and shape the organisation’s decisions. | Brand promise  
Customer promise  
CX maturity  
Internal communication  
CX resources |
| Customer Insight and Understanding | To know, design and implement the voice of the customer programme using the most appropriate methods to capture the right information, analyse it and convert it into insights that the members of the organisation can operationalise. | Voice of customer programme  
Research methods |
| Experience Design, Implementation and Innovation | To innovate and improve, which involves implementing actions related to the experience that customers wish to receive from the organisation. From this perspective, there are two types of actions: those that improve the relationship for a customer individually (inner loop) and those that improve the relationship by enhancing or innovating products, services or interactions for customers in general (outer loop). The central tool for experience design is the customer journey (Lemon & Verhoef, 2016; Rosenbaum et al., 2017). | Design thinking  
Customer journey  
Blueprint  
Close the loop |
| Metrics, Measurement and ROI | To measure, define and implement metrics related to measuring the performance of the CX proposal, as well as those concerning knowledge of customer expectations and perceptions. Indicators such as the Net Promoter Score (NPS; Reichheld, 2003), the Customer Effort Score (CES; Dixon et al., 2010), the Customer Satisfaction Score (CSAT), the Customer Experience Index (Temkin, 2010) and the Brand Advocacy Index (BAI; Sweeney et al., 2020) are commonly used in the business world. | CX metrics  
KPIs and reporting  
ROI |
| Culture and Accountability | To manage CX in a proactive and disciplined manner, being accountable and driving change. This aspect translates into the design and implementation of the governance approach to managing the CX strategy, including the periodic review of CX metrics to measure performance and the status of ongoing actions and programmes. To create a system of shared values and behaviours that encourage, empower and enable all employees to deliver remarkable customer experiences (Plaskoff, 2017). To improve the experiences of customers, organisations must first improve the experiences of employees. | CX governance  
Project management  
Agile methodology  
Role of CX professionals  
e-NPS  
Communications  
Recognise  
Employee journey  
Ambassadorship |

Source: Own elaboration.
Research has the most publications on the subject, with 20 publications receiving a total of 2,332 citations.

4.4. Mapping customer experience (CX) with VOSviewer software

4.4.1. Map of authors

Figure 4 offers a graphical representation of the co-authorship network for CX research. Co-citations are defined as the frequency with which two documents are cited together (Small, 1973). Co-citations analysis is a useful technique to detect the similarity between publications, as well as variations within a subject over time. This graphical representation was produced using the co-citation data set, which, for this study, included all authors with at least eight CX publications.

Figure 4 depicts four large clusters of interconnected authors. These clusters are represented in different colours. The red cluster contains Janet McColl-Kennedy, Lars Witell, Arne de Keyser and Lerzan Aksoy. The main topics of their research are the implementation of CX in services, co-creation, service marketing and CX management. The next cluster, which is also related to the previous one and appears in green, is made up of Jamie Burton, Frederic Ponsignon, Philipp Klaus and Thorsten Gruber, amongst others. Their research is related to services, service marketing and service operations. The next group of authors consists of J. Volker, G. Kuppelwieser, Jay Kandampully and Elina Jaakkola, represented in

<table>
<thead>
<tr>
<th>CXPA core competency</th>
<th>Reference</th>
<th>TC</th>
<th>C/Y</th>
</tr>
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<tbody>
<tr>
<td>Customer Insight and</td>
<td>Brodie, R. J., Hollebeek, L. D., Jurić, B., &amp; Ilić, A. (2011).</td>
<td>1110</td>
<td>100.91</td>
</tr>
<tr>
<td></td>
<td>Rose, S., Clark, M., Samouel, P., &amp; Hair, N. (2012).</td>
<td>343</td>
<td>34.3</td>
</tr>
</tbody>
</table>

Source: Own elaboration.
blue. Their core research topics are related to value creation, customer engagement, innovation and service management. The final cluster is not related to the previous ones in terms of citations. This cluster, which appears in yellow, consists of Raouf Ahmad Rather, Linda D. Hollebeek, Imran Khan and Zillur Rahman. Their research focuses on customer engagement, marketing, service marketing and consumer behaviour.

### Table 4. The most productive and influential customer experience (CX) authors.

<table>
<thead>
<tr>
<th>R</th>
<th>Author</th>
<th>TP</th>
<th>TC</th>
<th>H</th>
<th>C/P</th>
<th>C/Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Klaus, P.</td>
<td>23</td>
<td>731</td>
<td>11</td>
<td>31.78</td>
<td>66.5</td>
</tr>
<tr>
<td>2</td>
<td>McColl-Kennedy, J. R.</td>
<td>11</td>
<td>542</td>
<td>9</td>
<td>49.27</td>
<td>33.9</td>
</tr>
<tr>
<td>3</td>
<td>Edvardsson, B.</td>
<td>10</td>
<td>587</td>
<td>8</td>
<td>58.7</td>
<td>53.36</td>
</tr>
<tr>
<td>4</td>
<td>Patricio, L.</td>
<td>9</td>
<td>664</td>
<td>6</td>
<td>73.78</td>
<td>36.89</td>
</tr>
<tr>
<td>5</td>
<td>Rajaobelina, L.</td>
<td>8</td>
<td>89</td>
<td>5</td>
<td>11.13</td>
<td>17.80</td>
</tr>
<tr>
<td>6</td>
<td>Fisk, R. P.</td>
<td>7</td>
<td>626</td>
<td>5</td>
<td>89.43</td>
<td>34.78</td>
</tr>
<tr>
<td>7</td>
<td>Grewal, D.</td>
<td>7</td>
<td>1024</td>
<td>6</td>
<td>146.29</td>
<td>78.77</td>
</tr>
<tr>
<td>8</td>
<td>Burton, J.</td>
<td>6</td>
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<td>3</td>
<td>15.67</td>
<td>13.43</td>
</tr>
<tr>
<td>9</td>
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<td>6</td>
<td>74</td>
<td>5</td>
<td>12.33</td>
<td>12.33</td>
</tr>
<tr>
<td>10</td>
<td>Cunha, J. F. E.</td>
<td>6</td>
<td>447</td>
<td>4</td>
<td>74.5</td>
<td>24.83</td>
</tr>
</tbody>
</table>

TP = Total publications; TC = Total cites; H = h-index; C/P = citations per publication; C/Y = citations per year.
Source: Own elaboration.

### Table 5. The most productive and influential institutions in the field of customer experience (CX).

<table>
<thead>
<tr>
<th>R</th>
<th>Institution</th>
<th>Country</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>State University System of Florida</td>
<td>USA</td>
<td>41</td>
</tr>
<tr>
<td>2</td>
<td>Karlstad University</td>
<td>Sweden</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>Hong Kong Polytechnic University</td>
<td>China</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Indian Institute of Management (IIM) System</td>
<td>India</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>University of Central Florida</td>
<td>USA</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>University of Queensland</td>
<td>Australia</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>Clemson University</td>
<td>USA</td>
<td>17</td>
</tr>
<tr>
<td>8</td>
<td>University of London</td>
<td>United Kingdom</td>
<td>17</td>
</tr>
<tr>
<td>9</td>
<td>Indiana University System</td>
<td>USA</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>University System of Georgia</td>
<td>USA</td>
<td>16</td>
</tr>
</tbody>
</table>

TP = Total publications.
Source: Own elaboration.

### Figure 3. Distribution of publications by country.
Source: Own elaboration.
4.4.2. Key concepts in customer experience (CX)

Figures 5 and 6 show the keywords associated with the concept of CX. This analysis considered keywords that had appeared in articles more than 40 times. All keywords are directly related to the central concept of CX. The 10 most representative keywords are ‘satisfaction’, ‘impact’, ‘performance’, ‘quality’, ‘loyalty’, ‘behaviour’, ‘technology’, ‘experience’, ‘customer satisfaction’ and ‘service quality’. There are two clusters, appearing in red and green, respectively. The red cluster contains keywords associated with the desired effects of CX management, such as ‘impact’, ‘engagement’, ‘behaviour’ and ‘trust’. The cluster also contains terms that largely describe the new channels used to deliver experiences, such as ‘technology’, ‘online’, ‘social media’ and ‘Internet’. The green cluster includes keywords related to the implementation and

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Journal Of Retailing and Consumer Services</th>
<th>TP</th>
<th>TC</th>
<th>H</th>
<th>C/P</th>
<th>C/Y</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Journal Of Service Management</td>
<td>44</td>
<td>1479</td>
<td>17</td>
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<td>134.45</td>
</tr>
<tr>
<td>3</td>
<td>Journal Of Services Marketing</td>
<td>44</td>
<td>672</td>
<td>13</td>
<td>15.3</td>
<td>61.09</td>
</tr>
<tr>
<td>4</td>
<td>International Journal of Hospitality Management</td>
<td>24</td>
<td>636</td>
<td>14</td>
<td>26.5</td>
<td>45.43</td>
</tr>
<tr>
<td>5</td>
<td>International Journal of Retail Distribution Management</td>
<td>24</td>
<td>255</td>
<td>10</td>
<td>10.6</td>
<td>51</td>
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<tr>
<td>6</td>
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<td>20</td>
<td>328</td>
<td>10</td>
<td>16.4</td>
<td>32</td>
</tr>
<tr>
<td>7</td>
<td>Journal of Service Research</td>
<td>20</td>
<td>2332</td>
<td>17</td>
<td>117</td>
<td>155.47</td>
</tr>
<tr>
<td>8</td>
<td>Sustainability</td>
<td>20</td>
<td>70</td>
<td>5</td>
<td>3.5</td>
<td>17.5</td>
</tr>
<tr>
<td>9</td>
<td>European Journal of Marketing</td>
<td>16</td>
<td>70</td>
<td>5</td>
<td>3.5</td>
<td>17.5</td>
</tr>
</tbody>
</table>

TP = Total publications; TC = Total cites; H = h-index; C/P = citations per publications; C/Y = citations per year.

Source: Own elaboration.

Figure 4. Co-authorship map of CX authors.
Source: Own elaboration.

Table 6. Journals with the most publications on customer experience (CX).

5. Conclusions

In recent years, both the scientific community and the professional sphere have shown an increasing interest in CX. This is especially true in the last three and a half years, during which time 57% of the scientific articles on this concept were published.

This growing interest is linked to the increase in customer interactions from countless touch points, which organisations offer customers through multiple channels (including digital channels) and media. This growing interest is also linked to the emergence of new actors, partners and collaborators that are not part of the direct hierarchy of the organisation but that can have major repercussions in terms of CX. Accordingly, customer journeys have become more complex and are more difficult for organisations to design and control. Companies are facing growing channel and media fragmentation, making omnichannel management a key objective if firms wish to create a value proposition that is both coherent and consistent with a deep understanding of customers’ current needs and expectations (Brynjolfsson et al., 2013; Verhoef et al., 2015). The design and control of such interactions requires
organisations to adopt a holistic approach. Under such an approach, organisations must combine all their functions (marketing, commercial, operations, service, etc.)—including human resource policies, information technology and external partner relations—to design and deliver consistent, predictable and coherent experiences that are in line with the brand proposal.

Hence, increasingly complex customer journeys are crucial in shaping the brand-customer relationship. Through this process, firms can achieve strong, positive experiences that result in higher customer satisfaction. Consequently, they can raise core performance indicators such as recommendations, conversion rates, loyalty and customer lifetime value.

Regarding the central theme of the 10 articles with the most citations (Table 1) and taking the CXPA’s five core competencies as a reference, around one third of the articles (30%) are focussed on design, improvement and innovation, whilst another third (30%) are focussed on the measurement and monitoring of CX metrics. In contrast, there is scant production in relation to competencies associated with creating a strong CX culture and the CX management model. The absence of studies on this topic reveals potential areas for future research. For example, future research could study the importance of alignment between the members of an organisation and the delivery of CX. Also, from the perspective of the CEM model, research could explore how to develop a framework to review initiatives aimed at achieving CX-related aims. In this respect, the academic community has not yet provided a complete guide explaining how companies can operationalise CX in all its facets.

The article ‘Brand Experience: What is It? How is it Measured? Does it Affect Loyalty?’ by Brakus et al. (2009) is the most cited CX article, with 1,333 citations. The article ‘Understanding Customer Experience Throughout the Customer Journey’ by Lemon and Verhoef (2016) has the highest number of citations per year, with a yearly average of 136.5. This finding suggests growing interest from organisations in understanding the concept and the use of tools such as the customer persona and customer journey to understand the needs and expectations of customers when designing interactions to operationalise the concept of CX.

The authors of these two articles are not amongst those with the most publications. The author with the most articles on CX is Phil Klaus, with 23. The three most cited publications by Phil Klaus are related to CX measurement and monitoring. Dhruv Greval is the only author in both lists (i.e., most prolific and most cited authors). Greval has the seventh highest number of articles on the subject (with 7) and co-authored the articles with the eighth and ninth most citations. Both articles are related to the development of the concept of CX and the management of CX (i.e., CEM).

U.S. universities are important in the field of CX. The analysis of the university affiliations of authors in this field reveals that five of the 10 most productive universities are located in the United States. The State University System of Florida is responsible for the most publications (with 41). The most cited article produced within this system is ‘Customer experience management in hospitality: A literature synthesis, new understanding and research agenda’, with 76 citations. The analysis
shows that both the United States and the United Kingdom are pioneers in CX. These countries have influenced others, such as India and China, in the development of the concept of CX.

With regard to the keywords associated with CX (Figures 5 and 6), there are two clusters. The first group of keywords is related to the operationalisation of CX. The second cluster consists of keywords related to the effects of CX implementation, as well as terms related to the design and delivery of experiences through new channels within the framework of new business models. This cluster contains keywords such as ‘technology’, ‘online’, ‘social media’ and ‘Internet’.
Regarding technology, there has been growth in the amount of data on the market for solutions to support CX strategies. According to Gartnet’s predictions for 2021, this trend is reflected by the concept of ‘total experience’, which refers to the coherent, interactive and smooth coexistence of customers, employees and user experience. Digitalisation, social networks and the review of customer preferences post-COVID-19 are current CX issues. The validity of the term must be under constant review given the constant changes in the needs and expectations of customers, as well as the conditions of the business environment and the possibilities created by new technologies. These topics present possibilities for future lines of research on CX. In this regard, given the rise of the concept of ‘digitalisation experience’, Table 7 shows the key aspects that organisations should consider in relation to each of the core competencies of the CXPA framework.

Despite evidence of research opportunities to measure the impact of CX (Lemon & Verhoef, 2016), the literature reveals concern over the use of the term ‘customer experience’ (CX) to validate and support the effects of improved perceived CX on organisational outcomes (the economics of CX). In this regard, the term is linked to expressions such as ‘word of mouth’ (i.e., recommendations amongst customers) and ‘brand experience’ (i.e., the promise that a brand provides good experiences). Both of these concepts are related to attracting customers. Other terms, such as satisfaction and loyalty, have also been linked to the concept of retention from a business perspective.

In summary, CX is a multidisciplinary concept that has aroused considerable interest in the scientific community and professional sphere. CX must constantly adapt to changes in the needs and expectations of customers, as well as the environment and the possibilities created by new technology. The tendency is towards research specialisation in the different disciplines within this field. Opportunities for future research can be found in the following areas: the study of voice of customer programmes that help conceptualise both the importance of the customer and the design of experiences; research into CX-related tools such as the customer journey, blueprint and customer persona; analysis of the impact of digitalisation on the delivery of experiences; investigation of the inclusion of key stakeholders in the delivery of experiences; analysis of optimal governance models that enable CX management in organisations; analysis of the qualifications, location and responsibilities of CX professionals; and measurement of the impact of CX in organisations and its linkages with organisational performance (i.e., the economics of experience).

Disclosure statement

No potential conflict of interest was reported by the authors.

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Brynjolfsson, E., Hu, Y. J., & Rahman, M. S. (2013). *Competing in the age of omnichannel retailing* (pp. 1–7). MIT.


