



Unravelling the customer journey: A conceptual framework and research agenda

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ABSTRACT

While customer journey (CJ) research proliferates, prior studies have adopted different CJ conceptualisations, theoretical perspectives, and methods, fostering fragmentation in CJ research. Addressing this literature-based tension or gap, we systematically map the corpus of CJ literature to uncover its intellectual structure, reducing the rising fragmentation observed in this topic area. Specifically, we chart the CJ literature's evolutionary path and central themes in the period of 2001–2023. Using bibliometric- and thematic analysis, we identify six main CJ themes, including the CJ-based customer experience, CJ-based customer behaviour, CJ-based design, CJ-based smart technology, CJ-based social media, and CJ mapping, which collectively depict the CJ's intellectual structure in the study period. We also develop a conceptual framework of the CJ, which includes the focal concept and its key antecedents, mediators, moderators, and consequences. We conclude by outlining important theoretical and practical implications that arise from our analyses, and by offering an agenda for further CJ research.

1. Introduction

The *customer journey* (CJ), “the process a customer goes through, across all stages and touchpoints, that makes up the customer experience” (Lemon and Verhoef, 2016, p. 71), has rapidly developed in the literature and in business practice in the last decade (Tueanrat et al., 2021a). For example, leading private (e.g., Apple or Google) and public organisations (e.g., government departments) are increasingly designing their offerings to enhance or optimise the CJ (e.g., Anderson, 2024; McKinsey, 2015).

The CJ, which comprises different (e.g., *pre-*, *during*, and *post-purchase*) stages (Grewal and Roggeveen, 2020), exhibits an inextricable link to the *customer experience* (CX), or a customer's “cognitive, emotional, behavioural, sensorial, and social responses to a firm's offerings during [their] entire purchase journey” (Lemon and Verhoef, 2016, p. 71). Therefore, while the CX may fluctuate through the CJ, the CJ describes the customer's entire trajectory of their experience with a

brand or firm. While the CJ concept features most extensively in the literature, related terms such as the user-, consumer-, citizen-, or stakeholder journey (e.g., Pins et al., 2022; Shavitt and Barnes, 2020; Hollebeek et al., 2023a) have also been proposed, reflecting the theoretical linking of multiple human roles to the journey concept (e.g., Liu et al., 2024).

Understanding the CJ is critical, given its holistic portrayal of the customer's experience with a firm (Becker and Jaakkola, 2020). However, despite significant advances in the CJ and related literature, authors have adopted a range of CJ conceptualisations, perspectives, and methods, yielding different and potentially incompatible findings. For example, while some authors view the CJ as a customer's linear purchase decision-making process (Voorhees et al., 2017), recent studies suggest its potential *non-linear* dynamics (e.g., through feedback loops, channel switching, or dropouts; Kranzbühler et al., 2018; Siebert et al., 2020), raising literature-based inconsistency. Moreover, while the CJ was traditionally mainly explored offline, limited understanding surrounds

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increasingly phygital (i.e., hybrid digital/physical) journeys. For example, insight into the proportion of relevant digital (vs. physical) experiences lags behind (Mele and Russo-Spena, 2022), thus also requiring further exploration.

Consequently, the corpus of CJ research is becoming increasingly fragmented (e.g., due to lacking agreement on the CJ's conceptualisation, key facets, or its nomological network), exposing a critical literature-based tension or gap and raising a need for its systematic mapping. Prior authors have conducted systematic reviews of the CJ literature (e.g., Følstad and Kvale, 2018; Gao et al., 2020; Tueanrat et al., 2021a). These reviews are suitable for analysing smaller data (article) quantities using manual data processing, thus yielding more limited insight. However, bibliometric analysis is capable of evaluating larger datasets (Donthu et al., 2021b), thus offering a more comprehensive picture of the CJ literature, as therefore adopted in this research. Moreover, though Rana et al. (2023) conduct a bibliometric analysis of the literature addressing automated or AI-based CJs, bibliometric research that more holistically addresses the CJ lags behind, as therefore examined in this research.

Addressing this issue, we assess the intellectual structure of the CJ literature published from 2001 to 2023, thus consolidating increasingly disparate views of the CJ and its dynamics and reducing the observed fragmentation. To guide our analyses, we seek answers to the following research questions:

- o RQ1: What major themes characterise CJ research in the study period?
- o RQ2: How did the identified CJ themes evolve through the study period?
- o RQ3: How do the proposed CJ themes relate to one another?
- o RQ4: How might CJ research move forward from here?

This research makes the following contributions to the CJ literature. First, by conducting a series of bibliometric- and thematic analyses, we uncover the CJ's main themes (Donthu et al., 2021a), including the CJ-based customer experience, CJ-based customer behaviour, CJ-based design, CJ-based smart technology, CJ-based social media, and CJ mapping. Through the proposed set of universal CJ themes, our analyses help unify increasingly disparate findings reported in the CJ literature, thus combating its rising fragmentation. Overall, our analyses help get CJ researchers *on the same page*, allowing CJ research to move forward in a more unified manner.

Second, following MacInnis' (2011, p. 141) postulation that "knowledge advancement occurs not only by studying and developing constructs but also by conceptualising their relationship to other concepts, often in a nomological network," we use the identified CJ themes to develop a conceptual framework of the CJ. We group CJ antecedents (CJ-based customer behaviour), mediators (CJ-based design, CJ mapping), moderators (CJ-based social media, CJ-based smart technology), and consequences (CJ-based customer experience). By plotting the identified CJ themes in a conceptual framework, our work furthers understanding of each theme's association with the CJ, providing vital insight to CJ researchers.

The article unfolds as follows. Section 2 reviews key CJ and related literature, followed by an overview of the deployed methodology in Section 3. Section 4 outlines the main results, followed by a discussion of the findings and their main implications in Section 5. Finally, we draw key conclusions from our research in Section 6.

2. Overview of CJ research

In this section, we review the CJ's core theoretical tenets, as acknowledged in Lemon and Verhoef's (2016) influential definition, which we also adopt in this article. First, the CJ is commonly understood as the unfolding of a process in which customers move sequentially through a typically predetermined set of stages in their purchase

decision-making, reflecting a linear, static perspective of the CJ (Hollebeek et al., 2023a; Grewal and Roggeveen, 2020). Its typical starting point is the consumer's consideration of potential products or brands to purchase, which is subsequently reduced as the individual proceeds in their decision-making process (Voorhees et al., 2017). However, emerging research increasingly recognises the CJ's emerging, non-predetermined, or dynamic nature (e.g., with customers skipping or skimming particular journey stages or designing their own (e.g., technology-driven) journeys; Siebert et al., 2020; Koch et al., 2023; Mele et al., 2024).

Second, the CJ contains multiple *touchpoints* (Hollebeek et al., 2023a). Though the definition of touchpoints remains subject to debate (e.g., while some view it as moments of interaction, others refer to it as communication or marketing channels; Homburg and Tischer, 2023), we adopt Dhebar's (2013, p. 200) channel-centric conceptualization, which views touchpoints as "points of human, ... communication, spatial, and electronic interaction collectively constituting the interface between an enterprise and its customers." These touchpoints, which may be brand-, brand partner-, customer-, or externally owned (Lemon and Verhoef, 2016), permit customers' interactions with brands, firms, employees, etc., revealing the relevance of customers' interactive engagement in the CJ (Demmers et al., 2020).

Third and relatedly, the CJ is intricately linked to the *customer experience* (Wang et al., 2024; Hollebeek et al., 2023a), as explicitly noted in Lemon and Verhoef's (2016) CJ conceptualisation. As customers proceed through their purchase journey, they are predicted to display (e.g., cognitive, emotional, and behavioural) responses to particular brand-related stimuli, collectively constituting the customer experience (Shankar et al., 2016). However, while some CJ definitions explicitly refer to the customer experience, others posit that the CJ is associated with, or produces, an experience (De Keyser et al., 2020).

We address the impending fragmentation in CJ research by reconciling different CJ conceptualisations, methodologies, and findings. In other words, the observed fragmentation calls for a systematic mapping of the CJ literature to unify disparate views of the CJ, thus addressing the outlined literature-based tension.

3. Methodology

3.1. Overview of bibliometric methodology

To answer our research questions, we undertake bibliometric- and thematic analysis of the CJ literature. Bibliometric analysis, the quantitative analysis of the bibliographic features of a body of literature, applies mathematical or statistical tools to written text, including articles or books, to clarify its intellectual structure (Pritchard, 1969; Singh et al., 2021). Bibliometric research thus systematically identifies and assesses published work in a topic area (Small, 1973; Hollebeek et al., 2022). Specifically, key procedures used in bibliometric studies include performance analysis (White and McCain, 1998) and science mapping (Noyons et al., 1999; Börner et al., 2003). While the former evaluates the productivity and popularity of specific sources based on bibliographic data (Lim et al., 2024), the latter highlights structural and cognitive patterns of a domain of interest by visualising its main topics (Aria and Cuccurullo, 2017).

Our bibliometric analysis was carried out by using Biblioshiny - Bibliometrix R-package, which provides an interface to compute descriptive statistics and bibliometric metrics to enable the scientific mapping of the CJ (Aria and Cuccurullo, 2017; Mukherjee et al., 2022). To the best of our knowledge, no prior studies have applied bibliometric analysis to the CJ literature, as noted, warranting the undertaking of our analyses. We next outline the adopted article search strategy in Section 3.2, followed by a summary of our data-analytical procedures in Section 3.3. An overview of the research process is shown in Fig. 1.

Research objectives	Methodology	Outcomes
RQ1: <i>What major themes characterise CJ research in the study period?</i>	➤ Descriptive analysis	➤ Major CJ publications and journals
	➤ Co-occurrence network	➤ Main CJ themes
RQ2: <i>How did the identified CJ themes evolve through the study period?</i>	➤ Thematic map	➤ Developmental state and relative importance of CJ themes
	➤ Thematic evolution and Keyword overlay visualization map	➤ Temporal development of CJ themes and their thematic linkages
RQ3: <i>How do the proposed CJ themes relate to one another?</i>	➤ Content analysis of thematic clusters	➤ Key CJ antecedents, mediators, moderators, and consequences
RQ4: <i>How might CJ research move forward from here?</i>	➤ Theoretical associations and Conceptual analysis	➤ CJ-based further research agenda

Fig. 1. Methodological overview.

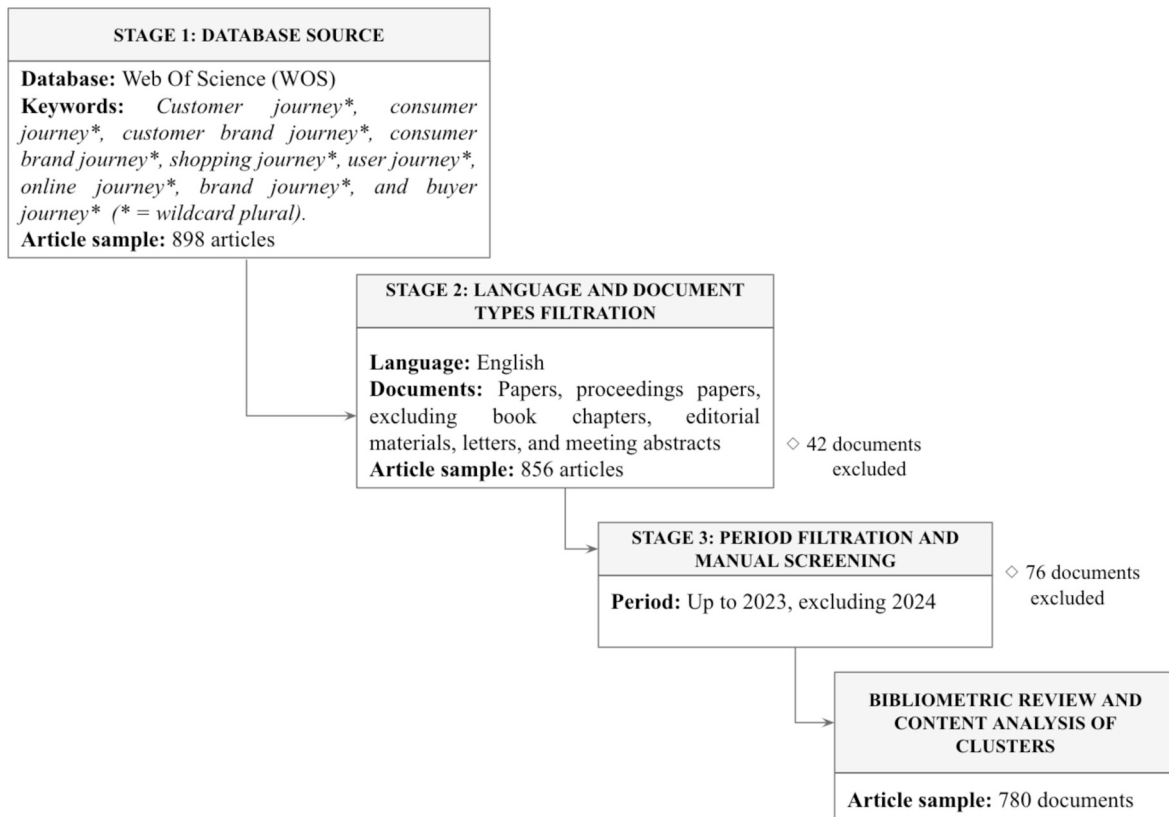


Fig. 2. Search strategy.

3.2. Search strategy

Our search strategy comprised three stages: (a) database search, (b) language filtration, and (c) period filtration (see Fig. 2). In January 2024, we collected CJ articles published from 2001 to 2023 through the Web of Science database, which offers an extensive collection of published research (Hollebeek et al., 2022). A start year of 2001 was chosen due to the first identified CJ article being published that year. We searched for the following keywords: *Customer journey**, *consumer journey**, *customer brand journey**, *consumer brand journey**, *shopping journey**, *user journey**, *online journey**, *brand journey**, and *buyer journey**, generating a sample of 898 articles. We limited our analysis to English articles and conference proceedings, excluding book chapters, editorials, letters, and meeting abstracts, yielding a total of 856 articles. We also cleaned the data to minimise errors, including article duplication (Donthu et al., 2021b). Finally, to ensure that all articles met our selection criteria, we manually screened the search results to identify documents published outside the specified period (from 2001 to 2023) and those that addressed the CJ (or a related focal keyword) only marginally or incidentally. A total of 76 documents were excluded, yielding a final sample of 780 documents for further review.

The sample's main descriptive statistics are summarised in Table 1 which presents a comprehensive overview of the dataset spanning from 2001 to 2023. It includes 780 documents from 217 different sources. On average, each document was published 4.02 years ago and has received 17.44 citations, translating to an average of 3.088 citations per document per year. The dataset references a total of 34,708 sources. The document types are categorized into 559 articles and 221 conference proceedings. The document contents feature 1271 Keywords Plus (ID) and 2724 Author's Keywords (DE). Author collaboration details reveal a total of 2525 authors, with 95 single-authored documents. The average number of documents per author is 0.345, while the average number of authors per document is 2.9. The average number of co-authors per document is 3.32, resulting in a collaboration index of 3.16.

3.3. Data analysis

We next analysed the temporal evolution of the CJ articles, while also performing descriptive analysis of these works by counting major CJ publications and journals (i.e., by quantifying, aggregating, and ranking these indicators; Hollebeek et al., 2022; Lim et al., 2024).

Table 1
Overview of dataset.

Timespan	2001–2023
Sources (journals, etc.)	416
Documents	7801
Average years from publication	4.02
Average citations per document	17.44
Average citations per doc p.a.	3.09
References	34,708
Document types	
Articles	559
Conference Proceedings	221
Document contents	
Keywords Plus (ID)	1271
Author's Keywords (DE)	2724
Author collaboration	
Authors	2525
Single-authored documents	95
Documents per author	0.35
Authors per document	2.9
Co-Authors per document	3.32
Collaboration index	3.16

Moreover, we also scientifically mapped CJ research by using content or thematic analysis to derive key CJ themes (Callon et al., 1983; Cobo et al., 2011a). To distil these insights, we constructed a co-occurrence network of CJ-related terms, a thematic map of the CJ, and a display of the thematic evolution of CJ research.

First, to understand the CJ's intellectual structure (Donthu et al., 2021a), we conducted a keyword co-occurrence analysis (Mukherjee et al., 2022), thus addressing RQs 1 and 2. This analysis establishes theoretical links between each article's keywords, serving as an important input for the development of a network of CJ themes (Donthu et al., 2021b). The fundamental ideas behind keyword co-occurrence analysis are that (i) a research topic is represented by a set of key terms (Leydesdorf, 1989), and (ii) "keywords converging into a cluster represent a common theme" (Mukherjee et al., 2022 p.105). Accordingly, we examine each article's keywords and their co-occurrence to better understand the CJ's intellectual structure (Donthu et al., 2021a).

Second, we developed a thematic network for the identified clusters to further unpack its development (i.e., density) and transversality (i.e., centrality; Cobo et al., 2011b; Callon et al., 1983), thus also addressing RQ2. We assess the identified themes using community detection (i.e., by evaluating paper, journal, and/or word-based clusters; Ding, 2011). The deployed axes represent network centrality and density, respectively (Cobo et al., 2011b). While *centrality* refers to a theme's importance in CJ research, *density* reflects the theme's developmental state. These analyses thus permit the development of thematic typologies (Cahlik, 2000), as reflected by the respective quadrant in which they are placed. Each theme is visualised as a bubble in the thematic diagram (see Fig. 5). While the terms in each bubble represent those with the highest *intra*-theme occurrence, each bubble's size is proportional to the relevant concept's *intra*-cluster occurrence. At the same time, its position reflects cluster centrality and density (Callon et al., 1983), exposing the CJ's conceptual sub-domains (Pohlmann and Kaartemo, 2017).

Third, following Cobo et al. (2011a), we also analysed the thematic evolution of the CJ to reveal its respective themes in particular periods (López-Robles et al., 2019), yielding a so-called Sankey diagram that shows the links between the identified themes through the assessment period, in line with RQ2. By tracing the thematic evolution of the identified CJ themes through the keyword overlay visualisation map using VosViewer (Van Eck & Waltman, 2014), we expose their temporal development, allowing us to unveil their thematic linkages and offering insight into RQ3.

We then deployed manual content analysis to analyse the articles contained in each cluster (theme), including by locating specific keywords or observations in the relevant articles (Goyal and Kumar, 2021; Pels et al., 2022). Following MacInnis' (2011, p. 141) postulation that "knowledge advancement occurs not only by studying and developing constructs but also by conceptualising their relationship to other concepts, often in a nomological network," we use the identified themes to develop a conceptual framework of the CJ. We assessed the occurrence, significance, and theoretical associations characterising the themes (Drisko and Maschi, 2016), helping us detect key CJ antecedents, mediators, moderators, and consequences, in turn permitting the development of a conceptual framework of the CJ (Mukherjee et al., 2022), thus addressing RQ3. Finally, we draw on our analyses to provide an agenda for further CJ research, offering insight into RQ4.

4. Findings

We next present the main findings. Section 4.1 reports on the evolution state of CJ research, followed by an overview of key CJ-publishing journals in Section 4.2.

4.1. Evolution of CJ research

Fig. 3 shows the distribution of the 780 documents by publication year in the reference period, exposing an average annual growth rate of

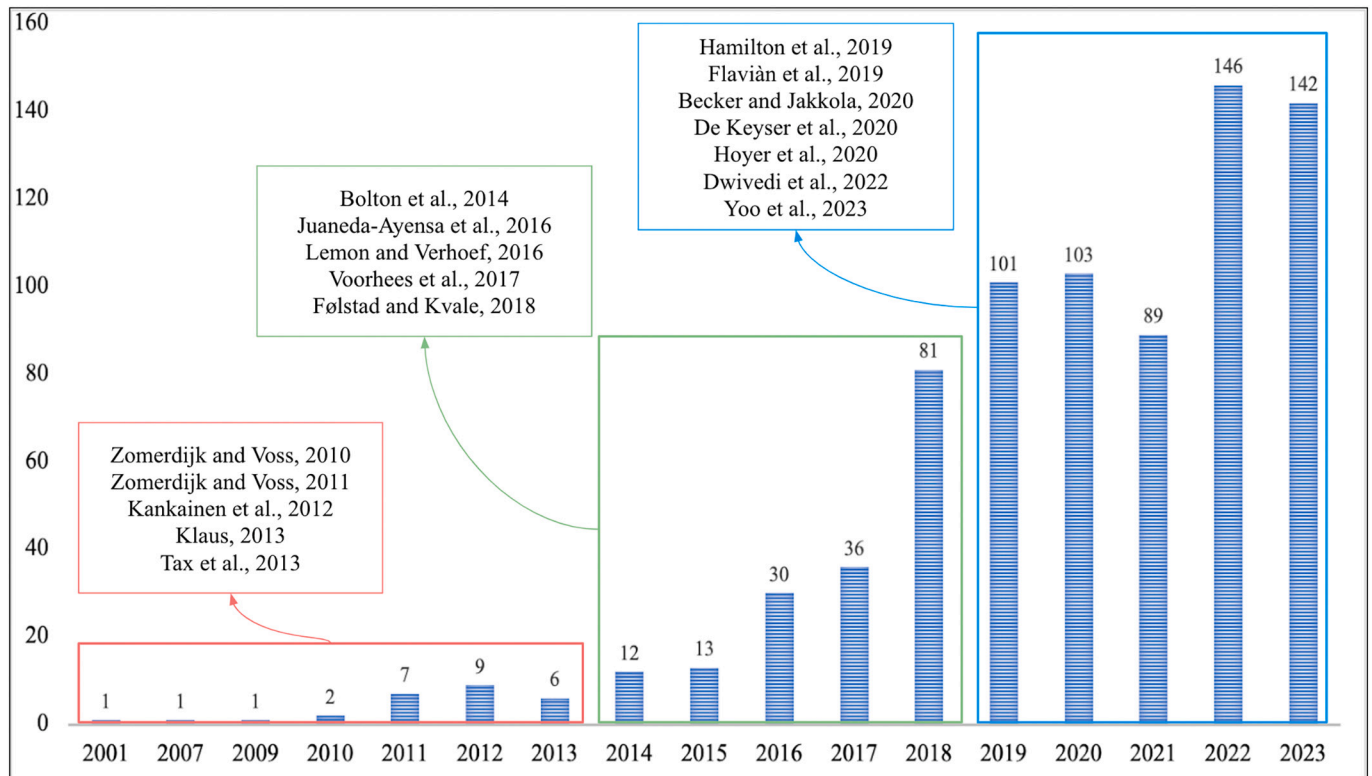


Fig. 3. Temporal evolution of CJ research (2001–2023) and most cited works.

42.5 %. This finding is high compared to global scientific production, which expands at, on average, approximately 3 % annually (Bornmann and Mutz, 2015), revealing the CJ's rapidly rising academic and practical importance (Trujillo-Torres et al., 2024). This growth is also reflected in Special Issues on the CJ, including in 2020 (*Journal of Retailing*), 2021 (*Tourism Management Perspectives*), and 2022 (*Technological Forecasting and Social Change*). Moreover, the emergence of smart

technology (Mele et al., 2021b; Akram et al., 2022; Aw et al., 2022) and the rising popularity of access-based consumption (Trujillo-Torres et al., 2024) have also spurred a notable increase in CJ research in recent years.

Table 2
Leading CJ publishing journals (2001-2023).

Rank	Source	Subject area	No. of articles	Total citations	Average citations per document	h-index	ABCD ranking
1	<i>Journal of Business Research</i>	Business and International Management, Marketing	25	1151	46.0	236	A
2	<i>Journal of Retailing & Consumer Services</i>	Retailing/service	24	889	37.0	120	A
3	<i>Journal of the Academy of Marketing Science</i>	Marketing	21	950	45.2	194	A*
4	<i>Journal of Retailing</i>	Retailing	18	1033	57.4	153	A
5	<i>Sustainability</i>	Business	17	156	9.2	136	–
6	<i>International Journal of Retail & Distribution Management</i>	Retailing	15	359	23.9	94	A
7	<i>Journal of Service Management</i>	Service	12	347	28.9	77	A
8	<i>Journal of Services Marketing</i>	Service	12	294	24.5	119	A
9	<i>Journal of Service Research</i>	Service	11	717	65.2	137	A*
10	<i>Journal of Research in Interactive Marketing</i>	Marketing	10	297	29.7	50	B
11	<i>Psychology & Marketing</i>	Marketing	8	248	31.0	133	A
12	<i>International Journal of Consumer Studies</i>	Business	7	93	13.3	88	A
13	<i>European Journal of Marketing</i>	Marketing	7	209	29.9	146	A
14	<i>Journal of Marketing</i>	Marketing	7	1427	203.9	268	A*
15	<i>Journal of Service Theory & Practice</i>	Service	7	165	23.6	95	A
16	<i>Technological Forecasting & Social Change</i>	Business, Management, Innovation; Applied Psychology	7	138	19.7	155	A
17	<i>Industrial Marketing Management</i>	Marketing	6	348	58	177	A*
18	<i>Journal of Interactive Marketing</i>	Marketing	6	571	95.1	126	A
19	<i>International Journal of Information Management</i>	Information Management	5	277	55.4	177	A*
20	<i>Journal of Consumer Behaviour</i>	Marketing	5	78	15.4	62	A

4.2. Leading CJ-publishing journals (2001–2023)

Table 2 provides an overview of key CJ-publishing journals and their respective impact factors. According to the Web of Science, 217 journals published CJ articles in the study period. The *Journal of Business Research*, *Journal of Retailing and Consumer Services*, and the *Journal of the Academy of Marketing Science* emerge as the most productive and influential CJ outlets. The *Journal of Retailing* ranks fourth (18 articles), which ran a Special Issue on the CJ in 2020, as noted, followed by *Sustainability* (17 articles). As expected, a range of marketing and business journals have published CJ research. Moreover, the number of CJ papers in journals, including *Sustainability* (17) or *Technology Forecasting and Social Change* (7), reflects the growing role of environmental, social and technological factors in understanding the CJ (Akram et al., 2022). In terms of impact (i.e., average number of citations per document (AC) = total citations/No. of articles), the *Journal of Marketing* (AC = 203.8) and *Journal of Service Research* (AC = 65.18) lead the way. Notably, 9 out of the top 20 journals are marketing journals, underscoring the critical importance of CJ within the field of marketing, followed by 4 leading journals in the service domain. Overall, our analyses show that CJ research is increasingly published in reputed journals, in line with its rising importance.

4.3. Keyword co-occurrence analysis and main CJ themes

We next derive the CJ's key themes through keyword co-occurrence analysis (Mukherjee et al., 2022). In Fig. 4, each node represents a keyword, while node colour depicts the different thematic clusters. Using keyword co-occurrence analysis, we identify six major CJ clusters or themes, including the CJ-based customer experience, CJ-based customer behaviour, CJ-based design, CJ-based smart technology, CJ-based social media, and CJ mapping, thus addressing RQ1.

4.3.1. The CJ-based customer experience

The CJ-based customer experience, shown in pink in Fig. 4, represents a prominent CJ theme (Lemon and Verhoef, 2016). It exposes strong linkages to several of the other clusters, including CJ-based smart technology, CJ-based social media, and CJ-based design, which can be used, collectively, to boost or optimise the customer's purchase journey (Kuehn et al., 2019). Key descriptors in this cluster include customer engagement, customer experience management, omnichannel management, and customer satisfaction, revealing a dynamic view of the CJ (Becker and Jaakkola, 2020). Moreover, technological concepts (e.g., phygital or AR) also appear in this cluster, revealing the CJ-based customer experience's growing link to digital technologies, illustrating the rise of the digital and phygital CJs (Mele et al., 2021a), in particular.

4.3.2. CJ-based customer behaviour

The second cluster, *CJ-based customer behaviour* (shown in brown in Fig. 4), focuses on buyer behaviour through the CJ (Grewal and Roggeveen, 2020). Given the CJ's distinct (e.g., pre-, during, and post-purchase) phases (e.g., Tueanrat et al., 2021b), customer behaviour tends to exhibit differing dynamics at different stages of their journey. Unlike *CJ-based design*, which takes a more latent (e.g., emotive) focus, research in this cluster centres on customers' *observable* behaviour (e.g., actions or activities) in the CJ (Hollebeek et al., 2020). Key concepts in this cluster include consumer decision-making, social influence, sustainable consumption, and communication, which may also be aided by specific technologies (e.g., technology acceptance or mobile commerce; e.g., Hilken et al., 2018; Kuehn et al., 2019). Correspondingly, this cluster also links closely to the *CJ-based social media*, *CJ-based customer experience*, *CJ-based smart technology*, and *CJ mapping* clusters.

4.3.3. CJ-based design

CJ-based design (shown in green in Fig. 4) explores how specific design elements can be used to develop, improve, or optimise the CJ,

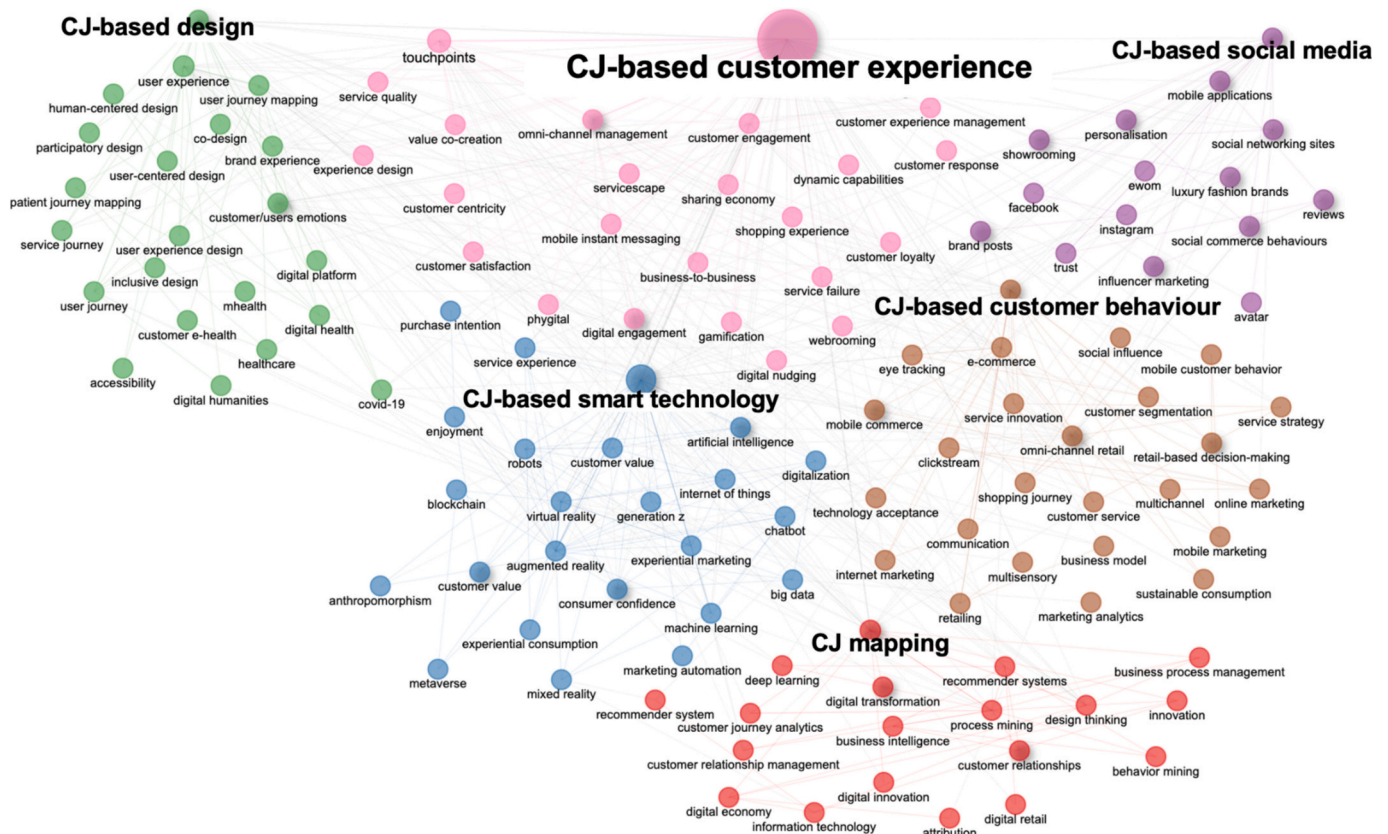


Fig. 4. CJ themes.

thus offering direct managerial relevance (Teixeira et al., 2012). It thus features concepts, including experience design, emotion, participatory or inclusive design, and customer loyalty, among others. Overall, studies in this cluster assess how design can be leveraged to ameliorate the CJ. The concepts of user- and brand experience also take a central role (Lemon and Verhoef, 2016), both in this cluster itself and further illustrated by its close link to its neighbouring cluster of the *CJ-based customer experience*. This cluster appears relatively emotive in nature, as suggested by its keyword of customer or user emotions, exposing its more affective (e.g., experiential) nature, as illustrated by its sub-focus on the health sector (e.g., as evident in its keywords of healthcare, digital health, and patient journey mapping).

4.3.4. *CJ-based smart technology*

This cluster, *CJ-based smart technology* (shown in blue in Fig. 4) contains integrative research on the CJ and specific smart technologies (Dwivedi et al., 2023b; He and Zhang, 2023), including robots, chatbots, augmented, virtual, or mixed reality, and the metaverse, among others, as shown in Fig. 4. These technologies may either be used at particular stages of or throughout customers' digital or phygital journeys (Mele et al., 2021a). In this cluster, smart technology is found to impact customers' enjoyment, confidence, value, and purchase intentions in their purchase journey (e.g., Hollebeek et al., 2021, 2024), in turn boosting their relationship with the firm and raising firm performance (Huang and Rust, 2021; Yeo et al., 2022).

4.3.5. *CJ-based social media*

Research in this cluster (shown in purple in Fig. 4) examines social media's role in affecting how consumers discover, evaluate, and engage with brands (Lassila et al., 2023). Social media have enabled new pathways for customer/firm interaction and engagement (Hollebeek et al., 2014), impacting the customer journey (Cuomo et al., 2021; Jacobson et al., 2022). For example, consumers are able to publicly or privately discuss their brand experiences on social media, purchase items through social commerce channels (e.g., Facebook Marketplace), or engage in (reverse) showrooming (Viejo-Fernandez et al., 2020; Hamilton et al., 2021). Moreover, by tracking users and generating key analytics (Mele and Russo-Spena, 2022), social media offer an essential

vehicle for *CJ personalisation*, the development of users' customised journey-based elements, profiles, or touchpoints (Hollebeek et al., 2023a, 2023b). Fundamental notions include social commerce behaviour, electronic word-of-mouth, brand posts, personalisation, and specific social media (e.g., Facebook/Instagram).

4.3.6. *CJ mapping*

Our final cluster, *CJ mapping* (shown in red in Fig. 4), focuses on charting the CJ, including through innovative technologies (e.g., deep learning, recommender systems, CJ analytics, or process mining, among others), as shown in Fig. 4. To map the CJ, research in this cluster explores, analyses, and decomposes the journey to understand better and synthesise its components and their respective interactions (Mele et al., 2021b), which may be facilitated by using digital technology. The resultant CJ mapping represents a tangible artefact that outlines the evolution of the customer's experience with the organisation, highlighting moments of delight and opportunities for improvement (Rosenbaum et al., 2017; Hollebeek et al., 2023a). Given the strategic nature of CJ mapping, studies in this cluster tend to take a firm (vs. customer) perspective (Patti et al., 2020; Koch et al., 2023).

4.4. *Developmental state and relative importance of CJ themes*

We further analysed the developmental state and relative importance of each CJ theme (e.g., by identifying specific themes as well-established vs. emerging, or as core vs. peripheral themes) through the development of a thematic diagram that maps each theme's centrality and density (Cobo et al., 2011b; see Fig. 5). Though centrality denotes a theme's pertinence in CJ research, density reflects its developmental state (Cahlik, 2000).

First, themes in the upper-right quadrant are CJ motor themes, or those that are well-developed and offer structure to this research stream (Cobo et al., 2011a/b). Specifically, the theme of *CJ-based customer behaviour* exhibits high centrality and density, implying its relatively well-developed state and its high importance in CJ research. Given the importance of examining customers' actions and decision-making that shape their journey, this finding makes sense (Lemon and Verhoef, 2016). Second, *CJ-based design* is represented in the upper-left quadrant,

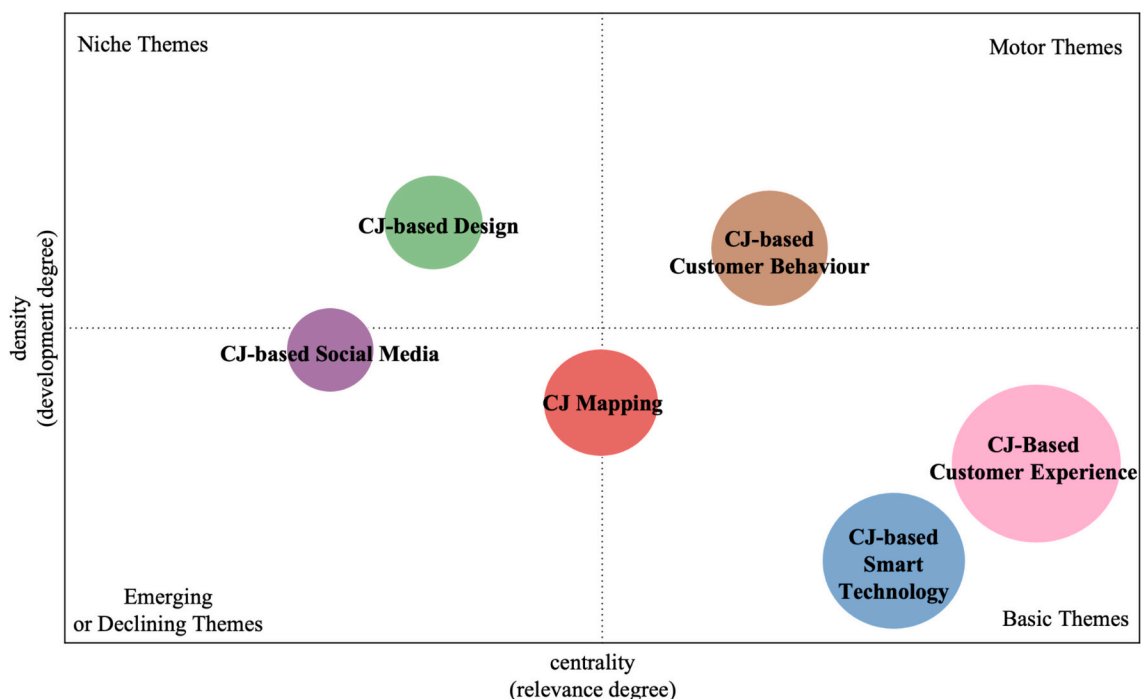


Fig. 5. Thematic diagram of CJ research: Centrality and density.

which contains well-developed but isolated niche themes. This theme exhibits relatively developed internal links (i.e., high density) but less prominent external links, exposing its lesser importance in the field's overall development to date (i.e., lower centrality).

Third, *CJ mapping* is represented in the centre of the lower-left and -right quadrants, placing it in between the CJ's core motor themes on the one hand and its emerging or declining themes on the other. *CJ mapping* is thus characterised by average centrality and density values, suggesting that it is well-developed and important to CJ research (e.g., Rosenbaum et al., 2017).

Fourth, *CJ-based social media* is depicted in the lower-left quadrant, revealing it as an either emerging or declining CJ theme. Upon further inspection, it represents an *emerging* CJ theme, given the proliferation of recent studies in this topic area (e.g., Schweidel et al., 2022; Mele et al., 2021a). Studies in this cluster reveal low centrality and density, implying this theme's relatively nascent developmental state, thus offering ample opportunities for further exploration.

Finally, the *CJ-based customer experience* and *CJ-based smart technology* themes are placed in the lower-right quadrant, which contains fundamental CJ themes. These themes are characterised by high centrality and low density, implying their nature as broad or general CJ themes (Cobo et al., 2011a). The *CJ-based customer experience* reveals a close theoretical link to customer experience research (Halvorsrud et al., 2016), yielding these concepts' frequent co-occurrence (Kumar et al., 2023). Their high centrality and low density render them crucial, pertinent themes for future research. Finally, the theme of *CJ-based smart technology* addresses the pivotal, growing role of artificial intelligence, robots, chatbots, and virtual, augmented, or mixed reality applications (Hollebeek et al., 2024; Yanxia et al., 2024), which are increasingly recognised to impact the CJ (e.g., by boosting its efficiency; Dwivedi et al., 2023b; He and Zhang, 2023).

4.5. Thematic and temporal evolution of CJ research

We next undertook thematic analysis, while also assessing the temporal evolution of the CJ literature, allowing us to identify the development of the CJ themes over time, thus addressing RQ2. In Fig. 6, we present a Sankey diagram showing the CJ's thematic evolution across

three major sub-periods: (a) 2001–2013, (b) 2014–2017, and (c) 2018–2023. We first set an initial 13-year sub-period (i.e., 2001–2013), allowing us to detect key themes in the CJ's establishment phase. In the next sub-period (2014–2017), the number of CJ articles expanded rapidly, leading us to adopt this four-year interval. Finally, we glean insight into more recent CJ themes by assessing articles published from 2018 to 2023.

Fig. 6 shows three key CJ themes in the period of 2001–2013, including the *customer experience*, *customer behaviour*, and *design*, revealing their fundamental nature. This sub-era thus focused on understanding and conceptualising the CJ, its association with the customer experience and other customer behaviour concepts, along with strategic CJ design (Norton and Pine, 2013; Tax et al., 2013).

From 2014 to 2017, the scope of CJ research started to broaden, revealing rising academic interest in the concept. Scholarly efforts also turned to new areas, including omnichannel strategy, touchpoints, and the role of digital marketing in the CJ (Rosenbaum et al., 2017). Relatedly, research addressing the *CJ-based design* is subject to significant growth in this period, which also evidences the inception of *CJ mapping*.

Finally, the period of 2018–2023 reveals further growth in CJ research (e.g., Hamilton et al., 2021). While the core theme of the *customer experience* continues, *CJ-based customer behaviour* sees a resurgence after featuring less prominently from 2014 to 2017. Given the close association of the customer experience to specific customer behaviour concepts (e.g., brand engagement/love), these themes overlap in some studies (e.g., by showing how the customer experience affects buyers' brand love through their journey; Stein and Ramaseshan, 2020). Moreover, *CJ mapping*, along with *CJ-based social media*, assumes a growing role in this period (e.g., Tueanrat et al., 2021b). Emerging CJ themes include smart technology and artificial intelligence in the CJ (e.g., Huang and Rust, 2023).

To better understand the more recent evolution of CJ themes, we present a co-occurrence analysis of CJ articles published since 2018. Fig. 7 portrays the attention given to digital transformation and technology in the CJ (e.g., AI, augmented reality, chatbots, or the metaverse; Cuomo et al., 2021; Dwivedi et al., 2023b; Yanxia et al., 2024). Academicians have also addressed the impact of smart technologies across

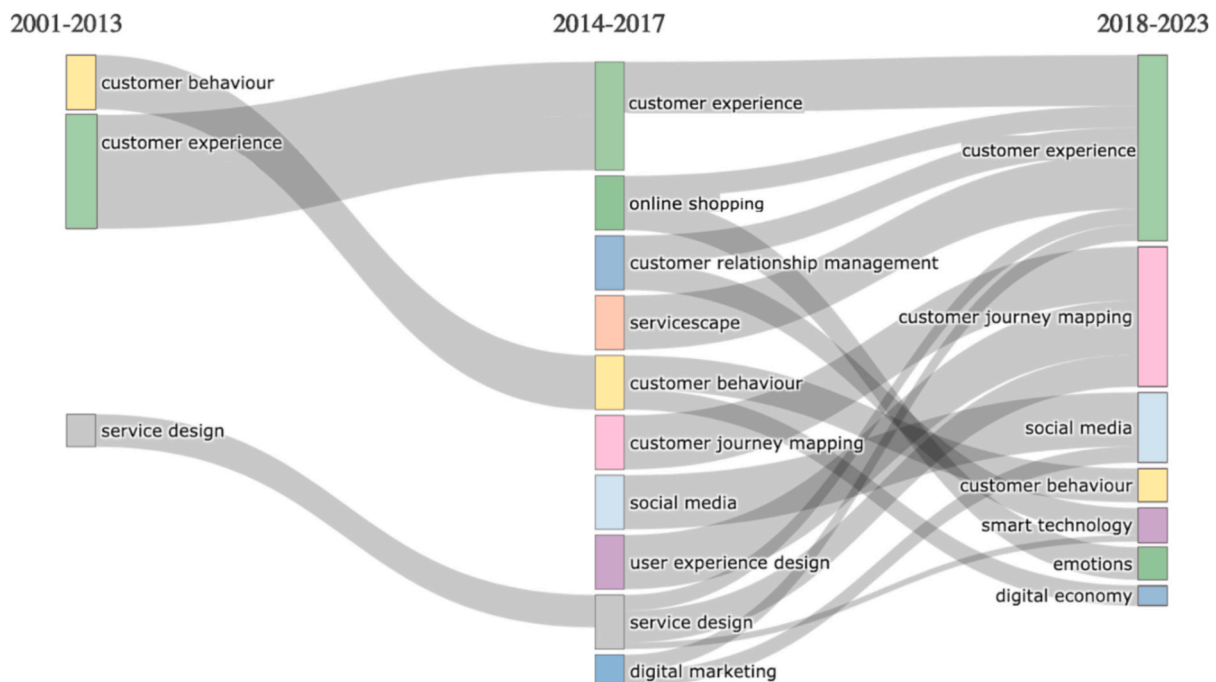


Fig. 6. Thematic evolution of CJ research.

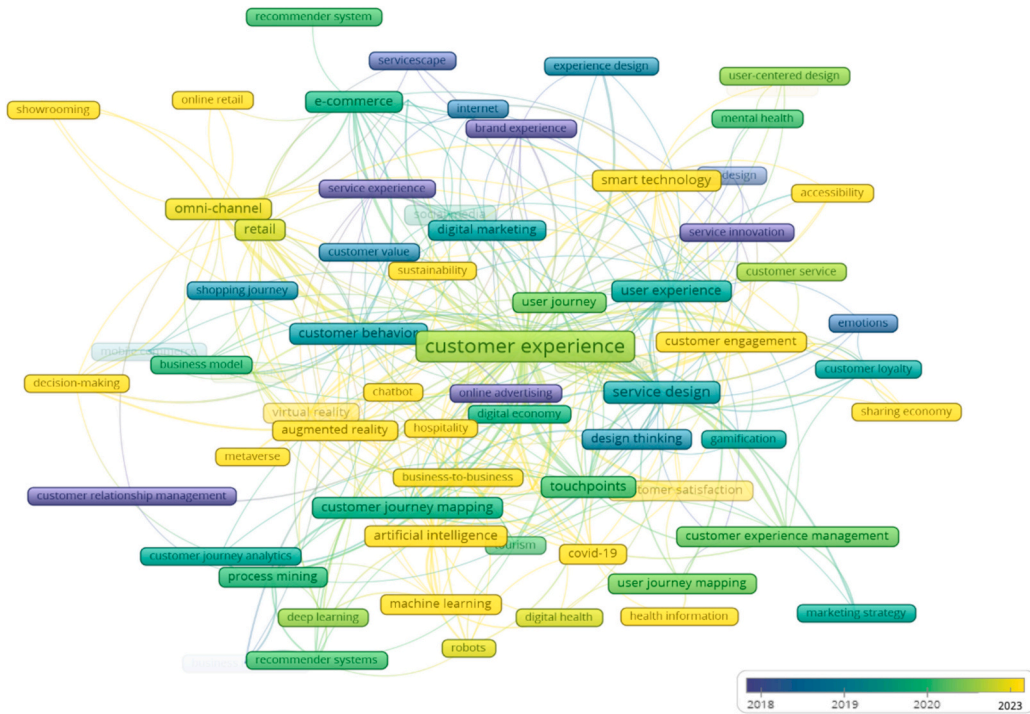


Fig. 7. CJ themes from 2018 to 2023.

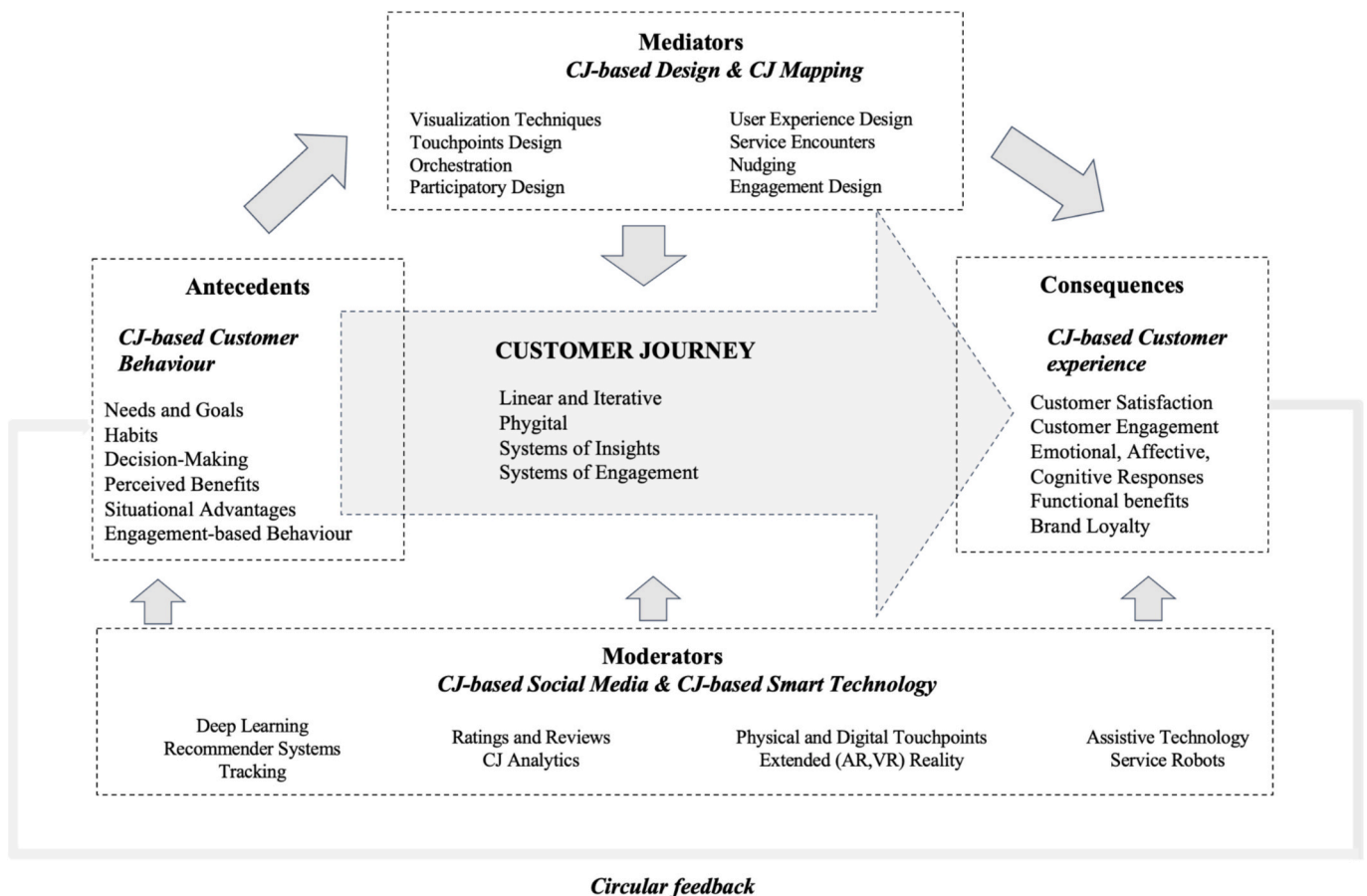


Fig. 8. Conceptual framework of the CJ.

CJ stages, yielding insight into customers' engagement, experience, and co-creation through their journey, and the mapping of their journeys, among others (Hoyer et al., 2020; Russo et al., 2023). Studies in this sub-era have addressed issues, including AI's capacity to personalise the CJ (e.g., by using big data) and the impact of personalised CJs on customer- and firm metrics (e.g., Kumar et al., 2023; D'Arco et al., 2019). For example, Huang and Rust (2023) propose an AI-enabled customer care journey that addresses how AI can be used to move customers through their journey. Overall, we detect a growing focus on digital or phigital (vs. purely offline) CJs (Mele et al., 2021a, 2024) in this period.

4.6. Conceptual framework of the CJ

We next address how the proposed CJ themes relate to one another, thus answering RQ3. The identified CJ themes, collectively, depict the core issues characterising CJ research (Pels et al., 2022), which can be mapped in a conceptual framework of the CJ and its key antecedents, mediators, moderators, and consequences (MacInnis, 2011), as shown in Fig. 8. While *antecedents* are inputs that bring about specific CJ-based effects, *mediators* act as an in-between in the association of particular CJ antecedents and consequences, which may also be affected by *moderators*, which see differing CJ dynamics for different levels of the moderating variable. Finally, *consequences* represent important outcomes of the CJ.

To develop the framework, we followed prior bibliometric and systematic review authors, who have proposed a conceptual model to enhance the value of their analyses (e.g., Hollebeek et al., 2024). Specifically, we developed six cards containing the identified CJ themes, which – based on iterative discussion among the researchers and consultation of the literature – were placed in different possible orders until a suitable framework, commensurate with the literature, was identified.

First, CJ-based customer behaviour is incorporated as a key CJ antecedent that triggers the journey's commencement. The CJ, in turn, yields a particular customer experience. As the CJ progresses, CJ-based design and CJ mapping are identified as pertinent determinants of the customer experience, as shown by their respective mediating role in the association of consumer behaviour and the development of their CJ-based experience. We depict social media and smart technology as important moderators in the path travelled by customers through their respective journeys (e.g., with high (vs. low) levels of these technologies differentially impacting the unfolding CJ; Dwivedi et al., 2023b). Finally, the depicted feedback loop suggests that the customer's experience with a firm after their journey serves as an input to their brand-related behaviour at the start of their next CJ with the firm, revealing the CJ's cyclical nature. We next discuss the framework, which is also accompanied by a set of propositions.

4.6.1. CJ antecedents

We identify customer behaviour as a key antecedent that triggers the CJ's commencement, in turn impacting the customer's experience. Though we acknowledge that consumer behaviour continues throughout or pervades the CJ, our focus is to highlight its function as an *impetus* to the journey. Specifically, when customers recognise their need (e.g., for a particular product), whether based on utilitarian or more hedonic reasons (Hu et al., 2022), they are likely to embark on a new CJ (Voorhees et al., 2017), triggering their interactions with providers.

Consumers look to satisfy their purchase-related goal(s) and interact with the firm through one or multiple touchpoints. Their journey's evolution is contingent on the individual's perceived journey-related benefit, where touchpoints are not only used to meet their intended goal(s) or need(s) but also to engage in the provider's processes (Hollebeek et al., 2023a). Some scholars emphasise the need for a more nuanced consideration of the integration of the different channels comprising the CJ (e.g., by stressing the importance of contextual or situational advantages; Wagner et al., 2020; Mishra et al., 2021). Firms

are increasingly empowering consumers to pursue their own (e.g., personalised) journey (vs. follow a firm-orchestrated journey; De Keyser et al., 2020) to allow customers to efficiently meet their goals or needs, thereby unlocking further potential consumer-perceived benefits.

Customers' shopping behaviours have evolved owing to technological (e.g., Internet-based) advances (Juaneda-Ayensa et al., 2016; Aw et al., 2022). For example, e-commerce has generated new purchase opportunities, affecting consumer expectations, purchase intentions, and decision-making processes (e.g., by impacting their personal innovativeness, effort expectancy, and performance expectancy (Juaneda-Ayensa et al., 2016; Vakulenko et al., 2019)). We posit:

Proposition 1. CJ-based customer behaviour represents an antecedent to the CJ by identifying consumer habits, intentions, etc. that spur the CJ's commencement.

4.6.2. CJ mediators

We identify *CJ-based design* and *CJ mapping* as mediators in the association of the CJ's proposed antecedent and its suggested consequences (i.e., by affecting customers' transition from one stage to another in the CJ). CJ-based mediators can be exploited by firms to shape the CJ and customers' associated experiences. In this sense, design principles and methods consider the CJ's elements and touchpoints, shifting the focus from individual journey-based elements to their orchestration (Edelman and Singer, 2015; Teixeira et al., 2012). Organisations can increase customers' engagement and shape their experience through visualisation techniques (e.g., that orchestrate its behind-the-scenes processes; Rosenbaum et al., 2017).

These activities rely on understanding the customer's needs and goals. By adopting a problem-solving mindset, the design approach focuses on how customers perceive multiple touchpoints in a thematically cohesive, consistent, and context-sensitive way (Kuehnl et al., 2019). Journey mapping completes the picture by providing insight into how and why consumers behave in certain ways and perceive specific benefits or constraints (Patti et al., 2020). Journey mapping thus represents a powerful way to make sense of customer behaviour and their design-based engagement and experience (Kuehnl et al., 2019; Rudkowski et al., 2020). CJ maps imply a broad focus that considers the multiplicity of stimuli and connectivity of touchpoints that customers encounter along their journey. Each time a customer connects with an organisation, the perceived value of the interaction and the customer's engagement propel the individual to the next stage of their journey (Rosenbaum et al., 2017). We postulate:

Proposition 2. CJ-based design and CJ mapping act as mediators in the association of the proposed CJ antecedents and consequences by orchestrating customers' engagement-promoting service encounters and by nudging their behaviour toward experience.

4.6.3. CJ moderators

The themes of *CJ-based social media* and *-smart technology* serve as moderators that can either enhance or diminish the relationship between the identified CJ antecedents (i.e., customer behaviour) and consequences (i.e., customer experience). Social media may influence customers through their journey (e.g., by impacting their brand-related knowledge or by providing brand recommendations; Vermeer et al., 2020; Hamilton et al., 2021; Hollebeek et al., 2014). Brand-owned social media posts are integral to customers' decision-making processes (Grewal and Roggeveen, 2020). Correspondingly, scholars have linked customer engagement, brands' social media posts, and CJ stages (Demmers et al., 2020; Yeo et al., 2022). Specifically, adapting brand-related content to individuals' CJ stage can raise customers' brand attachment, engagement, and intimacy, among others (Wang and Lee, 2020; Vermeer et al., 2020; Hamilton et al., 2021).

Companies can generate user analytics by matching their transaction records to social media-based tracking data (Mele and Russo-Spena, 2022), which can be used to personalise the journey (Wilson-Nash

et al., 2020; Manthiou and Klaus, 2022). Social media have levelled the playing field between customers and brands (e.g., by allowing two-way communications), thereby also impacting the CJ (Demmers et al., 2020; Mele et al., 2021a).

Furthermore, smart technologies provide real-time actionable insight to nudge customer behaviour and foster their experience (Mele et al., 2021b). The related concepts of deep learning, process mining, and recommender systems illustrate the growing adoption of technological tools for CJ analysis and mapping (e.g., by offering sensory feedback to engage consumers or by strengthening customer/brand relationships; Hollebeek et al., 2020; Vakulenko et al., 2019). Artificially intelligent and other smart technologies (e.g., AR, VR, chatbot-based, wearable, or Internet-of-Things-based) technologies may thus impact each stage of the journey (Manthiou and Klaus, 2022; Yanxia et al., 2024). We theorize:

Proposition 3. CJ-based social media and CJ-based smart technology act as moderators in the association of the identified CJ antecedents and consequences by illuminating the engagement mechanisms that facilitate CJ personalisation, strengthening the association of customer behaviour and experience.

4.6.4. CJ consequences

We identify the *CJ-based customer experience* as a key CJ consequence. The CJ develops as a series of experiences (Tax et al., 2013) through customers' touchpoint-based interactions with the organisation (Barwitz and Maas, 2018), service encounters (Voorhees et al., 2017), and a multiplicity of channels (Hilken et al., 2018). Though the customer experience unfolds through the entire CJ, our focus is not on single events but on customers' cumulative journey-based experience, highlighting its role as a CJ outcome. Customer experience incorporates customers' cognitive, emotional, behavioural, sensorial, and spiritual responses to (e.g., brand-related) stimuli (Becker and Jaakkola, 2020; Kranzbühler et al., 2018), requiring a holistic view of touchpoints critical (Dhebar, 2013; Bolton et al., 2014).

Customer interactions with smart technologies (e.g., AI/VR) are expected to alter their CJ and thus their experience (Novak and Hoffman, 2019; Flavián et al., 2019). Moreover, phygital interactions enable hybrid experiences (Hilken et al., 2018; Mele et al., 2024). From the provider's perspective, understanding the CJ facilitates the development of insight into the root causes of customers' sub-optimal experiences (Følstad and Kvale, 2018; McColl-Kennedy et al., 2019), helping firms create more engaging or delightful future customer experiences (Bolton et al., 2014).

The dynamics characterising customers' prior purchase cycles may impact their current or future cycles. For example, customers' intent to continue their journey (e.g., as exhibited through their brand loyalty intent) also acts as a key CJ consequence (Siebert et al., 2020), which may fluctuate though their (current) journey (e.g., based on the customer's perceived journey value; Hollebeek et al., 2023b). When customers see value in their unfolding journey, their satisfaction and loyalty are likely to rise, and vice versa (Bolton et al., 2014). We posit:

Proposition 4. The customer experience represents a consequence of the CJ by addressing the customer's cognitive, emotional, or behavioural responses arising from multiple firm/brand-based stimuli.

4.6.5. Focal concept: the customer journey

The CJ describes customers' interactions with a firm, from their initial contact, through to their (*post*-)purchase dynamics (Hollebeek et al., 2023a, 2023b). However, the CJ's continuation also sees challenges, including channel switching or dropouts (Kranzbühler et al., 2018). The CJ-based path unfolds through real and virtual channels, and includes multiple interactions, touchpoints, and stages (Norton and Pine, 2013; Halvorsrud et al., 2016).

Owing to rapid technological innovation and adoption, physical and digital touchpoints are not stand-alone, but may be combined to

constitute hybrid *phygital* channels and encounters (Mele et al., 2024). Correspondingly, firms are required to shape the architecture of the phygital CJ through "the interplay between systems of insights and systems of engagement activated by multiple customer-provider interactions in an entanglement of physical and digital contexts" (Mele and Russo-Spena, 2022, p. 74). In each interaction, an exchange of data, insights, and sensations takes place (Wagner et al., 2020), affecting or nudging customers' decision-making processes (Mele et al., 2021a; Mele and Russo-Spena, 2022; Del Vecchio et al., 2023). The phygital CJ has been conceptualised as a circular path of moments fuelled by smart technologies that foster interactions, relationships, and emotions (Mele et al., 2021a). Based on the framework, we formulate the following overall proposition:

Proposition 5. The CJ connects customer behaviour to the customer experience. The CJ's path is (a) mediated by how providers exploit design and map how customers engage with the brand or firm, and (b) moderated by how social media and smart technologies are used and exploited.

5. Discussion, implications, limitations, and future research

5.1. Discussion and theoretical implications

The proposed framework of the CJ its propositions offer a lucid contribution poised to augment research within the CJ domain. These propositions delineate a comprehensive understanding of the dynamics between customer behaviours, design, technological advancement, and the resultant customer experiences.

Proposition 1. CJ-based customer behaviour represents an antecedent to the CJ by identifying consumer habits, intentions, etc. that spur the CJ's commencement.

Proposition 2. CJ-based design and CJ mapping act as mediators in the association of the proposed CJ antecedents and consequences by orchestrating customers' engagement-promoting service encounters and by nudging their behaviour toward experience.

Proposition 3. CJ-based social media and CJ-based smart technology act as moderators in the association of the identified CJ antecedents and consequences by illuminating the engagement mechanisms that facilitate CJ personalisation, strengthening the association of customer behaviour and experience.

Proposition 4. The customer experience represents a consequence of the CJ by addressing the customer's cognitive, emotional, or behavioural responses arising from multiple firm/brand-based stimuli.

Proposition 5. The CJ connects customer behaviour to the customer experience. The CJ's path is (a) mediated by how providers exploit design and map how customers engage with the brand or firm, and (b) moderated by how social media and smart technologies are used and exploited.

In line with its contribution, this research raises important implications for further CJ research, as discussed for the proposed CJ themes below (also see Table 3). First, *CJ-based customer behaviour* addresses customers' behavioural manifestations through the CJ. Despite this cluster's foundational role in CJ research, as outlined, a need for further exploration remains. For example, the rapid rate of technological innovation (e.g., digital transformation) yields new CJ dynamics, opportunities, and challenges that merit further (e.g., theoretical, empirical, and methodological) investigation (Mele and Russo-Spena, 2024). For example, studies could focus on how the proliferation of channels and touchpoints affects customer expectations and perceived journey value (Hollebeek et al., 2023b). Demographic factors (e.g., age, education) may exert important effects on the CJ, warranting further exploration of different customer cohorts' behaviour through the CJ (e.g., that

Table 3
Agenda for further CJ research.

Items	CJ themes	Research questions	Key references
Antecedents	Customer behaviour	<ul style="list-style-type: none"> How have recent and ongoing events (pandemic, etc.) affected an individual's buying habits, including needs, frequency patterns, and background factors? Do specific kinds of engagement influence different customer behaviour? Do customer cohorts behave differently in their CJ? Do customers behave in different channels in their CJ? How to promote engagement-based behaviour? 	<p>Demmers et al., 2020 Viejo-Fernandez et al., 2020 Mishra et al., 2021 Mele et al., 2021a Hollebeek et al., 2023a Fuller et al., 2023</p>
Mediators	Design	<ul style="list-style-type: none"> How does the design of customer journey nudge engagement? How to design innovative touchpoints? How to design systems of insights to acquire customer data and get customer analytics along the customer journey? How to design systems of engagement to foster customer experience along the customer journey? What are the roles of Inclusive design and Participatory Approach? How to design smart nudging? 	<p>Grewal and Roggeveen, 2020 Hollebeek et al., 2020 Singh et al., 2021 Mele and Russo-Spena, 2022 Sassanelli and Terzi, 2022 Ponsignon, 2023 Silva et al., 2023</p>
	CJ mapping	<ul style="list-style-type: none"> How to personalise customer journey proposals? How to exploit technologies to co-design customer journey mapping? How do we consider the role of emotions in Journey Mapping? How does the adoption of system thinking guide the CJ mapping? 	<p>Vakulenko et al., 2019 Patti et al., 2020 Rudkowski et al., 2020 Cuomo et al., 2021 Koch et al., 2023 Sharma and Fatima, 2024</p>
Moderators	Smart technology	<ul style="list-style-type: none"> What is the main challenge in implementing systems of insights to acquire customer data and get customer analytics along the customer journey? How do customers experience smart technologies during their shopping journey? How do smart technologies (i.e., wearables, chatbot, etc.) nudge customer engagement during the customer journey? Detecting what technological solutions can foster experience in specific journey phases 	<p>Mele and Russo-Spena, 2022 Flavián et al., 2019 Manthiou and Klaus, 2022 Del Vecchio et al., 2023 Dwivedi et al., 2023a, 2023b He and Zhang, 2023 Huang and Rust, 2023 Yanxia et al., 2024 Trujillo-Torres et al., 2024</p>

Table 3 (continued)

Items	CJ themes	Research questions	Key references
		<ul style="list-style-type: none"> (pre-, purchase, and post)? How will the phygital and metaverse dimensions affect the customer journey? To what extent does a highly personalised digital CJ raise consumer-perceived privacy or security issues compared to a traditional, physical CJ? Relatedly, to what degree do consumers wish to control the unfolding of their journey (vs engage in a company-directed journey)? 	
	Social media	<ul style="list-style-type: none"> How to use social media analytics to impact the customer journey? What are the roles of social media norms in different cultures? How does social media strategy influence customer experience? How to engage customers on different social media platforms? How to manage brand strategy and adapt brand content on SNSs to the customer journey over time? How can social media metrics support the customer journey mapping? 	<p>Wang and Lee, 2020 Ngarmwongnoi et al., 2020 Vermeer et al., 2020 Hamilton et al., 2021 Yeo et al., 2022 Lassila et al., 2023</p>
	Outcome	<ul style="list-style-type: none"> How to manage a seamless customer experience in a phygital context? Do specific technologies affect customer experience differently? How to develop CX measurement to improve the customer journey? How to manage data security and privacy? Who owns customer data? How do experiences arise alongside the CJ through a relational journey approach? 	<p>De Keyser et al., 2020 Hoyer et al., 2020 Becker and Jaakkola, 2020 Siebert et al., 2020 Hollebeek et al., 2023a Gahler et al., 2023 Kumar et al., 2023</p>

of Gen Y or Gen Z).

Second, *CJ-based design* also raises pertinent implications. Given the key work in design (e.g., Kuehnl et al., 2019; Patrício et al., 2011) and the growing insight in this area, we anticipate a rich future research landscape in this interdisciplinary area. For example, while models and tools facilitating the design of experience-enhancing journeys are challenging to develop (Sassanelli and Terzi, 2022), any steps taken toward the fulfilment of this objective are expected to hold value to scholars and practitioners.

While *CJ mapping* traditionally took a more linear, sequential CJ perspective (e.g., Voorhees et al., 2017), emerging, dynamic perspectives view the CJ as a more flexible constellation of the customer's steps toward purchase, as outlined (e.g., by skipping or skimming specific journey stages; Hollebeek et al., 2023a). To construe such dynamic CJ

maps, design thinking may be applied, thus linking the identified themes of *CJ mapping* and *CJ-based design*. For example, after mapping the CJ and identifying its customer-perceived strengths and challenges, scholars could (re)design or innovate relevant customers' journeys or parts thereof (Knaak, 2019; Sassanelli and Terzi, 2022), revealing important strategic insight through their integration.

The phygital CJ addresses the customer's progression through a path facilitated by technologies, including social media, AI, VR, etc., as discussed. Though research on the phygital CJ is rapidly emerging, key issues that require additional insight persist. Researchers are advised to clarify the role of specific technologies and/or customer experiences in the CJ. For example, the growing role of smart technology may imply new trends (e.g., the rising entanglement of entertainment, work, social media, virtual life, and gaming in the metaverse), requiring further investigation. The phygital CJ also implies pertinent challenges that offer grounds for further study. For example, to what extent do phygital CJs place (e.g., bargaining) power in the hands of consumers (vs. the firm)? Therefore, phygital customer experience management and measurement pose key remaining challenges that researchers may wish to address (e.g., by identifying appropriate digital and physical touchpoint-based data collection, storage, and integration tools, (e.g., flexible data analytics) approaches, and/or the ethical management of consumer privacy, security, and control through the CJ).

We also derive the following holistic implication from the proposed framework and propositions. However, as CJ research continues to evolve (e.g., with the emergence and rise of new (e.g., generative AI) technology), some of the modelled associations may change in terms of their relative importance or shape over time. We thus urge CJ researchers to continue tracking key CJ trends to stay abreast of any new developments in this regard.

5.2. Limitations and further research

Further research opportunities arise from the limitations inherent in our research, thus offering insight into RQ4. For example, our article search was limited to journals included in the Web of Science, thus potentially overlooking specific sources. Moreover, as an article's citation metrics tend to increase over time, older (vs. more recent) papers have had more time to accumulate citations, leaving them at a relative advantage and exposing an inherent limitation of bibliometric analysis (Aria and Cuccurullo, 2017).

Second, though the search considered all eligible papers, other or additional databases (e.g., Google Scholar) may be used to produce (somewhat) different findings. Furthermore, scholars may extend our work by conducting meta-analyses of specific CJ aspects (e.g., chatbot anthropomorphism in the CJ; Yanxia et al., 2024).

6. Conclusion

The CJ offers an important topic in the marketing- and related literature that sees pertinent theoretical intersections with new technology and innovations (e.g., AI or VR). Though the corpus of CJ research is rapidly expanding, authors' increasingly different interpretation, understanding, and assessment of the CJ has generated a level of theoretical fragmentation in CJ research (Tueanrat et al., 2021a) that we seek to address in this research. Specifically, we conducted a bibliometric review and thematic analysis to map the body of CJ research (2001–2023), thus charting its intellectual structure and reducing the observed fragmentation.

This article makes the following contributions to the CJ literature. First, we map the CJ literature's evolutionary path by quantifying and aggregating key CJ themes (Braam et al., 1991), charting its evolution over time (Kumar et al., 2023). While authors, including Gao et al. (2020) or Følstad and Kvale (2018) have systematically reviewed the CJ literature, bibliometric analysis of CJ research lags behind to date, warranting the undertaking of our analyses (Aria and Cuccurullo, 2017).

Specifically, by outlining the CJ literature's cumulative scientific knowledge and its evolutionary nuances (Donthu et al., 2021b), we drive six key CJ themes, including CJ-based customer behaviour, CJ-based design, CJ-based social media, CJ-based smart technology, the CJ-based customer experience, and CJ mapping, which collectively characterise the field (Cobo et al., 2015).

Second, the CJ lexicon is evolving to increasingly include technological concepts (e.g., AI/VR), as shown in the proposed conceptual framework (Pels et al., 2022) and its associated propositions (Goyal and Kumar, 2021; Hollebeek et al., 2023a). These offer a valuable roadmap for further CJ researchers (e.g., by specifying theoretical associations between the identified CJ themes). Specifically, the framework proposes CJ-based customer behaviour as a key CJ antecedent, and the CJ-based customer experience as a focal CJ consequence. Moreover, CJ-based design and CJ mapping are found to mediate the association of the CJs' antecedents and consequences, while CJ-based social media and CJ-based smart technologies act as moderators.

Third, we derive an agenda for further CJ research. Specifically, building on the proposed CJ themes, we synthesise key opportunities for researchers in the coming years. For example, as the range of digital platforms continues to expand, we expect to see a growing role of digital and phygital CJs, which may see unique dynamics (vs. more traditional CJs; Mele and Russo-Spena, 2022).

Overall, this research helps scholars to better understand the CJ and pinpoint those CJ niches that warrant further research. This review thus offers a pioneering attempt to identify key CJ themes and map their relationships, as set forth in the CJ literature in the last two decades. The results indicate that the area (a) has yet to reach maturity, (b) is subject to fragmentation, and (c) offers pertinent opportunities for further research (e.g., at the interface of the CJ and specific technologies), leading us to predict further growth and development of CJ research as its research journey unfolds.

CRedit authorship contribution statement

Cristina Mele: Writing – review & editing, Writing – original draft, Supervision, Conceptualization. **Linda D. Hollebeek:** Writing – review & editing, Writing – original draft, Supervision. **Irene Di Bernardo:** Writing – review & editing, Writing – original draft, Methodology. **Tiziana Russo Spena:** Writing – review & editing, Writing – original draft, Supervision, Conceptualization.

Data availability

No data was used for the research described in the article.

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