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Customer Journeys: A Systematic Literature Review

Abstract

Purpose – Customer journeys has become an increasingly important topic in service management and design. The study reviews customer journey terminology and approaches within the research literature prior to 2013, mainly from the fields of design, management, and marketing.

Design/methodology/approach - The study was conducted as a systematic literature review. Searches in Google Scholar, Scopus, Web of Knowledge, ACM Digital Library, and ScienceDirect identified 45 papers for analysis. The papers were analysed with respect to customer journey terminology and approaches, the relation to customer experience, the referenced background, and the use of visualizations.

Findings – Across the reviewed literature, customer journeys are described not only as a means to take the viewpoint of the customer, but also to reach insight into their experiences. A rich and at times incoherent customer journey terminology is analysed and discussed, as are two emerging customer journey approaches: customer journey mapping (analysis of a service process "as is") and customer journey proposition (generative activities leading towards a possible service "to be").

Research limitations/implications – The review is limited to analysing and making claims on research papers that explicitly apply the term *customer journey*. In most of the reviewed papers, customer journeys are not the main object of interest but are discussed as one of several topics.

Practical implications - A nuanced discussion of customer journey terminology and approaches is provided, supporting the practical application of a customer journey perspective.

Originality/value - The review contributes a needed common basis for future customer journey research and practice.

Keywords - Customer Journeys, Literature Review, Service Management, Service Design

1. Introduction

Within the service field, the processual and experiential aspects of services are acknowledged as highly important (Edvardsson *et al.*, 2005). Customer experience, that is, the customer's cognitive, affective, emotional, social, and physical responses to a company (Verhoef *et al.*, 2009) is a key competitive advantage in a range of service sectors (Meyer and Schwager, 2007). The notion that

customer experience is shaped during (as well as before and after) the interactions between the customer and the service provider (Berry *et al.*, 2002, 2006) has spawned much research on the drivers of customer experience (Carreira *et al.*, 2013; Verhoef *et al.*, 2009) and how customer experience evolves throughout the service process (Baron and Harris, 2010; Johnston and Kong, 2011; Walter *et al.*, 2010). Several frameworks and methods, such as service blueprinting (Bitner *et al.*, 2008) and multilevel service design (Patrício *et al.*, 2011), have been proposed to manage the processual and experiential as intertwined aspects of services. Nevertheless, how to enhance and manage customer experience across channels and customer interactions continues to be an important service research priority (Ostrom *et al.*, 2015).

Within this context, the term *customer journey* has been widely adopted in practical service management and design (Rawson, Duncan, and Jones, 2013; Zomerdijk and Voss, 2010, 2011). The term addresses the processual and experiential aspects of service processes as seen from the customer viewpoint. It is described as the repeated interactions between a service provider and the customer (Meroni and Sangiorgi, 2011), as an "engaging story" about the user's interaction with a service (Stickdorn and Schneider, 2010), or as a walk "in the customer's shoes" (Holmlid and Evenson, 2008). The customer journey perspective is key to the design processes of recognized service design agencies (Kimbell, 2011), is critical for involving customers in strategy work and business model development (Norton and Pine, 2013), and has also made its way into acknowledged books on service design (Miettinen and Koivisto; 2009; Polaine, Løvlie and Reason, 2013; Stickdorn and Schneider, 2010). Throughout the paper we refer to that research and practice in which the term *customer journey* is explicitly applied to obtain a customer viewpoint on the service process as holding a *customer journey perspective*. When addressing the specific meanings given to *customer journey* and associated terms such as *touchpoints*, *stages*, *steps*, and *events*, we refer to these as *customer journey terminology*.

Driven by the current interest in customer journeys, various customer journey approaches have emerged. We understand *customer journey approaches* to be methods and practices where the service process is analysed, modelled, managed, or (re)designed applying a customer journey perspective. Methods and practices in which the term *customer journey* is not explicitly applied are not included in what we in this paper refer to as *customer journey approaches*.

Zomerdijk and Voss (2010, 2011) found that leading experiential service providers often use customer journey approaches in service management and design. Customer journeys are identified as a preferred means among service designers to summarize customer research (Segelström and Holmlid, 2009), and are seen as valuable for communication and for strengthening stakeholder empathy with customers (Segelström, 2013). Customer journey approaches are also used for the management and design of public sector services (Parker and Heapy, 2006; HM Government, 2007), and for service innovation in consumer markets (Edelman and Singer, 2015).

While the term *customer journey* is widely used, and customer journey approaches are commonly applied, there does not seem to be a common understanding of what customer journeys

are and how different customer journey approaches may support service management and design. This is, for example, seen in the lack of a common customer journey terminology and reference literature. The current body of knowledge on customer journeys reflects a mix of related perspectives rather than a single commonly acknowledged customer journey perspective. Some view customer journeys as clearly delimited service processes with marked start- and endpoints (Whittle and Foster, 1991), others see customer journeys as more open-ended processes comparable to the customer loyalty staircase (Nichita *et al.*, 2012). Some see touchpoints as the key building block of customer journeys (Meroni and Sangiorgi, 2011; Stickdorn and Schneider, 2010), others disregard touchpoints in their discussion of customer journeys and rather address events (Crosier and Handford, 2012) or service encounters (Tax *et al.*, 2014). Some consider customer journeys as a tool for reporting and visualizing user research (e.g. Segelström, 2013), others discuss customer journeys in the context of generative design activities (e.g. Steen *et al.*, 2011). Hence, the literature on customer journeys does not appear coherent. When we later in the paper refer to *the customer journey perspective*, in contrast to other general perspectives, this underlying plurality should be kept in mind. Recently, Halvorsrud and colleagues made a call for a common language of service design "to precisely model services and support a common service understanding" (Halvorsrud *et al.*, 2014, p. 292), and presented a structuring framework for customer journey analysis (Halvorsrud *et al.*, 2016). For customer journeys to advance as a mature topic of interest, it may be beneficial to address the current incoherence in terminology and approaches.

This paper aims to contribute a needed basis for a common understanding of customer journeys and associated approaches. Specifically, it contributes an overview of how the term *customer journey* is used in the literature, as well as existing customer journey approaches. For this purpose, the paper presents a systematic literature review of peer-reviewed research papers from journals and conferences concerning customer journeys in the period 1991 to 2012.

The paper is structured as follows. The next section presents a background on customer journeys and related approaches followed by the research questions (section 3), the review method (section 4) and the key findings (section 5). The paper concludes by discussing the implications and limitations of the findings, as well as future work (sections 6 and 7).

2. Background

2.1 Directions in customer journey research and practice

The historical roots of the customer journey perspective are challenging to trace, as it has appeared in different fields of practice and research more or less in parallel.

Within the field of design, Parker and Heapy's (2006) pamphlet *The Journey to the Interface* has been instrumental in sparking interest in customer journeys (Haukkamaa *et al.*, 2010; Kimbell, 2011; Manschot and Visser, 2011). This pamphlet presents journeys as a lens for "seeing services as people do" (p. 19). Parker and Heapy forcefully argue for the usefulness of this perspective, based

on practical examples and interviews from case organizations within the private and public sectors.

In the service management tradition, the works of Zomerdijk and Voss (Voss and Zomerdijk 2007; Zomerdijk and Voss, 2010, 2011) have been influential in showing how the customer journey perspective has emerged as a topic of interest among practitioners. Through case studies with service providers, design agencies, and consulting firms, they found that experiential services often are designed through a customer journey approach, to strengthen the customer experience across the entire service process. Their work has been influential in service management research (Mahr *et al.*, 2013; Patrício *et al.*, 2011; Shaw and Williams, 2009; Tax *et al.*, 2014; Teixeira *et al.*, 2012).

Finally, a distinct customer journey approach has evolved within the field of marketing. Here, the focus has been on consumers' decision processes, from becoming aware of a company to making a purchase (Lee, 2010) or becoming a loyal customer (Buttle, 2003; Court *et al.*, 2009). In this approach, customers' behaviour and experiences typically are analysed according to a predefined onboarding process, structured in steps such as *awareness*, *familiarity*, *consideration*, *purchase*, and *loyalty* (Court *et al.*, 2009), or *pre-purchase*, *purchase*, and *post-purchase* (Lemon and Verhoef, 2016), often supported by customer relationship management (CRM) systems (Buttle, 2003) or web analytics (Anderl *et al.*, 2016; Lee, 2010; Muret, 2013).

2.2 Customer journey visualizations

The customer journey perspective is closely associated with the use of visualizations, often referred to as *customer journey maps* (Meroni and Sangiorgi, 2011; Stickdorn and Schneider, 2010). The benefit of such visualizations is highlighted in the seminal work of Parker and Heapy (2006), and method support in this regard has recently been strengthened (Halvorsrud *et al.*, 2014, 2016; Moon *et al.*, 2016).

Different frameworks for classifying service design visualization techniques and purposes provide useful perspectives on the characteristics and purposes of customer journey maps. Diana, Pacenti, and Tassi (2009) classify visualization techniques in terms of their level of realism (*iconicity*) and the degree to which the temporal aspects of the service are reflected (*time*). The customer journey map is characterized as a *flow* type visualization technique where the visualizations are made at an abstract or diagrammatic form and represent the unfolding of the service process across time (Diana *et al.*, 2009).

Segelström (2013) distinguishes different purposes of service visualizations according to the *analysis-synthesis bridge model* (Dubberly *et al.*, 2008). He in particular discusses customer journeys and customer journey maps as applied by service designers to interpret customer research.

Blomkvist (2014), in his work on service prototypes, discusses customer journey maps in the context of service prototyping. The customer journey map is seen as a *definite prototype*, that is a prototype which reaches a stable state once it is created. Blomkvist notes that the dynamic character of services also may require more responsive prototype formats, referred to as *ongoing prototypes*, that is, prototypes which respond to actions. In particular, the service walkthrough is investigated as

a means to prototype customer journeys in an ongoing manner (e.g. Blomkvist, Åberg, and Holmlid, 2012; Arvola, Blomkvist, Holmlid, and Pezone, 2012; Blomkvist, Fjuk, and Sayapina, 2016).

2.3 Related approaches and terms

The customer journey perspective has been linked to other methods and terms in service research such as service blueprinting and service journeys.

2.3.1 Service blueprinting

Service blueprinting was developed in the 1980s by Shostack (1982, 1984) and has been further developed and taken up as a method to support service management (Bitner *et al.*, 2008) and service design (Polaine *et al.*, 2013) with the purpose of "illuminating the customer's role in the service process" (Bitner *et al.*, 2008, p. 71). Here, the service process is presented as diagrammatic visualizations, *service blueprints*. Like the customer journey map, the service blueprint is considered a flow in the classification system of Diana *et al.* (2009). However, in service blueprinting, the focus of attention typically is split between the customer's point of view and issues pertaining to the underlying service organization and infrastructure. To address the latter aspects of the service process, the service blueprint describes *support processes* and *backstage actions*, that is, the actions of the service provider that are invisible to the customer, in addition to *customer actions*, *onstage actions* of service employees, as well as *service evidence*, that is, the tangibles that customers are exposed to that may affect their service experience (Shostack, 1982; 1984). This is different from what would be expected in a customer journey approach, where the customer is consistently placed "at the heart of service system design" (Zomerdijk and Voss, 2010, p. 74) and the underlying service organization and infrastructure are not as prominent as in service blueprinting.

2.3.2 Service journeys

In early research on customer journeys (Johns, 1999; Johns and Clark, 1993; Whittle and Foster, 1991) the term *service journey* was used more or less as a synonym to *customer journey*. Later, the customer journey perspective evolved to encompass research and practice that span and, to some extent, unite different strains of work on customer experience (as is seen e.g. in Kimbell, 2011; Zomerdijk and Voss, 2010). The term *service journey*, however, tends to be applied in research specifically addressing customer expectation management and service quality perceptions (e.g. Ghobadian *et al.*, 1994; Gyimóthy, 2000a) drawing on service quality theory on experience as formed through disconfirmation of expectation (Parasuraman *et al.*, 1985). Gyimóthy, in her work on vacation experiences, also criticizes service journeys as implying a "generic provider-oriented service process analysis" (Gyimóthy, 2000b) insufficient for capturing the rich experiences of vacationing tourists (Gyimóthy, 2000c). More recently, Hsieh, Yuan and colleagues (Hsieh and Yuan, 2010; Hsieh *et al.*, 2011; Lin and Yuan, 2011) apply service journeys in their studies of technology and method support for customer expectation management and personalized customer process. Some recent research reports also apply *service journey* as a synonym to *customer journey*

(e.g. Clatworthy, 2011; Gloppen, 2009). This use of the term is in line with that of Parker and Heapy (2006), who refer to their experience-oriented journey perspective as concerning *service journeys* without explicitly picking up on the link to customer expectation management. A journey perspective similar to that of Parker and Heapy also seems reflected in a small number of studies which use the term *service journey* rather than *customer journey* (e.g. Giusti and Zancanaro, 2009; Tollestrup, 2009). However, the term *service journey* arguably does not enjoy the same traction within service management and design as does *customer journey*, possibly due to service journeys mainly concerning customer expectation management.

2.3.3 *Orchestration of clues and customer process*

In addition to service blueprinting and service journeys, other approaches and terms have been proposed to address customer- and process-oriented service provision. For example, Berry *et al.*'s (2002, 2006) call for an *orchestration of clues* that gives attention to the customer experience throughout the service process in a manner that is similar to customer journey approaches. Furthermore, Edvardsson's (1998) term *customer process* reflects a similar sensitivity for the service process as seen from the customer's point of view as does the term *customer journey*. Given the growing interest in, and awareness of, service processes and customer experience over the last two or three decades, it should be no surprise that a wide range of research and practice related to customer journeys exists. However, as customer journeys have been the main focus of this interest in recent years, the field of service management and design is in particular need of insight into the lines of work which explicitly address customer journeys so as to enable further development of this body of knowledge.

3. Research question

Though the interest in customer journeys as a topic of research and practice has spread across a range of fields, comprehensive analyses of the literature on customer journeys is missing. This represents a fundamental shortcoming. For this topic to evolve in response to the combined experiences within and across the fields of service management and design, a comprehensive literature review is needed.

This paper aims to provide an overview of existing uses of the term *customer journey* and existing customer journey approaches. This aim also entails the ambition to identify uses of related terms, such as *touchpoints*, and detail methods, procedures, or practices pertaining to the customer journey perspective. The aim of the study, hence, is to explore and understand the universe of conceptualizations and practices that are united by this term, not to map a body of literature corresponding to a detailed preconception of what customer journeys are.

To guide the review, the following research questions were stated:

1. *How is the term customer journey used in the peer-reviewed literature?*
2. *Which customer journey approaches are emerging in this literature?*

The study specifically aimed to identify, analyse, and critically discuss emerging approaches in which the term *customer journey* is explicitly applied.

Since the current interest in customer journeys is driven by increased sensitivity to customer experience (e.g. Zomerdijk and Voss, 2010), the first research question was understood as encompassing the relation between customer experience and customer journeys.

4. Method

The review was conducted as a systematic literature review, which entails a thorough, transparent, and replicable process for literature search and analysis. This choice of method is suitable as the research questions require a quantitative overview of existing terminology use and customer journey approaches before considering their variations and issues of note. The review was guided by Kitchenham and Charters' (2007) recommendations. The review process, as is detailed below, departed from these recommendations (a) in the definition of the search term, and (b) in the final analysis of the papers, to identify and analyse qualitative similarities and differences in terminology and approaches as well as issues and opportunities.

4.1 Scoping

The review was scoped to include only papers which specifically use the term *customer journey*. This scoping supports a highly targeted review on a key topic of interest within service management and design.

The scoping represents a departure from Kitchenham and Charters' (2007) recommendations, as these entail identifying synonyms and alternative terms. As such, the study does not provide systematic coverage of work on service blueprinting, service journeys, or customer experience. This does not limit the validity of the study with regard to the research objective, but poses limitations in the interpretation of the findings. In particular, the findings cannot be seen as holding implications for the general literature on these related terms and approaches. For example, the scoping allows us to use the findings to make new claims on how, for example, customer experience is treated in the peer-reviewed literature that explicitly uses the term *customer journey*, but not on how customer experience is understood in the general literature on customer journeys. Likewise, the scoping allows us to compare customer journey approaches to service blueprinting as presented in the background section, but not to make new claims on service blueprinting in general.

4.2 Search and analysis

A comprehensive overview of the relevant peer-reviewed literature required the search to be conducted in a broad literature base. Hence, we chose to make our search in Google Scholar (<http://scholar.google.com>). This search engine has a broader coverage of publication channels (Beel *et al.*, 2010) and specific fields, for example within the social sciences (Harzing, 2013) and

marketing (Soutar and Murphy, 2009), than do academic search engines such as Scopus (<http://www.elsevier.com/online-tools/scopus>) and Web of Knowledge (WoK; <http://wokinfo.com>). To check the comprehensiveness of the Google Scholar search, and potentially complement it, the search was replicated in the following search engines: Scopus, WoK, ACM Digital Library (<http://dl.acm.org>), and ScienceDirect (<http://sciencedirect.com>).

The search on "customer journey" in Google Scholar was conducted on February 25, 2013. The time-scope of the literature review was set to papers published prior to 2013. The total number of hits reported by Google Scholar was 1090. As Google Scholar shows only the first 1000 hits, only these were included. This limitation in Google Scholar did not cause concern as no relevant hits were found beyond the first 800 hits of the search result.

All hits were collated in an Excel spreadsheet as a record of the search. In total, 93 were identified as peer-reviewed journal papers and 61 as peer-reviewed conference papers. Journals were classified as peer-reviewed by definition of WoK or Scopus. Conferences were identified as peer-reviewed by virtue of accepting papers upon peer review of the full manuscript, as described on the conference webpage or in the conference proceedings.

The hits were analysed to filter out papers that mentioned customer journeys only in passing. This filtering was conducted by accessing the papers in question, reading their abstracts thoroughly, and briefly reading and searching the remainder of the paper. As an operational criterion for this filtering, this study excluded papers where the term *customer journey* was used only once or twice in the text unless the topic of customer journeys was treated in more detail in the paper by terms such as *journey* or *user journey*, provided these terms clearly were applied as synonyms to *customer journey*. Such inclusion due to combined use of the term *customer journey* and synonymous terms was relevant for five papers. In four of these, synonymy was identified in consequence of *customer journey* and the substitute term clearly being used in reference to the same type of process or process perspective. In one, synonymy is explicitly stated in the paper. This filtering excluded 99 hits; sixteen of these based on reading the abstract only, as the full manuscripts were non-retrievable.

Furthermore, 12 papers were excluded because they were non-retrievable (3), book reviews (2), duplicates (1), highly exploratory and brief (<3000 words) conference papers (2), or erroneously classified as peer-reviewed conference papers (4).

The supplementary literature searches generated a total of 61 hits in the other search engines; Scopus (33), WoK (3), ACM Digital Library (11), and ScienceDirect (14) with four of these hits overlapping. Of these hits, 15 had already been identified in the Google Scholar search and included, while 30 had already been identified and excluded. Of the remaining 16 hits, 15 were excluded as they treated customer journeys only in passing (8), were published in a trade publication (3), were highly exploratory and brief conference papers (2), had been presented at a conference with peer review of abstracts only (1), or were non-retrievable (1). The remaining hit, a peer-reviewed conference paper, was included in the total set of papers.

The retrieved papers were then scrutinized for background references on customer journeys. This process was conducted by accessing and analysing any source cited in conjunction with the term *customer journey* or customer journey approaches. One additional journal paper specifically addressing customer journeys (Whittle and Foster, 1991) was identified and included in the review. In all, the final count of reviewed papers was 45; 30 journal papers and 15 conference papers. These papers were analysed in terms of the aspects as described in Table 1.

Table 1: Aspects used for analysis of the papers included in the literature review.

<i>Aspect</i>	<i>Coding</i>	<i>Description</i>
Field of research	Data-driven categories	Identification of the field of research in which the paper is situated. If unclear from the paper's content, field of research was decided based on the paper's publication channel.
Research contribution on customer journeys	Data-driven categories	Identification and categorization of whether the paper contributes original research or findings on customer journeys.
Background on customer journeys	Yes/no and data-driven categories	Identification and categorization of the background sources on customer journeys reported in the paper (if any).
Customer journey terminology	Data-driven categories	Identification and categorization of terminology applied to describe customer journeys or customer journey elements in the paper.
Presented customer journey visualizations	Yes/no and data-driven categories	Identification and categorization of common structures in the customer journey visualizations presented in the paper (if any).
Customer journey approaches and data collection methods	Yes/no and data-driven categories	Identification and categorization of methods, procedures, or practices where a customer journey perspective is applied to analyse, model, manage, or (re)design the service process as experienced by the customer, including data collection methods applied for this purpose (if any).
The relation to customer experience	Yes/no and data-driven categories	Identification of links made between customer journeys and customer experience (if any), and analysis of how customer journey approaches are set up to support management and design for customer experience.

The analysis of the papers involved three researchers (including the authors of this paper). One of these (the first author) was the main reader and coder of the papers. The two others were involved in planning the analysis, reading key papers, discussing during the analysis, and checking

the analysis results. Establishing data-driven categories during the analysis followed Ezzy's (2013) recommendations for thematic analysis. The analysis was based on two data types: the (a) textual and (b) visual content of the reviewed papers. The visual content of interest included the presented customer journey visualizations. We will, in the results section, make clear when the analysis is based on the visual content of the reviewed papers.

In a systematic literature review, the issue of publication bias should be addressed. Publication bias concerns the tendency of over-reporting findings that conform to the researchers' expectations; in particular, the over-reporting of findings in line with the researchers' hypotheses. According to Kitchenham and Charters (2007), publication bias is a particular threat for reviews of studies reporting on hypotheses testing in classical experiments. Our review does not include any studies reporting on hypotheses testing, but rather studies reporting on method experiences and case studies. Here, publication bias may be discussed relative to whether the findings adhere to existing frameworks within the literature or perspectives with communities of researchers or practitioners. To check for potential publication bias, we have based the review on a background which also covers the non-peer-reviewed papers. For this purpose, we have scanned the practitioner literature. In particular, we have thoroughly considered all practitioner sources referenced as background on customer journeys in the reviewed papers. Furthermore, the inclusion of both conference and journal papers in the review may provide insight into publication bias, as conferences typically are lower threshold publication arenas than journals and, hence, a potential outlet for findings which go against established frameworks or perspectives.

The next section presents the results of the analysis, structured as follows. First, an overview of the reviewed papers is provided (5.1). Then we present findings concerning the link between customer journeys and customer experience (5.2), customer journey terminology (5.3), and customer journey approaches (5.4). Throughout the results presentation, the analysis is augmented with details from some of the papers to serve as concrete examples. The papers chosen to exemplify the findings are selected based on their relevance for each analysis aspect. As the papers vary in their relevance for each analysis aspect, some papers are used more as examples than others.

5. Results

5.1 Overview of the reviewed papers and referred works

Though the earliest identified peer-reviewed paper on customer journeys is more than 20 years old (Whittle and Foster, 1991), the vast majority of the papers are published since 2009. A detailed overview of the papers is provided in the Appendix. See Table 2 for an overview of the number of papers according to publication year.

Table 2: Distribution of the reviewed papers according to publication year.

<i>Year</i>	<i>Journal</i>	<i>Conference</i>	<i>Total</i>
1991	1	0	1
1993	1	0	1
1999	1	0	1
2007	1	0	1
2008	0	2	2
2009	4	5	9
2010	5	3	8
2011	9	1	10
2012	8	4	12
Total	30	15	45

The papers concern application areas as diverse as tourism, transport, banking, eCommerce, telecom, amusement parks, education, and accessibility, and are distributed mainly across the fields of design (18), management (14), and marketing (13). These fields are in some of the papers sought bridged. For these papers, field classification was done according to the field targeted by its publication channel.

The two most referenced background sources in the papers are Parker and Heapy's (2006) service design pamphlet *The Journey to the Interface. How Public Service Design Can Connect Users to Reform* (mentioned in four of the reviewed papers) and the work of Zomerdijk and Voss (mentioned in five of the papers), including their book chapter *Innovation in Experiential Services - An Empirical View* (Voss and Zomerdijk, 2007) and their journal paper *Service Design for Experience-Centric Services* (Zomerdijk and Voss, 2010). Other previous works mentioned as background in more than one paper are Stickdorn's work on service design (Stickdorn, 2009; Stickdorn and Schneider, 2010), Richardson's book *Innovation X: Solutions for the New Breed of Complex Problems Facing Business* (Richardson, 2010), Dunn and Davis' *Brand Touchpoint Wheel* (Davis and Dunn, 2002; Dunn and Davis, 2003), Buttle's work on customer relationship management (Ang and Buttle, 2002; Buttle, 2003), and the HM Government guide on customer journey mapping (Varney, 2006; HM Government, 2007).

In most of the reviewed papers, the customer journey perspective is not the key topic of interest. The term *customer journey* is *not* mentioned in the title, abstract, or keywords of the majority of the papers (32). Rather, the customer journey perspective is typically presented or discussed as one of several topics of relevance to service design or management, or customer journey approaches are used as parts of larger studies. For example, Bridge (2012) discusses

customer journey mapping as one of several approaches to support the management and design of citizen centric services. Clatworthy (2010, 2011) treats customer journey mapping and redesign in the context of a service design method for touchpoint innovation. Kimbell (2011) presents three case studies of service design companies where customer journey mapping is one of several approaches in use by the studied service design agencies.

Thirty-three of the papers were found to make original contributions of relevance for the customer journey perspective, in the form of case experiences (24), method support (14), or interviews with service designers (2). For example, Trischler and Zehrer (2012) present findings from a customer journey mapping in the case of an amusement park. Zomerdijk and Voss (2010, 2011) report on the design of experiential services using customer journey approaches on the basis of data from multiple cases. Segelström and Holmlid (2009) discuss the use of customer journey visualizations in user research based on an interview study with service designers from different organizations. The 12 remaining papers present a customer journey perspective as background only.

In the subsequent analyses, we do not distinguish between papers that make original contributions of relevance for the customer journey perspective and those that do not, as we have not found this to represent a key differentiator for the use of terminology or perspectives on various approaches. We nevertheless find this to be relevant background information as it provides an indication as to the degree to which the reviewed work contains original research contributions.

Some papers also present customer journey visualizations (16 papers, e.g. Crosier and Handford, 2012; Stickdorn and Zehrer, 2009; Trischler and Zehrer, 2012). The visualizations are highly diverse, as is exemplified by Figures 1–3 later in the paper. However, a few common features were identified. The journeys are typically visualized as processes spanning a number of steps, stages, touchpoints, or activities; as a horizontal line or row (11 papers, e.g. Bridge, 2012; Huang *et al.*, 2012; Peterson *et al.*, 2010) or a vertical line or column (Johns and Clark, 1993; Rasila *et al.*, 2009; Whittle and Foster, 1991). The visualizations were found to be augmented with diverse types of information such as customer emotions (e.g. Trischler and Zehrer, 2012), customer needs (e.g. Bridge, 2012), customer requirements (e.g. Huang *et al.*, 2012), and pain-points (e.g. Rasila *et al.*, 2009). No visualizations include all the above-mentioned information types. Rather, the content of the visualizations seems to have been selected based on specific needs and preferences rather than commonly shared conventions.

5.2 Customer journeys and customer experience

As a first step in our investigation of how the term *customer journey* is used, we reviewed how customer experience is treated in the reviewed papers. We identified the papers explicitly linking the customer journey perspective to customer experience, and classified how these report on the customer journey perspective.

5.2.1 Customer journeys to support management and design for customer experience

We find the customer journey perspective to be closely linked to the notion of *customer experience*

in the vast majority of the reviewed papers (40); sometimes termed *service experience* (e.g. Shaw and Williams, 2009; Segelström and Holmlid, 2009, 2012; Trischler and Zehrer, 2012) or *user experience* (e.g. Huang *et al.*, 2012; Mangiaracina *et al.*, 2009). The customer journey perspective is often presented as a means to understand customer experience. Trischler and Zehrer (2012) describe customer journey maps as a way to visualize research on experiences. Kankainen *et al.* (2012) view the customer journey perspective as a means to "describe the process of experiencing service" (p. 221). Crosier and Handford (2012) consider customer journey mapping as an approach to analyse "emotional responses to products, goods, and services" (p. 68). In these papers, the customer journey perspective is not only seen as a means to take the customer's point of view, but also as a means to reach insight into their experiences. This aspect is in some papers related to "empathizing" with the customer, and is argued to be important on multiple levels for service designers (e.g. Miettinen *et al.*, 2012; Spraragen and Chan, 2008; Steen *et al.*, 2011) as well as service managers (e.g. Baranova *et al.*, 2011; Peterson *et al.*, 2010; Rasila *et al.*, 2009). For example, Crosier and Handford (2012) assert that such empathizing is important to promote services for customers with special needs. Kimbell (2011) discusses how learning about customers' experiences attune service managers and designers to the needs of customers. Bridge (2012) connects empathizing with customers to improved involvement of customers in co-design processes, and Kronqvist and Korhonen (2009) show how such empathizing may drive the design process.

In one of the earliest papers identified in the review, Johns and Clark (1993) argue that the customer journey perspective strengthens service experience management. This argument has since been expanded to a point where customer journey approaches can be used to change and improve customers' experiences as part of a design process (Steen *et al.*, 2011). The customer journey perspective is seen as relevant not only as a means to understand the customer experience but also to design for customer experiences.

5.2.2 Customer journeys and customer experience assessment

The link between the customer journey perspective and customer experience is also illustrated in customer experience assessments, included as part of the customer journey visualizations in five of the reviewed papers (Crosier and Handford, 2012; Rasila *et al.*, 2009; Stickdorn and Zehrer, 2009; Trischler and Zehrer, 2012; Yeh *et al.*, 2012). These were identified through our analysis of the visual content in the papers. For example, in a customer journey map by Trischler and Zehrer (see Figure 1), customer experience in terms of "dissatisfaction" and "satisfaction" is presented as a plotted line below a schematic presentation of the journey. Stickdorn and Zehrer (see Figure 2) present customer experience scores for each touchpoint in their customer journey map. And Crosier and Handford (see Figure 3) illustrate customer experience in terms of "emotional response" scores as an integrated part of the customer journey visualization.

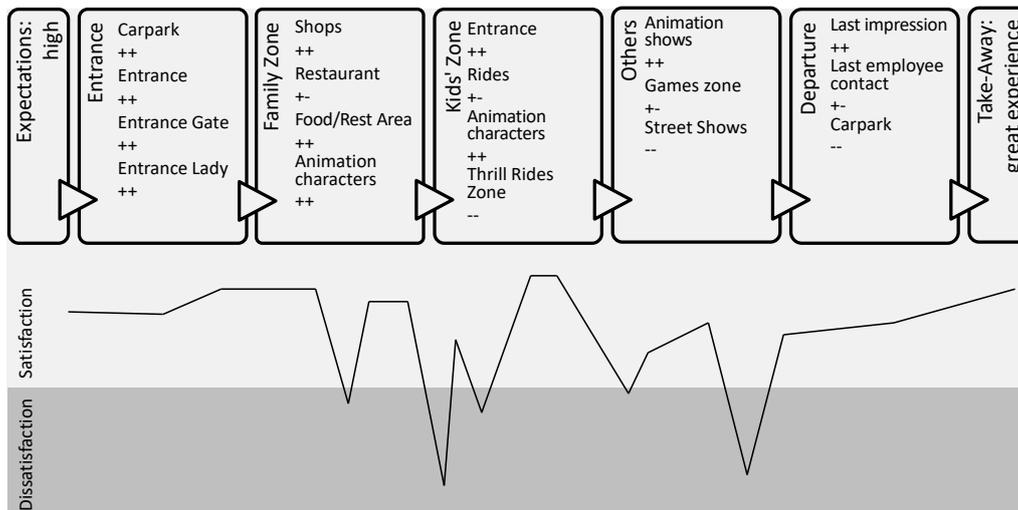


Figure 1: Example customer journey map to support management/marketing (redrawn from Trischler and Zehrer, 2012, p. 65).

The data sources on which such customer experience assessments are based vary between the papers. In one of the papers (Stickdorn and Zehrer, 2009), the visualized customer experience assessments is an aggregate of the customers' reported experience ratings. In the other papers (Crosier and Handford, 2012; Rasila *et al.*, 2009, Trischler and Zehrer, 2012, Yeh *et al.*, 2012), the customer experience assessments are based on the researchers' interpretations of qualitative experience data gathered through interviews or observations. Such data may also be reported as qualitative descriptions in the customer journey visualizations (e.g. Crosier and Handford, 2012; Yeh *et al.*, 2012) as seen in Figure 3.

5.2.3 Customer journeys to investigate and communicate common experiences

Though customer experience is often taken to concern responses of a subjective character (e.g. Teixeira *et al.*, 2012), it is noteworthy that the analyses reported in the reviewed papers typically concern experiences that are common or typical rather than individual or subjective (e.g. Baranova *et al.*, 2011; Clatworthy, 2010; Huang *et al.*, 2012; Johns and Clark, 1993; Mangiaracina *et al.*, 2009; Rasila *et al.*, 2009). For example, Huang *et al.* (2012) present extended customer journey maps for different user types. The workshop-based service design method proposed by Clatworthy (2010) concerns the mapping and design of typical customer journeys for identified customer and actor constellations.

This tendency to consider common or typical customer experience is exemplified in the customer journey visualizations presented in the reviewed papers. The presented visualizations consistently provide overviews of aggregates of observations or reports from multiple customers, rather than deep-dives into a single customer's experiences. For example, the customer journey visualizations presented in Figures 1–3 (Crosier and Handford, 2012; Stickdorn and Zehrer, 2009; Trischler and Zehrer, 2012) are all visualized as a single sequence of events or touchpoints, based on the data from several people. This does not, however, imply that experience data are not gathered at the level of individual customers. For example, the visualizations presented in Figure 1–3 are all

based on data gathered at the level of individual customers and some, such as Crosier and Handford (2012), also report on example qualitative data from individual customers.

5.3 Customer journey terminology

We have already seen that customer journeys concern customer experience. But what is meant by the term *customer journey*? In the reviewed papers, this term is typically used in reference to a process, path, or sequence through which a customer access or use a service. The descriptions and definitions typically highlight the customer-centric character of the customer journey perspective. For example, Kankainen *et al.* (2012) describe the customer journey as "the process of experiencing service through different touchpoints from the customer's point of view" (p. 221). Patrício *et al.* (2011) define the customer journey as "a series of touchpoints, involving all activities and events related to the delivery of the service from the customer's perspective" (p. 182). Zomerdijk and Voss (2010) report that "case study companies often referred to a series of touchpoints as the customer journey. The customer journey involves all activities and events related to the delivery of a service from the customer's perspective" (p. 74).

5.3.1 Variations in the use of the term customer journey

The reviewed papers vary considerably in their scoping of customer journeys. Some focus on clearly delimited journeys that "has a start and an end" (Whittle and Foster, 1991, p. 18), while others target more open-ended journeys such as the transition "from never-a-customer to always-a-customer" (Nichita *et al.*, 2012). An example of the former is the decision journey described by Lee (2010), that is, "the online journey a customer makes from first interacting with a company's online media through to the online purchase." (p. 17). An example of the latter is the retention journey of Stone and Liyanearachchi (2007) which encompasses the life-cycle stages of *pre-acquisitions, welcoming, maturity, and renewal*.

Other papers scope the customer journey to concern a particular service offering, but slightly extended so as to capture issues immediately before and after service delivery. For example, Stickdorn and Zehrer (2009), in their presentation of a customer journey associated with a tourist destination, consider the journey to start with the customer's preparations for the hotel stay in the *pre-service phase* and end when the customer has answered the hotel rating request in the *post-service phase* (see Figure 2). Peterson *et al.* (2010) describe the customer journey as "starting from the moment customers initially indicate interest, through the time they spend gathering information, to when they complete a transaction and seek post-sale support" (p. 11).

Considerable variation is also found in the degree to which the customer journey spans multiple touchpoints, channels, and service providers. On the one extreme, Mangiaracina *et al.* (2009) propose a customer journey approach to analyse the customer's process within a single e-commerce website. On the other extreme, Crosier and Handford (2012), in a paper on customer journey mapping as an advocacy tool for disabled people, present customer journey maps that encompass multiple channels and service providers (see Figure 3). Some customer journey

approaches concern multiple points of contact within the same channel, such as the online customer journey analysis presented by Lee (2010) or the amusement park analysis presented by Trischler and Zehrer (2012). Other approaches concern multiple channels and multiple points of contact, such as the customer journeys presented by Patrício *et al.* (2011) in their case examples of multilevel service design.

5.3.2 Variations in the use of the term touchpoint

The reviewed papers vary not only in their scoping of customer journeys, but also in the terminology used to describe aspects of customer journeys, such as *touchpoints*, *steps*, *stages*, and *periods*. The same terms are given slightly different meanings, and different terms are given the same meaning.

The term *Touchpoint* is used in most of the reviewed papers (30), though thoroughly described or defined in only a few (8). In these papers, touchpoints are seen as the building blocks of customer journeys in the sense that customer journeys are defined or described as a set or sequence of touchpoints (e.g. Gloppen, 2009; Clatworthy, 2011; Kankainen *et al.*, 2012). While our analysis of the *touchpoint* term is based on the textual content of the reviewed papers, we note that touchpoints also are central in several of the presented customer journey visualizations (e.g. Xinhui, 2008; Shaw and Williams, 2009; Stickdorn and Zehrer, 2009; Trischler and Zehrer, 2012; Yeh *et al.*, 2012). Figure 2 presents an example customer journey with touchpoints, such as *hotel website*, *hotel check in*, and *hotel rating website*.

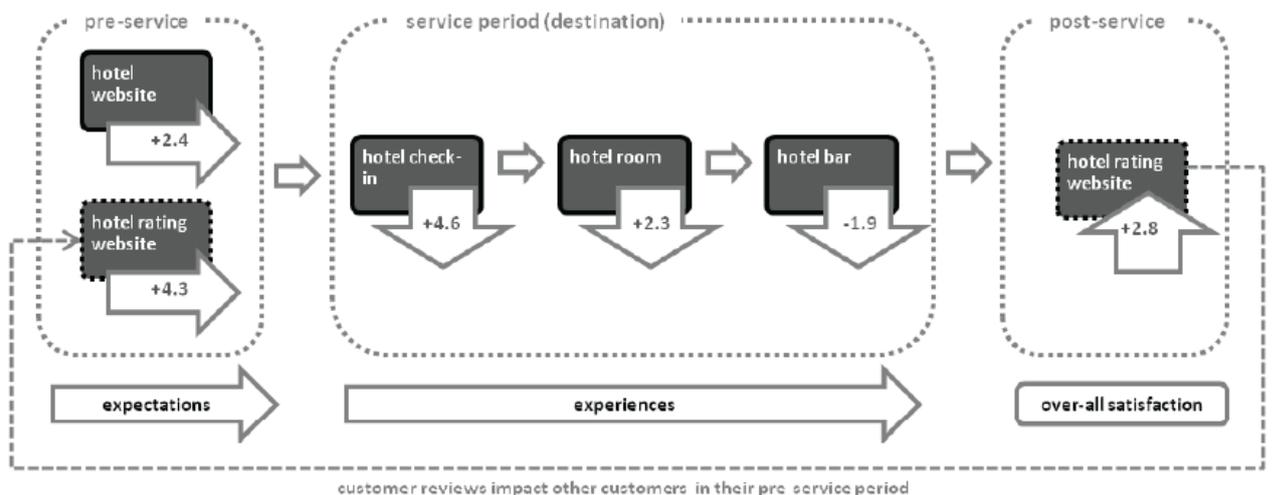


Figure 2. Customer journey with touchpoints concerning a tourist destination (Stickdorn and Zehrer, 2009, p. 8). Copyright held by Stickdorn and Zehrer (permission granted).

Some variation exists in the reviewed papers concerning the *touchpoint* term. Some authors describe *touchpoints* as instances of interaction or communication between a customer and a service provider (Zomerdiijk and Voss, 2010, 2011; Patrício *et al.*, 2011). For example, Zomerdiijk and Voss (2011) present touchpoints as "moments of contact between the customer and the organization" (p.

74). Others view *touchpoints* as the location or channel mediating the interaction or communication (Clatworthy, 2010, 2011). Here, touchpoints are described to include, for example, physical buildings, websites, print-outs, self-service machines, and customer assistants. Yet others make no clear distinction between the two above uses of *touchpoints* (Stickdorn and Zehrer, 2009; Gloppen, 2009; Kimbell, 2011). These latter authors seem to see touchpoints as including instances of interaction and communication as well as tangible objects and the physical surroundings.

Despite the importance attributed to touchpoints in most of the reviewed papers, a substantial minority of the papers (15) do not use this term at all. Nevertheless, most of these papers concern what could be referred to as touchpoints e.g. by Clatworthy (2010, 2011). For example, Johns and Clark (1993) include *entry*, *museum exhibits* and *exit* in their museum customer journey, though they do not refer to these as touchpoints.

5.3.3 Variations in the sectioning of customer journeys.

Customer journeys are often divided into sections (27 papers), typically termed *steps* or *stages* (e.g. Crosier and Handford, 2012; Kimbell, 2011; Patrício *et al.*, 2011; Rasila *et al.*, 2009). Other terms in use for such sections are *events* (Johns and Clark, 1993; Kankainen *et al.*, 2012), or *periods* (Stickdorn and Zehrer, 2009). This sectioning, while identified on the basis of the textual content of the reviewed papers, is also seen in the presented visualizations. Figure 3 presents a customer journey structured in sections. The figure represents the downtown shopping preparation and experiences of visually impaired people (Crosier and Handford, 2012). Such sectioning may be useful to add structure to the analysis and provide an easy overview of the visualized customer journey.

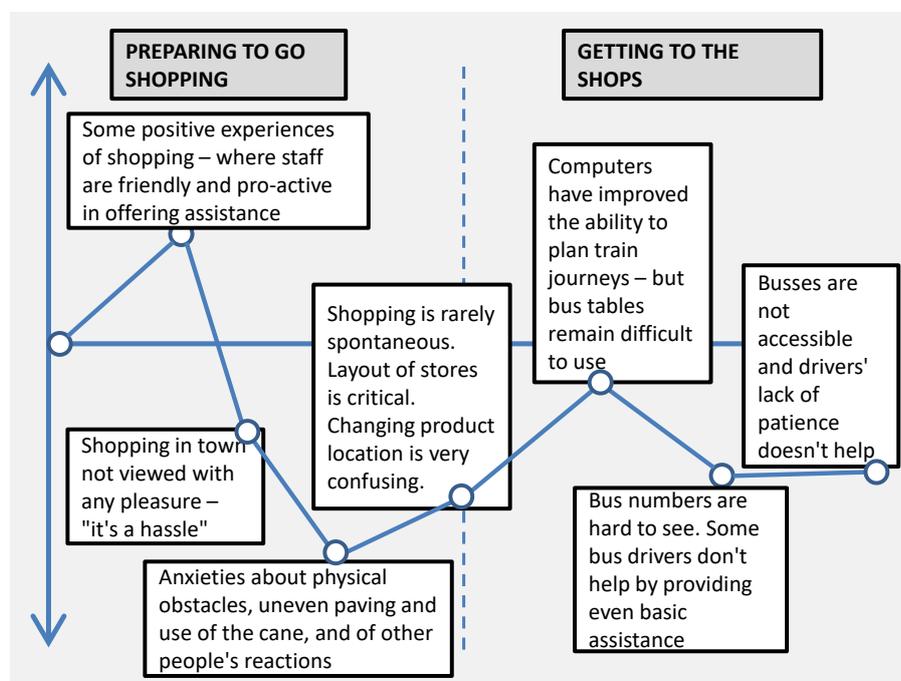


Figure 3: Customer journey concerning blind or partially sighted people shopping (redrawn from Crosier and Handford, 2012, p. 75) Vertical axis: Emotional response.

Customer journeys are sectioned according to various characteristics. In some of the papers, the sectioning is conducted with reference to customers' activities. For example, in the analysis of a journey concerning arrival for work at a business park, Rasila *et al.* (2009) section the journey according to customer tasks like *parking the bike, entering the building, taking a shower, and entering the main lobby*. In other papers, the sectioning is conducted according to the overall structure of the service or service environment. For example, in the amusement park journey analysed by Trischler and Zehrer (2012), the journey is sectioned according to park zones such as *car park, family zone, kids' zone, and departure* (see Figure 1). Some also present journeys that are sectioned according to a pre-phase, a main service phase, and a post-phase, as for example in the tourist destination customer journey by Stickdorn and Zehrer (see Figure 2).

5.4 Customer journey approaches

In the analysis of the papers, it was found that customer journey approaches can be grouped into two broad groups: *customer journey mapping* and *customer journey proposition*, reflecting two complementary ways in which customer journeys are applied in service management and design. These two groups are presented below.

5.4.1 Customer journey mapping

Customer journey mapping is the activities to analyse an existing service process "as is". Hence, customer journey mapping addresses implemented service processes, and typically encompasses data collection with customers and/or internals, qualitative and/or quantitative data analysis, and presentations of findings, typically in the form of visualizations. Customer journey mapping is often presented as part of the research phase of a design process.

About half the reviewed papers (24) were found to describe or discuss customer journey mapping (see the two columns on customer journey mapping in the Appendix). Often, this approach is explicitly referred to as *mapping* (e.g. Crosier and Handford, 2012; Trischler and Zehrer, 2012; Zomerdijk and Voss, 2010). However, some do not use this term but rather refer to this type of activity e.g. as *documentation and assessment* of customer journeys (Stickdorn and Zehrer, 2009) or journey-based *audits* (Johns and Clark, 1993). Yet others do not use a specific term for customer journey mapping, but rather discuss customer journeys as a means for service designers to summarize or visualize customer research (e.g. Segelström, 2009; Segelström and Holmlid, 2012).

Customer journey mapping is typically seen as part of a more comprehensive design process in the papers that described such mapping. For example, Steen *et al.* (2011) present a case where the mapped customer journey was used as input for redesigning a post box service. However, this link to design is not always present. For example, Johns and Clark (1993) present customer journey mapping as a way to monitor the service provided by museums and galleries. This variation indicate that customer journey mapping may be conducted both as part of service design processes and for the purpose of managing implemented services.

The presented mappings are based on a diverse set of data sources, including input from

customers, external consultants, and company internal experts. Data from customers are typically collected on an individual basis; in particular, through interviews and observation. Data from company internal resources are typically collected through collaborative methods or processes, such as workshops (Clatworthy, 2010, 2011) or other co-design processes (Steen *et al.*, 2011); something that may enable sharing across organizational silos. Interestingly, only a few papers report on cases where customer journeys have been mapped on the basis of data from both company internals and customers (Baranova *et al.*, 2011; Steen *et al.*, 2011; Zomerdijk and Voss, 2010, 2011).

Customer journey mapping is nearly ubiquitously reported as involving some kind of visualization. Of the 24 papers that concern customer journey mapping, 22 report on the use of some kind of visualization, typically referred to as a *customer journey map* (e.g. Kimbell, 2011; Stickdorn and Zehrer, 2009; Zomerdijk and Voss, 2010) but also, for example, *flow model* (Yoo *et al.*, 2010), *flowchart of the visitor journey* (Johns and Clark, 1993), or *experience sheet* (Rasila *et al.*, 2009).

5.4.2 Customer journey proposition

In this study, *customer journey proposition* refers to generative design activities within a customer journey perspective which leads towards a possible service "to be". This is the second main group of customer journey approaches identified in the analysis. Customer journey proposition is typically reported as part of larger design processes; processes which may also include customer journey mapping. The term *customer journey proposition* is not used in any of the reviewed papers, but is a term of our making. The term is suitable because it alludes to the customer journey as something that can be designed for, bearing in mind that the actual journey is something each customer experiences in the meeting with the service provider.

Customer journey proposition is treated in some detail in only six of the reviewed papers, with descriptions of participants and / or method support (see the two columns on customer journey proposition in the Appendix). More often, the reviewed papers were found to present the generative phases of development in more general terms without direct reference to the application of a specific customer journey approach (e.g. Bridge, 2012; Huang *et al.*, 2012). Some (e.g. Kronqvist and Korhonen, 2009; Yoo *et al.*, 2010) describe how customer journey maps may be used as background information in co-creative workshops, but without presenting any detail on how a customer journey perspective may be used to guide the generative workshop activities. Others report on cases involving design or redesign activities intended for service improvement on the basis of a customer journey perspective, but without details on how the generative design activities had proceeded (Zomerdijk and Voss, 2010, 2011).

A small number of the reviewed papers do, however, present customer journey proposition in some detail. Steen *et al.* (2011) report on a workshop where all employees involved in a service design project jointly designed for an improved customer journey. Clatworthy (2010, 2011) presents a co-design activity where key touchpoints of a customer journey map are removed to spur reflection on what kind of touchpoint could serve as a better replacement. Kankainen *et al.* (2012)

present customer journey proposition involving customers in the form of a storytelling group method where users were invited to formulate "dream journeys" during co-design workshops, and Miettinen *et al.* (2012) report on case experiences with design for a novel customer journey through service prototyping. Finally, Patrício *et al.* (2011), as part of the multilevel service design framework, present modelling support for visualization and analysis of novel customer journeys.

6. Discussion

In response to the need for a common understanding on which to base future work within the customer journey perspective, this study has provided findings from a systematic review of the peer-reviewed literature. The following sections discuss the reviewed literature based on the findings. The discussion is structured according to the main research questions concerning (1) how the term *customer journey* is used and (2) emerging customer journey approaches.

6.1 How is the term customer journey used?

To investigate how the term *customer journey* is used, we first analysed the relation between customer journeys and customer experience before investigating the customer journey terminology as applied in the reviewed papers.

6.1.1 Customer journeys for customer experience

Customer experience is seen as a key competitive advantage in the service sector. However, as argued by Meyer and Schwager (2007), while customer experience is potentially affected by every communication or interaction between the company and its customers, company decisions concerning particular aspects of a service are often made without considering their effect on the total customer experience. The increasing uptake of the customer journey perspective may, hence, be due to a growing awareness of the need to manage and design for customer experience across touchpoints and service offerings (Zomerdijsk and Voss, 2010). The customer journey perspective also reverberates the call of Berry and colleagues (Berry *et al.*, 2002, 2006) for increased attention towards the series of customer communications and interactions that constitute the basis for customer experience.

In the analysis of the reviewed papers, the close link between the customer journey perspective and the notion of customer experience is illustrated by the fact that almost all the reviewed papers concern both customer journeys and customer experience. As the customer journey perspective has been adopted to support the management and design for customer experience, customer journeys are understood to concern more than just the observable series of steps or touchpoints which a customer goes through as part of service provision; customer journeys are also taken to concern the emotional and cognitive responses in the customer. When Trischler and Zehrer (2012) present the mapped customer journey of an amusement park, they not only describe the journey in terms of its steps or touchpoints; they also describe what the customers think and feel throughout the park visit. Likewise, when Crosier and Handford (2012) report on the mapped customer journey of visually

impaired shoppers, they highlight the shoppers' thoughts and feelings in addition to their observable behaviour.

It is interesting to note that though the customer journey perspective concerns customer experience and the customer's point of view, the analysis is nearly always conducted at the level of common or typical customer experiences. This leaning towards the common or typical customer journey has previously been observed by Gudiksen and Brandt (2014), who argue that research on customer journeys "do not seem to question if customers always go through the same order of touchpoints" (p. 111). Based on our findings, we may complement and nuance this observation of Gudiksen and Brandt. Yes, research in service design seems to favour typical customer journeys. At the same time, customer journey analyses may also highlight variation. For example, the multilevel service design framework of Patrício *et al.* (2011) supports the analysis of multiple typical journeys depending on touchpoint or service interface configurations. And the customer journey analyses presented by, for example, Trischler and Zehrer (2012) show how different target groups may have different customer journeys. It may also be noted that whereas the customer journey routinely is analysed on the level of common or typical journeys, data are often gathered on the level of individual customers. Hence, it may be argued that the inclination towards aggregated customer journeys is due to a need to gain the overview required to comprehend and make use of the gathered material from individual customers. Nevertheless, pursuing the argument of Gudiksen and Brandt (2014), it may be beneficial also to consider individual customers' journeys as analysis output.

6.1.2 *Incoherent terminology?*

Existing customer journey terminology is associated with several issues. In the reviewed papers, terms such as *customer journey* and *touchpoints* are often used without being defined or described. Furthermore, there is significant divergence in how key terms are used. For example, presented customer journey analyses vary considerably in scope and the term *touchpoints* takes on various meanings. The variation observed in the visualizations of customer journeys may also serve as an indication of incoherence in terminology.

Incoherence in terminology may represent a challenge when considering customer journeys as an object of rigorous study and analysis (Halvorsrud *et al.*, 2014, 2016). Nevertheless, any study of customer journeys will need to be sensitive to the origins of the customer journey perspective. The customer journey perspective has not been developed through theoretically grounded academic enquiry. Rather, it has been developed as part of the evolving practice of service design, as is clearly seen in the two most cited background resources on this perspective: the pamphlet by Parker and Heapy (2006), written by practitioners for practitioners, and the work of Voss and Zomerdiijk (2007; Zomerdiijk and Voss, 2010, 2011), a systematic study of service design practitioners. For the service practitioner, clarity in definitions may not be a goal in itself. On the contrary, if the objective of the customer journey perspective is to drive innovation in the domain of experiential services, a malleable terminology may be a strength rather than a weakness as this may support new insight

and ideation.

In the introductory sections to their book on service design thinking, Stickdorn and Schneider (2010), while aiming to "propose the basis for a common language of service design" (p. 29), point out that premature definitions of an evolving phenomenon might imply non-beneficial constraints. How can we adequately define what we yet do not know? While rigorous definitions indeed can reduce the flexible and versatile nature of the customer journey perspective and terminology, increased rigor in terminology may also potentially strengthen communication in multi-disciplinary teams and organizations. Possibly, the needed degree of rigor in customer journey terminology may depend on the service design context. Hence, flexibility in terminology may be beneficial for proposing new directions, whereas rigor in terminology may be beneficial from the perspective of cross-disciplinary collaboration in service implementation.

6.1.3 Towards a common terminology of customer journeys

Moving towards a common terminology for researchers and practitioners holding a customer journey perspective, requires sensitivity concerning the dual purposes such a terminology should support; rigorous analysis and theory building versus innovative and perspective-changing design practice. In the following, we will discuss some implications of these two ways to understand customer journey terminology in light of the reviewed papers.

Customer journeys

In the reviewed literature, it seems universally accepted that customer journeys concern the service process as seen from the customer viewpoint. Furthermore, customer journeys are typically described or defined as a series of steps and/or touchpoints. That is, the descriptions and definitions typically concern the observable elements of the customer journey. As such, customer journeys as presented in the reviewed papers, as well as acknowledged text books on service design (e.g. Stickdorn and Schneider, 2010; Meroni and Sangiorgi, 2011), are congruent with the classification of customer journey visualizations as flows in the framework of Diana *et al.* (2009); that is, visual representations of the service process as unfolding in time at a relatively high level of abstraction.

It is, however, noteworthy that a description and definition of customer journeys as a series of steps and/or touchpoints does not explicitly address a key characteristic of customer journeys: the strong link to customer experience. Although customer experience is mentioned in relation to customer journeys in most of the reviewed papers, the term *customer experience* is hardly defined in any of these papers. Furthermore, customer experience is not explicitly included in the definitions of customer journeys. Hence, there seems to be a potential for improving existing definitions of customer journeys; a complete definition of *customer journey* may benefit from considering also the concern for the subjectively experienced aspects of customer journeys, not only the objectively observable string of touchpoints.

What about the scope of customer journeys? Should this also be part of a general definition of customer journeys? We have seen that the scope of customer journeys is highly flexible across the

reviewed papers. The journey can be a clearly defined service process, as in the amusement park journey of Trischler and Zehrer (2012), or a more open-ended process, as in the tourist destination journey of Stickdorn and Zehrer (2009). Furthermore, the journey may be single-channel (e.g. Mangiaracina *et al.*, 2009) or multi-channel (e.g. Patrício *et al.*, 2011), and it may concern either single (Trischler and Zehrer, 2012) or multiple (e.g. Crosier and Handford, 2012) service providers. There is no sign in the literature that this variation in the scope of customer journeys is seen as problematic. The variation in the scope of the journeys seems to reflect the rich and diverse nature of services targeted by the 45 papers we have reviewed. Possibly, this variation in scope is a manifestation of what Stickdorn and Schneider (2010) view as beneficial flexibility in terminology.

The elements of customer journeys

The terminology concerning the elements of customer journeys may be divided in two main groups: terms referencing sections of customer journeys and terms referencing individual points of interaction or communication between the customer and the service provider.

Terms referencing sections of customer journeys, such as *steps*, *stages*, or *events* were found typically to indicate an ad-hoc structuring of customer journeys. That is, the customer journey is structured according to the particular context of the customer journey under analysis, not according to a predefined framework. For example, the amusement park journey analysed by Trischler and Zehrer (2012) is structured according to the zones of a particular park. Such ad-hoc structuring may indeed signify useful flexibility in customer journey terminology. However, it may for some purposes be beneficial to section customer journeys according to a commonly applied set of units. An example of such units could be the division of customer journeys into *pre-service*, *service*, and *post-service*, as suggested by Stickdorn and Zehrer (2009). This structure reflects an established understanding of service, as is seen e.g. in early models of service consumption (Fisk, 1981). Stickdorn and Schneider (2010) likewise recommended this structure in their book on service design thinking.

Touchpoints, the term typically used to reference the individual points of interaction or communication with the customer, may also be associated with some issues. First, not all authors use this term, though they describe customer journey elements that could be classified as touchpoints, following the understanding of this term as reflected in Clatworthy (2010, 2011). Second, the term *touchpoints* is given at least two different meanings in the reviewed literature; touchpoints understood as resembling the service encounters of the service management literature and touchpoints understood as encompassing also the channels or physical surroundings per se.

For researchers and practitioners of service management and design, it will be important to be aware of the variation in the use of the term *touchpoint*. In tightly knit design or management teams, the lack of a common definition of touchpoints in the general literature will hardly be an issue. However, when communicating across disciplinary borders or organizational silos, such variation may be problematic.

6.2 Which customer journey approaches are emerging?

Customer journey mapping and customer journey proposition have been presented as two main customer journey approaches. For each of these, we will discuss key issues and opportunities.

6.2.1 Issues and opportunities in customer journey mapping

Customer journey mapping provides valuable insight in service provision "as is", and is by far the most reported customer journey approach. Customer journey mapping clearly is a useful and versatile approach for service designers and managers alike, as indicated by its prominence among practitioners (Segelström and Holmlid, 2009; Segelström, 2013).

In the reviewed papers, customer journey mapping typically refers to a process of customer research including data collection and analysis, in addition to the use of visualizations. This is in line with Segelström's (2013) classification of customer journey visualizations as a means to support the design phase of interpretative research. However, the reviewed papers serve to extend Segelström's analysis as they provide insight into how the user research that is visualized in the customer journey maps has come into being. Customer journey mapping typically refers to a process that may involve observation studies (e.g. Huang *et al.*, 2012; Yoo *et al.*, 2010), interviews (e.g. Baranova *et al.*, 2011; Crosier and Handford, 2012), and workshops (e.g. Clatworthy, 2010, 2011), as well as complex qualitative and/or quantitative analysis where data from multiple sources are gathered to form customer journey maps (e.g. Stickdorn and Zehrer, 2009; Trischler and Zehrer, 2012). This rather complex process of data collection and analysis, however, does not seem to be treated in the needed detail in current introductory sources on customer journey mapping (e.g. Stickdorn and Schneider, 2010; Meroni and Sangiorgi, 2011). Here, the focus of attention rather is on presenting the customer journey perspective and visualizations of customer journeys, rather than the underlying data gathering and analysis needed to conduct customer journey mapping. The lack in common methodological guidance on customer journey mapping is also reflected in the great variation in data collection methods applied for this purpose; from informal interviews (e.g. Baranova *et al.*, 2011) to data collection through smartphone apps (e.g. Stickdorn and Zehrer, 2009). Here, the literature review serves to identify the need for a commonly acknowledged understanding of the details of customer journey mapping. At the same time, as discussed by Segelström (2013), the purpose of customer journey mapping in general, and its visual output in particular, is not only to provide an overview of customer insight, but also to strengthen stakeholders' empathy with the customers. Hence, the need for increased methodological guidance on customer journey mapping should be seen in light of customer journey mapping as a process leading to increased stakeholder empathy something that may pose other requirements on the process and outcome than mere method and analytical rigor. Furthermore, for the visual output of customer journey mapping to serve a communicative purpose, it may not necessarily be beneficial that these are comprehensive and rigorous presentations. Rather, the researcher may benefit from flexibility in expression and choice of content.

Two main routes to customer journey mapping are identified in the reviewed papers. First, some of the presented studies solely base the customer journey mapping on data from customers. For example, Trischler and Zehrer (2012), in their analysis of an amusement park journey, gather insight data on the basis of customer interviews and observations only. Then, some of the presented studies consider the management expectations for customers' experience. For example, Clatworthy (2010) present a method for touchpoint innovation where customer journeys are mapped on the basis of data from company internals. Indeed, a few papers gather data from both customers and company internals (Baranova *et al.*, 2011; Steen *et al.*, 2011; Zomerdijk and Voss, 2010, 2011), but none of these systematically compare the findings from these two data sources. From service research, we know that the service performance gap (Bitner *et al.*, 2010) is a challenge to service providers. That is, service providers may fail to meet customers' expectations due to a discrepancy between intended service design and actual service delivery. To close this gap, systematic comparison of the customer journey as expected by company internals and the customer journey as experienced by customers may be valuable. Early method support for closing this gap was provided by the HM Government guide on customer journey mapping (HM Government, 2007), and more recently by Halvorsrud *et al.*, (2016).

, Our analysis of customer journey mapping serves as a valuable supplement to the conceptual model of Diana *et al.* (2009). The latter model addresses the *output* from customer journey mapping (i.e. a customer journey map), whereas customer journey mapping as presented in this paper concerns the entire mapping process, including data gathering and analysis in addition to the visual output. Likewise, our analysis of customer journey mapping extends that of Segelström (2013) by characterizing the process preceding the visual output.

6.2.2 *The unrealized potential of customer journey proposition*

Customer journey proposition is only infrequently described in detail in peer-reviewed publications that use the term *customer journey*. This customer journey approach is treated in some detail in only six of the reviewed papers. This lack of attention towards customer journey proposition in the reviewed papers also corresponds to what is found in Stickdorn and Schneider's (2010) introductory book on service design thinking; here, a customer journey approach is presented only for the exploratory user research phase, not in relation to service development or delivery.

The lack of detailed descriptions of customer journey proposition, however, does not mean that this customer journey approach is irrelevant. In their book *Design for Services* (2011), Meroni and Sangiorgi support the idea of customer journey proposition as they see the customer journey map to be useful also later on in the service design process when specifying the detail of new services. Likewise, Koivisto (2009) argues for the use of the customer journey as a tool in the concept design phase. Also, in the reviewed papers, the term *customer journey* is often used in reference to the service one wants to invent through a generative design process. Hence, customer journey proposition may well be more common in service management and design than what is made explicit in the reviewed papers. That said, neither Meroni and Sangiorgi, Koivisto, nor the reviewed papers provide

a comprehensive overview of customer journey proposition. Rather, different authors (e.g. Kankainen *et al.*, 2012; Miettinen *et al.*, 2012) offer relatively narrow glimpses into the generative design activities and support needed for this purpose.

Why, if we suspect customer journey proposition to be a significant practical customer journey approach, do the reviewed papers contain so little detail on this? One answer to this question could be *publication bias*, that is, the situation where findings conforming to researcher expectations are more likely to be reported and published than findings going against expectations (Kitchenham and Charters, 2007). From Segelström (2013) we know that customer journeys are typically first used for interpretative research. Consequently, early research may be guided by the level of interest in customer journeys for this phase of the design process. Furthermore, in the early literature on customer journeys, customer journey mapping has been established as the main customer journey approach. Therefore, it may be seen as more relevant for researchers to report own experiences with customer journey mapping approach rather than doing the heavy work of establishing customer journey proposition as an approach worthy of reporting. Given that this is the case, the early success of the literature on customer journey mapping may now possibly be hampering the reporting of customer journey proposition as a complementary customer journey approach.

Even so, it is possible that the prevalence of customer journey mapping in the literature may have motivated researchers to use other terms when reporting on approaches similar to customer journey proposition. Neither our knowledge of the practitioner literature, nor our scrutiny of the reviewed conference and journal papers, suggest that this is the case. Nevertheless, as our scoping of the review implies that claims can be made only for the peer-reviewed literature in which the term *customer journey* specifically is applied, there may in principle exist reports of approaches which resemble customer journey proposition of which we are unaware and which have not been covered in our analysis. This serves as a reminder of the limitation in this review due to its scoping. A literature search with a broader set of search terms could have allowed claims also regarding such resembling approaches.

Within the peer-reviewed literature that explicitly and frequently use the term *customer journey*, there are few publications found and available on customer journey proposition as an approach. Research using other terms for this approach may be useful to include in future studies of customer journeys, and for such research to be published using the term *customer journey*. Here, Blomkvist's (2014) work on service prototyping could serve as a useful basis, as it provides a framework for investigating prototypes as means for exploration, evaluation, and communication in service design; all of which are key activities in papers reporting on customer journey proposition (Clatworthy, 2010, 2011; Kankainen *et al.*, 2012; Miettinen *et al.*, 2011; Steen *et al.*, 2011). Furthermore, the work of Blomkvist and others on the service walkthrough method (e.g. Blomkvist *et al.*, 2012; Arvola *et al.*, 2012; Blomkvist *et al.*, 2016) represents a relevant complement to the reviewed papers on customer journey proposition. Possibly, future work on customer journey proposition needs to address in detail the interplay between uses of what Blomkvist refers to as *definite prototypes*, such as customer journey maps, and *ongoing prototypes*, such as walkthroughs

and role-play. This interplay is, for example, briefly alluded to in the service design introductory book of Polaine *et al.* (2013, p. 143).

7. Conclusion

The presented literature review indicates a relatively immature field of study, with opportunities for development both with regard to terminology and approaches. At the same time, the review holds important implications for the practical management and design of services, as well as for future research.

The main contributions of the review are to provide an overview of the peer-reviewed literature in which the term *customer journey* is applied, and, thereby, to serve as a basis for future research and practice, particularly concerning the relation between customer experience and the customer journey perspective, issues concerning customer journey terminology, and opportunities concerning customer journey approaches. This contribution aligns with the research priorities identified by Ostrom *et al.* (2015) by providing new knowledge concerning how customer journey terminology and approaches may be applied to manage and enhance service experiences.

The review is somewhat limited in that its search procedure included only peer-reviewed journal and conference papers on customer journeys. However, by scrutinizing the reported background on customer journeys in the reviewed papers, the review has included in its background those parts of the remaining literature, such as books and reports, which have made an impact on the peer-reviewed literature on customer journeys. There may, however, exist communities of practice on customer journeys that are shared only through channels other than journals and conferences with a peer-review process. The knowledge and experiences of such communities are not included in the presented review. Another limitation of the review is that customer journeys were not the main topic of the majority of the reviewed papers; rather customer journeys were typically presented or discussed as one of several approaches to support the management and design of services. This latter limitation may indicate the usefulness of replicating the review at a later point in time, as the literature on customer journeys then is likely to have been substantially extended.

Despite this limitation, the review points out a number of relevant and interesting directions for future research and practice. In particular, we have noted the need for future work concerning (a) guidance on methods for data collection and analysis in customer journey mapping (b) customer journey proposition as a customer journey approach, and (c) the need to move towards a terminology of customer journeys that may support both rigorous analysis and innovative design practice. We hope that the review may serve as a needed common basis for future research on customer journeys and motivate the further development of customer journeys in support of service management and design.

References

Anderl, E., Becker, I., von Wangenheim, F. and Schumann, J. H., (2016), "Mapping the customer journey: Lessons learned from graph-based online attribution modeling", *International Journal of Research in Marketing*, Vol. 33 No. 3, pp.457-474.

Ang, L. and Buttle, F. A. (2002), "ROI on CRM: a customer-journey approach", paper presented at the 18th IMP Conference, Perth, Australia, available at: <http://impgroup.org/uploads/papers/4225.pdf> (accessed 1 November 2014).

Arvola, M., Blomkvist, J., Holmlid, S. and Pezone, G. (2012), "A service walkthrough in Astrid Lindgren's footsteps", in *Proceedings of ServDes 2012*, Linköping University Electronic Press, Linköping, pp. 21-29. Baranova, P., Morrison, S. and Mutton, J. (2011), "Enhancing the student experience through service design: the University of Derby approach", *Perspectives: Policy and Practice in Higher Education*, Vol. 15 No. 4, pp. 122-128.

Baron, S. and Harris, K. (2010), "Toward an understanding of consumer perspectives on experiences", *Journal of Services Marketing*, Vol. 24 No. 7, pp. 518-531.

Berry, L. L., Carbone, L. P. and Haeckel S. H. (2002), "Managing the Total Customer Experience", *Sloan Management Review*, Vol. 43 No. 3, pp. 85-89.

Berry, L. L., Wall, E. A., and Carbone, L. P. (2006), "Service Clues and Customer Assessment of the Service Experience: Lessons from Marketing", *Academy of Management Perspectives*, Vol. 20 No. 2, pp. 43-57.

Beel, J., Gipp, B. and Wilde, E. (2010), "Academic search engine optimization (ASEO)", *Journal of Scholarly Publishing*, Vol. 41 No. 2, pp. 176-190.

Bitner, M. J., Ostrom, A. L. and Morgan, F. N. (2008), "Service blueprinting: a practical technique for service innovation", *California Management Review*, Vol. 50 No. 3, pp. 66-94.

Bitner, M. J., Zeithaml, V. A., and Gremler, D. D. (2010), "Technology's impact on the gaps model of service quality", in Maglio, P. P., Kieliszewski, C. A., and Spohrer, J. C. (Eds.) *Handbook of Service Science*, Springer-Verlag US, New York, pp. 197-218.

Blomkvist (2014), "Representing future situations of service. Prototyping in service design ", PhD thesis, Linköping Studies in Arts and Sciences, No. 618, <http://liu.diva-portal.org/smash/get/diva2:712357/FULLTEXT02.pdf> (accessed 29 August 2016).

Blomkvist, J., Åberg, J., and Holmlid, S. (2012), "Service walkthroughs to support service development", in *Proceedings of ServDes 2012*, Linköping University Electronic Press, Linköping, pp. 43-52.

Blomkvist, J., Fjuk, A., and Sayapina, V. (2016), "Low threshold service design: desktop walkthrough", in *Proceedings of ServDes 2016*, Linköping University Electronic Press, Linköping, pp. 154-166.

Blomkvist, J. and Holmlid, S. (2010), "Service prototyping according to practitioners", in *Proceedings of ServDes 2010*, Linköping University Electronic Press, Linköping, pp. 1-12.

Bridge, C. (2012), "Citizen centric service in the Australian department of human services: the department's experience in engaging the community in co-design of government service delivery and developments in e-government services", *Australian Journal of Public Administration*, Vol. 71 No. 2, pp. 167-177.

Buttle, F. (2003), *Customer Relationship Management: Concepts and Tools*, Butterworth-Heinemann, Burlington, MA.

Carreira, R., Patrício, L., Natal, R. , Magee, C. and Hommes, Q. V. E. (2013). "Towards a holistic approach to the travel experience: a qualitative study of bus transportation", *Journal of Transport Policy*, Vol. 25 No. 1, pp. 233-243.

Chaffey, D. and Patron, M. (2012), "From web analytics to digital marketing optimization: increasing the commercial value of digital analytics", *Journal of Direct, Data and Digital Marketing Practice*, Vol. 14 No. 1, pp. 30-45.

Clatworthy, S. (2010), "Service innovation through touch-points: the AT-ONE touch-point cards", in *Proceedings of ServDes 2010*, Linköping University Electronic Press, Linköping, pp. 25-38.

Clatworthy, S. (2011), "Service innovation through touch-points: development of an innovation toolkit for the first stages of new service development", *International Journal of Design*, Vol. 5 No.2, pp. 15-28.

Court, D., Elzinga, D., Mulder, S. and Vetvik, O. J. (2009), "The consumer decision journey", *McKinsey Quarterly*, June 2009, available at: http://www.mckinsey.com/insights/marketing_sales/the_consumer_decision_journey (accessed 1 November 2014).

Crosier, A. and Handford, A. (2012), "Customer journey mapping as an advocacy tool for disabled people: a case study", *Social Marketing Quarterly*, Vol. 18 No. 1, pp. 67-76.

Davis, S. M. and Dunn, M. (2002), *Building the Brand-driven Business: Operationalize Your Brand to Drive Profitable Growth*, Jossey-Bass, San Francisco, CA.

Diana, C. Pacenti, E. and Tassi, R (2009), "Visualtiles: communication tools for (service) design", in *Proceedings of ServDes 2009*, Linköping University Electronic Press, Linköping, pp. 65-76.

Dubberly, H., Evenson, S. and Robertson, R. (2008), "On modeling The analysis-synthesis bridge model", *Interactions*, Vol. 15 No. 2, pp. 57-61.

Dunn, M. and Davis, S. M. (2003), "Building brands from the inside", *Marketing Management*, Vol. 12 No. 3, pp. 32-37.

Edelman, D. C., and Singer, M. (2015), "Competing on Customer Journeys", *Harvard Business Review*, Vol 93, pp. 88-100.

Edvardsson, B. (1998), "Service quality improvement", *Managing Service Quality*, Vol. 8 No. 2, pp. 142-149.

Edvardsson, B., Gustafsson, A. and Roos, I. (2005), "Service portraits in service research: a critical review", *International Journal of Service Industry Management*, Vol. 16 No. 1, pp. 107-121.

Ezzy, D. (2013), *Qualitative Analysis: Practice and Innovation*, Routledge, London.

Fisk, R. P. (1981), "Toward a consumption/evaluation process model for services", *Marketing of Services*, American Marketing Association, Chicago, IL, pp. 191-195.

Ghobadian, A., Speller, S. and Jones, M. (1994), "Service quality: concepts and models", *International Journal of Quality & Reliability Management*, Vol. 11 No. 9, pp. 43-66.

Giusti, L. and Zancanaro, M. (2009), "What we can learn from service design in order to design services", in *Proceedings of Future Internet-FIS 2009*, Springer, Berlin, pp. 46-56.

Gloppen, J. (2009), "Service design leadership", in *Proceedings of ServDes 2009*, Linköping University Electronic Press, Linköping, pp. 77-92.

Gudiksen, S.K. and Brandt, E. (2014), "The service Ouroboros: Designing persona service cycles", in *Proceedings of ServDes 2014*, Linköping University Electronic Press, Linköping, pp. 110-121.

Gyimóthy, S. (2000a), "Visitors' perceptions of holiday experiences and service providers: an exploratory study", *Journal of Travel & Tourism Marketing*, Vol. 8 No. 2, pp. 57-74.

Gyimóthy, S. (2000b), "Odysseys: analysing service journeys from the customer's perspective", *Managing Service Quality: An International Journal*, Vol. 10 No. 6, pp. 389-396.

Gyimóthy, S. (2000c), "Service quality: a self-perpetuating concept?", *Journal of Quality Assurance in Hospitality & Tourism*, Vol. 1 No. 2, pp. 31-57.

Halvorsrud, R., Kvale, K., and Følstad, A. (2016), "Improving service quality through customer journey analysis", *Journal of Service Theory and Practice*, Vol. 26 No. 6, pp. 840-867.

Halvorsrud, R., Lee, E., Haugstveit, I. M., Følstad, A. (2014), "Components of a visual language for service design", in *Proceedings of ServDes 2014*, Linköping University Electronic Press, Linköping, pp. 291-300.

Harzing, A.W. (2013), "A preliminary test of Google Scholar as a source for citation data: a longitudinal study of Nobel Prize winners", *Scientometrics*, Vol. 94 No. 3, pp. 1057-1075.

Haukkamaa, J., Yliräisänen-Seppänen, P. and Timonen, E. (2010), "Characteristics of value co-creation in a learning environment by service design and service-dominant logic frameworks", in *Proceedings of ServDes 2010*, Linköping University Electronic Press, Linköping, pp. 51-64.

HM Government (2007), "Customer journey mapping: guide for practitioners", instruction material, available at:
http://webarchive.nationalarchives.gov.uk/http://www.cabinetoffice.gov.uk/media/123970/journey_mapping1.pdf (accessed 1 November 2014).

Holmlid, S. and Evenson, S. (2007), "Prototyping and enacting services: Lessons learned from human-centered methods", paper presented at the 10th Quality in Services conference, QUIS 2007, Orlando, Florida, available at:
http://www.ida.liu.se/divisions/hcs/ixs/publications/fulltext/2007/HolmlidEvenson_QUIS07.pdf (accessed 1 February 2016).

Holmlid, S. and Evenson, S. (2008), "Bringing service design to service sciences, management and engineering", in Hefley, B. and Murphy, W. (Eds.), *Service Science, Management and Engineering Education for the 21st Century*, Vol. 3, Springer Science+Business Media, New York, NY, pp. 341-345.

Hsieh, Y. H. and Yuan, S. T. (2010) "A SD logic based approach to input-output analysis for technology spillover", in *Proceeding of the Hawaii International Conference on System Sciences, HICSS 2011*, IEEE, doi: 10.1109/HICSS.2010.30.

Hsieh, Y. H., Yuan, S. T. and Kuo, R. L. (2011), "A PSO-based intelligent service dispatching mechanism for customer expectation management", *Expert Systems with Applications*, Vol. 38 No. 10, pp. 12128-12141.

Huang, K. H., Deng, Y. S. and Chuang, M. C. (2012), "Static and dynamic user portraits", *Advances in Human-Computer Interaction*, doi:10.1155/2012/123725.

Johns, N. (1999), "What is this thing called service?" *European Journal of Marketing*, Vol. 33 No. 9/10, pp. 958-971.

Johns, N. and Clark, S. L. (1993), "Customer perception auditing: a means of monitoring the service provided by museums and galleries", *Museum Management and Curatorship*, Vol. 12 No. 4, pp. 360-366.

Johnston, R. and Kong, X. (2011), "The customer experience: a road-map for improvement", *Managing Service Quality*, Vol. 21 No. 1, pp. 5-24.

Kankainen, A., Vaajakallio, K., Kantola, V. and Mattelmäki, T. (2012), "Storytelling group—a co-design method for service design", *Behaviour and Information Technology*, Vol. 31 No. 3, pp. 221-230.

Kimbell, L. (2011), "Designing for service as one way of designing services", *International Journal of Design*, Vol. 5 No. 2, pp. 41-52.

Kitchenham, B. and Charters, S. (2007), *Guidelines for Performing Systematic Literature Reviews in Software Engineering*, technical report, Keele University, Keele.

Klaus, P. and Maklan, S. (2012), "EXQ: a multiple-item scale for assessing service experience",

Journal of Service Management, Vol. 23 No. 1, pp. 5-33.

Koivisto, M. (2009), "Frameworks for structuring services and customer experiences", in Miettinen, S. and Koivisto, M. (Eds.), *Designing Services with Innovative Methods*, University of Art and Design, Helsinki, pp. 136-149.

Kronqvist, J. and Korhonen, S. M. (2009), "Co-creating solutions-combining service design and change laboratory", in *Proceedings of ServDes 2009*, Linköping University Electronic Press, Linköping, pp. 135-150.

Kulkarni, A. V., Aziz, B., Shams, I. and Busse, J. W. (2009), "Comparisons of citations in Web of Science, Scopus, and Google Scholar for articles published in general medical journals", *JAMA: The Journal of the American Medical Association*, Vol. 302 No. 10, pp. 1092-1096.

Lee, G. (2010), "Death of 'last click wins': Media attribution and the expanding use of media data", *Journal of Direct, Data and Digital Marketing Practice*, Vol. 12 No. 1, pp. 16-26.

Lemke, F., Clark, M. and Wilson, H. (2011), "Customer experience quality: an exploration in business and consumer contexts using repertory grid technique", *Journal of the Academy of Marketing Science*, Vol. 39 No. 6, pp. 846-869.

Lemon, K. N., and Verhoef, P. C. (2016). Understanding Customer Experience throughout the Customer Journey. *Journal of Marketing*, doi: <http://dx.doi.org/10.1509/jm.15.0420>

Lin, Y. and Yuan, S. T. (2011), "Coopetition based interaction design for optimal customer attraction", in *Proceeding of the Hawaii International Conference on System Sciences, HICSS 2011*, IEEE, doi: 10.1109/HICSS.2011.131.

Mahr, D., Kalogeras, N. and Odekerken-Schröder, G. (2013), "A service science approach for improving healthy food experiences", *Journal of Service Management*, Vol. 24 No. 4, pp. 435-471.

Mangiaracina, R., Brugnoli, G. and Perego, A. (2009), "The eCommerce Customer Journey: A Model to Assess and Compare the User Experience of the eCommerce Websites", *Journal of Internet Banking and Commerce*, Vol. 14 No 3.

Manschot, M. and Visser, F. S. (2011), "Experience-value: a framework for determining values in service design approaches", paper presented at the International Associations of Societies of Design Research Conference (IASDR), 31 October–4 November, Delft, the Netherlands, available at: <http://studiolab.ide.tudelft.nl/studiolab/mmanschot/files/2011/12/IASDR-442-Manschot.pdf> (accessed 1 November 2014).

Meroni, A. and Sangiorgi, D. (2011), *Design for Services*, Gower.

Meyer, C., and Schwager, A. (2007), "Understanding Customer Experience", *Harvard Business Review*, Vol. 85 No. 2, pp. 117-127.

Miettinen, S. and Koivisto, M. (2009), *Designing Services with Innovative Methods*, University of Art and Design, Helsinki.

Miettinen, S., Rontti, S., Kuure, E. and Lindström, A. (2012), "Realizing design thinking through a service design process and an innovative prototyping laboratory – Introducing Service Innovation Corner (SINCO)", Proceedings of the conference on design research society (DRS 2012), pp. 1202-1214.

Moon, H., Han, S. H., Chun, J., and Hong, S. W. (2016), "A design process for a customer journey map: a case study on mobile services. *Human Factors and Ergonomics in Manufacturing & Service Industries*, Vol. 26 No. 4, pp. 501-514.

Muret, P. (2013), "Introducing 'the customer journey to online purchase' - interactive insights on multi-channel marketing", available at: <http://analytics.blogspot.no/2013/04/introducing-customer-journey-to-online.html> (accessed 1 November 2014).

Nichita, M. E., Vulpoi, M. and Toader, G. (2012), "Knowledge management and customer relationship management for accounting services companies", in *Proceedings of the European Conference on Knowledge Management*, Academic Publishing International, Reading, pp. 832-838.

Norton, D. W., and Pine, B. J. (2013). Using the customer journey to road test and refine the business model. *Strategy & Leadership*, Vol. 41 No. 2, pp. 12-17.

Ostrom, A. L., Parasuraman, A., Bowen, D. E., Patrício, L., Voss, C. A. and Lemon, K. (2015). Service research priorities in a rapidly changing context. *Journal of Service Research*, Vol. 18 No. 2, pp. 127-159.

Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1985), "A conceptual model of service quality and its implications for future research", *The Journal of Marketing*, Vol 49, pp. 41-50.

Parker, S. and Heapy, J. (2006), *The Journey to the Interface: How Public Service Design Can Connect Users to Reform*, Demos, London.

Patrício, L., Fisk, R. P., e Cunha, J. F. and Constantine, L. (2011), "Multilevel service design: from customer value constellation to service experience blueprinting", *Journal of Service Research*, Vol. 14 No. 2, pp. 180-200.

Peterson, M., Gröne, F., Kammer, K. and Kirscheneder, J. (2010), "Multi-channel customer management: delighting consumers, driving efficiency", *Journal of Direct, Data and Digital Marketing Practice*, Vol. 12 No. 1, pp. 10-15.

Polaine, A., Løvlie, L. and Reason, B. (2013), *Service Design: From Insight to Implementation*, Rosenfeld Media, Brooklyn, NY.

Rasila, H. M., Rothe, P. and Nenonen, S. (2009), "Workplace experience - a journey through a business park", *Facilities*, Vol. 27 No. 13/14, pp. 486-496.

Richardson, A. (2010), *Innovation X: Solutions for the New Breed of Complex Problems Facing Business*, Jossey-Bass, San Francisco, CA.

Rawson, A., Duncan, E., and Jones, C. (2013). The truth about customer experience. *Harvard Business Review*, Vol. 91 No. 9, pp. 90-98.

Segelström, F. (2009), "Communicating through visualizations: service designers on visualizing user research", in *Proceedings of ServDes 2009*, Linköping University Electronic Press, Linköping, pp. 175-185.

Segelström, F. (2013), "Stakeholder engagement for service design", PhD thesis, Linköping Studies in Arts and Sciences, No. 586, available at: <http://www.diva-portal.org/smash/get/diva2:647878/FULLTEXT03.pdf> (accessed 1 November 2014).

Segelström, F. and Holmlid, S. (2009), "Visualizations as tools for research: service designers on visualizations", paper presented at Nordes 2009, 30 August–2 September, Oslo, Norway, available at: <http://www.ida.liu.se/~fabse/papers/nordes09.pdf> (accessed 1 November 2014).

Segelström, F. and Holmlid, S. (2012), "One case, three ethnographic styles: exploring different ethnographic approaches to the same broad brief", in *Ethnographic Praxis in Industry Conference Proceedings*, Blackwell Publishing, Oxford, pp. 48-62.

Shaw, G. and Williams, A. (2009), "Knowledge transfer and management in tourism organisations: an emerging research agenda", *Tourism Management*, Vol. 30 No. 3, pp. 325-335.

Shostack, G. L. (1982), "How to design a service", *European Journal of Marketing*, Vol. 16 No. 1, pp. 49-63.

Shostack, G. L. (1984), "Designing services that deliver", *Harvard Business Review*, Vol. 62 No. 1, pp. 133-139.

Skinner, C. (2010). The complete customer journey: avoiding technology and business barriers to measure the total value of media. *Business Strategy Series*, Vol 11 No 4, pp. 223-226.

Soutar, G. N. and Murphy, J. (2009), "Journal quality: a Google Scholar analysis", *Australasian Marketing Journal (AMJ)*, Vol. 17 No. 3, pp. 150-153.

Spraragen, S. L. and Chan, C. (2008), "Service blueprinting: when customer satisfaction numbers are not enough", paper presented at the International DMI Education Conference. Design Thinking: New Challenges for Designers, Managers and Organizations, 14–15 April, Cergy-Pontoise, France.

Steen, M., Manschot, M. and De Koning, N. (2011), "Benefits of co-design in service design projects", *International Journal of Design*, Vol. 5 No. 2, pp. 53-60.

Stickdorn, M. (2009), "Service design in tourism", Miettinen, S. and Koivisto M. (Eds.), *Designing Services with Innovative Methods*, Taik Publications, Helsinki, pp. 246-265.

Stickdorn, M. and Schneider, J. (2010), *This is Service Design Thinking*, BIS Publishers, Amsterdam.

Stickdorn, M. and Zehrer, A. (2009), "Service design in tourism: customer experience driven destination management", paper presented at ServDes 2009, 24–26 November, Oslo, Norway, available at: http://www.aho.no/PageFiles/6819/Stickdorn_Zehrer.pdf (accessed 1 November 2014).

Stone, M. (2009), "Staying customer-focused and trusted: Web 2.0 and Customer 2.0 in financial services", *Journal of Database Marketing and Customer Strategy Management*, Vol. 16 No. 2, pp. 101-131.

Stone, M. (2010), "Smart utilities and CRM: the next phase of customer management in utilities", *Journal of Database Marketing and Customer Strategy Management*, Vol. 17 No. 1, pp. 49-58.

Stone, M. and Liyanearachchi, D. (2007), "Managing retention - who does it well?", *Journal of Database Marketing and Customer Strategy Management*, Vol. 14 No. 2, pp. 90-103.

Tavassoli, N. (2011), "So you think you know your customers?", *International Commerce Review*, Vol. 10 No. 1, pp. 56-69.

Tax, S. S., McCutcheon, D. and Wilkinson, I. F. (2013), "The service delivery network (SDN) a customer-centric perspective of the customer journey", *Journal of Service Research*, Vol. 16 No. 4, pp. 454-470.

Teixeira, J., Patrício, L., Nunes, N. J., Nóbrega, L., Fisk, R.P. and Constantine, L. (2012), "Customer experience modeling: from customer experience to service design", *Journal of Service Management*, Vol. 23 No. 3, pp. 362-376.

Tollestrup, C. (2009), "Conceptualising services: developing service concepts through AT-ONE", in *Proceedings of ServDes 2009*, Linköping University Electronic Press, Linköping, pp. 187-200.

Trischler, J. and Zehrer, A. (2012), "Service design: suggesting a qualitative multistep approach for analyzing and examining theme park experiences", *Journal of Vacation Marketing*, Vol. 18 No. 1, pp. 57-71.

Tseng, M. M., Qin Hai, M. and Su, C. J. (1999), "Mapping customers' service experience for operations improvement", *Business Process Management Journal*, Vol. 5 No. 1, pp. 50-64.

Varney, D. (2006), "Service transformation: a better service for citizens and business, a better deal for the taxpayer, government publication", HM Treasury, London, UK, available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/229012/011840489X.pdf (accessed 1 November 2014).

Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., and Schlesinger, L. A. (2009). "Customer Experience Creation: Determinants, Dynamics and Management Strategies", *Journal of Retailing*, Vol. 85 No. 1, pp. 31-41.

Voss, C. and Zomerdijs, L. (2007), "Innovation in experiential services - an empirical view", in DTI (Ed.), *Innovation in Services*, DTI, London, UK, pp. 97-134.

Walter, U., Edvardsson, B. and Öström, Å. (2010), "Drivers of customers' service experiences: a study in the restaurant industry", *Managing Service Quality*, Vol. 20 No. 3, pp. 236-258.

Wechsler, J. (2012), "Reflections on service design, frameworks, and the service organization", *Design Management Review*, Vol. 23 No. 2, pp. 58-64.

Whittle, S. and Foster, M. (1991), "Customer profiling: getting into your customer's shoes", *International Journal of Bank Marketing*, Vol. 9 No. 1, pp. 17-24.

Xinhui, R. (2008), "A study of service innovation in airlines based on experiential services", in *Proceedings of the International Conference on Service Systems and Service Management, ICSSSM'08*, IEEE, doi: 10.1109/ICSSSM.2008.4598455.

Yeh, H. J., Chuang, L.C. and Kuo, D. C. L. (2012), "Toward an methodology for SST-based service design: a customer journey perspective", in *Proceedings of the 8th International Conference on Computing Technology and Information Management, ICCM2012*, IEEE, pp. 878-883.

Yoo, D., Zimmerman, J., Steinfeld, A. and Tomasic, A. (2010), "Understanding the space for co-design in riders' interactions with a transit service", in *Proceedings of the 28th International Conference on Human Factors in Computing Systems, CHI 2010*, ACM, New York, NY, pp. 1797-1806.

Zomerdijk, L. G. and Voss, C. A. (2010), "Service design for experience-centric services", *Journal of Service Research*, Vol. 13 No. 1, pp. 67-82.

Zomerdijk, L. G. and Voss, C. A. (2011), "NSD processes and practices in experiential services", *Journal of Product Innovation Management*, Vol. 28 No. 1, pp. 63-80.

Appendix: Overview of the reviewed papers

Reference	Search source	Channel	Scientific field	CJ in title, abstract, key words	Contribution on CJ	CJ described or defined	Customer experience focus in paper	Visualizations of CJ	Customer journey mapping		Customer journey proposition	
									Data sources	Methods	Participants	Methods
Baranova <i>et al.</i> (2011)	Google Scholar	Journal	Management		Case	Yes	Key focus	Yes	Customers Internals	Interview		
Bridge (2012)	Google Scholar	Journal	Management		Case	Yes	Key focus	Yes	Customers	Not reported		
Chaffey and Patron (2012)	Google Scholar	Journal	Marketing									
Clatworthy (2011)	Google Scholar	Journal	Design		Method	Yes	Key focus		Internals	Workshop	Internals	Workshop
Crosier and Handford (2012)	Google Scholar Scopus	Journal	Marketing	Yes	Case	Yes	Key focus	Yes	Customers	Observation Interview		
Huang <i>et al.</i> (2012)	Google Scholar	Journal	Design		Method Case		Key focus	Yes	Customers	Observation Interview		
Johns and Clark (1993)	Google Scholar	Journal	Management		Case	Yes	Key focus	Yes	Internals	Service quality audit		
Johnston and Kong (2011)	Google Scholar	Journal	Management		Case		Key focus		Customers	Customer forum Interview		

Reference	Search source	Channel	Scientific field	CJ in title, abstract, key words	Contribution on CJ	CJ described or defined	Customer experience focus in paper	Visualizations of CJ	Customer journey mapping		Customer journey proposition	
									Data sources	Methods	Participants	Methods
Kankainen <i>et al.</i> (2012)	Google Scholar Scopus WoK	Journal	Design	Yes	Method Case	Yes	Key focus				Customers	Workshop
Kimbell (2011)	Google Scholar	Journal	Design		Case		Key focus		Customers Externals Internals	Observation Service walkthrough Interview		
Klaus and Maklan (2012)	Google Scholar	Journal	Management			Yes	Key focus					
Lee (2010)	Google Scholar Scopus	Journal	Marketing	Yes	Case	Yes						
Lemke <i>et al.</i> (2011)	Google Scholar	Journal	Marketing			Yes	Key focus					
Mangiaracina <i>et al.</i> (2009)	Google Scholar Scopus	Journal	Marketing	Yes	Method	Yes	Key focus					
Patrício <i>et al.</i> (2011)	Google Scholar	Journal	Design		Method Case	Yes	Key focus	Yes	Customers	Observation Interview Focus group Service	Not reported	Modelling support

Reference	Search source	Channel	Scientific field	CJ in title, abstract, key words	Contribution on CJ	CJ described or defined	Customer experience focus in paper	Visualizations of CJ	Customer journey mapping		Customer journey proposition	
									Data sources	Methods	Participants	Methods
										walkthrough Question.		
Peterson <i>et al.</i> (2010)	Google Scholar Scopus	Journal	Marketing	Yes	Method		Key focus	Yes				
Rasila <i>et al.</i> (2009)	Google Scholar	Journal	Management		Method Case		Key focus	Yes	Customers	Service walkthrough		
Shaw and Williams (2009)	Google Scholar	Journal	Management				Some focus	Yes				
Skinner (2010)	Google Scholar	Journal	Marketing	Yes		Yes						
Steen <i>et al.</i> (2011)	Google Scholar Scopus	Journal	Design		Case		Key focus		Customers Internals	Experience measure Informal mapping	Internals	Workshop
Stone (2009)	Google Scholar	Journal	Marketing		Case		Some focus					
Stone (2010)	Google Scholar	Journal	Marketing				Some focus					

Reference	Search source	Channel	Scientific field	CJ in title, abstract, key words	Contribution on CJ	CJ described or defined	Customer experience focus in paper	Visualizations of CJ	Customer journey mapping		Customer journey proposition	
									Data sources	Methods	Participants	Methods
Stone and Liyanearachchi (2007)	Google Scholar	Journal	Marketing				Key focus					
Tavassoli (2011)	Google Scholar	Journal	Marketing									
Teixeira <i>et al.</i> (2012)	Google Scholar Scopus	Journal	Management				Key focus					
Trischler and Zehrer (2012)	Google Scholar Scopus	Journal	Marketing	Yes	Case	Yes	Key focus	Yes	Customers	Observation Interview		
Tseng <i>et al.</i> (1999)	Google Scholar	Journal	Management	Yes	Method		Key focus					
Whittle and Foster (1991)	Google Scholar	Journal	Marketing		Method	Yes	Key focus	Yes				
Zomerdijk and Voss (2010)	Google Scholar Scopus	Journal	Management	Yes	Case	Yes	Key focus		Customers Internals	Not reported	Not reported	Not reported
Zomerdijk and Voss (2011)	Google Scholar Scopus	Journal	Management	Yes	Case	Yes	Key focus		Customers Internals	Not reported	Not reported	Not reported

Reference	Search source	Channel	Scientific field	CJ in title, abstract, key words	Contribution on CJ	CJ described or defined	Customer experience focus in paper	Visualizations of CJ	Customer journey mapping		Customer journey proposition	
									Data sources	Methods	Participants	Methods
Clatworthy (2010)	Google Scholar	Conference	Design		Method	Yes	Key focus		Internals	Workshop	Internals	Workshop
Gloppen (2009)	Google Scholar	Conference	Design			Yes	Key focus		Internals	Not reported		
Haukkamaa <i>et al.</i> (2010)	Google Scholar	Conference	Design		Case	Yes	Some focus					
Kronqvist & Korhonen (2009)	Google Scholar	Conference	Design		Case	Yes	Key focus		Customers	Interview		
Manschot and Visser (2011)	Google Scholar	Conference	Design		Method	Yes	Key focus	Yes				
Miettinen <i>et al.</i> (2012)	Google Scholar	Conference	Design		Method Case		Key focus				Not reported	Prototyping support
Nichita <i>et al.</i> (2012)	Scopus	Conference	Management			Yes	Some focus					
Segelström (2009)	Google Scholar	Conference	Design	Yes	Interview study				Customers	Not reported		
Segelström and Holmlid (2009)	Google Scholar	Conference	Design		Interview study		Some focus		Customers	Not reported		
Segelström and Holmlid (2012)	Google Scholar	Conference	Design		Case		Some focus		Customers	Smartphone app		

Reference	Search source	Channel	Scientific field	CJ in title, abstract, key words	Contribution on CJ	CJ described or defined	Customer experience focus in paper	Visualizations of CJ	Customer journey mapping		Customer journey proposition	
									Data sources	Methods	Participants	Methods
Spraragen and Chan (2008)	Google Scholar	Conference	Design		Method	Yes	Key focus	Yes	Customers	Interviews (discussing with customers)		
Stickdorn and Zehrer (2009)	Google Scholar	Conference	Design	Yes	Method Case	Yes	Key focus	Yes	Customers	Smartphone app		
Xinhui (2008)	Google Scholar	Conference	Management				Key focus	Yes				
Yeh <i>et al.</i> (2012)	Google Scholar Scopus	Conference	Management	Yes	Case	Yes	Key focus	Yes	Customers	Interviews		
Yoo <i>et al.</i> (2010)	Google Scholar	Conference	Design		Case	Yes	Some focus		Customers	Observation Interview Workshop		

Note: In this table, Customer Journey is abbreviated CJ. The content of the four right-hand columns is detailed in Section 5.4. "Not reported" in these columns indicates that the paper reports on customer journey mapping or customer journey proposition, but without specifying the involved participants or the method applied.