

**Customer Journeys in An Omnichannel Retail
Environment: Antecedents of Satisfaction
and Customer Coping Strategies**

Yanika Tueanrat

A thesis submitted for the Degree of Doctor of Philosophy to
Newcastle University Business School at Newcastle University

November 2021

This page is intentionally left blank.

Abstract

Customer journey has been recognised for its strengths in understanding complex customer behaviour and gaining insights into customer experience. While the term has been applied in diverse disciplines and its literature has grown more than sevenfold over the last eight years, the knowledge of the topic remains disperse and incoherent. This thesis aimed to develop a systematic understanding of the customer journey by identifying the underlying themes of the phenomenon, placing them in contexts and synthesising the current body of knowledge. Firstly, the thesis adopted a systematic review approach to identify the key aspects of the customer journey presented in the business literature up to 2020. The quantitative content analysis identified five underlying research themes of the customer journey, namely, service satisfaction, failure and recovery, co-creation, customer response, channels and technological disruption. Then, three of the identified themes were further examined in the two identified purchasing contexts. More specifically, in the service satisfaction context, the thesis examined the impact of customer co-creation behaviour, customer response and customer channel use on customer journey satisfaction. Regression analysis confirmed the significance of all factors, except information seeking and arousal in all phases and exploration in the post-purchase phase, on customer journey satisfaction. Moderator tests also revealed how the impact of each factor on customer journey satisfaction varied across three channel user segments. In the context of service failure, the thesis considered the customer coping journey that illustrated an internal process that customers went through after encountered failure incidents. The study established the link between the service satisfactory and service failure context by examining moderating effects of pre-failure customer co-creation behaviour, customer response and customer channel use on the customer coping journey. The structural equation modelling and multigroup analysis confirmed the role of the pre-failure customer journey in portending post-failure customer experience. The significant of this thesis is that it aggregated the relevant knowledge about customer journeys to date and systematised the relationships between various marketing concepts related to the customer journey. The empirical findings of the thesis offered a theoretical groundwork for future development of the topic and provided practical implications to better understand and manage customer experience.

Declaration

I declare that the thesis is my own work and has not been submitted for any other degree or professional qualification. Parts of the thesis have been submitted to journals and conferences as noted below.

Tueanrat, Y., Papagiannidis, S. and Alamanos, E. (2021) 'A conceptual framework of the antecedents of customer journey satisfaction in omnichannel retailing', *Journal of Retailing and Consumer Services*, 61, p. 102550.

Tueanrat, Y., Papagiannidis, S., & Alamanos, E. (2021). 'Impact of customer co-creation behaviour, customer response and customer experiential values on customer journey satisfaction'. *British Academy of Management 2021 Conference*. Lancaster University Management School, Lancaster, 31 August - 3 September. London: British Academy of Management.

Tueanrat, Y., Papagiannidis, S. and Alamanos, E. (2021) 'Going on a journey: A review of the customer journey literature', *Journal of Business Research*, 125, pp. 336-353.

Tueanrat, Y., Papagiannidis, S., & Alamanos, E. (2019). 'Customer Journeys: A Systematic Analysis'. *British Academy of Management 2019 Conference*. Aston University Business School, Birmingham, 3-5 September. London: British Academy of Management.

Acknowledgement

I would like to express my deepest gratitude to my supervisory team, Dr. Eleftherios Alamanos and Professor Savvas Papagiannidis, for the endless support, constant encouragement and kind understanding throughout the years. Their guidance and commitment in the project helped me learn and improve my knowledge and skills, while developing the best possible PhD experience. Their approach to work inspires me to always strive for improvement and sets a great example for my future career. Thank you for all the opportunities given during these years.

I would like to thank my friends, whom I have shared positive thoughts and encouraging words throughout the years. This PhD journey would have been more challenging without you.

The most warm-hearted gratitude I would like to express is to my family for being truly supportive, loving and caring. Thank you for always being by my side, cheering me up and believing in me.

Table of Contents

Abstract.....	iii
Declaration.....	iv
Acknowledgement	v
Table of Contents	vi
List of Tables	ix
Lists of Figures.....	x
Chapter 1. Introduction	1
1.1 Domains of Customer Journey.....	2
1.2 Touchpoints as Building Blocks of Customer Journey	3
1.3 Phases of Customer Journey	5
1.4 Sequence of Customer Journey.....	7
1.5 Research Gaps, Aims and Objectives.....	8
1.5.1 Research gap 1.....	9
1.5.2 Research gap 2.....	11
1.5.3 Research gap 3.....	12
1.6 Structure of the Thesis.....	14
Chapter 2. Literature Review on the Customer Journey.....	15
2.1 The Systematic Review Process	15
2.1.1 Literature selection	16
2.2.2 Document classification and research themes identification.....	17
2.2 Profile of the Customer Journey Literature.....	20
2.3 Quantitative Content Analysis	24
2.4 The Five Themes of the Customer Journey Literature	27
2.4.1 Service satisfaction, failure and recovery	27
2.4.2 Customer response	31
2.4.3 Co-creation.....	34
2.4.4 Channels.....	36

2.4.5 Technological Disruption.....	40
2.5. Suggestions for Future Research	42
2.5.1 Research agenda for the five themes.....	44
2.5.2 Theory, context, construct and methodology.....	48
2.6 Literature Update	49
Chapter 3. Conceptual Models and Hypothesis Development.....	54
3.1 Study 1: Customer Purchasing Journey in Service Satisfaction Context	56
3.1.1 Omnichannel customer journey.....	56
3.1.2 Impact of customer co-creation behaviour, customer emotional response and customer experiential value on customer journey satisfaction	59
3.1.3 Moderating effects of customer segmentation.....	62
3.2 Study 2: Customer Coping Journey in Service Failure Context	63
3.2.1 Customer coping behaviour	64
3.2.2 The Customer Coping Journey	64
3.2.3 Moderating effects of pre-failure customer purchasing journey	68
Chapter 4. Methodology	72
4.1 Research Philosophy.....	72
4.2 Data Collection	74
4.3 Measurement.....	76
4.4 Sampling.....	81
4.5 Data Analysis	84
4.5.1 Linear regression analysis and moderation analysis	85
4.5.2 Latent class analysis	89
4.5.3 Reliability and validity analysis	90
4.5.4 Common method variance	93
4.5.5 Structural path analysis and multigroup analysis	95
4.6 Research Ethics	98
Chapter 5. Results and Findings.....	100

5.1 Study 1: Antecedents of Customer Journey Satisfaction	100
5.1.1 Regression analysis	100
5.1.2 Customer segmentation.....	103
5.1.3 Moderation effects.....	106
5.2 Study 2: The Customer Coping Journey	107
5.2.1 Path analysis	107
5.2.2 Moderation effects.....	109
Chapter 6. Discussion	112
6.1 The Customer Journey in the Service Satisfaction Context.....	113
6.2 The Customer Journey in the Service Failure Context.....	118
6.3 Overall Discussion.....	123
Chapter 7. Conclusion.....	129
7.1 Theoretical Contributions.....	131
7.2 Practical Implications	134
7.3 Limitations and Future Research Suggestions	137
Appendices	140
Appendix A: Questionnaire for Study 1	140
Appendix B: Questionnaire for Study 2	164
References	173

List of Tables

Table 1 Bibliographic sources of the customer journey articles	21
Table 2 The ten most cited articles of the customer journey literature.....	21
Table 3 Theories used in the customer journey articles.....	22
Table 4 The five most frequently studied contexts in the customer journey articles.....	22
Table 5 Method used in the customer journey articles	22
Table 6 Variables researched in the quantitative customer journey articles	23
Table 7 Publication pattern of the customer journey literature	25
Table 8 Research agenda	45
Table 9 Comparison of Positivism and Interpretivism	74
Table 10 Measurement Items for Survey 1	79
Table 11 Measurement Items for Survey 2	81
Table 12 Common Sampling Techniques.....	83
Table 13 Demographic profile of respondents for survey 1	84
Table 14 Demographic profile of respondents for survey 2	84
Table 15 Investigating variables of Study 1	87
Table 16 Multicollinearity statistics of Study 1	88
Table 17 Reliability and convergent validity	92
Table 18 Convergent validity test	93
Table 19 Goodness-of-fit indices	93
Table 20 Metric invariance	97
Table 21 Collinearity statistics of independent variables	100
Table 22 Results of the regression analysis.....	102
Table 23 Log-likelihood statistics for model selection.....	103
Table 24 Latent-class cluster profiles (n = 425).....	104
Table 25 The Wald test of paired comparisons	104
Table 26 Significant covariate parameters of the model	105
Table 27 Moderating effect of the customer segmentation	107
Table 28 Path coefficient analyses.....	108
Table 29 The analysis of control variables	109
Table 30 Problematic purchasing journey phase.....	109
Table 31 Moderation tests	111
Table 32 Critical factors of customer journey satisfaction	115
Table 33 Moderating Effect of Pre-Failure Customer Journey	121

Lists of Figures

Figure 1 Research gaps, aims and objectives of the thesis	9
Figure 2 The PRISMA diagram	17
Figure 3 Flow map of the cluster-based document classification process	20
Figure 4 Dendrogram of frequently occurring terms	26
Figure 5 Heat map of research themes against phases of a customer journey	43
Figure 6 Conceptual model of the thesis	55
Figure 7 Conceptual framework for study 1.....	58
Figure 8 Conceptual framework for study 2.....	63

Chapter 1. Introduction

In the past few years, the customer journey has been receiving remarkable attention in both marketing research and practice. Such interest has been driven by the prominence of the customer-centric philosophy in the marketing field (Crosier and Handford, 2012). Customers now have more control over their experience than ever (Stein and Ramaseshan, 2016). They play an active role in providing and integrating resources to form their own service experience (Dellaert, 2019; Varnali, 2019). Technological advances have also proliferated communication and retail channels that customers can simultaneously use to interact with companies (Grewal, Roggeveen and Nordfält, 2016; Farah and Ramadan, 2017). The development have broadened the interactions between customers and companies that are blurring the boundaries between the offline and the online world (Brynjolfsson, Hu and Rahman, 2013; Pantano and Gandini, 2018). Such a phenomenon has given rise to the concept of omnichannel retailing that emphasises the interplay between channels to provide seamless experiences for customers (Verhoef, Kannan and Inman, 2015; Manser Payne, Peltier and Barger, 2017; Voorhees *et al.*, 2017). In the omnichannel environment, customers move freely and expect frictionless travel across multiple channels and touchpoints (Melero, Javier Sese and Verhoef, 2016; Huré, Picot-Coupey and Ackermann, 2017). Customers are interacting with a brand however and whenever they want (Pantano and Gandini, 2018). The increasing complexity in customer behaviour and touchpoint network has given a rise to the customer journey as an approach to gain insights into the formation of customer experience and the complication of service delivery process (Halvorsrud, Kvale and Følstad, 2016; Lemon and Verhoef, 2016). The customer journey differs from traditional perspectives, such as service blueprinting, which examine phenomena from standpoints of companies (Bolton *et al.*, 2014). The customer journey places customers at its heart, making it a useful approach in assessing and understanding customer experience within any service context (Rawson, Duncan and Jones, 2013).

The acknowledgement of the advantages of the customer journey has led to a dramatic increase in academic publications pertaining to the concept across diverse disciplines. The customer journey literature has grown over sevenfold in the last few years. However, the knowledge in the area has remained incoherent and fragmented. Some studies see customer journeys as a tool for visualizing services (Zomerdijk and Voss, 2010; Anderl, Schumann and Kunz, 2016), while others focus on consumers' decision processes (Wolny and Charoensuksai, 2014; Canfield and Basso, 2017). Some studies construct a customer journey with touchpoints (Clatworthy, 2011a; Baxendale, Macdonald and Wilson, 2015), while some divide the journey into phases or events (Lemon and Verhoef, 2016; Panzera *et al.*, 2017). The diverse conceptualisations and

applications of the customer journey result in confusion as regards its scope, components and outcomes. The difference in practice also makes it difficult to derive general conclusions and meaningful implications. Overall, the incoherence in the customer journey literature imposes challenges for further theoretical development and the advancement of practical implications. Therefore, this thesis aims to systematically develop knowledge and frameworks to move the field forward with a more unified and integrated understanding of the customer journey. The following sections in the chapter provide background information on the customer journey, discuss research gaps in the literature, explain research objectives of the thesis and conclude with an overview on the structure of the thesis.

1.1 Domains of Customer Journey

The historical root of the customer journey is challenging to trace, as the concept has emerged in different fields and practices in parallel (Følstad and Kvale, 2018b). Various perspectives have been used to conceptualised and defined the customer journey. Although the diverse perspectives are related, they can be classified into three domains, namely customer, company and journey. From the customer domain, a customer journey focuses on the hierarchical steps that lead customers to make a purchase or consumption decision (Beltagui, Candi and Riedel, 2012; Braidford and Stone, 2016). The customer journey in this domain is strongly linked to the purchase funnel (Lemon and Verhoef, 2016). It describes stages that customers go through “to learn about, purchase and interact” with company offerings (Norton and Pine II, 2013). Stages in the journey can be varied across the models (Dhebar, 2013; Busdieker, 2016). However, the common descriptions are 'information search', 'information evaluation', 'choice selection', 'purchase transaction' and 'purchase evaluation' (Klaus, 2013; Li and Kannan, 2014; Braidford and Stone, 2016; Busdieker, 2016; Majra *et al.*, 2016; Kannan and Li, 2017). This early consumer decision-making process is commonly used to develop a path-to-purchase model, which places the product attainment process at its primary focus. The customer decision process approach can be related to a top-down method in customer journey mapping that begins with a predefined customer intention and extends particular components into tasks and routines (Moon *et al.*, 2016). This domain of the customer journey focuses on the decision making process, rather than outcomes of the journey (Åkesson, Edvardsson and Tronvoll, 2014).

From the company domain, the customer journey is a tool to track contributions of multiple touchpoints in the service delivery system on service evaluations of customers. The perspective roots in the service management background. The aim of customer journey in this domain is to assess a service of a company, where the outputs can be used for service design and service improvement (Moon *et al.*, 2016; Rosenbaum, Otolara and Ramírez, 2017). The approach

facilitates the learning and management of companies to create interactions and build memorable moments with customers (Zomerdijk and Voss, 2011; Muskat *et al.*, 2013; Canfield and Basso, 2017). It visually describes the entire service process as experienced by the customers and promote an integrated study of the service delivery system (Halvorsrud, Kvale and Følstad, 2016). The graphical representation enables companies to examine customer expectations and attitudinal impacts of the interaction across the whole engagement process (Crosier and Handford, 2012; Canfield and Basso, 2017). It documents interactions that are opportunities for the company to create value (Beltagui, Candi and Riedel, 2012). The tool offers necessary support for the companies to step into customers' shoes and thoroughly explore their entire service process to untapped potential opportunities (Lee, 2010; Busdieker, 2016). In addition, the practice also labels "the glitches" within the process (Crosier and Handford, 2012), as well as discloses issues that hinder desirable experiences (Mangiaracina, Brugnoli and Perego, 2009). The deep analyses by using the customer journey enable companies to design holistic customer experiences and ensure consistency across the journey (Beltagui, Candi and Riedel, 2012; Bolton *et al.*, 2014). The customer journey from the company domain is not only a tool to improve offerings but also lead innovation, allocation of resources and necessary changes for the company (Canfield and Basso, 2017; Mikolajová and Olšanová, 2017).

Lastly, the customer journey can be explored from the emerging journey perspective. The domain focuses on components and structure of the customer journey. It highlights characteristics of the customer journey, which are holistic, interaction-based and a collection of touchpoints. A journey reflects both timing and order of contacts between customers and a company (Anderl, Schumann and Kunz, 2016). The process is usually sectioned into before, during and after the experience with an offering, which reflects movement of customers across different touchpoints, and sometime different channels, to fulfil their goal (Åkesson, Edvardsson and Tronvoll, 2014; Ellway, 2014; Anderl *et al.*, 2016; Canfield and Basso, 2017). However, some scholars recognised that customers are no longer limit to the marketing funnel stages and experience with an open-structure journey that has no certain chronological order (Riivits-Arkonsuo, Kaljund and Leppiman, 2014; Farah and Ramadan, 2017). The thesis has proceeded with the journey perspective. For the rest of the thesis, the term "customer journey" is referred to a sequence of stages and touchpoints that customer goes through to consume an offering of a company and form his or her experience.

1.2 Touchpoints as Building Blocks of Customer Journey

Touchpoints occur whenever a customer, directly or indirectly, interacts with a brand or its representations in the service ecosystem (Clatworthy, 2011a; McKechnie, Grant and Shabbir

Golawala, 2011; Baxendale, Macdonald and Wilson, 2015). They can be either controlled or not controlled by the company and may take place across multiple channels in any phase of the customer journey (Jenkinson, 2007; Zomerdijk and Voss, 2010; Åkesson, Edvardsson and Tronvoll, 2014; Stein and Ramaseshan, 2016). Similar concepts to touchpoints include ‘cues’ and ‘service encounters’. However, those terms refer to operational plans of the companies, while ‘touchpoints’ reflect the perspective of customers and their experience (Zomerdijk and Voss, 2010). Each touchpoint has either interactive or communicative values for customers and a brand (Peltier, Zahay and Krishen, 2013; Aichner and Gruber, 2017). They are mediums for customers to personalise their experience while travelling through different phases of the journey (Ponsignon, Durrieu and Bouzdine-Chameeva, 2017). Customers develop their unique experience over the course of interactions and no single touchpoint is solely liable for the achievement (Lee, 2010; Anderl, Schumann and Kunz, 2016). Therefore, an investigation of touchpoints in all phases that customers undertake would help researchers and practitioners to articulate and improve their holistic understanding in customer experience (Beltagui, Candi and Riedel, 2012; Crosier and Handford, 2012).

Touchpoint is recognised as the central aspect of the customer journey. In other words, a customer journey is a collection of touchpoints (Cassab and MacLachlan, 2009; Zomerdijk and Voss, 2010; Clatworthy, 2011b; Baxendale, Macdonald and Wilson, 2015). Customer touchpoints can be depicted from a process timeline (Rosenbaum, Otalora and Ramírez, 2017). They can be expected, unexpected, unwanted or missing from the service blueprint (Halvorsrud, Kvale and Følstad, 2016). Each of them provides an intangible experience to the customer and build to the overall positive or negative customer experiences (Clatworthy, 2011b; Aichner and Gruber, 2017). The data about critical moments, or points that have a significant impact on customer experience, are collected at touchpoints (McKechnie, Grant and Shabbir Golawala, 2011; Rawson, Duncan and Jones, 2013). These critical touchpoints highlight opportunities for companies to co-create value with customers and thus create profit, increase customer engagement, and lead to differentiation from the competition (Norton and Pine II, 2013; Mikolajová and Olšanová, 2017).

The importance of touchpoint attributes may change over the course of a customer journey (Meyer and Schwager, 2007; Majra *et al.*, 2016). Although customers may not utilise the same set of touchpoints, prior studies argued that their chronological sequence can be formalised and yield informative outputs (Muskat *et al.*, 2013; Canfield and Basso, 2017; Rosenbaum, Otalora and Ramírez, 2017). Identification of distinct touchpoints in a customer journey deepens the level of analysis and leads companies to look at the interactions between them as well as

obtaining a holistic view about the service (Lee, 2010; Straker, Wrigley and Rosemann, 2015; Stein and Ramaseshan, 2016). The segmentation of customers based on their touchpoint usage may offer meaningful insights (Anderl, Schumann and Kunz, 2016; Halvorsrud, Kvale and Følstad, 2016). Previous research has identified different groups of touchpoints based on their functional attributes (Straker, Wrigley and Rosemann, 2015; Huré, Picot-Coupey and Ackermann, 2017), ownership (Lemon and Verhoef, 2016; Manser Payne, Peltier and Barger, 2017) and origin (Li and Kannan, 2014; Anderl, Schumann and Kunz, 2016).

1.3 Phases of Customer Journey

Space has a profound connotation in experience design and is emphasised through the structure of the customer journey (Dhebar, 2013). The appointment of the holistic experience into phases makes the complex phenomenon more manageable and comprehensible. The approach enables a detailed understanding of customers at a certain point in time as well as broaden the consideration to cover the entire process the customers go through (Muskat *et al.*, 2013; Ellway, 2014; Lemon and Verhoef, 2016). The customer journey is usually divided into three phases, consisting of before, during and after the primary service delivery (Muskat *et al.*, 2013; Moon *et al.*, 2016; Mikolajová and Olšanová, 2017; Rosenbaum, Otalora and Ramírez, 2017).

The first of the common three defined customer journey chronology is the pre-phase. The first stage considers experience that have been developed before the primary task of a customer is accomplished (Lemon and Verhoef, 2016; Rosenbaum, Otalora and Ramírez, 2017). It starts when customers are either searching for information or making initial contact with the company (Voorhees *et al.*, 2017). The stage includes activities such as problem identification, solution definition and options identification (Dhebar, 2013). The pre-phase consists of all touchpoints in the period preceding the core service encounters that inspire customer engagement in the core-service phase (Voorhees *et al.*, 2017). Alternatively, consenting to the traditional marketing funnel, this stage may relate to behaviours such as need recognition, search and consideration. These activities stimulate customers to proceed and take further actions to satisfy their goal and pursue the service (Lemon and Verhoef, 2016).

The pre-phase ends when the delivery of the primary service begins. However, it is challenging to define a clear final moment of the pre-phase and the start of the core service, as the boundaries are continually evolving with customer expectation, technology and changes in customer behaviours (Voorhees *et al.*, 2017). Furthermore, the initial customer contact may be unrecognisable in some cases that the pre-phase is prolonged and complicated (Hall and Towers, 2017). The preparation phase may be lengthened in case of risk-averse and cautious

customers who prefer a thorough planning before the further action in the actual core-stage (Crosier and Handford, 2012). The quality of the first contact has a critical role in building customer awareness that could retain or drive away customers (Voorhees *et al.*, 2017). Therefore, each touchpoint in the pre-phase should be designed to shape perceptions and expectations of the customers, while driving positive brand awareness. The well-designed touchpoints will help the prospective customers to understand the superior values and benefits of the brand comparing the competitors (Khanna, Jacob and Yadav, 2014).

The second phase of the customer journey is the core-phase, which has also been referred as 'during-phase' (Panzer *et al.*, 2017), usage-phase (Khanna, Jacob and Yadav, 2014), purchase-phase (Kannan and Li, 2017) and service-phase (Rosenbaum, Otolara and Ramírez, 2017). This stage refers to the time interval during delivery of the primary service or an actual purchase by the customer (Rosenbaum, Otolara and Ramírez, 2017; Voorhees *et al.*, 2017). The touchpoints in the core-phase transit customers from consideration to acquisition. The service encounters in this phase should be designed to maximise the perceived values of the offering for customers and instil their confidence in the acquisition decisions (Khanna, Jacob and Yadav, 2014). The interactions during this period fulfil a foundational customer need, which is the focal motivation that initiates the customer engagement with the companies. A core-phase is the stage that a pre-phase and a post-phase make references to (Voorhees *et al.*, 2017). In the retail industry, this phase focuses on the customer experiences that occur during the choice making, ordering and payment (Lemon and Verhoef, 2016; Mikolajová and Olšanová, 2017).

The last primary stage of the customer journey is the post-phase. It encompasses customer interactions with the company following delivery of the primary offering. This stage, theoretically, begins after the attainment of the foundational offering of the company and customers are assessing and responding to the experience from the two previous stages (Khanna, Jacob and Yadav, 2014; Rosenbaum, Otolara and Ramírez, 2017). Customer behaviours in the post-phase include, but not limited to, usage and consumption, after-service engagement, service maintenance and service recovery (Voorhees *et al.*, 2017). The touchpoints in the post-phase should aim to retain customers and trigger their loyalty through repurchase or engagement. The effective interactions in this stage would sustain the relationship with the customer over time, potentially to the end of customer life, and extend the experience journey (Lemon and Verhoef, 2016; Voorhees *et al.*, 2017).

The three-phase framework provides an overview of the customer journey. However, further stages that are aligning with the three main phases are usually defined to add details and get a

more comprehensive understanding in the customer journey (Klaus, 2013). The multichannel researchers typically adopted the traditional purchase funnel and considered the multiple steps customers move from need recognition to purchase evaluation. While, the service managers usually focused on specific encounters and their contribution to the overall service experience (Lemon and Verhoef, 2016).

1.4 Sequence of Customer Journey

Customers form experience with brands through their interactions with various touchpoints across different phases of the journey (Åkesson,Edvardsson and Tronvoll, 2014; Mele and Russo-Spena, 2021). In other words, customers can be described as travellers who perform numerous activities at various stages of the journey, which shape their perceptions and impression of the brand (Ellway, 2014; Anderl *et al.*, 2016; Krey *et al.*, 2021). The order of activities and touchpoints that the customers encounter is displayed as the sequence of the customer journey (Rosenbaum,Otalora and Ramírez, 2017), whilst the distance travelled on the journey reflects the progress that the customers are making towards their goals (Tseng,Qinhai and su, 1999). Therefore, the journey sequence is an important aspect that helps researchers and practitioners gain insights into the customers (Bolton *et al.*, 2014; Voorhees *et al.*, 2017). So far, the customer journey literature has considered three types of journey sequences, namely, linear, loop and non-chronological.

The linear customer journeys have a definite start and end point. Although the length of individual journeys can be varied due to the extent of customer involvement, customer characteristics and the service being investigated (Wolny and Charoensuksai, 2014; Hall and Towers, 2017), each journey starts before and ends after the main service is delivered (Zomerdijsk and Voss, 2010; Gupta,Sachan and Kumar, 2020). This type of journey sequence considers that customers navigate through the service system in a chronological and one-way order (Halvorsrud,Kvale and Følstad, 2016; Cui *et al.*, 2022). The most common linear structure is related to the traditional purchase funnel, which recognizes the movement of customers from need recognition to post-purchase evaluation (e.g. Crosier and Handford (2012), Majra *et al.* (2016), Kaczorowskaspyschalska (2017) and Earley (2021)).

The loop customer journey is an extension of the linear form that recognises a possible re-entry of the customers into the journey after ending the post-phase (Jenkinson, 2007; Huang, 2021). The loop structure can be caused by several factors. It could be caused by a continuous flow of a service delivery process that requires more than one transaction (Zomerdijsk and Voss, 2010; Anderl *et al.*, 2016) or an attempt of a brand to prolong their interactions with customers and

create a loyalty loop (Nunes *et al.*, 2013; Voorhees *et al.*, 2017; Kimura, 2022). The cycle structure of the journey that locks the customers within it offers a nurturing process, which stimulates innovation and continuous service improvement of the company (Zomerdijsk and Voss, 2011; Shetty and Kalghatgi, 2018).

Lastly, the non-chronological customer journey has an open architecture that endorses customisation, flexibility and the openness of the journey (Riivits-Arkonsuo, Kaljund and Leppiman, 2014). The model recognises that customers may not always move in a unidirectional flow with a clear functional goal (Mangiaracina, Brugnoli and Perego, 2009; Moon *et al.*, 2016). Instead, they may have an erratic and opportunistic journey that does not follow the linear structure and has no clear transitions between phases (Wolny and Charoensuksai, 2014). The non-chronological sequence anticipates the inconstancy of customer emotional and behavioural responses through the journey (Dhebar, 2013). Furthermore, technological advances also contribute to this emerging journey sequence by removing some phases or making some journey phases obsolete (Farah and Ramadan, 2017; Kannan and Li, 2017).

Although the loop and non-chronological sequence can offer more responsive and dynamic models, this thesis focuses on the linear sequence of the customer journey. The linear model is appropriate for the research objectives, which aim to clarify the components and outcomes of the customer journey. The more simplified and predicted structure is an ideal instrument that helps the researchers to achieve the objective (Siebert *et al.*, 2020). In addition, the linear customer journey is also the most widely acknowledged approach in the field (e.g. Lemon and Verhoef (2016), Panzera *et al.* (2017), Barwitz and Maas (2018) and Berman (2020)).

1.5 Research Gaps, Aims and Objectives

The customer journey has been widely studied in the marketing, decision making and service management field in the past decade (Tax, McCutcheon and Wilkinson, 2013; Riivits-Arkonsuo, Kaljund and Leppiman, 2014; Busdieker, 2016; Gao, Melero and Sese, 2019; Earley, 2021). However, the diverse background of the concept has made the literature appear fragmented and incoherent (Følstad and Kvale, 2018b). Therefore, this thesis aims to aggregate and organise the current body of knowledge and place it in contexts to uncover the relationships between the customer journey and other business variables. The results offer a theoretical groundwork for future development of the topic and further develop our understanding about the customer journey for advanced applications. To fulfil the research objective, one systematic

review and two empirical studies are developed (figure 1). This section proceeds to elaborate on the research gaps and aims of this thesis.

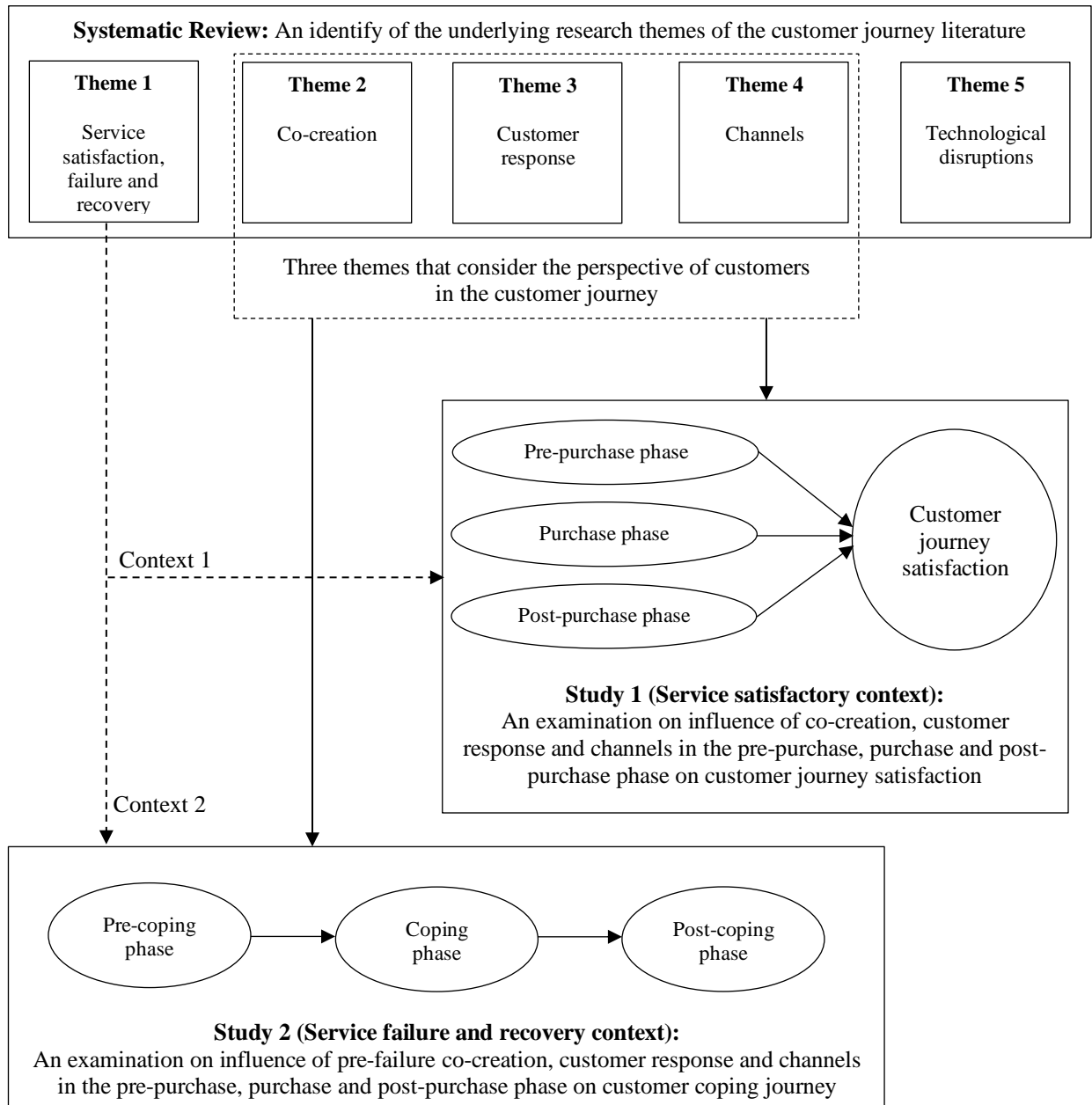


Figure 1 Research gaps, aims and objectives of the thesis

1.5.1 Research gap 1

Attempts have been made to review the historical roots, terminologies and approaches of the customer journey based on 45 articles published prior to 2013 (Følstad and Kvale, 2018b). However, the literature has evolved quickly, covering a wide range of themes and areas, evidenced by a diverse set of related marketing aspects and divergent uses of customer journeys in empirical studies (Chen, Kyaw and Ross, 2008; Klaus, 2013; Muskat *et al.*, 2013; Åkesson, Edvardsson and Tronvoll, 2014; Lim, Al-Aali and Heinrichs, 2015; Fornari *et al.*, 2016; Canfield and Basso, 2017; Panzera *et al.*, 2017). Hence, past literature on customer

journey does not appear coherent. Given that the customer journey literature has grown more than sevenfold in the past eight years and the previous review (Følstad and Kvale, 2018b) focused on the terminology as well as its applications in service design, there is a need to revisit this fast-growing body of work and examine the underlying themes to integrate the understanding of the customer journey into other constructs in business and marketing studies. Taking the above into account, the first objective of the thesis is to systematically develop and integrate understanding of the customer journey in the existing literature. To be more specific, the first research aim is:

Research aim 1: To identify the underlying research themes of the customer journey literature

A systematic literature review with a quantitative content analysis is adopted to organise the knowledge and provide a holistic picture of the customer journey literature up to May 2020. The review identifies five research themes of the customer journey literature. Theme 1 concerns the contexts of the customer journey. It discusses about service satisfaction, service failure and recovery and service mapping. Theme 2, 3 and 4 contain a sub-dimension that reflects the perspective of customers in the journey. The three themes consider co-creation, customer response and channels. Lastly, theme 5 focuses on emerging disruptions from technological advancements that affect customer behaviour, touchpoint networks and structure of journeys. Moreover, the review also produces a dendrogram that maps relationships between the identified themes and listed the main keywords of each topic. A heatmap is also illustrated to highlight the most and the least research areas in the literature to provide suggestions for future research.

To further develop the knowledge of the customer journey in a consistent manner, the rest of the thesis proceeds by building on the findings of the systematic literature review. The three identified themes that consider the perspective of customers are explored in the two identified contexts. To be specific, the empirical studies of the thesis examine the significance and roles of customer co-creation behaviour, customer response and customer channel use in the customer journey of the service satisfactory and service failure context. Study 1 aims to extend the knowledge about customer experience in the service satisfactory situations by investigating the three customer-related themes as antecedents of customer journey satisfaction. Study 2 hopes to shed light on the internal process that customers go through after failure incidents. The second study proposes the customer coping journey framework and examines the influence of the three customer-related themes on the coping journey.

1.5.2 Research gap 2

In omnichannel retailing, customers are no longer mindful of channel boundaries, but routinely utilise touchpoints that offer them the highest value (Nunes and Cespedes, 2003; Flavián, Gurrea and Orús, 2016). Technological advances have increased the decision power of customers when interacting with retailers (Wind and Hays, 2016). Such a changing retail environment has resulted in more complex customer channel behaviour and journey patterns which were not possible in the past (Van Bruggen *et al.*, 2010; Verhoef, Kannan and Inman, 2015). The complexity of customer behaviours in omnichannel retailing raises the need for companies to map and examine critical components of the customer journey to identify pivotal satisfying and dissatisfying elements in the service process (Richardson, 2010; Rawson, Duncan and Jones, 2013).

Build on the systematic literature review in the thesis, customer co-creation behaviour, customer response and customer channel behaviour have been identified as the major dimensions of the customer journey that contain the viewpoints of the customers. Similarly, previous studies have also suggested the significance of the four factors. The increasing importance of customer-centric business strategies has boosted the acknowledgement of the customers as value and experiential co-creators (Crosier and Handford, 2012). Customers co-create value with brands by providing their input during the course of interaction (Barile *et al.*, 2017). Every contact may stimulate positive or negative emotional responses from the customers (Jenkinson, 2007). Such emotional assessment shapes customer beliefs about performance and the attractiveness of the brand, and consequently influences their attitudes and intentions in the journey (Khanna, Jacob and Yadav, 2014). In addition, customers also continuously evaluate the experiential values that they get from interactions with the companies (Norton and Pine II, 2013; McColl-Kennedy *et al.*, 2015). Customers are satisfied when their expected values from an interaction are achieved (Lee, Lanting and Rojdamrongratana, 2017). Furthermore, customers who use dissimilar channels may perceive the same event differently due to their heterogeneity in goals and values (Barwitz and Maas, 2018).

Therefore, it is essential to examine the major dimensions of the customer journey in all pre-purchase, purchase and post-purchase stages (Lemon and Verhoef, 2016; Voorhees *et al.*, 2017). Neglecting the temporal change could limit the understanding and effectiveness of customer journey management, as customers are constantly adjusting their goals and expectations through different stages of the journey (Van Vaerenbergh *et al.*, 2019; Hu and Tracogna, 2020). Understanding the critical components of the customer journey and their dynamic through different phases are keys to stimulating strong and positive holistic evaluation

by the customers (Åkesson,Edvardsson and Tronvoll, 2014). Hence, survey 1 is developed to further examine the relationships between the identified themes from the systematic literature review and the customer journey. To be specific, research aims for study 1 are:

Research aim 2: To investigate the influences of customer co-creation behaviour and customer response on customer journey satisfaction

Research aim 3: To examine the channel user segment as a moderator of the relationships

For the thorough and holistic understanding about the influence of the customer co-creation behaviour and customer response on customer journey satisfaction, the relationships between the factors are examined in all three phases of the journey. This detailed investigation aims to track the development and identify the most influential aspects in each phase of the journey. Furthermore, respondents are also classified according to their channel use in the pre-purchase, purchase and post-purchase phase. Then, the customer segmentation is tested for its moderating effect to reveal the heterogeneity among customers in different clusters.

1.5.3 Research gap 3

Service failure may cause disruptions to the regular customer purchasing journey (Van Vaerenbergh *et al.*, 2019). A service failure occurs when the service performance as perceived by the customers is below their expectations (Bitner,Booms and Tetreault, 1990). This can happen at any stage of the journey, whether during search in the pre-purchase, order placement and payment in the purchase phase or consumption in the post-purchase phase (Taylor *et al.*, 2020). Service failures in the omnichannel environment are multifaceted (Rosenmayer *et al.*, 2018). A failure can be in the form of a missing touchpoint, a dysfunctional touchpoint, an unexpected touchpoint or an irregular touchpoint sequence (Halvorsrud,Kvale and Følstad, 2016). Service failures may cause disconfirmation and psychological distress to customers (Smith,Bolton and Wagner, 1999), which then reduces customer satisfaction (Hess,Ganesan and Klein, 2007). The dissatisfied customers could spread negative word-of-mouth and switch to other service providers (Maxham III and Netemeyer, 2002; Weun,Beatty and Jones, 2004). Therefore, it is important for companies to track and analyse not only the causes, but also the effect on the customer experience, of the failure incidents to gain a better understanding of the events and develop appropriate measures to counteract them.

The business and marketing literature has examined the period after the occurrence of service incidents, but mainly focused on service recovery, with emphasis on the activities and efforts of the companies rather than on how customers respond (Bitner,Booms and Tetreault, 1990;

Miller, Craighead and Karwan, 2000; Maxham III, 2001; Wirtz and Mattila, 2004). Also, most studies on customer reactions to service failure have focused on the propensity to seek redress and complaint behaviour (Blodgett and Anderson, 2000; Bougie, Pieters and Zeelenberg, 2003; Chebat and Slusarczyk, 2005). Such projects have neglected the internal process that customers experience when faced with stressful consumption encounters. In addition, the majority of published research has investigated service failure as a discrete event (Goldstein *et al.*, 2002; Surachartkumtonkun, McColl-Kennedy and Patterson, 2014), which overlooks the temporal dimension of service failures. Hence, the research scope of the existing literature has limited the inclusion of customers and restricted the understanding about the post-failure period, which may explain the low effectiveness of recovery mechanisms (Van Vaerenbergh *et al.*, 2019).

In order to enhance our knowledge of customer experience after a failure incident, this thesis introduces the customer coping journey, which extends the concept of customer coping behaviour to cover all stages of the customer journey. Coping refers to the cognitive and behavioural efforts of an individual to mitigate the distress associated with negative experiences (Lazarus and Folkman, 1984), while the customer journey refers to the sequence of stages and touchpoints that contributes to customer experience (Halvorsrud, Kvale and Følstad, 2016; Følstad and Kvale, 2018b). Survey 2 is developed to examine the internal process that customers encounter after failure incidents. Specifically, research aims of study 2 are:

Research aim 4: To examine the sequence of stages that customers go through after encounter a failure incident

Research aim 5: To assess the influence of pre-failure customer purchasing journey on post-failure customer experience

The thesis examines the customer coping journey by dividing the process into three phases and investigates the relationships between customer failure appraisals, customer coping strategies and customer cognitive and behavioural responses. This study contributes to the service failure and customer experience literature by placing customers at the heart of the process, examining a series of cognitive and behavioural stages that they go through after encountering a failure incident. Furthermore, the study also integrates the knowledge about customer experience in the service satisfactory and service failure context by examining the influence of pre-failure customer co-creation behaviour, pre-failure customer response and pre-failure customer channel use on each relationship path in the customer coping journey.

In summary, the main objective of the thesis is to develop a systematic understanding of the customer journey by identifying the underlying themes of the phenomenon, placing them in contexts and examining their relationships to advance the current body of knowledge. To achieve the research purpose, firstly, the researcher adopts the systematic literature review approach and quantitative content analysis to synthesise and organise the existing customer journey knowledge into themes. Then, the three identified themes that consider the perspective of customers are examined for their roles in shaping the outcomes of the customer journeys. The thesis advances the current customer journey model by identifying its components, adding them to the linear model and examining their correlations with the customer journey. The findings also contribute to the customer journey literature by extending the research scope beyond the purchasing context and integrating two customer journeys from different settings to offer a more holistic view. Additionally, the thesis also contributes to the omnichannel and service failure by examining customer channel behaviour in depth and scrutinising the internal process that customers go through to overcome failure incidents. The aggregation and systematic development of the customer journey knowledge in this thesis provides a theoretical groundwork for future practice and research into the topic.

1.6 Structure of the Thesis

The thesis comprises of seven chapters. The current chapter provides research background of the customer journey, summarises research gaps of the field and explains research objectives of the thesis. Chapter 2 presents a systematic literature review on the customer journey. The chapter follows a systematic procedure and adopts a quantitative content analysis to offers comprehensive insights into the relevant papers published to date. The review organises the existing knowledge of the customer journey into five themes, consisting of service satisfaction, failure and recovery, customer response, co-creation, channels, and technological disruption. A dendrogram and a heatmap are also produced to illustrate relationships between the identified themes and highlight research gaps of the current literature set, respectively. The findings of the systematic review provide foundation for studies of the thesis. Chapter 3 provides the theoretical justifications for the conceptual models and the hypotheses of the thesis. The empirical work of the thesis consists of two studies. One focuses on the customer journey in the service satisfactory context, while another examines the customer journey in the service failure context. The relationships between the two contexts are also established. Chapter 4 explains the methodological approach of the thesis. It covers research philosophy, data collection, measurement, sampling, data analysis and research ethics. Chapter 5 reports results and findings of the thesis. Chapter 6 discusses the inferences from the results of the two surveys of the thesis.

Lastly, chapter 7 is a concluding chapter, focusing on the theoretical and practical contributions of the thesis as well as discussing limitations and suggestions for future research.

Chapter 2. Literature Review on the Customer Journey

The customer journey literature has evolved quickly and covered a wide range of themes and areas, evidenced by a diverse set of related marketing aspects and divergent uses of customer journeys in empirical studies (Chen, Kyaw and Ross, 2008; Klaus, 2013; Muskat *et al.*, 2013; Åkesson, Edvardsson and Tronvoll, 2014; Lim, Al-Aali and Heinrichs, 2015; Fornari *et al.*, 2016; Canfield and Basso, 2017; Panzera *et al.*, 2017). Hence, the past literature on customer journey does not appear coherent. Therefore, this chapter aims to develop a systematic understanding of the customer journey. To be specific, this chapter adopts a stream-based systematic review approach to identify the underlying research themes about the phenomenon, placing them in context and synthesising the current body of knowledge. The attempt to aggregate and integrate the relevant literature to date provides a theoretical groundwork for future development of the topic. The following sections will explain the methodology employed for the review, present results and discuss findings.

2.1 The Systematic Review Process

Systematic review papers can be of several types (Snyder, 2019; Paul and Criado, 2020), namely, Structured review focusing on widely used methods, theories and constructs (Canabal and White III, 2008; Paul and Singh, 2017; Kahiya, 2018; Rosado-Serrano, Paul and Dikova, 2018; Mishra, Singh and Koles, 2020), Stream-based review identifying research themes (Jones, Coviello and Tang, 2011; Prayag and Ozanne, 2018; Schmitt, Raisch and Volberda, 2018; Vahidzadeh *et al.*, 2020), Bibliometric review analysing citations and co-citations (Randhawa, Wilden and Hohberger, 2016; Donthu, Kumar and Pattnaik, 2020; Goyal and Kumar, 2020), Framework-based review using a framework to integrate the existing knowledge (Xie, Reddy and Liang, 2017; Paul and Benito, 2018), Hybrid- Narrative review providing a framework for setting future research agenda (Paul, Parthasarathy and Gupta, 2017; Bahoo, Alon and Paltrinieri, 2020; Dabić *et al.*, 2020; Kumar, Paul and Unnithan, 2020), Theory-based review discussing the role of a specific theory (Gilal *et al.*, 2019; Paul and Rosado-Serrano, 2019), Meta-analysis synthesising results of empirical works (Knoll and Matthes, 2017; Barari *et al.*, 2020; Rana and Paul, 2020) and reviews aiming for model or theory development (Paul, 2019; Paul and Mas, 2019). This review was conducted as a stream-based systematic review to produce robust and reliable results that synthesise and map the knowledge related to the

customer journey. The approach was suitable as the customer journey has been conceptualised differently and studied in relation to diverse concepts in the business discipline (Wong *et al.*, 2013).

2.1.1 Literature selection

The process of the review adopted the steps guided by Tranfield, Denyer and Smart (2003). A PRISMA diagram (Moher *et al.*, 2009) (figure 2) has been produced to summarise the flow of information included in this review. The preliminary stage involved a discussion among the three members of the review team to set the research protocol. A precise guideline was produced to facilitate the transparency and the objectivity of the review. The SPICE framework (Booth, 2004) was applied to formulate a review question and facilitate the decision of the inclusion and exclusion criteria at this stage. The question is, from the perspective of the customer journey, what are the relevant business and marketing concepts that have been studied in the customer journey literature published in academic journals prior to May 2020. The initial set of search keywords was “*customer journey*” or “*consumer journey*”. However, this limited search excluded some key papers, due to the lack of a universal definition and the cross-disciplinary perspectives of the term (Følstad and Kvale, 2018b). Therefore, “*touchpoint*” or “*touch point*”, which was recognised as a building block of customer journeys (Clatworthy, 2011a), was employed as an additional search string. The systematic review on the terminologies of the customer journey by Følstad and Kvale (2018b) also revealed that the concept of touchpoints was, explicitly or implicitly, discussed in all articles about the customer journey. Therefore, the selected terms were utilised to locate as many relevant publications as possible (Schibrowsky, Peltier and Nill, 2007).

The search was conducted within three electronic databases, namely Scopus, Business Source Complete in EBSCO and Web of Science to ensure a comprehensive coverage of the relevant literature (Lu, Papagiannidis and Alamanos, 2018; Martín-Martín *et al.*, 2018). The analysis covered approximately twenty years of research on the customer journey, up until May 2020. After removing duplicates, the search yielded a total of 401 studies, 208 and 193 from ‘customer journey’ and ‘touchpoint’, respectively. The abstract of each retrieved study was extracted to a spreadsheet for the review panel to assess their relevance. For an article to be included, it had to be related to business and marketing, written in English and available in full text. The exclusion criteria were also set for quality appraisal. Articles not related to customer journeys or focused on either customer behaviour or a specific touchpoint, but not related to a customer journey context, were excluded. Non-academic and non-published studies were also excluded to represent only validated academic knowledge and to avoid heterogeneity issues in the

analysis (Salipante,Notz and Bigelow, 1982; Denyer and Tranfield, 2009). The three panel members reviewed the extracted information independently to reduce the risk of biased decisions (Hasson,Keeney and McKenna, 2000; Paul and Singh, 2017). Only documents that found agreement from at least two out of three members were incorporated and analysed. The final set of retrieved papers comprised 147 documents, 103 and 44 from 'customer journey' and 'touchpoint', respectively.

Identification

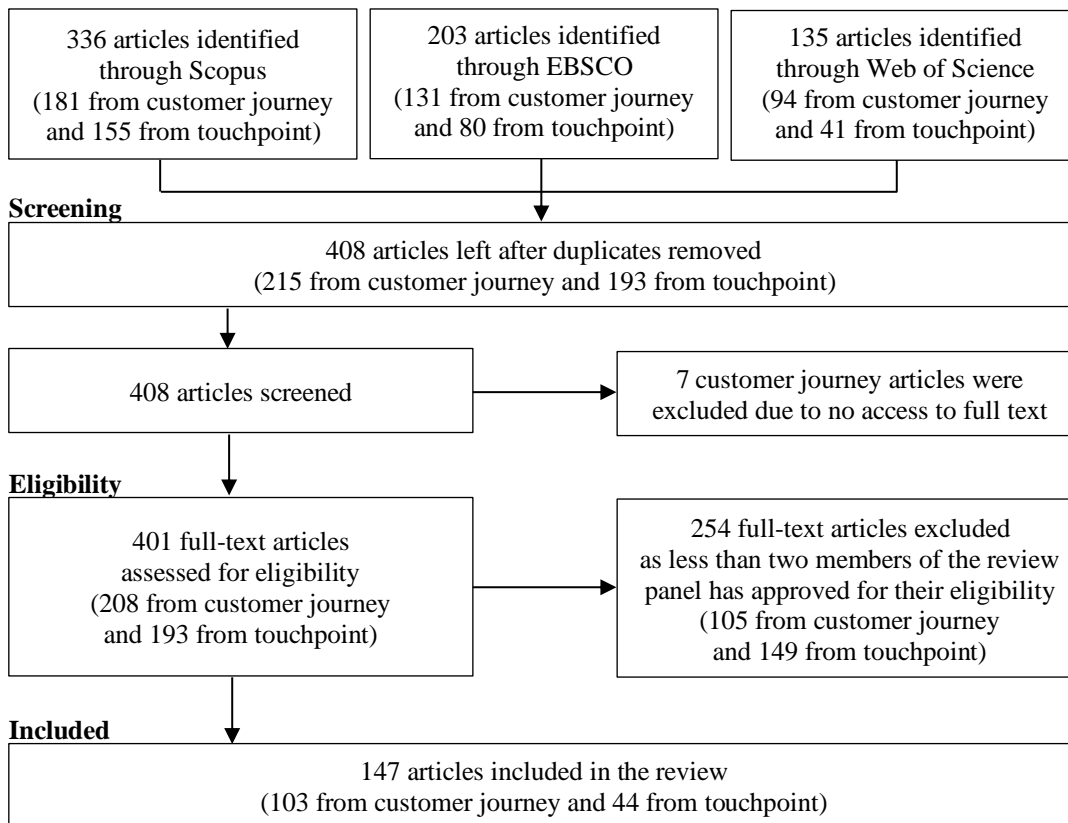


Figure 2 The PRISMA diagram

2.2.2 Document classification and research themes identification

A cluster-based feature selection and document classification was adopted as an analysis procedure of the review (Chaussabel and Sher, 2002; Yeh, Jen and Hsu, 2012). Clustering and classification were branches of text mining, a process of discovering embedded information and semantic structures of the text corpus. This approach involved machine learning, which is an application of statistical data and algorithms to create a model for the machine to extract the useful information (Zhai and Massung, 2016).

Document classification is a supervised text mining technique to group similar documents together according to a set of pre-defined categories (Zhai and Massung, 2016). However, the

literature retrieved from the online databases was unlabelled for the purposes of the systematic review. Therefore, term clustering was first utilised to identify the embedded themes and common keywords discussed in the review articles, and they were thus labelled. The quantitative content analysis deduced statistically significant concepts and themes in the text corpus, thus increasing the replicability, objectivity and generalisability of the research findings (Riffe, Lacy and Fico, 2014; Randhawa, Wilden and Hohberger, 2016). QDA Miner, a textual analysis software program, with its quantitative extension WordStat, were used for the process, based on a dictionary construction approach. To prepare the documents for the content analysis software, all articles were first converted into plain text files. Images, graphs, hyphens, braces and square brackets that may reduce the accuracy of the machine learning process were removed to minimise possible interruptions in a sentence or a paragraph. Spelling-mistakes were also corrected to enhance the process performance.

Wordstat was then used to compute the frequency of all words appearing in the review documents as a basis of the dictionary construction. Exclusion and lemmatisation lists were activated at this stage to reduce the size of the wordlist, retaining the most relevant and informative terms, and thus lessening the processing time (Péladeau and Stovall, 2005). Words that appear in either every case or rare cases had low discriminative value for text classification (Yeh, Jen and Hsu, 2012). Therefore, the cut-off thresholds were set to remove terms occurring less than 4 or more than 70% of the cases from the dictionary. In addition, methodology terms were also discarded because they were not meaningful in identifying the embedded themes of the articles. The quantitative content analysis software produced the universal meaning of each word by approximating their connotations in the text corpus. However, words were only meaningful within their specific context. Thus, common phrase extraction and keyword-in-context were performed to reduce semantic ambiguity, false positive and false negative errors, and to validate the dictionary (Péladeau and Stovall, 2005). Lastly, for the dictionary construction phase, words with similar meanings or words that shared the same ideas were grouped and decoded as synonyms of a single word entry (Yeh, Jen and Hsu, 2012).

Cluster analysis was employed as a tool for thematic identification and feature reduction. The content analysis software computed the Jaccard similarity and the co-occurrences between words (Péladeau and Stovall, 2005), in the same and different cases, to produce a dendrogram representing the result of the clustering process. Terms with high similarities were put in the same cluster, with lesser associates in the neighbouring branches. The major clusters that contained four or more terms were extracted as categorisation indexes and features of the articles. As a result, five clusters and their branches were identified and labelled as themes and

sub-themes of the literature. The embedded themes of a text could be discovered by the semantic patterns or the repetition of certain words (D'Andrade, 1991; Marikyan, Papagiannidis and Alamanos, 2019). Thus, a document categorisation was conducted by cross-tabulating the extracted indexes against each document to identify their dominant features and label them accordingly (Davi *et al.*, 2005).

The labelled documents were then used as inputs of the classifier to train the algorithms. WordStat generated different combinations of classifier algorithms and cross-validation methods to identify the best performing set. The classifier used in this review was a k -Nearest Neighbour algorithm, validated by a 10-fold cross-validator method. The algorithm determined a class label by searching for the k most similar documents and then sharing their dominant label (Zhai and Massung, 2016). A flow map of the cluster-based document classification process is presented in figure 3.

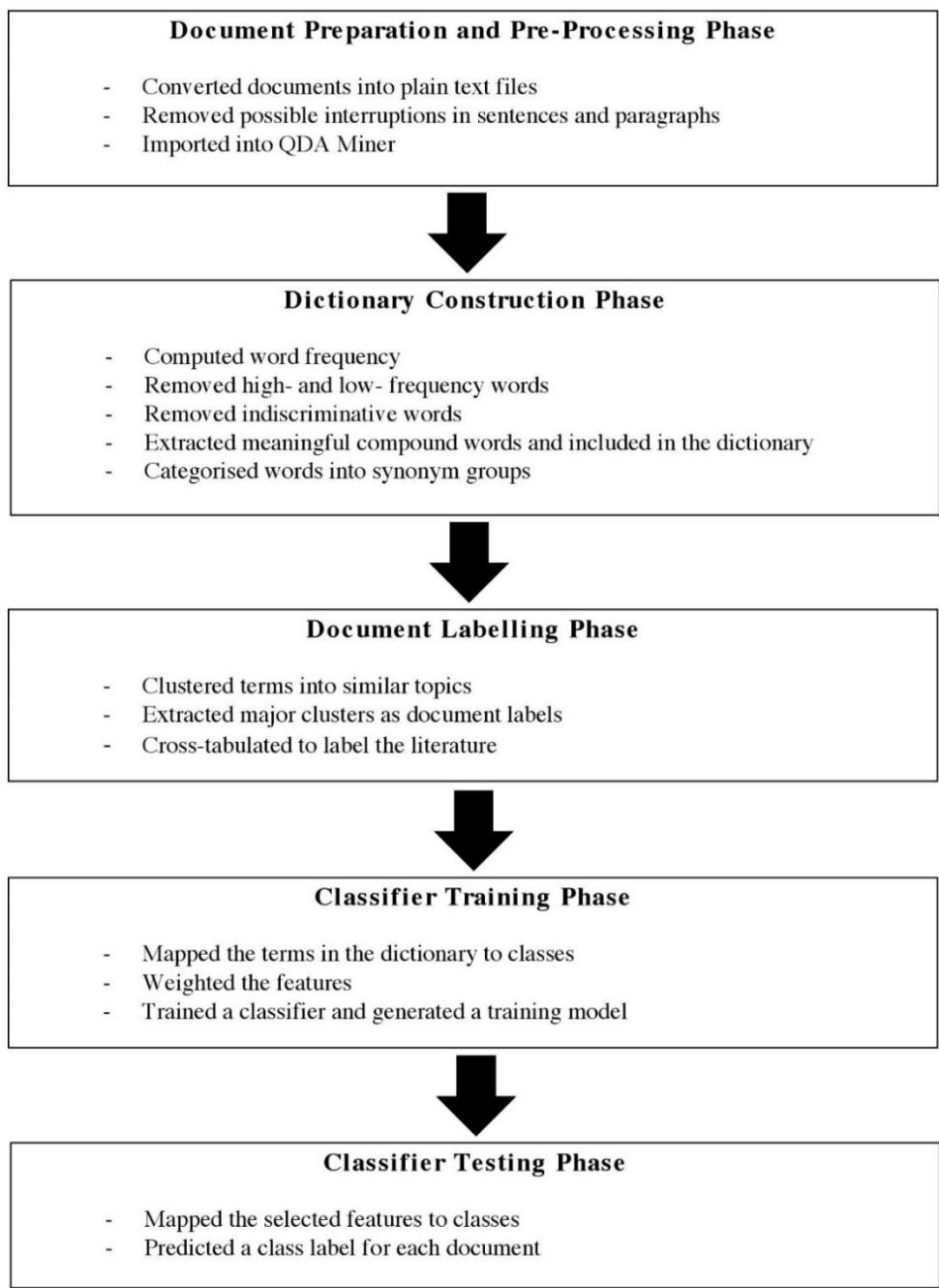


Figure 3 Flow map of the cluster-based document classification process

2.2 Profile of the Customer Journey Literature

The Theory-Context-Construct-Methodology (TCCM) framework (Paul and Rosado-Serrano, 2019) was adopted to provide an overview of the customer journey literature. The bibliographic sources, most cited articles, commonly applied theories, studied contexts, researched variables and employed methods of the retrieved articles are summarised in tables 1 to 6.

Journal	Before 2005	2006 - 2010	2011 - 2015	2016 - May 2020	Total
Journal of Services Marketing	0	0	2	7	9
Journal of Retailing and Consumer Services	0	0	0	9	9
Journal of Direct, Data and Digital Marketing Practice	0	3	5	0	8

Journal of Retailing	0	0	1	7	8
Journal of the Academy of Marketing Science	0	0	0	8	8
Journal of Business Research	0	0	0	7	7
Journal of Service Management	0	1	3	2	6
International Journal of Retail and Distribution Management	0	0	0	6	6
Journal of Service Research	0	1	1	3	5
Harvard Business Review	0	2	2	0	4
Business Horizons	0	1	1	2	4
International Journal of Research in Marketing	0	0	1	3	4
Journal of Service Theory and Practice	0	0	1	3	4
Business Process Management Journal	1	0	0	0	1
Canadian Journal of Administrative Sciences	1	0	0	0	1
Others	0	2	16	45	63
Total	2	10	33	102	147

Note: The listed journals have either published at least one article before 2005 or published more than three articles in total.

Table 1 Bibliographic sources of the customer journey articles

	Author(s)	Journal	Total citations
1	Lemon and Verhoef (2016)	Journal of Marketing	738
2	Meyer and Schwager (2007)	Harvard Business Review	544
3	Zomerdijk and Voss (2010)	Journal of Service Research	404
4	Kannan and Li (2017)	International Journal of Research in Marketing	187
5	Croteau and Li (2003)	Canadian Journal of Administrative Science	183
6	Tax, McCutcheon and Wilkinson (2013)	Journal of Service Research	151
7	Li and Kannan (2014)	Journal of Marketing Research	134
8	Bolton <i>et al.</i> (2014)	Journal of Service Management	118
9	Voorhees <i>et al.</i> (2017)	Journal of Business Research	110
10	Breidbach, Brodie and Hollebeek (2014)	Managing Service Quality	109

Note: Based on Scopus (8 October 2020)

Table 2 The ten most cited articles of the customer journey literature

Theory	Frequency
Game theory	3
Social practice theory	3
Relationship marketing theory	2
Uses and gratifications theory	2
Prospect theory	2
Utility theory	2
Experiential learning theory	2
Network theory	2
Information processing theory	2
Complexity theory	2
Justice theory	2
Adaption level theory	2

Cognitive dissonance theory	2
Construal level theory	2
Consumer culture theory	2
Diffusion of innovations theory	2
Role theory	2
Social exchange theory	2
Others	26
Total	64

Note: The listed theories have been applied more than once in the literature set and the total frequency exceeds the number of articles that explicitly state the theories because some studies applied multiple theories (e.g. Kerr and Kelly (2019), Rosenbaum, Ramirez and Matos (2019) and Steward *et al.* (2019)).

Table 3 Theories used in the customer journey articles

	Industry	Frequency		Country	Frequency
1	Tourism	18	1	United States	17
2	Financial services and insurance	16	2	United Kingdom	14
3	Electronics	15	3	Italy	10
4	Events and entertainment	15	4	Germany	8
5	Clothing and apparel	14	5	Sweden	6

Table 4 The five most frequently studied contexts in the customer journey articles

Method	Before 2005	2006 - 2010	2011 - 2015	2016 - May2020	Total
Conceptual paper	1	5	9	34	48
Survey	1	2	8	22	33
Interview	0	2	9	22	33
Secondary data	0	1	6	23	31
Focus group	0	0	1	11	12
Ethnography	0	0	2	7	9
Diaries	0	0	2	2	4
Real-time tracking	0	0	0	1	1
Total	2	10	37	122	171

Note: Totals exceed the number of retrieved articles because some studies use multiple methods (e.g. Aichner and Gruber (2017), Huré, Picot-Coupey and Ackermann (2017) and Sultan (2018)).

Table 5 Method used in the customer journey articles

Variables	Frequency
Independent variables	
Customer-related variables	
Channel choice	15
Touchpoint exposure	11
Customer satisfaction	5
Perceived value	4
Customer engagement	2
Customer emotional response	2
Customer experience	2
Other individual contexts (e.g. customer goal, purchase frequency and spending)	10
Company-related variables	
Channel strategy	6
Management capability	2
Type of company	1
Journey-related variables	

Touchpoint attributes	6
Journey structure	2
Touchpoint ownership	1
<i>Dependent variables</i>	
Customer-related variables	
Customer experience	5
Loyalty (repurchase and advocacy)	11
Purchase intention	5
Customer satisfaction	4
Customer cognitive and emotional responses	4
Impulsiveness	2
Perceived value	2
Others (e.g. channel choice, self-disclosure and willingness to donate)	7
Company-related variables	
Conversion rate	3
CRM performance	3
Retention rate	2
Others (e.g. clickthrough rate, reach and company value)	4
Journey-related variable	
Classification of touchpoints	1
<i>Mediator variables</i>	
Customer-related variables	
Customer attitudes	3
Customer experience	3
Relationship quality	2
Others (e.g. emotional response, loyalty intention and perceived value)	4
Company-related	
Business and channel strategy	3
Others (e.g. customer value and management capability)	2
<i>Moderator variables</i>	
Customer-related variables	
Psychographics	3
Purchase intensity	2
Sociodemographic	2
Others (e.g. brand involvement, channel exposure and perceived benefits)	7
Company-related variable	
Business strategy	2
Journey-related variables	
Channel ownership	1
Journey phase	1
Touchpoint interaction effect (carryover and spread over effect)	1

Note: The reported frequencies are based on empirical studies, excluding articles that do not include quantitative examination of bivariate or multivariate relationships (e.g. Becker and Jaakkola (2020) and Faulds et al. (2018)).

Table 6 Variables researched in the quantitative customer journey articles

Although the initial search result showed that the first article that used the term customer journey or touchpoint was published in 1991, the earliest article that met all the review criteria was published in 1999. The number of published journal articles that met the review criteria grew from 18 at the end of 2012 to 147 in May 2020, which represented an approximately seven-fold increase. The total number of publications in 2019 and the first five months of 2020 exceeded the amount that was published from 2015 to 2018 combined. The 147 retrieved articles were published in 65 different academic journals (Table 1). Prior to 2011, Journal of Direct, Data and Digital Marketing Practice and Harvard Business Review were the major sources, published almost half of the literature. The three main journals that published more

than a third of the literature after 2018 were Journal of the Academy of Marketing Science, Journal of Retailing, and Journal of Business Research. The ten most cited articles among the retrieved papers are listed in Table 2.

Out of the 147 retrieved articles, 53 studies applied at least one theory to explain customer behaviour or service process in the context of the customer journey. The literature set included 46 different theories (Table 3), with the most frequently applied theories being game theory and social practice theory. From 93 and 83 articles that explicitly stated their researched industrial context and geographic scope respectively, the most frequently studied industries were tourism, and financial services and insurances, whilst United States and United Kingdom were the commonly studied locations. Other regularly researched contexts are shown in Table 4.

Table 5 displays the method used in the customer journey articles over time. The current set of the literature predominantly employed qualitative methodologies, which were beneficial in conceptual and instrumental development and reflected the early stage of the research in the domain (Johnson, Onwuegbuzie and Turner, 2007). This reasoning is supported by the dearth of quantitative papers on the customer journey prior to 2014. Out of 95 articles that utilised a qualitative methodology, half of them were conceptual papers while the other half were empirical studies. The common qualitative methods used to collect empirical data included interviews, focus groups, ethnography, and diaries. There were 44 studies that adopted a quantitative approach and collected data by using surveys, company databases or real-time tracking. The researched variables in the retrieved quantitative articles are categorised and listed in Table 6. Most of the quantitative studies investigated customer-related variables from the customer's viewpoint. Although mixed methodologies were less popular, the approach was becoming more common after 2016.

2.3 Quantitative Content Analysis

The results of the clustering analysis reflected the use of terminologies in different topics, as well as the wording within the same texts (Yeh et al., 2012). The coherence of the terms was based on their frequency in the texts and co-occurrences with other keywords. The descriptors that appeared near each other or within the same paragraph conveyed strong connections and therefore were grouped in the same branch. The distance between terms or clusters indicated their level of paradigmatic relations. The highly associated terms were put into the adjoining branches, while the less coherent words were placed further away (Provalis Research, 2015; Zhai and Massung, 2016). The analysis produced a dendrogram of frequently occurring terms (figure 4). The agglomeration results revealed five major themes, labelled *service satisfaction*,

failure and recovery, customer response, co-creation, channels, and technological disruption. The identified themes reflected the research trends in customer journey studies. The terms within the branches comprise detailed features of the themes. They highlight factors and concepts that are commonly considered in the literature regarding the topics. Furthermore, the distance between each word also portrays the relationships among them (Yeh et al., 2012).

The five distinct themes were cross-tabulated against each document to identify the dominant theme of each paper. After the retrieved articles were labelled, they were input into the software program as training data to train a classifier for the cluster-based document classification. The iterative process was designed to minimise the error in the results of document classification. The frequency of the predicted classes is also displayed under each theme in figure 4. The dominant classes of the customer journey literature were *service satisfaction, failure and recovery, and channels*, which consisted of 48 and 36 studies respectively. Twenty-five and twenty-three papers each investigated *co-creation* and *customer response*. The less explored and relatively emerging theme in the customer journey literature was *technological disruption*, which 17 articles focused on. Table 7 summarises a publication pattern of the customer journey literature overtime.

Theme	Before 2005	2006 - 2010	2011 - 2015	2016 - May2020	Total
Service satisfaction, failure and recovery	2	5	11	28	46
Channels	0	2	8	26	36
Customer response	0	2	6	15	23
Co-creation	0	1	7	17	23
Technological disruption	0	0	1	16	17

Table 7 Publication pattern of the customer journey literature

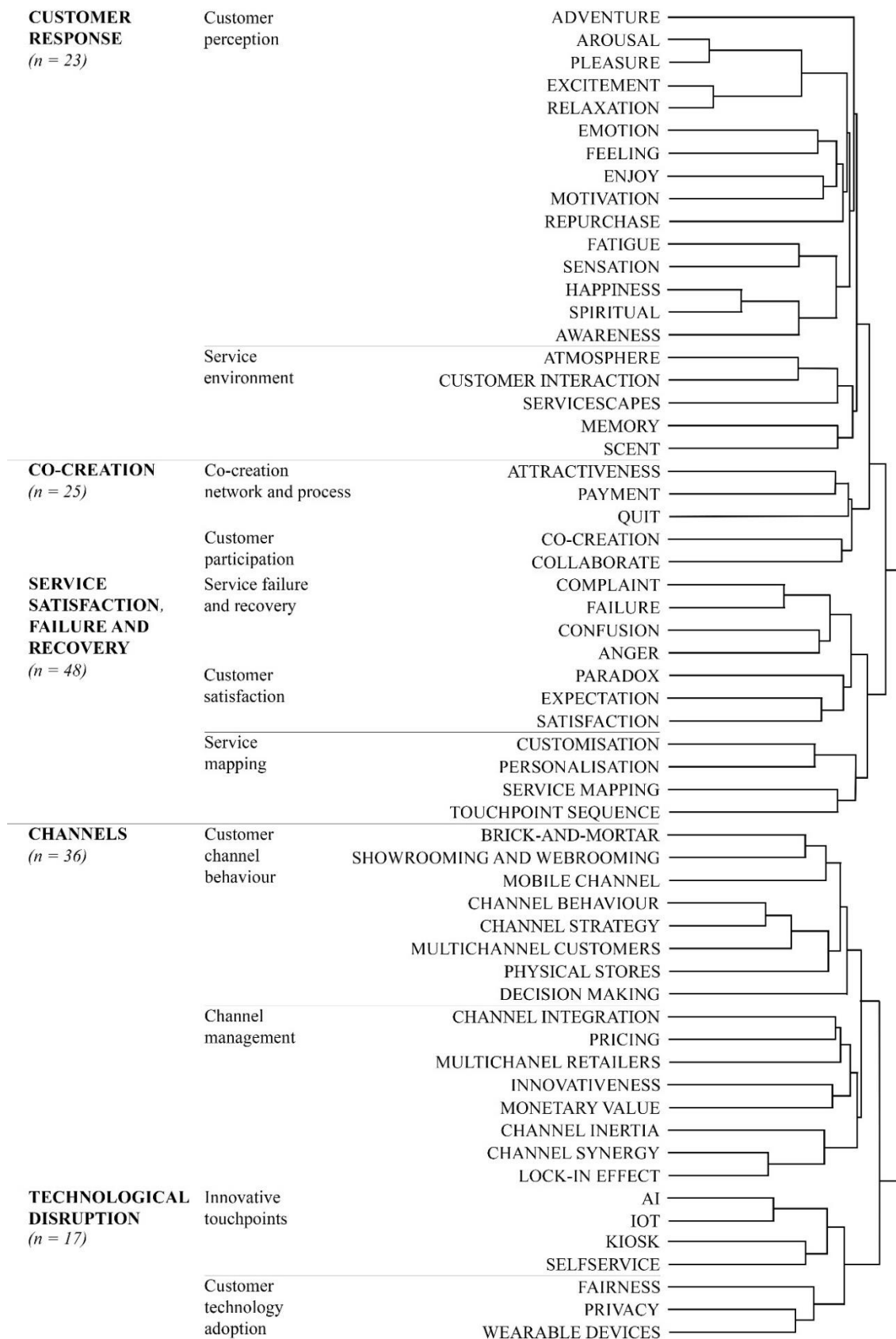


Figure 4 Dendrogram of frequently occurring terms

2.4 The Five Themes of the Customer Journey Literature

This section discusses the relevant literature for each of the five identified themes of the customer journey literature, namely *service satisfaction*, *failure and recovery*, *customer response*, *co-creation*, *channels* and *technological disruption*.

2.4.1 Service satisfaction, failure and recovery

Customers continuously adjust their perceptions of a brand at every touchpoint they encounter (Meyer and Schwager, 2007). A series of customer interactions with touchpoints over an extended period, which starts before and ends after the actual transaction, accumulate to a service evaluation of a customer (Kotni, 2017). A fulfilled interaction contribute to customer satisfaction (Halvorsrud,Kvale and Følstad, 2016), whilst confused and frustrating interactions may lead to customer dissatisfaction and an increase in a churn rate (Ieva and Ziliani, 2018a). The customer journey is the actual process which represents the formation of customer experience and facilitates the understanding of how customer goals, expectation and behaviours evolve over time (Sultan, 2018; Olson *et al.*, 2019). The concept of customer journeys is especially useful for companies that are trying to match their services with customer expectations.

The service satisfaction, failure and recovery stream of the customer journey literature focuses on the service contexts and the overall structure of a customer journey. The stream comprises of three sub-themes. Customer satisfaction focuses on a static cognitive evaluation of the customer that serves as a building block to understand customer experience in the customer journey (Lemon and Verhoef, 2016). Service failure and recovery concerns problematic touchpoints or a structure of a journey and mechanisms to reverse the adverse consequences. Lastly, service mapping recognises a customer journey not only as a mean to understand customer experience but also a tool to design it (Canfield and Basso, 2017).

Customer satisfaction

Customer satisfaction has primarily been conceptualised as an alignment between service delivery and customer expectation. Customers are satisfied when their expected values of a product, a service or a relationship are achieved (Lee,Lanting and Rojdamrongratana, 2017). Attaining and maintaining a high level of customer satisfaction is a critical indicator reflecting the performance of the company (Tseng,Qinhai and su, 1999). A gratifying customer evaluation brought about positive word of mouth, customer retention and intention to repurchase, which leads to longstanding relationships and profitability (Marino and Presti, 2018; Koetz, 2019).

Customers derive satisfaction and dissatisfaction from interactions with various touchpoints, such as employees, website interfaces and online communities, along a customer journey (Lim, Al-Aali and Heinrichs, 2015). The term touchpoint refers to service encounters that a customer engages with and, directly or indirectly, relates to a given brand, thereby affecting customer perceptions and evaluations of the brand in general and the customer journey in particular (Clatworthy, 2011a; Baxendale, Macdonald and Wilson, 2015). The interactions can be verbal or non-verbal, and sometimes outside of the company's control (Ieva and Ziliani, 2018a). Customers interact with a touchpoint with a goal or task in their mind (Voorhees *et al.*, 2017). Every contact at a touchpoint can lead to either a positive or negative brand evaluation by the customers, depending on the discrepancy between the touchpoint performance and customer expectations (Følstad and Kvale, 2018b). Therefore, companies have to systematically measure and monitor their interactions with customers at all touchpoints across the entire customer journey (Aichner and Gruber, 2017). The customer-centric assessment of the service quality is beneficial for companies in designing a service process (Kranzbühler *et al.*, 2018). The obtained understanding of customer expectations and reactions facilitates the improvement of the quality of interactions and strengthens relationships with the customers (McKechnie *et al.*, 2011). A minimised gap between touchpoint performance and customer expectations increases customer satisfaction and, thus, enhances the competitive advantage of the company (Halvorsrud, Kvale and Følstad, 2016).

Service failure and recovery

Service failures are interruptions that make customers deviate from their regular journey (Van Vaerenbergh *et al.*, 2019). They could be occurrences of unplanned touchpoints, missing touchpoints, touchpoint breakdowns or irregularities in touchpoint sequence (Halvorsrud, Kvale and Følstad, 2016). Failures can occur at any phase of the journey and cause either momentary or enduring adverse impacts on customer experience (Lemon and Verhoef, 2016). A service interruption temporarily raises customer expectations on the service quality, thereby narrowing their zone of tolerance (Van Vaerenbergh *et al.*, 2019). Poor service experience induces customers to churn and makes the brand less attractive to prospective customers due to negative word of mouth (Patti, van Dessel and Hartley, 2020). However, a similar negative incident may pose different consequences for various brands, depending on the efficiency of their recovery mechanisms and relationship quality. Nevertheless, service failures are often treated as a discrete event, which neglects the temporal dimension and limits the effectiveness of recovery (Van Vaerenbergh *et al.*, 2019). Instead, companies need to have a means that makes it possible for them to systematically monitor the development of the negative experience and promptly

address it (Panzera *et al.*, 2017; Rosenbaum,Otalora and Ramírez, 2017). Successful service recovery can overturn the crisis, impress the customers and enhance customer loyalty to the brand (Palmer and Bejou, 2016).

Customers are constantly adjusting their expectation levels through their relationship stages with a company, which makes the moment that a service failure occurs a determinant of its consequences (Meyer and Schwager, 2007). Engaged customers who are committed and have emotionally invested in the brand for a long time are likely to stay after the interruption as they find it harder to break off and migrate to a competing brand, whilst customers in the early stage of a relationship may be forgiving and find a justification to validate their choice. The most volatile groups are those in the middle stage of their lifecycle, who have not yet built sufficient trust in and commitment to the company (Palmer and Bejou, 2016; Kanuri and Andrews, 2019). Procedural, financial and relational costs are barriers that discourage customers from switching behaviour (Sultan, 2019). However, a repeated failure can severely affect the experience of the customer in all stages of the lifecycle and motivate them to take unfavourable actions against the brand. Therefore, companies need to address service failure in a timely manner. Real-Time recovery management does not only minimise the adverse impacts but also creates a better customer impression (Følstad and Kvale, 2018a). Furthermore, the customer lifetime management, by which a company customises its offers to match with customer stages, enables the dynamic aspect of customer management and thereby strengthens their relationship with the customers (Lee,Lanting and Rojdamrongratana, 2017; Ponsignon,Smart and Phillips, 2018). The way a company handles a complaint is a critical determinant of its relationship with the customer, and is closely linked to customer satisfaction, commitment and trust (Kranzbühler *et al.*, 2018).

Service mapping

Customer journey mapping is a versatile tool that is applicable in many business contexts and models. Although this thesis is focusing on the linear structure of the journey, customers may also travel in a loop or non-sequential order (Ellway, 2014; Braidford and Stone, 2016; Moon *et al.*, 2016). The customer journey is a continuous process whereby companies aim to extend the interactions and relationship with their customers to create stickiness and brand loyalty (Voorhees *et al.*, 2017). The act of repurchase, whether manually or automatically through a subscription plan, leads customers to surpass the pre-purchase phase and renew their journey at the purchase phase (Nunes *et al.*, 2013; Ramadan,Farah and Kassab, 2019). Furthermore, unique business models, such as pop-up stores and the sharing economy, also result in distinctive characteristics of the customer journey. Pop-up stores differ from permanent

physical stores in terms of their short lifetime and they usually offer a non-replicable experience, driving customers to visit through fear of missing out (Lowe, Maggioni and Sands, 2018). Brands often seek to exert more control over their non-owned touchpoints in the journeys with pop-up stores to ensure an alignment between planned service and customer experience (Rudkowski *et al.*, 2020). In contrast, businesses that rely on the sharing economy tend to act as facilitators for the creator role of customers (Dellaert, 2019). Brands would limit their interference to the optimal point where customers may travel smoothly across the journey without a feeling of intrusiveness (Thomas, Epp and Price, 2019).

Companies that strive to improve customer experience need to build capacity for structurally monitoring touchpoints and assessing customer experience through the entire consumption process (Følstad and Kvale, 2018b; Ieva and Ziliani, 2018b). It is their job to critically analyse the impact of different experiential factors and closely monitor customers' cognitive, emotional and behavioural responses in each and every stage of the consumption (Edelman and Singer, 2015). The customer journey mapping is an important customer-centric approach that helps companies to improve and manage the service delivery process by visualising all touchpoints that are both encountered and unseen by the customer but contribute toward the customer experience (Halvorsrud, Kvale and Følstad, 2016; Canfield and Basso, 2017). The more touchpoints in the service process, the more complicated and necessary for companies to map customer journeys (Richardson, 2010). The approach is effective in identifying critical satisfying moments and revealing problematic incoherence in the service process (Rawson, Duncan and Jones, 2013; Aoki *et al.*, 2019). It provides a dynamic view of customer needs and uncovers customer expectations hidden inside customer data (Bhide *et al.*, 2009).

There is no definite procedure to collect touchpoint data and map a journey. The metrics that measure customer responses and experiences in a journey are broadly categorised into perception-based, operational based and outcome-based (Patti, van Dessel and Hartley, 2020). The indicators of success and failure of an individual touchpoint can range from its contribution to positive customer attitude, wait time to related number of complaints (Baxendale, Macdonald and Wilson, 2015; Panzera *et al.*, 2017; Sultan, 2019). Companies have flexibility in customising the approach to suit their purposes (Richardson, 2010). Nonetheless, a useful customer journey mapping often contains consumption stages, touchpoints, customer responses and critical experiential factors (McKechnie, Grant and Shabbir Golawala, 2011; Becker and Jaakkola, 2020). Companies can combine and recombine the knowledge extracted from the mapping of customer journey to tailor their service delivery process to enhance customer experience and create competitive advantages (Peltier, Zahay and Krishen, 2013; Lee, Lanting

and Rojdamrongratana, 2017). The insights enable the company to design a touchpoint sequence that improves customers satisfaction while minimising dissatisfying moments (Norton and Pine II, 2013; George and Wakefield, 2018). A well-designed service process pays particular attention to the moments in a customer journey that are most responsive to customer experience (Meyer and Schwager, 2007; Muskat *et al.*, 2013). Hence, customer journey mapping is useful for companies in both service improvement and new service development (Zomerdijk and Voss, 2011).

The recent technological advances and the interest in “big data” have led companies to collect an unprecedented volume and variety of customer information (Patti, van Dessel and Hartley, 2020). However, ubiquitous customer data can pose challenges for companies in managing and integrating the unstructured data, which calls for a transition in organisation structures and processes to ensure consistency across touchpoints in all phases of the journey to match the growing customer expectation of a seamless experience (Piccoli *et al.*, 2009; Kuehnl, Jozic and Homburg, 2019). An operational shift and an investment in information technology systems help to diminish data fragmentation and promote an aggregated customer-centric framework to appreciate the communication synergies (Blackie, 2015; Edelman and Singer, 2015). An integrative metric that temporally tracks efficiency, quality, satisfaction and behaviours of customers is also important in the experiential retail environment (Voorhees *et al.*, 2017). The success of a company in an information rich era depends on its ability to analyse customer data, deliver authentic customer experience across all channels and co-create offerings based on knowledge about customers (Croteau and Li, 2003; Lee, Lanting and Rojdamrongratana, 2017).

2.4.2 Customer response

Customer response is an individual reaction to an interaction with a touchpoint. The interaction can be either direct or indirect and occurs through various touchpoints, such as a product, an employee or technology (Stein and Ramaseshan, 2016). Customers perceive each touchpoint as satisfying, dissatisfying or neutral based on their execution. The dissatisfying and satisfying encounters are referred to as pain and pleasure moments, respectively (Kranzbühler, Kleijnen and Verlegh, 2019). Mapping a customer journey has the distinctive advantage of presenting insightful information about customer experience that may appear unimportant when assessed by other methods (Crosier and Handford, 2012). The customer journey captures in-depth reactions of customers by monitoring their thoughts, feelings and behaviours in response to the retail environment at different stages of a journey (Zomerdijk and Voss, 2010). The customer responses extracted from the mapping of a customer journey are critical information for designing the service environment to customer experience (Stein and Ramaseshan, 2016).

The fundamental focus of customer responses in the customer journey literature is an exploration of the reactions of customers to touchpoint elements that impact on customer experience. This aspect is divided into two perspectives. The customers' viewpoint focuses on cognitive and emotional assessments that influence customer evaluation of the customer journey. On the other hand, the companies' perspective focuses on multi-sensory touchpoints and the service atmosphere that drive customer responses. Companies design their touchpoints and service delivery process to trigger favourable customer responses and create an outstanding customer journey that promotes positive brand perception (Zomerdijk and Voss, 2010).

Customer perception

Customer responses are the cognitive and emotional assessment of customer experiences. The cognitive aspect refers to customer's perception of experiential value gained from consuming a product or service while emotions measure customer feelings about the consumption (Crosier and Handford, 2012; Klaus, 2013). Brand awareness that enhances customers' perceived value in the earlier stage of a customer journey can significantly influence the final choice and holistic experience of customers (Cheng *et al.*, 2018). The awareness-building activities during the initial contacts are critical touchpoints to increase the spending and satisfaction of customers (Khanna, Jacob and Yadav, 2014). Although the cognitive and emotional responses are two separated agencies that are tightly intertwined, the emotional aspect has often been explained in terms of cognitions (Chen, Kyaw and Ross, 2008; Kuuru and Närvänen, 2019). Customers perceive a range of emotions, both positive and negative, through interactions across different phases of the journey. Positive and strong emotions contribute to a meaningful experience and reinforce relationship building. Customers that feel pleased, aroused or in control are more likely to remain in the service setting and are willing to spend more time and money there (Clarke, Perry and Denson, 2012). Furthermore, the emotions and feelings that a customer individually experiences can affect the perceptions of other customers through expressions, movements and gestures (Kuuru and Närvänen, 2019). Customer experience is formed through a continuous negotiation and perception of thoughts and feelings arising from all interactions in the customer journey (Kuuru and Närvänen, 2019). Responses from an individual touchpoint carry over to the next interaction and influence the subsequent reactions (Stein and Ramaseshan, 2019). They collectively shape customer beliefs about performance and the attractiveness of the brand and this consequently influences their attitudes and purchase intentions (Chen, Kyaw and Ross, 2008; Kranzbühler, Kleijnen and Verlegh, 2019).

Digital technology has recently demonstrated an increasing influence on customer response by mediating the way customers perceive and share their experience. The ability to communicate

and exchange cognitive and affective information reduces perceived risks, increases engagement and builds the emotional connections of the customers (Klaus, 2013; Stein and Ramaseshan, 2016). Customers utilise technology to help them recall details about a journey while using social media to seek social approval both before and after the purchase (Hall and Towers, 2017). An exposure to opinions and common preferences of people on the social media prior to making a decision can influence the final choice of customers (Hildebrand and Schlager, 2019). However, customer responses are complex and there is no ultimate service design that fits in every context (Stein and Ramaseshan, 2019). The same touchpoint can impose different effects on different individuals depending on their motivations, goals, social and cultural contexts (Barari and Furrer, 2018; Shavitt and Barnes, 2020). Therefore, companies must be aware of the complexity and not oversimplify customer responses (Rosenbaum, Ramírez and Matos, 2019).

Service environment

The five senses are recognized as critical information transmitters in the customer journey (Zomerdijsk and Voss, 2010). The service environment contains an array of environmental stimuli, ranging from the ambience, space to symbols. These stimuli influence the approach and avoidance behaviours of customers and thereby impact on the formation of their experience (Ponsignon, Durrieu and Bouzdine-Chameeva, 2017; Rosenbaum, Ramírez and Matos, 2019). Both tangible and symbolic aspects of service settings are critical to customer perceptions (Barari and Furrer, 2018). Well-designed functionalities and the layout of the setting help customers to move through their journey and accomplish their goals with ease and comfort (Ellway, 2014), while the psychological and social elements enhance awareness and provide spiritual experiences to customers (Hemetsberger, Kreuzer and Klien, 2019). The service stimuli have important roles in capturing attention, providing embodied experiences and motivating the participation of customers (Kuuru and Närvänen, 2019). Well-developed surroundings and atmosphere stimulate favourable responses while abating negative perceptions that potentially damage the trust and goodwill of the customers (Clarke, Perry and Denson, 2012).

All touchpoints from the start to the end of the service delivery process must communicate consistent values and messages to support the formation of brand associations (Zomerdijsk and Voss, 2010; Vredeveld and Coulter, 2019). Customers utilise different judgement strategies to process the wide range of information that they encounter across the journey (Santana, Thomas and Morwitz, 2020). The coherence in the process underlines connections between diverse brand attributes and service stimuli, which reinforce customers' learning and enhance their perceptions toward the brand (Stone, Machtynger and Machtynger, 2015; Kranzbühler, Kleijnen

and Verlegh, 2019). The design of the service delivery process should support the perspective, movement and pacing of customers during their navigation (Ellway, 2014). Brands should also provide clear, concise, and credible information to prevent confusion and the risk of customers dropping out (De Vries, Rietkerk and Kooger, 2019). Customers expect to navigate around the service process at their own pace with some hint of direction to minimise time pressures and cognitive effort (Zomerdijk and Voss, 2010; Clarke, Perry and Denson, 2012). Furthermore, companies have to be aware of changes that are imposed by the dynamic technological development to keep their service delivery process relevant to customer expectations (Klaus, 2013; Stein and Ramaseshan, 2016). They can also consider outsourcing dissatisfying touchpoints that are difficult or costly to improve to another party in the hope of shifting the blame from the focal brand (Kranzbühler, Kleijnen and Verlegh, 2019).

2.4.3 Co-creation

Co-creation emerges from the collaborative process and interrelationship among members in the service ecosystem (Bolton *et al.*, 2014). This perspective emphasises the creation and destruction of values through interactions between a customer and a brand (Åkesson, Edvardsson and Tronvoll, 2014). The understanding of the co-creation process in the context of the customer journey reveals significant elements that contribute to memorable customer experiences (Trischler and Zehrer, 2012; Micheaux and Bosio, 2019).

Co-creation in the context of the customer journey literature mainly discusses the role of the service network and customers that contribute to the formation of customer experience. This aspect recognises companies and customers as value-proposing actors, who add value through their resources and participation in the process (Barile *et al.*, 2017). Companies provide service interfaces with communicational and interactional touchpoints, while customers apply their skills and knowledge to utilise the service encounters, co-create value and personalise their experience along the customer journey (Bolton *et al.*, 2014; McColl-Kennedy *et al.*, 2015).

Network and process of co-creation

According to the concept of co-creation from a service dominant logic perspective, the service delivery network is a complex set of relationships among various actors, whose interactions and interdependencies co-create value and influence the responses of each other (Varnali, 2019). Although this service perspective reduces the control of companies in their operations (Bijmolt *et al.*, 2019), companies are responsible for equipping prerequisites such as information and engagement platforms to enable the co-creation process (Barile *et al.*, 2017). However, the optimal degree of intervention, the core value and the content that companies provide to

customers can vary through different phases of the journey depending on customer goals (Demmers, Weltevreden and van Dolen, 2020). A greater level of customer engagement does not always enhance customer experience (Pallant, Sands and Karpen, 2020), while a reduction in the involvement of the customers is also not always favourable (Hamilton *et al.*, 2019). Therefore, companies must have flexibility in their roles to maximise the perceived value of customers throughout the process (Thomas, Epp and Price, 2019). In general, companies have to orchestrate their mutually dependent touchpoints to jointly facilitate the exchange and integration of resources to stimulate value co-creation within the service network (Breibach, Brodie and Hollebeek, 2014; Schlegelmilch and Simbrunner, 2019). Such service planning requires a holistic understanding of a company's offerings that can affect value co-creation and appropriation activities (Stockwell, 2015; Botschen and Wegerer, 2017). The matching role of companies to customer goals in the co-creation process can reduce uncertainty and motivate customers to assume the role of co-creators (Wollenburg, Holzapfel and Hübner, 2019).

The co-creation perspective in the customer journey presents challenges for traditional marketing to pursue more customer-centric strategies that may involve changes in the value proposition and value delivery designs of the companies (McColl-Kennedy *et al.*, 2015). Companies must know their customers and approach them in an engaging, non-intrusive and congruent way to promote partnerships within the value network (Yachin, 2018; Nyström and Mickelsson, 2019). Companies can increase customer participation by improving the process to be more in line with customer preferences, making the activities more attractive while reducing associated costs and required effort by the customers (Mangiaracina, Brugnoli and Perego, 2009; Dellaert, 2019). Awards and punishments can also be used to incentivise customers (Nakata *et al.*, 2019). Successful value co-creation processes require companies to integrate the service system, be transparent and share relevant information in a timely manner with their customers to facilitate the collaborative process (Micheaux and Bosio, 2019; Wollenburg, Holzapfel and Hübner, 2019). Brands can also leverage innovative touchpoints and advanced analytics to provide customers with real-time support, insightful data and digital security (Tax, McCutcheon and Wilkinson, 2013; Bijmolt *et al.*, 2019). A shift from a traditional dyadic company-to-customer value delivery to value co-creation extends the interaction between companies and customers beyond transactions, which provides customer feedback and contributes to the customer relationship management performance for the business (Marino and Presti, 2018; McColl-Kennedy *et al.*, 2019).

Customer participation in the co-creation process

Customers have become co-creators, rather than mere consumers of products and services, whose emotional involvement plays a critical role in co-constructing the service experience (Varnali, 2019). This transformation in the role of customers has reinforced the importance of interaction, value-in-use and customer experience over product quality, especially in experience intensive industries (Yachin, 2018; Nyström and Mickelsson, 2019). Customers frequently seek unique offers that serve their individual preferences and needs. They utilise multiple touchpoints according to their own interests and motivations to personalise their experience along the journey and generate data in response (Tax, McCutcheon and Wilkinson, 2013). Customer participation in the process can enhance welfare by allowing more diverse products and services that match their needs (Dellaert, 2019). Customers' involvement is driven by self-determination to feel competent and belong to a brand community (Pallant, Sands and Karpen, 2020). The extent of customer co-creation behaviours greatly depends on their trust, loyalty and prior experiences with the company (Nakata *et al.*, 2019). Perceived control over the process and outcomes also plays a critical role in determining customer co-creation intention. Customers feel more comfortable when they can decide on their pace, direction and privacy (Åkesson, Edvardsson and Tronvoll, 2014). In general, the effectiveness of customers in a co-creation process is defined by their familiarity, as well as the reliability of the service process (Tax, McCutcheon and Wilkinson, 2013).

Technological advances have offered new and extended forms of interaction between customers and companies (Marino and Presti, 2018). They equip customers with information and tools to play an active role in the experience formation of not only themselves but also other customers in the service network (McColl-Kennedy *et al.*, 2015; Barile *et al.*, 2017). Digital platforms and mobile devices provide customers with easy access to extensive support and improve the learning process while promoting social interaction and the public recognition benefits of co-creation (Marino and Presti, 2018; Dellaert, 2019). However, the extensive range of touchpoints can leave customers feel overwhelmed and complicate the interactions (Pallant, Sands and Karpen, 2020). Customers increasingly expect to have control over their media exposure and the selection of touchpoints in the journey (Nyström and Mickelsson, 2019).

2.4.4 Channels

Customers accumulate experiences through a vast range of channels available in the service environment, such as physical stores, mobile devices and social networking sites (Barwitz and Maas, 2018). Channels offer various touchpoints that mediate communications and interactions between customers and companies. Technological advances have expanded the spectrum of the

interactive mediums and increased complexity in the customer journey (Wolny and Charoensuksai, 2014). The emerging touchpoints and channels have offered more flexibility to customers while increasing the complication in channel management for the company (van der Veen and van Ossenbruggen, 2015). Therefore, a thorough understanding of the emerging engagement platforms and changing customer channel behaviours is valuable for companies when managing the customer journey and creating a holistic customer experience (Li and Kannan, 2014; Hosseini *et al.*, 2018).

Past studies on channels have mainly focused on customer behaviour and the factors that contribute to the complex and dynamic decisions that customers encounter in the service system. The theme comprises two sub-topics, labelled channel behaviour and channel management. The customer channel behaviour branch focuses on channel usage and customers' preferences in their decision-making process. Channel management addresses the service design practice of the companies in attempting to develop customer journeys that provide outstanding customer experience.

Customer channel behaviour

Customers tend to behave heterogeneously and use different channels for specific reasons (Gao, Melero and Sese, 2019). They continuously assess their experience and reconsider their channel choice through the entire course of the journey (Anderl, Schumann and Kunz, 2016). Customer channel choice is driven by the value-in-use, which is the perceived usefulness and the benefits that customers seek from their interactions (Barwitz and Maas, 2018). When selecting a channel, customers evaluate search costs, opportunity costs and cognitive effort against potential risk reduction and comfort (Li and Kannan, 2014). Therefore, they are likely to interact with channels that they are more familiar with to reduce the associated effort and perceived risk (Anderl *et al.*, 2016; Hickman, Kharouf and Sekhon, 2019). However, channel preferences may vary across the different journey phases and stages of the relationship with a company due to different needs, goals and shopping values of the customer (Ballestar, Grau-Carles and Sainz, 2018; Scholz, Brenner and Hinz, 2019). In general, customers constantly select the options that offer the highest perceived value-in-use and allow them to navigate through a journey in the way that best corresponds to their goal (Hosseini *et al.*, 2018; Kerr and Kelly, 2019).

Customer channel behaviour has evolved with the development of the internet and digital platforms (Lynch and Barnes, 2020). The proliferation of channels has increased the complexity of the customer journey from the perspective of companies but provides rich interaction options

for customers to use through the decision-making process (Wolny and Charoensuksai, 2014; Huré, Picot-Coupey and Ackermann, 2017). Customers have an unprecedented freedom to shape their journey (Herhausen *et al.*, 2019). Technology has also enabled customers to switch and integrate channels more easily than ever (Hu and Tracogna, 2020). In the omnichannel environment, customers no longer complete their journey exclusively in one channel and expect companies to unify the various channels into a seamless experience (Gao, Melero and Sese, 2019). Customers can start a journey by visiting physical stores to test products but place an order on a website. Alternatively, they can obtain information from a commercial website before purchasing from a physical store. These contemporary channel behaviours are known as showrooming and webrooming, respectively (Jocovski *et al.*, 2019; Viejo-Fernández, Sanzo-Pérez and Vázquez-Casielles, 2019). Mobile devices play an instrumental role in fostering showrooming behaviour as they enable customers to search online while in a physical store to compare choices and find the best option. This phenomenon is recognised as mobile showrooming (Viejo-Fernández, Sanzo-Pérez and Vázquez-Casielles, 2020). Furthermore, mobile devices also contribute to the “want-it-here-want-it-now” mentality of customers, which lessens their willingness to compromise on the way they utilise multiple channels in their journeys (Faulds *et al.*, 2018).

The information and familiarity with a brand that customers accumulate through each interaction can be carried over and spilled over to consecutive channels. Previous channel exposure can reduce the cost of interaction as a result of lock-in effects, exposure effects, learning effects and risk reduction (Li and Kannan, 2014; Nakano and Kondo, 2018). However, if the channels are highly divergent or offer contradictory information, customers may drop out due to frustration and confusion (Anderl *et al.*, 2016). The customer usage of multiple channels does not always convey pleasure in shopping. It can also reveal the difficulty in the process and the risk avoidance behaviour of the customers (van der Veen and van Ossenbruggen, 2015). Therefore, companies have to emphasise channel congruity to help customers retrieve information from memory and promote coherence among their channel offerings (Gao, Melero and Sese, 2019).

Channel management

Customer decision-making is now a continuous process rather than discrete activities. Customers evaluate service delivery and the quality of their relationship with companies based on interactions with multiple channels (Cassab and MacLachlan, 2009). This change in customer behaviour leads to a downturn of the traditional single-channel approach and requires companies to adopt a more holistic mindset to influence the entire customer journey (Faulds *et*

al., 2018). Companies are expanding their channel portfolio in the hope of offering greater value-in-use and increasing opportunities to interact with customers, which thereby improves the customer acquisition and retention rate (Fornari *et al.*, 2016). A restriction to a certain platform can exclude potential synergies between channels and understate the evolving omnichannel customer behaviour (Yumurtacı Hüseyinoğlu, Galipoğlu and Kotzab, 2017; Rudkowski *et al.*, 2020). Therefore, companies should not deliberately migrate customers from one channel to another by increasing the difficulty of accessing the current preferable channel (van der Veen and van Ossenbruggen, 2015). Instead, they should leverage a range of channels to provide customers with seamless channel transition opportunities, aiming to minimise possible negative channel synergies while enhancing lock-in effects (Hu and Tracogna, 2020).

However, an investment in new channels and the operation of multiple channels can be expensive and pose challenges, such as the migration effect and channel cannibalisation, if not properly implemented or managed (Romaniuk, Beal and Uncles, 2013; Fornari *et al.*, 2016). The roles and value-in-use of each channel may also change as the retail environment and customer behaviour evolve (Steward *et al.*, 2019). These challenges have given rise to an omnichannel strategy as an approach for companies to manage their channel offerings and cope with the dynamic customer expectations (Hickman, Kharouf and Sekhon, 2019). A complete alignment of different channels requires a holistic understanding of companies in customer journeys and systemic adjustments in the strategies of all individual touchpoints within the brand ecosystem (Huré, Picot-Coupey and Ackermann, 2017).

Technology has enabled companies to collect customer data more easily than ever (Li and Kannan, 2014). The customer knowledge generated at touchpoints creates opportunities for companies to actively listen to their customers and extract insightful information for strategic planning (De Keyser, Schepers and Konuş, 2015; Schröder *et al.*, 2019). The collected information from such sources enables companies to better profile their customers, customise touchpoints for specific segments and serve them in a way that promotes customer loyalty (Nunes *et al.*, 2013; Herhausen *et al.*, 2019). However, raw data is usually unstructured, fragmented and incompatible for actionable planning (Dhebar, 2013; Manser Payne, Peltier and Barger, 2017). Companies have to integrate their database fully and precisely measure the incremental value of individual touchpoints along with their interactions in the customer journey (Danaher and Van Heerde, 2018). This information can enable companies to quantify the contribution of each touchpoint, avoid overlapping campaigns and optimise budget allocation (Kannan, Reinartz and Verhoef, 2016). The digital and omnichannel retail

environment requires companies to become information intensive and utilise technology in strategic service design (Peterson *et al.*, 2010; Straker, Wrigley and Rosemann, 2015).

2.4.5 Technological Disruption

Technological advance has resulted in an abundance of new innovative touchpoints that overcome time and location constraints in the service environment (Majra *et al.*, 2016). The introduction of new technologies, channels and devices has significantly transformed the way customers experience services and interact along their journey (Flavián, Ibáñez-Sánchez and Orús, 2019). Brands are also increasingly utilising technologies in their operations to enhance service experience (Del Bucchia *et al.*, 2020). The success of companies in the digital era relies on their abilities to track and comprehend the service offering as a whole and be responsive to their value creation and delivery process (Kannan and Li, 2017). Companies have to be aware of the new roles and interdependency between distinct touchpoints and their contributions to the customer experience to manage the customer journey effectively (Paluch and Tuzovic, 2019).

Research in the technological disruption stream has focused on the impact of technological advances on the service environment, customer behaviour and the structure of the customer journey. The theme was divided into two dimensions. The innovative touchpoints dimension investigated the emergence of digital technologies, while the customer technology adoption dimension focused on the responses of customers to the technological advances.

Innovative touchpoints

Innovative touchpoints, such as self-service kiosks, mobile devices and wearable technologies, enable companies to provide values, connect with customers and deliver experiences in a new fundamental way that increases sales and relationship-building opportunities (Del Bucchia *et al.*, 2020; Hamilton *et al.*, 2020). The recent technological development that integrates a virtual and a real-world environment, such as virtual reality and augmented reality, has “embedded, embodied and extended” customer experiences (Hilken *et al.*, 2018). The technologically-enabled touchpoints provide real-time, interactive and multisensory experience to customers by overlaying a virtual object into the physical world or fully immersing the user in a virtual world (Farah, Ramadan and Harb, 2019; Hollebeek *et al.*, 2020). The integration does not only offer a sense of authenticity and realism to customers but also closes the channel gap between online and offline channels, thus enhancing seamless experience (Hilken *et al.*, 2018). Furthermore, the technological embodiment that involves integration between the human body and a device also generates strong emotional bonds to customers due to its immersive capacity and sensory

attachment (Flavián,Ibáñez-Sánchez and Orús, 2019; Tyrväinen and Karjaluoto, 2019). These innovative touchpoints assist companies in collecting more accurate and granular customer data at a precise time and location, which helps to deepen the understanding of customer behaviour and personalise real-time offers (Singh *et al.*, 2020).

However, the digital technologies have changed the service landscape and pose challenges to businesses. The embodied digital information in an offline retail setting disrupts how customers evaluate products from packaging and in-store promotions to content generated online on social media (Hilken *et al.*, 2018). The increase in innovative touchpoints also disturbs the traditional marketing funnel, making some of the stages that customers go through when making a purchase decision obsolete (Farah and Ramadan, 2017). The customer decision making process is now a fluid journey that is not set in a certain chronological order (Grewal and Roggeveen, 2020). Overall, the emerging platforms and technologies challenge the relevance of existing touchpoints and the value chain of companies, demanding that they provide new service solutions to match the evolving customer expectations (Paluch and Tuzovic, 2019; Tyrväinen and Karjaluoto, 2019). It is necessary for companies to fully understand the impact of newly developed innovative touchpoints on customer values, expectations and attitudes to leverage on them effectively (Hamilton *et al.*, 2020). Companies that adopt the technologies without a well-rounded strategy and customised content for targeting the audience may result in mismatched interface preferences and unnecessary interruptions in the flow of interactions, which leads to customer avoidance and switching behaviour (Farah,Ramadan and Harb, 2019; Singh *et al.*, 2020).

Customer technology adoption

Technology has empowered customers to have a more dynamic and autonomous role in the formation of their experience (Flavián,Ibáñez-Sánchez and Orús, 2019). Digital touchpoints give customers a newfound sense of control, with instantaneous access to information and the ability to shop anytime and anywhere (Tyrväinen and Karjaluoto, 2019). The ease and minimal costs in sharing experience and getting advice from the online community has significantly reduced the information asymmetries between customers and brands (Kannan and Li, 2017). Technology-enabled touchpoints that rely on the advance of self-service technologies also promote the co-creating role of customers (Vakulenko *et al.*, 2019). However, the autonomous and data-driven technologies can also threaten the sense of competence and free will of customers, leaving them feeling vulnerable (de Bellis and Johar, 2020). Customers only welcome technological-based interactions when they perceived them to be pertinent and

customised to their needs, while irrelevant touchpoints can be recognized as an intrusion into their life (Del Bucchia *et al.*, 2020).

Customer response to the introduction of new technologies can range from excitement to anxiety (Vakulenko *et al.*, 2019). Innovative touchpoints that collect personal data and offer personalised recommendations raise suspicions and fear in customers driven by privacy concerns (Vaghela, 2014; Nam and Kannan, 2020). Intrusive brand messages in private spheres can create feelings of oppression and harassment that may eventually overpower customers' perceived sense of control and empowerment (Del Bucchia *et al.*, 2020). The level of privacy influences customer perceptions of value, fairness, trust and satisfaction. Companies may reduce these concerns by clearly communicating the terms and conditions and offer transparent privacy policies to customers related to their services (Paluch and Tuzovic, 2019). Furthermore, the technology adoption rate can also increase if customers recognise the benefits. Customers are more likely to adopt a new technology if they believe that it will increase their shopping performance, make the journey more enjoyable without requiring huge efforts to use. However, customers at different stages of channel adoption have different needs and technology readiness levels. First-time users may perceive a certain degree of confusion due to unfamiliarity, but experiences that accumulate over time can alleviate mistrust of new technological touchpoints (Vakulenko *et al.*, 2019). Therefore, companies have to know their customers and tailor their touchpoints accordingly (Tyrväinen and Karjaluoto, 2019). The uneasiness caused by the novelty of an innovative touchpoint diminishes over time as it is transformed into a conventional core experience, which in turn increases the adoption rate (Flavián, Ibáñez-Sánchez and Orús, 2019).

2.5. Suggestions for Future Research

A heat map was constructed to analyse the frequency and gaps in the customer journey literature (figure 5). This analysis is useful in disclosing research trends of topics with a multidimensional nature (Davlembayeva, Papagiannidis and Alamanos, 2019). The horizontal axis labels the three phases of the customer journey, namely the pre-purchase, purchase and post-purchase phase, while the vertical axis marks the five and eleven identified themes and sub-themes.

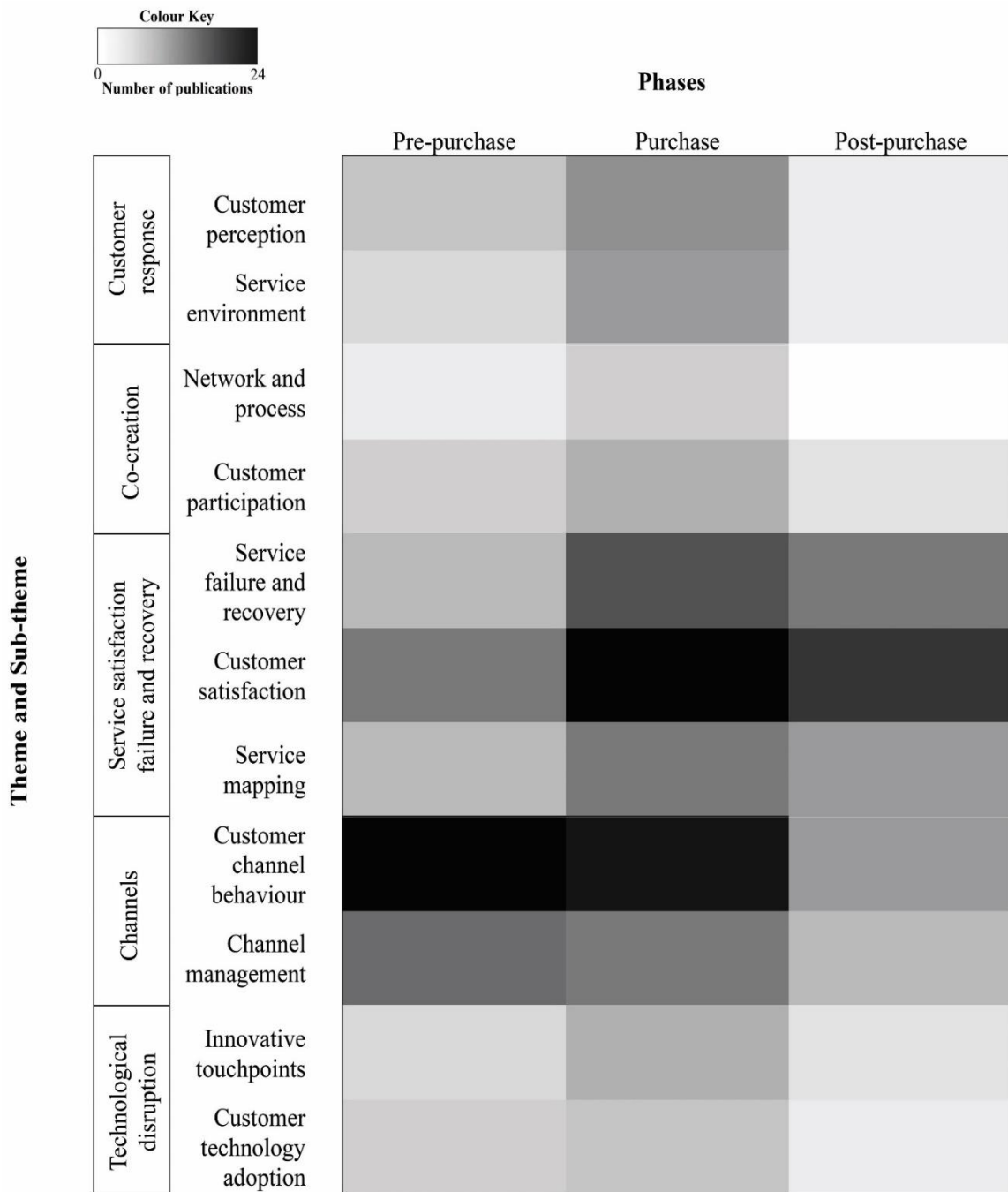


Figure 5 Heat map of research themes against phases of a customer journey

The development of the customer journey literature has been driven by an interest in the customer experience. Studies on service satisfaction, failure and recovery accounted for nearly half of the retrieved literature set. Service satisfaction, failure and recovery during transactions and channels in the pre-purchase phase received the most attention from the scholars in the past two decades. Customer response and the emerging technological disruptions were relatively underexplored. The analysis showed that the literature set mainly focused on the purchase phase while less emphasis has been put on the other two stages of the journey. Although co-creation has been studied in the customer journey context to some extent, most of the studies focused on

the customer participation and disregarded the network and process dimension of the theme. In general, the after-sales activities have received the least research attention of all the themes.

2.5.1 Research agenda for the five themes

Thematic area	Research questions
<p>Service satisfaction, failure and recovery</p> <p><i>Customer satisfaction</i></p>	<ul style="list-style-type: none"> • Which touchpoints and phases are the most critical determinants of customer satisfaction? • How customer expectations differ from phase to phase? What are the essential customer expectations that companies must fulfil at each phase to ensure a high level of customer satisfaction? • What constructs should be considered beside service quality for a more comprehensive and efficient measurement of customer satisfaction in the customer journey?
<p><i>Service failure and recovery</i></p>	<ul style="list-style-type: none"> • What kind of touchpoint interruption (e.g. unplanned touchpoints, missing touchpoints, touchpoint breakdown or an irregularity in touchpoint sequence) in the pre-purchase phase that cause a customer to drop the journey? • Are there early signs or critical negative incidents that companies should look out for to prevent a major service failure? • How does the stage of customer lifecycle moderate the consequences of a service failure and a service recovery journey? • What are critical touchpoints in the service recovery journey that help to overturn the negative customer experience?
<p><i>Service mapping</i></p>	<ul style="list-style-type: none"> • In what contexts the customer journey does not follow a linear and sequential pattern? What are the alternative patterns and structures of the customer journey? • How do the emerging business models and contexts, such as the second-hand market and customer-to-customer market, impact the structure and components of the customer journey? • What are the challenges and solutions for companies in mapping a customer journey? • What are factors that companies should consider when deciding their best practice for customer journey mapping?
<p>Customer response</p> <p><i>Customer perception</i></p>	<ul style="list-style-type: none"> • What are the critical attributes of a touchpoint that contribute to pleasure and comfortability of customers when undertaking a journey? • How customer emotions develop through different touchpoints and phases of a journey? What are their impacts on customer experience and loyalty intentions? • How do cognitive and emotional responses of the customer interact and jointly influence customer intentions and behaviours in the subsequence phases of the journey?
<p><i>Service environment</i></p>	<ul style="list-style-type: none"> • How do digital advances impact constitution of service attributes? How does the digital service environment affect customer perception in the customer journey? • How can companies align their service elements with the changing judgement strategies of the customers in different phases of the journey? • What are the results of outsourcing dissatisfying touchpoints on customer perception about locus of control? How does it impact on customer loyalty and evaluation on the company?
<p>Co-creation</p>	

<i>Network and process</i>	<ul style="list-style-type: none"> • What are different roles of a company in the sharing economy that it has limited control over the process? To what extent should the company intervene the customer journey? • How can innovative touchpoints and advanced technological tools be used to increase the efficiency and attractiveness of the co-creative activities and processes? • How can a company facilitate customers in the post-purchase phase to repurchase or cross buy other products and services? • How to map a customer journey beyond a dyadic interaction between a customer and a company to include touchpoints from third parties?
<i>Customer participation</i>	<ul style="list-style-type: none"> • Does the level of customer participation in each phase of the journey have the same impact on customer experience? What aspects of the customer co-creation behaviour have the highest influence on customer's evaluation? • How do the abundant choices of channels in an omnichannel retail environment affect customer's willingness to participate? Does more choices always give better outcomes for customers and companies?
Channels <i>Customer channel behaviour</i>	<ul style="list-style-type: none"> • How do customer channel behaviours evolve over the period of relationship with the company? • Are there other recognisable customer omnichannel behaviours, beside showrooming and webrooming, when extending the research scope beyond physical stores and websites and take all three phases of the journey into the consideration?
<i>Channel management</i>	<ul style="list-style-type: none"> • What are typologies of touchpoints in the omnichannel environment? • How to integrate innovative and traditional touchpoints to maximise performance of the customer journey? • How to track and measure contribution of each touchpoint in the customer journey on customer conversion and retention rate?
Technological disruption <i>Innovative touchpoints</i>	<ul style="list-style-type: none"> • How innovative touchpoints have disturbed and changed the structure of the customer journey? • What kind of relationship does customers develop with autonomous touchpoints? Do customers feel committed and loyal to autonomous touchpoints?
<i>Customer technology adoption</i>	<ul style="list-style-type: none"> • What regulations and measures a company can implement to reassure customers about their privacy? • Do customers perceive a trade-off between personalised service and privacy issue? • What are the contextual-level and individual-level factors that facilitate or impede customers to adopt innovative touchpoints?

Table 8 Research agenda

Service satisfaction, failure and recovery: In the early years, the research on service satisfaction, failure and recover in the context of the customer journey narrowly focused on the core service delivery process and neglected the other two phases of the journey, which restricted the understanding about critical moments that contribute to customer experience (Vaghela, 2014; Blackie, 2015). Therefore, a broader consideration that reinforce a holistic view of the customer consumption process is encouraged in the hope of advancing understandings in the domain (Voorhees *et al.*, 2017). Future research that investigate the evolvement of customer's goals and expectations, as well as compare impact of various touchpoints in different phases of the journey would provide insights into the development of customer service evaluation in the

customer journey. Although a few studies have examined procedures of customer journey mapping (e.g. Berman (2020), Panzera *et al.* (2017) and Tseng, Qinhai and su (1999)), the understanding remains fragmented. Thus, there is a need to review and integrate the knowledge about customer journey mapping. Furthermore, the customer journey does not always follow a linear and sequential pattern (Ellway, 2014; Wolny and Charoensuksai, 2014), future research may consider alternative structures of the journey. Lastly, researchers are encouraged to investigate other contexts of the customer journey beyond a purchase journey, such as a search journey and a customer support journey.

Customer response: The customer journey literature has heavily focused on customer perception and service environment in the purchase phase. Customer response has often been investigated in cognitive terms and neglected the unfolding of the emotional aspect (Kuuru and Närvänen, 2019). Scholars are encouraged to further investigate the development of the feelings and sensations of customers and their interrelations with the cognitive and behavioural responses throughout the journey. Studies on emotional responses are particularly important with the growing popularity of technological embodiment. Additionally, the integration of technologies into a service environment has imposed challenges for both the service environment and customer perception aspect of the customer journey. Future research should investigate changes in the constitution of service attributes and how they alter customer perceptions of their interactions (Ellway, 2014). Additionally, an investigation on how customer responses in one phase are carried over to the next, affecting cumulative customer perception, is also an area of research interest (Santana, Thomas and Morwitz, 2020). Researchers should also incorporate or distinctively investigate customer response in the post-purchase phase of the journey to enrich the scant literature. Potential research areas include the effects of the increasing connectivity and interactivity in the service system on customer consumption evaluation and cross-selling opportunities for companies.

Co-creation: The changes in the value chain and roles of customers, as well as other actors in the service ecosystem, are encouraging researchers to shift their focus from one-way service delivery to co-creative relationships (McColl-Kennedy *et al.*, 2015; Palmer and Bejou, 2016), especially with the rise of the sharing economy, which reduces the control of companies in the value creation process while further empowering the customers (Dellaert, 2019). More studies could investigate the changing responsibilities of companies in the new business environment and identify an optimal level of intervention to avoid unsolicited support that can hinder customer participation (Hamilton *et al.*, 2019). The co-creation perspective also extends the view on the value chain to consider more stakeholders that contribute to the formation of

customer experience (Mangiaracina,Brugnoli and Perego, 2009). Therefore, future research could consider the roles of these indirect touchpoints and how companies can intervene and influence them in their favour. The ‘collective journey’ (Thomas,Epp and Price, 2019), which studies the dynamic interplay between customer practices and retailer roles, is also a promising concept to explore to enhance the understanding of the co-creation process in the customer journey context. Empirical works that demonstrate the use of innovative touchpoints and advanced technological tools in relation to co-creative activities and processes also represent fruitful opportunities for both researchers and practitioners. Future research should also its study scope to cover the post-purchase phase and consider co-creation process (Pallant,Sands and Karpen, 2020).

Channels: The expansion of the touchpoint array has made a simple classification (as either online and offline) inadequate for actionable planning (Nakano and Kondo, 2018). Scholars need to explore touchpoints at a higher-level and consider their interactions to develop knowledge about omnichannel management (Khanna,Jacob and Yadav, 2014; Herhausen *et al.*, 2019). The advances in technology have also blurred the physical and virtual platforms (Kaczorowskaspychalska, 2017). Therefore, there is a need for studies that focus the integration of innovative and tradition touchpoints, such as the use of augmented reality in-store (Hilken *et al.*, 2018), to explore the unprecedented opportunities for enhancing customer experience. More studies that extend the knowledge about showrooming and webrooming behaviour will also be helpful for practitioners in resource allocation (Hu and Tracogna, 2020). Furthermore, the current practice of customer segmentation relies strongly on the continuous changing characteristics of individual channels, which makes the results highly dependent on the research scope (Barwitz and Maas, 2018). Therefore, researchers should consider segmenting customers based on more stable elements such as their sociological and psychological descriptions (Moon *et al.*, 2016; Manser Payne,Peltier and Barger, 2017). Additionally, investigations on how customer channel behaviours evolve over the relationship period with the company and thus move to a new segmentation are also a potential area for further research. Future research needs not neglect channels for the after-sales activities or it is a missed opportunity for customer retention and cross-selling.

Technological disruption: Technological disruption is an emerging theme in the context of the customer journey, with most of the related articles published after 2018. Digital advances have significantly changed the business landscape and elements of the customer journey. More studies, in line with Farah and Ramadan (2017), should investigate the impacts of innovative touchpoints, not just on customer expectations but actual behaviours that change the structure

of the customer journey. Further research that addresses the growing concern of customers about their data privacy and how companies can guarantee protection would also be beneficial in understanding the evolving customer expectations (Paluch and Tuzovic, 2019; Singh *et al.*, 2020). Scholars could examine the contextual-level and individual-level factors that stimulate customers to adopt (and prevent them from adopting) technological touchpoints (Flavián,Ibáñez-Sánchez and Orús, 2019; Del Bucchia *et al.*, 2020). Additionally, studies on the development of human and technological touchpoints would also be helpful for practitioners in addressing the challenges of the digital environment (de Bellis and Johar, 2020). In general, technological disruptions should be investigated with the other identified themes of the customer journey to broaden the awareness of their impacts and integrate the body of knowledge.

2.5.2 Theory, context, construct and methodology

Many studies of the customer journey are still in the early developmental stage and require empirical testing and further validation (Gao,Melero and Sese, 2019; Kanuri and Andrews, 2019; Kerr and Kelly, 2019), while longitudinal studies and a more extended data collection period also remain an area of interest for further investigation in all themes (McColl-Kennedy *et al.*, 2015; Yumurtacı Hüseyinoğlu,Galipoğlu and Kotzab, 2017). There is also a need for researchers to test the relevance and validity of existing models and measurements in the new service environment (Huré,Picot-Coupey and Ackermann, 2017). Future research can examine the customer journey in other niche service environments, such as the sharing economy and subscription-based industries. More importantly, researchers should not restrict the exploration of the customer journey to the individual consumption process. They are encouraged to apply the concept to deepen the understanding of other marketing constructs and business contexts, such as the customer recovery journey or the social customer journey (Van Vaerenbergh *et al.*, 2019; Hamilton *et al.*, 2020). Moreover, researchers could innovatively combine more than one of the identified themes and theories from various disciplines in a study to enhance the integrative understanding about the customer journey.

The large volume of individual-level touchpoint data also offers opportunities and complexity for future research (Kannan and Li, 2017). Social media platforms and mobile applications serve as rich data sources for various inputs and concurrent experiences (Baxendale,Macdonald and Wilson, 2015). However, it is imperative to develop a new data collection approach and data integration methods to track and organise ubiquitous data (Åkesson,Edvardsson and Tronvoll, 2014; Ponsignon,Durrieu and Bouzdine-Chameeva, 2017). A next-generation data solution would enable researchers and practitioners to have the right tools to collect the right

data, which in turn will minimise data inaccuracy and unnecessary spending (Barker, 2011). Furthermore, the current set of literature has often been reliant on completed journeys (De Keyser, Schepers and Konuş, 2015; Herhausen *et al.*, 2019). Thus, future studies are encouraged to explore the possibility of using technological innovations to capture real-time data for better accuracy and deeper analysis (Becker and Jaakkola, 2020). Lastly, there is a need to develop new integrative scales that can temporally and efficiently measure all the dimensions of customer experience, not just cognitive but also attitudinal and behavioural aspects, across different touchpoints in all phases of the customer journey (Voorhees *et al.*, 2017; Patti, van Dessel and Hartley, 2020).

Chapter 2 has fulfilled the first research gap discussed at the beginning of the thesis regarding the incoherence and fragmentation of the customer journey literature. The systematic literature review has aggregated and integrated the current knowledge about the topic by organising it into five themes. The results provide a theoretical groundwork for future research in this thesis.

2.6 Latest Literature on Customer Journeys

The systematic literature review has covered the journal articles that were published before June 2020. However, the customer journey literature in the business field has kept expanding. There were 145 new journal articles published between June 2020 and April 2022. The number of published articles studying the customer journey has been increasing every year. In 2020, there was a total of 57 newly published articles, representing a 25% growth from the previous year. Then, the customer journey literature continued to grow by 10% in 2021, making a total of 63 published papers in the year, whilst 40 journal articles were added to the literature set in the first four months of 2022. The top three sources of the new customer journey papers are Journal of Business Research (10 articles), Journal of Retailing and Consumer Services (10 articles) and Journal of Retailing (7 articles). The rest of this sub-section will discuss the knowledge that has been added in the newly published journal articles.

The most discussed topic in the recent literature that has been published since May 2020 was the roles and impact of technological advancements on customer journeys. The continual development of new devices, touchpoints and channels has increased the complexity and hyperconnectivity in the customer journey (Singh *et al.*, 2020). Customers are contacting companies anywhere and anytime across different journey stages and touchpoints (Wilson-Nash, Goode and Currie, 2020). New technological developments have greatly changed the service environment and consumer behaviour, which in turn affected the customer journey (Cuomo *et al.*, 2021; Tueanrat, Papagiannidis and Alamanos, 2021b). These changes have

increased the importance of the customer journey in understanding and managing the service environment and customer experience (Mele and Russo-Spena, 2021).

Technologies have played an increasingly prominent role in customer journeys (Tueanrat,Papagiannidis and Alamanos, 2021b). Customers use the internet to gather information in the pre-purchase phase, get product recommendations from a technology-driven mechanism in the purchase phase and interact with an automated system to seek aftersales services in the post-purchase phase (Wilson-Nash,Goode and Currie, 2020). Customers adopt technologies to enjoy perceived utilitarian and hedonic benefits, such as speed, assurance and innovativeness (Luceri *et al.*, 2022; Stocchi *et al.*, 2022). The rapid adoption of mobile devices has facilitated the growth and development of new technologies (Barbu *et al.*, 2021). The common use of smartphones has greatly shifted consumer shopping behaviour, with more than half of online shopping initiated on smartphones (Tupikovskaja-Omovie and Tyler, 2020). The devices help the exchanges between customers and companies to be without time or location-based restrictions (Stocchi *et al.*, 2022). The customer shopping experience is no longer bounded to physical interactions, which stimulates marketers to employ increasingly sophisticated ways to engage with customers throughout the journeys (Schweidel *et al.*, 2022). Hence, new tools, such as mobile applications, social media and location-based advertisements, are adopted by brands to take advantages of the new customer shopping behaviour (Ho,Dewan and Ho, 2020; Cuomo *et al.*, 2021; Luceri *et al.*, 2022).

Artificial intelligence (AI), augmented reality (AR) and virtual reality (VR) are among the machine-age technologies that are also widely studied in the recent customer journey literature (e.g. Gatter,Hüttl-Maack and Rauschnabel (2022), Javornik *et al.* (2021), Rauschnabel *et al.* (2022) and Zanger,Meißner and Rauschnabel (2022)). The technologies have further expanded the number of service interfaces, which consequently further increased the possible ways in which customers and companies can interact across journeys (Singh *et al.*, 2020). AI is the development of a computer system to perform tasks that normally require human intelligence (Singh, 2021). There are various forms of AI, such as chatbots, recommender systems, virtual assistance and interactive voices (Rana *et al.*, 2021). These new marketing tools help companies to enhance brand awareness, improve customer relationship marketing and offer personalised services for their customers (Vo-Thanh *et al.*, 2022). The technology is positively perceived, especially by young adult consumers, for their ability to provide instant information and the resolution of simple queries (Wilson-Nash,Goode and Currie, 2020). AI builds a relationship with its users by forming a multi-faceted identity, whereby customers perceive a brand under

several forms and aspects (Farah and Ramadan, 2020). This brand identity system facilitates a captive situation that leads to an addictive relationship in the long-term (Ramadan, 2021).

AR and VR are in a different realm of technology to AI. They focus on enhancing interactions in the customer journey. AR refers to the overlay of virtual objects in a real-world environment (Rana *et al.*, 2021), while VR is a computer-generated simulation of a situation that appears to be real (Wedel, Bigné and Zhang, 2020). The technologies enhance brand experience in a journey by inspiring, convincing and retaining the consumers (Rauschnabel *et al.*, 2022). They offer both functional and experiential benefits to consumers (Romano, Sands and Pallant, 2020; Wedel, Bigné and Zhang, 2020). AR and VR allow brands to convey brand attributes in an immersive and sensory-rich manner (Javornik *et al.*, 2021). These characteristics of the technologies increase the interactivity and customisation of the customer journey, as well as fulfilling a need for touch and human presence for the customers (Gatter, Hüttl-Maack and Rauschnabel, 2022; Simoni *et al.*, 2022). Furthermore, their users may share their augmented or virtual worlds with their peers to create community experience despite the physical distance (Rauschnabel *et al.*, 2022). The integration of the physical and virtual elements promotes the seamless transference in the customer journey (Javornik *et al.*, 2021).

Digitalisation has increased the interactions on the internet and generated a large amount of data that far exceeds human ability to absorb and interpret (Campbell *et al.*, 2020). Advanced technologies play a crucial role in helping brands to collect data, detect patterns and develop automated solutions (Rauschnabel *et al.*, 2022). The acquired data helps brands to investigate customer behaviour, personalise offerings and monitor touchpoint performance (Helouani, 2021). The knowledge assists managers to make more informed decisions based on the derived insights and conclusions from the large set of collected data (Campbell *et al.*, 2020). The information aids marketers in all stages of service designing from analysing the market, managing customers, developing business strategies to monitoring performance (Steinhoff and Zondag, 2021). In general, the ability to manage and analyse the big data helps companies to better understand, predict, and engage with their customers (Campbell *et al.*, 2020). The practice helps companies to offer a seamless experience throughout the journey and enhance overall brand experience (Rana *et al.*, 2021). However, not all customers are willing to share their personal data with companies. Their willingness varies depending on their relationship with the brand (Schweidel *et al.*, 2022).

In the digital age, online reviews provide a great data source for both customers and companies (Cuomo *et al.*, 2021). This user-generated content offers rich knowledge and timely information

about the related product or service (Yeo *et al.*, 2022). Customers seek online reviews for information validation, product evaluation, purchase and post-purchase validation, while brands use them to evaluate their performance from the perspective of customers and make improvements accordingly (Ngarmwongnoi *et al.*, 2020). The rising importance of online reviews contributes to the growth of online influencers, who act as independent third-party endorsers (Pop *et al.*, 2022). Brands usually employ online influencers to engage with consumers in more cohesive, affective and interactive ways (Jacobson, Hodson and Mittelman, 2022; Yeo *et al.*, 2022).

The differences in the online content are partly shaped by the dissimilar features and characteristics of various social media platforms (Yeo *et al.*, 2022). For example, Twitter is a microblogging platform that allows users to share their updates in 140 characters or less. The interface design shapes the content, making it less of a narrative. Hence, the platform is usually used for a quick update or as a promotion tool (Cuomo *et al.*, 2021). On the other hand, Instagram is a multimodal social networking platform that enables its users to instantly capture and share their life moments with friends (Ngarmwongnoi *et al.*, 2020). Therefore, most of the content on the platform is more emotion-oriented and community-focused than being informative or serving educational purposes (Yeo *et al.*, 2022).

The increasing significance of technologies in the customer journey presents a mixed bag of opportunities and challenges for brands. On the one hand, these technologies have the potential to improve customer engagement by expanding the diversity and convenience of service interfaces for flexible, personalised, and automated interactions (Singh *et al.*, 2020). On the other hand, the same technologies can also put service firms' capabilities to the test. A vast range of companies have adopted the machine-age technologies to improve and facilitate their offerings (e.g. Manthiou and Klaus (2022), Tupikovskaja-Omovie and Tyler (2021), Wilson-Nash, Goode and Currie (2020) and Zimmermann and Auinger (2022)), but many are still unsure how to adopt them (Hausmann and Schuhbauer, 2021). Moreover, only a small proportion of those companies have leveraged the advanced capabilities, such as using them for personalised promotions, collaborative filtering and predictive models (Campbell *et al.*, 2020). The main reason is because the adoption of new technologies requires management teams to rethink their strategies, develop new skills and acquire modern tools (Vo-Thanh *et al.*, 2022). Nevertheless, many managers have pointed to a lack of established marketing tools and knowledge within their specific industries as major obstacles in adopting the marketing technologies (Hausmann and Schuhbauer, 2021). Therefore, companies have a prominent role in building capabilities and systems that accommodate the new technologies to improve front-

stage customer touchpoints, backstage activities and overall interactions with customers (Mele and Russo-Spena, 2021). Today customers are expecting harmonious, seamless and reliable interactions throughout the customer journey with their personalised touchpoint combinations (Tueanrat,Papagiannidis and Alamanos, 2021a). A successful adoption of new technologies requires an understanding of the unique characteristics and impact of each tool on the customer journey (Rauschnabel *et al.*, 2022).

While leveraging on a myriad of traditional and technological touchpoints, it is also important for companies to identify, evaluate and measure the impact of those touchpoints along the customer journey (Tueanrat,Papagiannidis and Alamanos, 2021b). The practice consists of the four following steps, identify all brand-owned touchpoints, align company's planned touchpoints with customer's touchpoint perception, identify sales influencing touchpoints and derive marketing strategy to optimize the conversion rate (Zimmermann and Auinger, 2022). Furthermore, there is a need for researchers to: revisit consumer behaviour theories and examine their relevance in the new contexts, develop measurements and models for technology-generated data, examine consumer responses to new technological applications and further investigate the impact of new technologies on the markets (Wedel,Bigné and Zhang, 2020).

Chapter 3. Conceptual Models and Hypothesis Development

The systematic literature review has classified the existing knowledge in the customer journey literature into five themes. The service satisfaction, failure and recovery theme focuses on the contexts and structures of the customer journey. The co-creation theme discusses the roles of customers and companies in developing customer experience throughout the course of interactions. The customer response theme draws attention to the cognitive and emotional reactions of customers in the customer journey. The channels theme concentrates on the complex customer channel behaviour and the vast network of touchpoints in omnichannel retail environments. Lastly, the technological disruption theme sheds light on the impact of technological advances on the service environment, customer behaviour and the structure of the journey. The two empirical studies of this thesis adopt these findings to further develop the knowledge and move the field forward with a more unified and integrative understanding about the customer journey. This chapter provides the theoretical foundations and a research model for the empirical studies.

Service satisfaction and service failure are the two service contexts discussed in theme 1 of the systematic literature review. The service satisfaction focuses on the situations when customer expectations and needs are met, while service failure concerns the time when there is an interruption in the service delivery system. The two service contexts are used as the service setting and research scope of the empirical studies. Then, the three themes that concern customer in the journey are also further examined as critical aspects of the customer journey. To be specific, customer co-creation behaviour, customer response and customer channel use are examined for their roles in the customer journeys. The thesis examines both emotional and cognitive aspect of customer response, which are referred as emotional response and experiential value respectively. Respondents are classified into groups according to their channel usage for a detailed analysis of their needs, characteristics and behaviour. This customer segmentation enables researchers to derive more specific conclusions and make more precise suggestions for each particular customer group. Although the technological disruption theme is not explicitly studied in this thesis, both surveys consider customer channel choice beyond websites and physical stores to include other channels such as mobile phone application and social media. The conceptual model of the thesis is shown in figure 6.

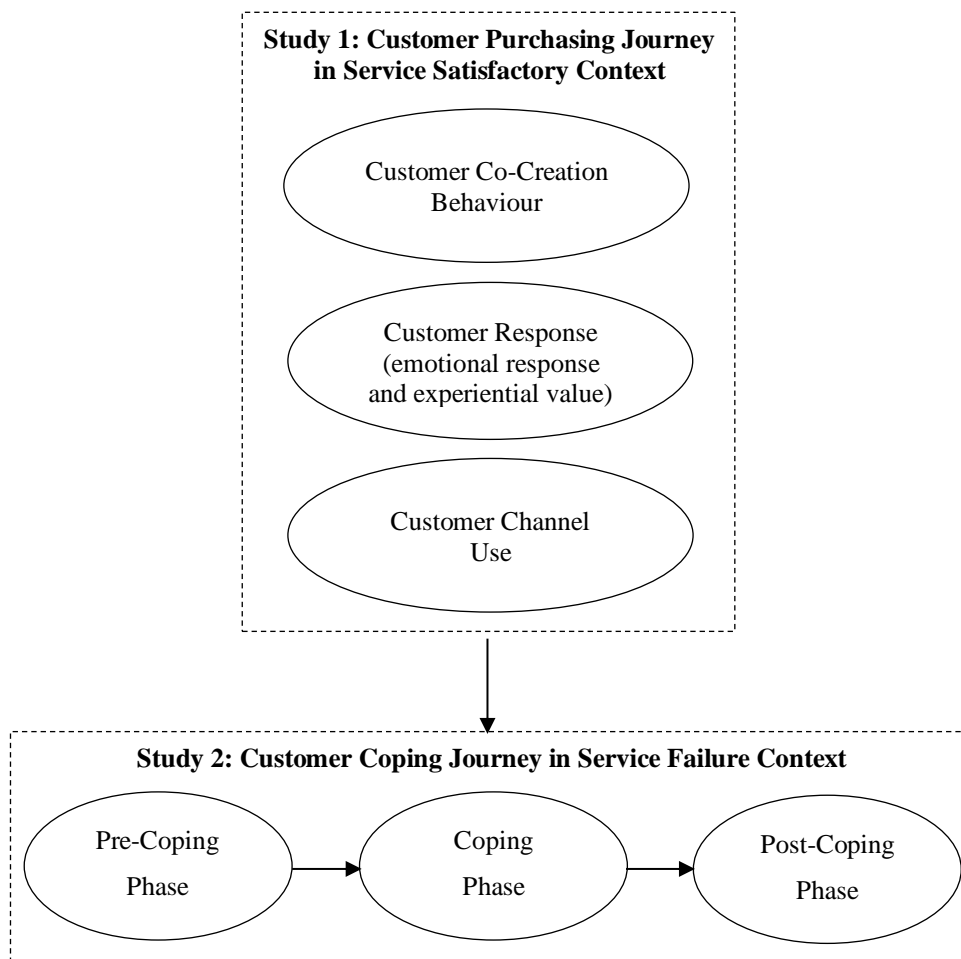


Figure 6 Conceptual model of the thesis

The thesis consists of two research empirical study. The first study focuses on the customer purchasing journey in the service satisfactory context. It examines the influence of customer co-creation behaviour, customer emotional response, customer experiential value and customer channel use on customer journey satisfaction. While the second study considers the customer coping journey in the service failure context and estimate the influence of pre-failure co-creation behaviour, customer emotional response, customer experiential value and customer channel use to draw links to the purchasing journey in study 1.

The following sections in this chapter present reasonings behind the conceptual framework of this thesis and the development of research models. Section 3.1 provides a research background on the omnichannel customer journey and discusses the rationales for the hypothesized relationships in the research model of study 1 for the customer purchasing journey in the service satisfaction context. Section 3.2 presents a review on the customer coping journey and justifies the rationales for the framework of study 2 for the customer coping journey in the service failure context.

3.1 Study 1: Customer Purchasing Journey in Service Satisfaction Context

Study 1 aims to investigate the influences of customer co-creation behaviour, customer response and customer experiential values on customer journey satisfaction and examine the channel user segment as a moderator of the relationships (figure 7). Each of the hypotheses will be tested in all pre-purchase, purchase and post-purchase phases of the customer journey.

3.1.1 Omnichannel customer journey

In omnichannel retailing, customers are no longer mindful of channel boundaries, but routinely utilise touchpoints that offer them the highest value (Flavián, Gurrea and Orús, 2016; Gasparin *et al.*, 2022). Technological advances have increased the decision power of customers when interacting with retailers (Mencarelli, Rivière and Lombart, 2021). Such a changing retail environment has resulted in more complex customer channel behaviour and journey patterns which were not possible in the past (Van Bruggen *et al.*, 2010; Verhoef, Kannan and Inman, 2015; Wang, 2021). The emerging extended reality technologies, such as augmented reality (AR) and virtual reality (VR), have further integrated the customer's online and offline activities to provide a more seamless experience (Javornik *et al.*, 2021; Rauschnabel *et al.*, 2022). This rich multimedia allows customers to try on products in virtual fitting rooms and bring the digital world into real stores (Romano, Sands and Pallant, 2020; Gatter, Hüttl-Maack and Rauschnabel, 2022). The changing customer behaviour and the growth of technological developments are stimulated by the common adoption of mobile devices (Fiestas and Tuzovic, 2021; Luceri *et al.*, 2022).

The growth of new platforms has led to a significant departure from the time when offline customers (who prefer to do their shopping-related activities in-store) and online customers (who prefer to complete similar tasks through the Internet) were recognised as the two prominent customer segments classified by their channel behaviour (Bhatnagar and Ghose, 2004; Thomas and Sullivan, 2005; Valentini, Neslin and Montaguti, 2020). As more channels and touchpoints are considered to reflect the technological advances in the retail environment, new customer segments such as multichannel enthusiasts (Konus, Verhoef and Neslin, 2008) and call centre prone shoppers (De Keyser, Schepers and Konuş, 2015) are discovered. More recently, similar investigations in the omnichannel retail environment that acknowledge the interplay between various channels in different phases of the journey have found two unique journey patterns. Firstly, the research-shopping customers, who gather information in one channel but purchase from another channel, have been identified (van Baal and Dach, 2005; Viejo-Fernández, Sanzo-Pérez and Vázquez-Casielles, 2020). This phenomenon can either refer to webrooming, in which customers search online but buy from a physical store, or

showrooming, which starts offline and then transfers to online. Research shopping behaviour is motivated by distinctive channel attributes, channel synergy and a weak lock-in effect (Verhoef, Neslin and Vroomen, 2007; Neslin, 2022). Secondly, scholars have also recognised the tendency for customers to use less interactive channels in the post-purchase phase for efficiency reasons (Barwitz and Maas, 2018). Customers continually make evaluation judgements about their interactions with touchpoints and carry them throughout the journey (Acquila-Natale and Iglesias-Pradas, 2021). An understanding of different omnichannel customer journeys and customer segmentations helps companies to manage their customers and target them more effectively (Goić, Jerath and Kalyanam, 2021).

The complexity of customer behaviours in omnichannel retailing raises the need for companies to map and examine critical components of the customer journey to identify pivotal satisfying and dissatisfying elements in the service process (Richardson, 2010; Rawson, Duncan and Jones, 2013). Customer co-creation behaviour, customer response and customer experiential values have been recognised as the major dimensions of the customer journey that represent the viewpoints of the customers (Tueanrat, Papagiannidis and Alamanos, 2021b). The increasing importance of customer-centric business strategies boosts the acknowledgement of the customers as value and experiential co-creators (Crosier and Handford, 2012). Customers co-create value with brands by providing their input during the course of interaction (Barile *et al.*, 2017). Every contact may stimulate positive or negative emotional responses from the customers (Jenkinson, 2007). Such emotional assessment shapes customer beliefs about performance and the attractiveness of the brand, and consequently influences their attitudes and intentions in the journey (Khanna, Jacob and Yadav, 2014). In addition, customers also continuously evaluate the experiential values that they get from interactions with the companies (Norton and Pine II, 2013; McColl-Kennedy *et al.*, 2015). Customers are satisfied when their expected values from an interaction are achieved (Lee, Lanting and Rojdamrongratana, 2017). Thus, it is vital to thoroughly examine the impact of customer co-creation behaviour, customer response and customer experiential values on customer journey satisfaction. Moreover, customers are constantly adjusting their goals and expectations through different stages of the journey (Hu and Tracogna, 2020). Therefore, it is essential to examine the major dimensions of the customer journey in all pre-purchase, purchase and post-purchase stages (Lemon and Verhoef, 2016; Voorhees *et al.*, 2017). Neglecting the temporal change could limit the understanding and effectiveness of customer journey management (Van Vaerenbergh *et al.*, 2019; Berman, 2020). Understanding the critical components of the customer journey and their

dynamic through different phases are keys to stimulating strong and positive holistic evaluation by the customers (Åkesson,Edvardsson and Tronvoll, 2014).

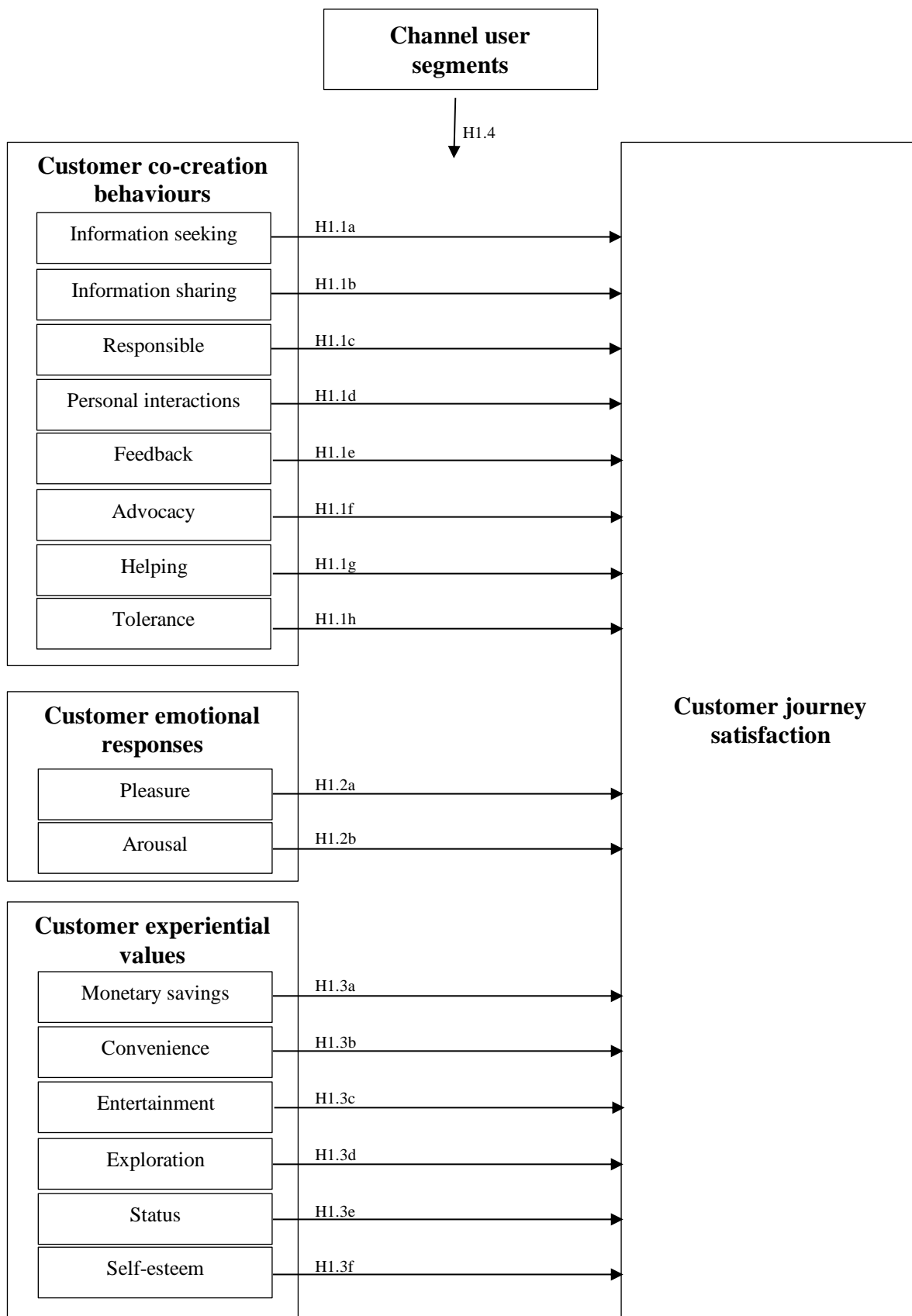


Figure 7 Conceptual framework for study 1

3.1.2 Impact of customer co-creation behaviour, customer emotional response and customer experiential value on customer journey satisfaction

Customer co-creation behaviour

Technological advances and the emergence of myriad touchpoints have empowered customers to be better informed and equipped with tools to freely select channels from those made available by retailers to suit their individual context (Herhausen *et al.*, 2019; Farah and Ramadan, 2020). Such customer involvement is the locus of experience co-creation in omnichannel retailing. Every contact can lead to either a positive or negative brand evaluation by the customers, depending on the outcomes of the interactions (Nöjd *et al.*, 2020). Prior research showed that the level of customer satisfaction is influenced by the degree of customer co-creation behaviours (Grissemann and Stokburger-Sauer, 2012; Hunt, Geiger-Oneto and Varca, 2012). Customer involvement in the experiential process does not only enable customers to satisfy their personal needs, but also contributes to customer satisfaction in several ways. A participation in the process makes customers more familiar with the offerings of the company and reduces their perceived risk in the consumption (Felleson and Salomonson, 2016; Jia and Wang, 2016). Thus, an iterative and a higher degree of involvement of the customers enhances trust, affective commitment and sense of ownership, which leads to customer satisfaction and the accumulation of customer loyalty (Brodie *et al.*, 2013; Dellaert, 2019; Pallant, Sands and Karpen, 2020). Moreover, the active roles of customers in the service delivery process also increases the motivations and commitments of the customers, which leads to greater perceived quality when evaluating the service (Claycomb, Lengnick-Hall and Inks, 2001). Since service quality is directly related to customer satisfaction, engaged customers are likely to be more satisfied (Lemon and Verhoef, 2016).

The customer co-creation behaviour in the customer journey can be divided into participation and citizenship dimensions (Ahearne, Bhattacharya and Gruen, 2005; Yi and Gong, 2008). The participation behaviour refers to in-role behaviours that are required from the customers to use the product or service of a company. These mandatory behaviours include information seeking, information sharing, responsible behaviour and personal interaction (Yi and Gong, 2013). Information seeking considers the acts of customers in acquiring information by directly asking a person or monitoring the behaviours of experienced customers (Kelley, Donnelly Jr and Skinner, 1990), while information sharing is the act of providing accurate and adequate information for the brand to perform its duties and meet the particular needs of the customers (Ennew and Binks, 1999). Responsible behaviour occurs when customers acknowledge their role as a value co-creator, which includes being cooperative, accepting directions from other

co-creators and complying with rules and policies during the process (Bettencourt, 1997). Personal interaction concerns the interactional aspect of the co-creation process and is shaped by the interpersonal relations between customers and employees (Ennew and Binks, 1999). On the other hand, citizenship behaviour considers extra roles of the customers that are not mandatory but generates extra values and provides a significant source of competitive advantage. The supplementary behaviours, including feedback, advocacy, helping and tolerance (Yi and Gong, 2013). Feedback refers to the solicited and unsolicited information that customers give back to a company, which is valuable for the improvement of products and processes (Groth, Mertens and Murphy, 2005). Advocacy refers to recommendations about an offering or a brand that customers make to others following their positive experience (Bettencourt, 1997). Helping relates to the voluntary assistance that customers offer to their peer customers, who may face similar difficulties to those they have experienced (Rosenbaum and Massiah, 2007). Lastly, tolerance measures customer willingness to be patient when the service delivery is not as expected (Lengnick-Hall, Claycomb and Inks, 2000). Hence, we hypothesise:

H1.1: (a) Customer information seeking behaviours, (b) information sharing behaviours, (c) responsible behaviours, (d) personal interactions, (e) feedback behaviours, (f) advocacy behaviours, (g) helping behaviours and (h) tolerance behaviours influence journey satisfaction.

Customer Emotional Response

Customer response refers to the reactions that customers have after interacting with a touchpoint, whether it is a product, an employee or technology (Stein and Ramaseshan, 2016). Customer response consists of various aspects. The cognitive aspect refers to customer awareness of the values being offered while the emotional aspect measures feelings about the consumption (Crosier and Handford, 2012; Klaus, 2013). However, previous studies have focused on the cognitive terms and neglected the unfolding of emotions (Chen, Kyaw and Ross, 2008; Kuuru and Närvänen, 2019). Therefore, there is a need to investigate the emotional assessment of customers for a richer and more holistic understanding of customer responses.

Customers perceive a range of emotions, both positive and negative, through interactions across different stages of the journey (Kranzbühler, Kleijnen and Verlegh, 2019; Manthiou, Hickman and Klaus, 2020). Emotions play a critical role in influencing customers' information processing, affecting customers' goal setting, determining customer behaviour and measuring the effect of marketing and service environment stimuli (Huang, 2001; Carlson *et al.*, 2014). Therefore, an examination on the role and the development of emotional responses in the

journey helps to gain insight into customers (Gaur,Herjanto and Makkar, 2014). According to Mehrabian and Russell (1974), human emotions can be measured in two independent dimensions. The pleasure dimension measures the degree of happiness and joy a customer feels, whereas arousal measures the extent to which a customer is stimulated or excited by the interaction. These emotional assessments shape customer perceptions about the performance and the attractiveness of the utilised touchpoints, and are later integrated to form an evaluation of journey satisfaction (Khanna,Jacob and Yadav, 2014; Prayag *et al.*, 2017). Thus, positive emotions such as pleasure and arousal are recognised as keys to customer satisfaction (Oliver, 1997; Chen,Kyaw and Ross, 2008). However, the same touchpoint can lead to different reactions for different customers depending on their contexts (Barari and Furrer, 2018; Shavitt and Barnes, 2020). Therefore, companies have to monitor the customer response at different stages and throughout the entire journey to identify pain and pleasure points and highlight opportunities to further enhance positive customer satisfaction (Beltagui,Candi and Riedel, 2012; Stein and Ramaseshan, 2016). This discussion leads to the following hypothesis:

H1.2: (a) Pleasure and (b) arousal influence journey satisfaction.

Customer Experiential Values

Customer experience has been recognised as a powerful aspect of consumption and a significant determinant for the success of a company (Holbrook and Hirschman, 1982; Nyström and Mickelsson, 2019). Customer experience refers to a multidimensional evaluation of customers and consists of various aspects. Customers constantly reevaluate their experiential values through all phases of the journey (Anderl,Schumann and Kunz, 2016). The impact of each experiential value dimension may vary in strength and intensity over different stages due to different needs and goals of the customer (Brakus,Schmitt and Zarantonello, 2009; Ballestar,Grau-Carles and Sainz, 2018). However, in general, customers are satisfied when the values they expected from the interaction are achieved (Lee,Lanting and Rojdamrongratana, 2017). Brands that can offer significant experiential values to customers enhance customer satisfaction, generate positive word of mouth and gain competitive advantage over the competitors (Carlson,O’Cass and Ahrholdt, 2015; Becker and Jaakkola, 2020). Therefore, it is essential for brands to understand the fundamental impacts and differences of various dimensions of experiential values to operate well in the omnichannel retail environment (Mathwick,Malhotra and Rigdon, 2001).

The three major aspects of experiential values that have been investigated in prior studies are utilitarian, hedonic and social experiences (Rintamäki *et al.*, 2006; Gallarza,Fayos Gardó and

Calderón García, 2017; Huré, Picot-Coupey and Ackermann, 2017). The utilitarian dimension focuses on the functional experiences and is contributed to by the monetary savings and convenience a customer receives from the interaction. The hedonic aspect relates to the fantasy and emotive dimension of the interaction, which is measured by the extent of entertainment and exploration. Finally, the social dimension concerns the symbolic and interactionist perspective of the consumption and is measured by its contribution to the status and self-esteem of a customer. Hence, we propose:

H1.3: (a) Monetary savings, (b) convenience, (c) entertainment, (d) exploration, (e) status and (f) self-esteem influence journey satisfaction.

3.1.3 Moderating effects of customer segmentation

Customers are individuals with goals and preferred experience (Nöjd *et al.*, 2020). Therefore, customer segmentation according to channel choices or journey patterns has helped omnichannel companies to manage and understand their customers (Neslin *et al.*, 2006; Konuş, Verhoef and Neslin, 2008). Each segment represents a distinct group of customers, who are different in terms of psychological needs and sociodemographics, which leads them to have different underlying reasons for interactions and behave differently (Barwitz and Maas, 2018). For example, technologically enthusiastic customers are more likely to use mobile devices and innovative platforms for their shopping (Meuter *et al.*, 2005), whereas physical stores that made it possible for customers to have immediate responses and face-to-face interactions with employees are preferred by the customers who value personal contact or perceive risk in consumption (Nicholson, Clarke and Blakemore, 2002; Forsythe *et al.*, 2006). Retail stores provide excellent opportunities for pre-purchase trial, instant gratification, personalized salesperson attention, and post-purchase services like return and exchange. Internet sites provide expanded accessibility, product information, and novelty (Chatterjee and Kumar, 2017; Miquel-Romero, Frasquet and Molla-Descals, 2020).

Previous experience with a channel can also motivate a customer to use the same platform throughout the journey to reduce learning costs and maximise the consistency of the shopping experience (Kuo, Hu and Yang, 2013). Previous studies have found that the level of need for interaction (Evanschitzky *et al.*, 2015; Demoulin and Djelassi, 2016; Lee, 2017), technology anxiety (Meuter *et al.*, 2003; Kim and Forsythe, 2008; Yang and Forney, 2013) and inertia (Van Birgelen, De Jong and De Ruyter, 2006; Gensler, Verhoef and Böhm, 2012; Li and Kannan, 2014) will differ across different customer channel user types. Moreover, demographics have also regularly differentiated the characteristics of each customer segment (Konuş, Verhoef and

Neslin, 2008; Frassetto, Mollá and Ruiz, 2015; Bhatnagar and Papatla, 2016). Consequently, the same factor could have varied degrees of influence on customer satisfaction, depending on their channel choice and journey patterns. We hypothesise that:

H1.4: Channel user segments moderate the relationships between customer co-creation behaviours, customer responses and customer experiential values and journey satisfaction.

3.2 Study 2: Customer Coping Journey in Service Failure Context

Study 2 aims to explore the internal process that customers go through after encounter with a failure incident. This study extends the context of service failure and recovery to cover all three phases of the customer journey and introduces the customer coping journey. Furthermore, the study also investigates the influence of the pre-failure customer purchasing journey on customer coping journey. The conceptual framework of study 2 is shown below.

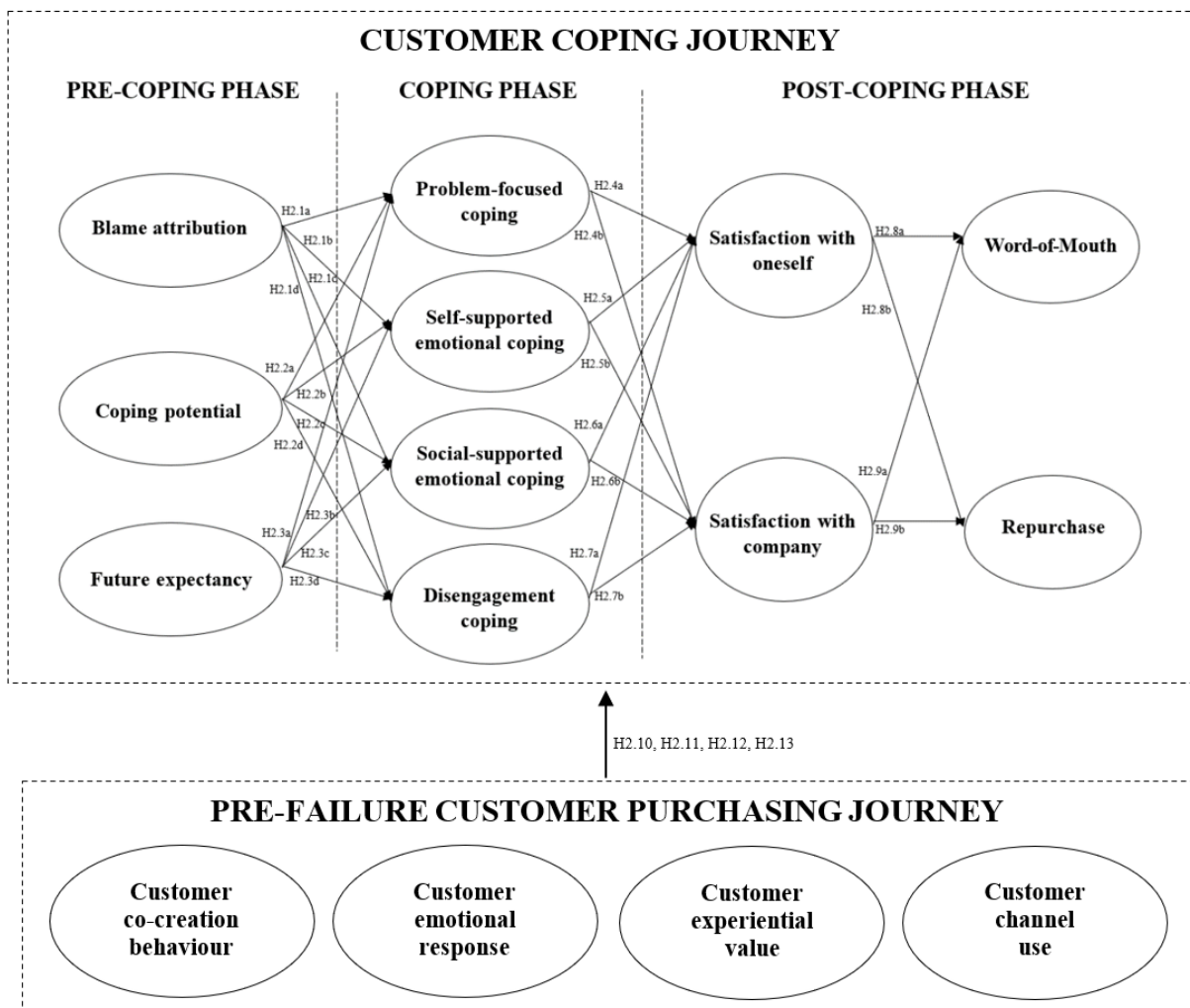


Figure 8 Conceptual framework for study 2

3.2.1 Customer coping behaviour

Coping is defined as the cognitive and behavioural efforts of individuals to deal with stressful events (Duhachek, 2005). Customers perceive stress when internal or external demands are appraised as taxing because they do not have sufficient resources (Lazarus and Folkman, 1984). The internal demands are personal requirements toward the service providers or the environment, while the external demands arise from the contextual or social environment, which require the customers to comply (Lazarus and Folkman, 1984; Beaudry and Pinsonneault, 2005). Stressful consumption encounters, such as service failures, trigger customers to employ various resources, including cognitive, psychological, physical, material, financial and social resources, to mitigate the negative experience (Yi and Baumgartner, 2004). Customers differ considerably in the ways they cope with and respond to failure incidents (Chebat, Davidow and Cudjovi, 2005). The level of stress experienced and the coping strategies employed by a customer are highly dependent upon the magnitude of the internal and external demands (Tax, Brown and Chandrashekar, 1998; Buchanan, Simmons and Bickart, 1999). If customers perceive the failure incident to be severe, they will be more likely to alter their relationship with the service providers or the environment to manage the issue. This involves the employment of conscious approaches, such as problem-focused strategy and direct engagement. On the other hand, if a service failure is appraised as low severity or involves minimal loss, customers will tend to rely on emotion-focused coping (Gabbott, Tsarenko and Wai Hoe, 2010). The research on customer coping behaviour has remained scant. Studies on customer response to failure incidents have mainly focused on redress (e.g. Blodgett and Anderson (2000), Bougie, Pieters and Zeelenberg (2003), Koussaifi, Hart and Lillystone (2020) and Locander, White and Newman (2020)) or outcomes of a coping process (e.g. Dorsey, Ashley and Oliver (2016), Le and Ho (2020) and Schoefer *et al.* (2019)). These research concerns have neglected the inclusion of the customer in the process of improving their negative experiences.

3.2.2 The Customer Coping Journey

The customer coping journey illustrates an internal process that customers experience when coping with a failure incident. The application of the customer journey approach makes it possible to identify critical components and visualise the development of customer coping experience across different stages (Richardson, 2010; Halvorsrud, Kvale and Følstad, 2016). This study divides the customer coping journey into three phases, namely pre-coping, coping and post-coping.

Pre-coping phase

The pre-coping stage covers the period between the initial customer awareness of the failure incident and the first customer effort to resolve the distress from the event. This phase considers the customer appraisals of the failure incidents. The appraisal is the cognitive evaluation by the customer on the failure incident in relation to his or her goals, values and beliefs (Folkman, 2013). The level of stress one gains from a service failure depends on the perception of the incident rather than the incident itself and this determines the subsequent coping responses (Lazarus and Folkman, 1984). Customers may react differently and utilise dissimilar combinations of strategies to cope with the distress based on their personal knowledge and experience (Smith, 1991; Gabbott, Tsarenko and Wai Hoe, 2010) However, the process should not be viewed as a function of personality traits, but as a function of situational factors (Lazarus and Folkman, 1984).

The appraisal process includes evaluations on blame attribution, coping potential and future expectancy (Lazarus and Folkman, 1984; Lazarus, 1991). Blame attribution refers to the extent to which the customer holds the company responsible for the failure incident (Weiner, 2000). Customers engage in causal thinking to determine why an incident occurred and who is responsible for its occurrence to help them make sense of the negative experience (Silver, Boon and Stones, 1983; Shaver and Drown, 1986). Coping potential and future expectancy are prospective appraisals (Lazarus, 1991). Coping potential reflects the degree of the confidence and efficacy that a customer has in his or her ability to overcome the aversive situation (Folkman *et al.*, 1986; Duhachek and Kelting, 2009). Customers react to failure incidents differently, while showing emotional resilience, feeling helplessness or expressing anger, their reactions differ depending on their belief that they are able to cope with and managing the unfavourable situation (Tsarenko and Strizhakova, 2013). Future expectancy considers the uncertainty and possible outcomes of the incident (Blodgett, Wakefield and Barnes, 1995). Customers are more likely to engage in problem-solving when they expect a successful outcome, while demonstrating anxiety or anger when the incidents are likely to be stable (Folkes, 1984; Blodgett, Wakefield and Barnes, 1995). The appraisal of blame attribution, coping potential and future expectancy in the pre-coping phase influences customer perceptions and the strategies that customers use to improve their situation in the coping phase, whether it is a problem-focused, self-supported emotional, social-supported emotional or disengagement approach (Lazarus, 1991; Maxham III and Netemeyer, 2002; Yi and Baumgartner, 2004; Zourrig, Chebat and Toffoli, 2009). A detailed explanation about each customer coping strategy is presented in the following sub-section.

H2.1: Blame attribution influences the customer's customer coping behaviour (a) problem-focused (b) self-supported emotional (c) social-supported emotional (d) disengagement coping strategy.

H2.2: Coping potential influences the customer's coping behaviour (a) problem-focused (b) self-supported emotional (c) social-supported emotional (d) disengagement coping strategy.

H2.3: Future expectation influences the customer's coping behaviour (a) problem-focused (b) self-supported emotional (c) social-supported emotional (d) disengagement coping strategy.

Since customer behaviours are bounded to location and time (Weun,Beatty and Jones, 2004; Sheth, 2020), the impact of failure severity and COVID are also included in the equation to control their effects when examining the relationships between customer appraisals and customer coping behaviour. Failure severity refers to the perceived magnitude or intensity of the service failure (Hess,Ganesan and Klein, 2007). The distinction in the perceived seriousness of the situation by customers influences their view of and responses to the failure incident (Weun,Beatty and Jones, 2004; Sengupta,Balaji and Krishnan, 2015; Cho,Jang and Kim, 2017). The damage from a failure incident triggers negative feelings and perceptions of the customer (Tsarenko and Tojib, 2012). If customers perceive the incident to be severe, they may adopt a revenge or avoidance behaviour and will be unlikely to forgive the service providers easily (Hsu *et al.*, 2021; Salagrama,Prashar and Tata, 2021). The COVID pandemic has also significantly affected both consumption behaviour and supply chains in the market (He and Harris, 2020; Yap,Xu and Tan, 2021). Many countries have enacted lockdowns and social restrictions to suppress the spread of the pandemic (Thomas *et al.*, 2021). The measures have shifted the majority of face-to-face and personalised interactions to contactless services on the internet platforms (Chiang and Trimi, 2020; Pandey and Kulshrestha, 2021). The abrupt changes in the service delivery process triggers many unexpected and uncontrollable service failures (Donthu and Gustafsson, 2020; Wang *et al.*, 2021). However, the social distance and the security measures have enhanced empathy of people toward others (Saladino,Algeri and Auriemma, 2020). Customers were also more willing to participate in failure recovery during the pandemic lockdowns (Istijanto, 2021). Therefore, local restrictions, such as lockdowns and limited store hours due to the pandemic, are taken into account in this study.

Coping phase

The coping phase begins when a customer starts to react to the failure incident and ends either when the customer feels satisfied with the circumstance or decides to give up on improving the situation. This phase focuses on customer coping strategies. Coping is a pervasive and complex

psychological process, involving a network of cognitive, attitudinal, and behavioural dimensions (Carver and Scheier, 1994). Customers engage with a range of coping strategies that serve their personal goals and values to overcome the undesirable situation (Yi and Baumgartner, 2004; Duhachek, 2005). They view different coping strategies as complementary and capable of being applied together rather than as independent approaches (Carver and Connor-Smith, 2009; Haj-Salem and Chebat, 2014). Hence, different coping strategies are considered simultaneously in the coping phase to reflect the nature of customer coping behaviour (Folkman and Lazarus, 1980).

Coping strategies have traditionally been categorised into problem-focused and emotion-focused (Folkman and Lazarus, 1980). Problem-focused coping refers to the efforts to directly resolve the challenges or threats, while emotional-focused coping involves the internal management of negative emotions by readjusting the interpretation of the situation (Lazarus and Folkman, 1984) (Lazarus, 1993). However, this classification is too simple to fully reflect customer coping behaviour (Lazarus, 2006). Alternatively, a three-dimensions typology, consisting of active coping, expressive support seeking and avoidance, has been suggested (Duhachek, 2005). Active coping resembles the problem-focused strategy and aims at problem solving and resolution. Expressive support seeking involves emotional expression and emotional communication to elicit distress and seek comfort (Shimazu and Schaufeli, 2007). Avoidance is a passive coping approach that attempts to avoid or disconnect from the unpleasant situation (Compas *et al.*, 2001). This study has adopted the practice of previous empirical studies and further divided the emotional expressive and support seeking coping strategy into self-supported and social-supported approaches (Schnider, Elhai and Gray, 2007; Zheng, Luo and Ritchie, 2021). Hence, the four customer coping strategies being examined in this study are problem-focused, self-supported emotional, social-supported emotional and disengagement coping behaviour. Customers employ coping strategies to restore their emotional balance and rebuild the harmonious state in their purchasing experience (Strizhakova, Tsarenko and Ruth, 2012). Therefore, the influences of each coping strategy that customers execute in the coping phase on customer satisfaction with themselves and the company in the post-coping phase are examined as part of the study.

H2.4: A customer problem-focused coping strategy influences customer satisfaction (a) with him or herself and (b) with the company.

H2.5: A customer self-supported emotional coping strategy influences customer satisfaction (a) with him or herself and (b) with the company.

H2.6: A customer social-supported emotional coping strategy influences customer satisfaction (a) with him or herself and (b) with the company.

H2.7: A customer disengagement coping strategy influences customer satisfaction (a) with him or herself and (b) with the company.

Post-coping phase

The post-coping phase focuses on cognitive and behavioural evaluations of customers in terms of their experience in the two previous phases of the coping journey. The duration of this stage depends on the persistence of the coping experience with the customer (Strizhakova, Tsarenko and Ruth, 2012). This study focuses on customer post-coping satisfaction, word-of-mouth intention and repurchase intention as customer evaluations in the post-coping phase. Adopting the definition from a previous study (Westbrook, 1980), customer post-coping satisfaction is defined as a cognitive evaluation of a customer on an outcome and experience associated with coping situations. In general, customers feel satisfied when the perceived benefits are greater than the perceived costs (Oliver, 1980; Bolton and Drew, 1991). Customers feel pleased with the situation if the service failure is resolved or under control (Tsarenko and Strizhakova, 2013). The evaluation is not limited to the company, but also involves the customers themselves (Parker *et al.*, 2012). Coping behaviour can build self-worth attributes, such as self-efficacy and competence, which give a sense of success and achievement to the individuals (VandeWalle, Cron and Slocum Jr, 2001; Ozgen and Duman Kurt, 2012). Satisfied customers tend to resume their temporarily halted purchasing journey and intention to patronise and recommend the company to others (Gabbott, Tsarenko and Wai Hoe, 2010; Van Vaerenbergh *et al.*, 2019).

H2.8: Customer post-coping satisfaction with him or herself influences post-coping (a) word-of-mouth intention and (b) repurchase intention.

H2.9: Customer post-coping satisfaction with the company influences post-coping (a) word-of-mouth intention and (b) repurchase intention.

3.2.3 Moderating effects of pre-failure customer purchasing journey

Failure appraisals and coping behaviour are contingent upon the prior knowledge and experience customers have of the companies (Lazarus, 1991; Smith, 1991; Buchanan, Simmons and Bickart, 1999). Therefore, this study also examines customer purchasing journey and customer channel use prior the failure incidents for their moderating effects on the customer coping journey.

Customer co-creation behaviour, customer emotional response and customer experiential values have been recognised as the major dimensions of the customer journey that contribute to customer service experience (Tueanrat,Papagiannidis and Alamanos, 2021b; Tueanrat,Papagiannidis and Alamanos, 2021a). Co-creation is joint value creation by the company and the customer (Prahalad and Ramaswamy, 2004). Customers contribute to the production and delivery of a product or service by investing their time, effort, information, knowledge and other resources in the process (Dong and Sivakumar, 2017). An active participation enables service experience personalisation and provides sense of accomplishment for the customers (Meuter *et al.*, 2000). Co-creation also strengthens the relationship between the customer and the company when the process is successful (Chan,Yim and Lam, 2010; Witell *et al.*, 2011). However, a high level of customer involvement increases contact points and service complexity that inevitably escalate the probability of failure incidents (Parasuraman, 2006). The comprehensive engagement in the process rises customer expectations and sense of responsibility on the outcomes (Childers *et al.*, 2001; Zhu *et al.*, 2013). Therefore, the customers who participate in the co-creation process may feel a greater disappointment when a co-created product or service fails (Roggeveen,Tsiros and Grewal, 2012; Heidenreich *et al.*, 2015).

H2.10: Pre-failure customer co-creation behaviour has moderating effects on the customer coping journey.

Emotions are complex and dynamic mental states that elicit by events, objects or persons (Bagozzi,Gopinath and Nyer, 1999; Ladhari,Souiden and Dufour, 2017). They reflect relationships that an individual has with his or her physical and social environment (Lambie and Marcel, 2002). Customers perceive a wide array of emotions across their purchasing journey that can be classified into two interdependent dimensions (Kranzbühler,Kleijnen and Verlegh, 2019; Manthiou,Hickman and Klaus, 2020). The pleasure dimension focuses the happiness and joy, whereas arousal measures stimulation and excitement (Mehrabian and Russell, 1974). These emotional assessments provide information, motivation and mindsets that impact decisions and behaviours of an individual (Gaur,Herjanto and Makkar, 2014; So *et al.*, 2015). Previous research has studied the role of past emotions experienced in the context of service failure and suggested that positive emotions offered psychological resources that helped the customer to cope from negative experiences (Yang *et al.*, 2018; Harrison-Walker, 2019). While negative emotions increased blame towards oneself, and thus decreased purchase intention (Vakeel *et al.*, 2018).

H2.11: Pre-failure customer emotional response (a) pleasure and (b) arousal has moderating effects on the customer coping journey.

Customers derive functional and emotional value from their shopping experience (Schmitt, 1999). When face with a variety of choices, customers select the option that offers the most promising values (Baumgartner *et al.*, 2008). They feel satisfied when their perceived experiential values exceed their expectations (Kao,Huang and Wu, 2008). However, service failures destroy both components of the shopping experience (Barari,Ross and Surachartkumtonkun, 2020). Although the hedonic dimension shows more prominent impact on customer satisfaction and word of mouth in regular purchasing journeys (Chitturi,Raghunathan and Mahajan, 2008), customers shift their priority to the cognitive experiential value in the failure situations (Pham and Avnet, 2004). It is because they are more sensitive to cognitive experience destruction (Pham and Higgins, 2005). Customer experiential values have a significant role in influencing customer attitudinal and behavioural outcomes of failure incidents (Mathwick,Malhotra and Rigdon, 2001; Eid and El-Gohary, 2015). The lower experiential value customer group is more responsive to a failure incident and tends to spread negative word of mouth when dissatisfied (Holloway,Wang and Parish, 2005). Furthermore, post-recovery satisfaction also leads to a higher repurchase intention among the customers who perceive higher experiential values.

H2.12: Pre-failure customer experiential value (a) utilitarian values and (b) hedonic value has moderating effects on the customer coping journey.

Although customers expect to receive similar services regardless of their channel choice (Rodríguez-Torrico,Cabezudo and San-Martín, 2017), their failure appraisals and service recovery expectations are influenced by the channel that they use (Harris *et al.*, 2006). Previous studies showed that customers perceived technology-related failures to be more permanent than employee-related causes (Iglesias, 2009), but tend to make stronger attributions of responsibility toward humans than robots (Belanche *et al.*, 2020). Technology can also create a psychological distance between the customer and the company, which triggers self-defence mechanisms and heightens customer expectations at the time of service failure (Lii *et al.*, 2013). Therefore, this study also examines customer channel use prior to the failure incidents for their moderating effects on the customer coping journey.

H2.13: Pre-failure customer channel use has moderating effects on the customer coping journey.

Chapter 3 has presented the conceptual framework and the hypotheses for study 1 and study 2. The chapter has provided theoretical justifications of the empirical studies. The next chapter explains the methodology that is adopted in this thesis to collect data and test the hypotheses.

Chapter 4. Methodology

This chapter discusses the methodological approach adopted by the thesis. It reflects on the research philosophy, data collection, measurement, sampling technique, data analysis and research ethics of the thesis.

4.1 Research Philosophy

Research philosophy refers to beliefs and assumptions about the nature and source of knowledge (Saunders, 2019). The philosophical viewpoint that researchers hold influences their approach and interpretation of research questions (Crotty and Crotty, 1998). A clear understanding in the philosophical choice is crucial for identifying appropriate data source and developing a coherent research design (Sihombing, 2002; Easterby-Smith, Thorpe and Jackson, 2012). The research philosophies are ranged between the two extremes, objectivism and subjectivism (Niglas, 2010). Objectivism embraces the assumptions of the natural science and argues that social world is external and exists independently from human perceptions (Saunders, 2019). A widely adopted research paradigm that falls into this end of the spectrum is positivism. On the other hand, subjectivism embraces the assumptions of arts and humanities and believes that the social reality is a result of interpretations (Saunders, 2019). An example of a research paradigm from this end is interpretivism.

Positivism and interpretivism are differed by their underlying assumptions on ontology, epistemology and methodology. Ontology concerns about the nature of reality. It refers to a set of assumptions about beings and the way the world operates (Saunders, 2019). Positivists believe that the world is in order and governed by universal laws (Yen, 2012). They argue that the reality is stable and there is only one definite truth (Hudson and Ozanne, 1988; Pascale, 2010). Positivists see the empirical facts as divisible (Creswell *et al.*, 2003). Thus, researchers can precisely investigate the world by controlling confounding variables (Bagozzi, 1980; Calder, Phillips and Tybout, 1981). On the other hand, the interpretivists deny the existence of the single objective reality. They argue that the reality is socially constructed (Berger and Luckmann, 1967). Meanings are varied in different social contexts as they are individually and collectively shaped (Lincoln and Guba, 1985; Yen, 2012). Interpretivism promotes the holistic view of reality, believing the social world is indivisible. By parting the system, the researchers are losing the rich insights and changing the meanings (Saunders, 2019).

Epistemology concerns about the constitution of knowledge and the relationship between the researcher and the reality (Carson *et al.*, 2001). The epistemological assumptions are related to the underlying ontology as the beliefs about the reality determine acceptable knowledge of the

study (Savigny, 2007). Based on the assumption of the single objective reality, the positivists seek to create general rules that are universally applicable (Keat and Urry, 2011). Knowledge of this stance is obtained from observable facts and numbers (Sihombing, 2002). Positivists argue that the actions of consumers can be used as explanations of real causes (Hunt, 1991). Furthermore, the researchers from this stance also keep distance and remain detached from participants, while limiting themselves to data collection and data analysis through an objective position (Della Porta and Keating, 2008; Teddlie and Tashakkori, 2009). This approach promotes emotionally neutral and value-free findings, which reflects an assumption regards the minimised influence of individual perception on reality (Bredo and Feinberg, 1982; Carson *et al.*, 2001). In contrast, the interpretivists argue for the dependence of realities on human behaviours and interpretations (Hudson and Ozanne, 1988). Relating to the view of dynamic and holistic realities in interpretivism, causes and effects are indistinguishable as they are mutually and simultaneous shaping the world (Lincoln and Guba, 1985). Thus, the interpretivist researchers adopt an empathetic stance, interact with their informants and rely on their personal contacts to gain insights into the context being studied (Ulin,Robinson and Tolley, 2005).

Methodologies are specific techniques or procedures that are used in a research process (Creswell *et al.*, 2003). In positivism, the researchers adopt the scientific protocol as a rational and logical approach to acquire objective knowledge (Bassey, 1995). The positivist research process follows the scientific formalities and has a step-by-step structure that allows the researchers to design a controlled experiment and investigate casual relationships among the selected variables (Hudson and Ozanne, 1988; Campbell and Stanley, 2015). Positivism relates to a deductive reasoning approach that aims to test theories by examining theoretically driven hypotheses of the relationships between variables (Creswell and Poth, 2016). The positivists value quantifiable information that gives statistical explanations as they acknowledge it to be reliable, objective and precise (Bassey, 1995; Ulin,Robinson and Tolley, 2005). They also argue that the hard data together with large sample size allows law-like generalisations to be created (Gill and Johnson, 2010). In contrary, the view of dynamic and multiple realities in interpretivism reflects through an iterative and flexible research structure (Carson *et al.*, 2001; Goldkuhl, 2012). The interpretivists see the research design as an emerging process and involve back-and-forth direction (Hudson and Ozanne, 1988; Saunders, 2019). As they believe that knowledge is embedded within human perceptions and subjective experiences, researchers from this stance take an unobtrusive, non-manipulative and non-controlling approach (Tuli, 2011). They also utilise inductive reasoning to interpret data and gain insights of the social event (Ulin,Robinson and Tolley, 2005).

	Positivism	Interpretivism
Ontology	The world is in order. There is one true reality that is external to human perceptions.	The reality is socially constructed. Meanings are individually and collectively shaped.
Epistemology	Facts and numbers are obtained to draw general rules.	Written, spoken and visual contents are used to interpret the social world.
Methodology	Primarily quantitative methods, e.g., surveys, content analyses and experiments. The approaches promote value-free and detachment of the researchers.	Primarily qualitative methods, e.g., interviews, ethnography and group focus. The approaches promote value-bound and an integral role of the researchers.

Table 9 Comparison of Positivism and Interpretivism

Since the thesis aims to deduce the general knowledge from the fragmented customer journey literature and statistically test the correlations between the customer journey and its relevant business concepts, a quantitative method is a more appropriate approach compared to qualitative and mixed methods. The quantitative approach not only reflects the positivist view of the researcher, who believes numbers and statistical data to be the true source of knowledge, but also enables one to investigate and derive the common conclusions about the customer journey in an omnichannel retail environment by dividing the reality and controlling confounding factors. Positivists treat the phenomenon as external and not constructed by perceptions of the researchers. Customer values, expectations and beliefs are also assumed to be predetermined and beyond the influence of the researchers. The divisible reality assumption of the philosophical stance makes it possible for the researchers to draw precise research scope and focus on the variables of interest. The research process of the thesis is structured and follows step-by-step instructions to eliminate speculative elements. The roles of the researchers in the thesis are limited to observe and draw conclusion objectively. The quantitative approach and a large sample size of the population enable the explanatory and predictive nature of the findings, allowing them to make inferences about impact of specific factors on customer journey satisfaction and coping behaviour in omnichannel retail environment (Grinnell Jr and Unrau, 2010; Rahi, 2017). Furthermore, the systematic literature review in chapter two has revealed the dominance of the qualitative methods in the customer journey literature. Therefore, this thesis adopts quantitative methods to fulfil its research objectives.

4.2 Data Collection

This thesis uses a survey approach to collect data. A survey is a systematic method of gathering information from a sample of the population (Groves *et al.*, 2009). The standardized procedures of surveys ensure that every participant is asked the same questions in a similar manner (Scheuren, 2004). This pre-determined structure reduces the error rate and the risk of researcher bias while increases reliability and accuracy of the results (Mitchell and Jolley, 2010). The

approach is often associated with deductive reasoning and widely used in social sciences (Saunders, 2019). A survey is one of the most convenient and cost-efficient ways to gather primary data on beliefs, attitudes and behaviours of individuals (Rahi, 2017; Ghauri, Grønhaug and Strange, 2020).

Previous literature has identified three main objectives for adopting the survey approach of data collection (Pinsonneault and Kraemer, 1993; Mitchell and Jolley, 2010). Firstly, the research is based on quantitative methods and aimed to test theoretically deduced hypotheses. The researchers must clearly identify the research hypotheses and know what to measure. Secondly, the instruments are pre-defined and well-reflected the research objectives. The survey must be developed in a way that ensure validity of the measurements. Thirdly, the research aims to analyse result of a sample group to make generalisations. Thus, sampling strategy is crucial in the survey approach to select individuals that represent the target population.

There are two main types of survey instruments. The interview surveys that researchers verbally ask questions and hear answers, and the questionnaire surveys that participants read questions and write their answers (Rahi, 2017). The interviews offer additional opportunities for researchers to interact with participants. Researchers can clarify confusion and encourage participants to finish the surveys through interactions. However, interviews are more time-consuming and expensive (Mitchell and Jolley, 2010). Whilst questionnaires can be simultaneously distributed to a large group of individuals through face-to-face, post or online channels (Blackmon and Maylor, 2005). Compared to structured interviews, written instruments are quicker, cheaper, more standardised and have no social desirability bias (De Leeuw, 1992).

This thesis adopts web-based questionnaires that let participants to fill out answers in an absence of an investigator for data collection. The approach is appropriate given the research objectives that aim to examine customer attitudes, emotions and behaviours in the customer journey. Comparing to traditional modes, web-based questionnaires require shorter transmitting time, lower distribution costs, lesser data entry time and offer more design options (Couper, Traugott and Lamias, 2001; Fricker and Schonlau, 2002; Lefever, Dal and Matthíasdóttir, 2007). The absence of an investigator also often promotes anonymity of participants and reduces ethical issues associate with an exertion and control of researchers in the data collection process (Nosek, Banaji and Greenwald, 2002; Gosling *et al.*, 2004). In addition, the selected approach has made it possible for the researchers to gather information during the pandemic time when social interactions are restricted.

However, self-administered and web-based questionnaires are subjected to some disadvantages such as a potential low completion rate due to low control of researchers over the procedure and missing data (Cobanoglu,Moreo and Warde, 2001; Fan and Yan, 2010). Thus, the researchers have taken these concerns into an account when designing questionnaires for the thesis. Firstly, all responses in the questionnaires are forced. Participants cannot proceed or submit the questionnaires if any question is left unanswered. Secondly, a monetary incentive is offered for each completed questionnaire. Rewards have been proven effective in increasing both quality and number of responses (Church, 1993; Göritz, 2006; Sánchez-Fernández *et al.*, 2010).

The questionnaires in this thesis can be divided into four main parts. The first part introduces the objective of the survey, declares the data use, lists contact details of the researchers and provides instructions to the participants. The section intends to offer information so that the participants can make an informed decision whether to proceed or exit the questionnaires. The second part aims to reconstruct memories of the respondents about the customer journey they have experienced. The section employs the Critical Incident Technique and asks about when did the journey happen, what product did they buy and what channels did they use. The use of critical incident technique to explore customer experience is common in marketing (e.g. (Forbes,Kelley and Hoffman, 2005), (Herhausen *et al.*, 2019), (Koussaifi,Hart and Lillystone, 2020) and (Barnes *et al.*, 2021)). The technique facilitates the investigation of significant occurrences from the perspective of the respondents that enables researchers to understand the way they are managed and the outcomes in terms of perceived effects (Chell, 1998; Gremler, 2004). The third section of the questionnaires contains demographics questions. The placement of the demographics items at the beginning of the questionnaire increases the response rate for the questions (Teclaw,Price and Osatuke, 2012). Lastly, the fourth section focuses on fresh data collection to fulfil the research objectives. All questions are closed-ended, and all answer options are fixed. The advantages of the design include an increase in reliability and validity of the measurements, an easy administration and higher accuracy of the results (Zhou *et al.*, 2017).

4.3 Measurement

Survey 1 focuses on the customer purchasing journey. The questionnaire consists of 68 items from five multi-item scales (table 11). Customer journey satisfaction is measured at the beginning of the questionnaire using adapted items from (Oliver, 1997). The scale of co-creation behaviour, customer response and customer experiential values are measured thrice, for the pre-purchase, purchase and post-purchase phase. The measurement of customer co-creation behaviour is originated by Yi and Gong (2013). The scale measures eight different

actions of customers, consisting of information seeking, information sharing, responsible behaviour, personal interaction, feedback, advocacy, help and tolerance. Pleasure and arousal are two dimensions that reflect customer emotional response. Both scales are from the study by Bigné, Mattila and Andreu (2008). Customer experiential values is a three-dimension construct measuring utilitarian, hedonic and social values. Each of the dimension contains two sub-dimensions the reflect the values. All customer experiential value scales are from Rintamäki *et al.* (2006). Lastly, the scale of need of interaction, technology anxiety and inertia from Meuter *et al.* (2005) are measured at the end of the questionnaire to consider individual context.

Construct	Items	Label	Source
Customer journey satisfaction	This was the best channel combination I could have used for shopping.	CS1	Oliver (1997)
	My choice of shopping channel combination was a wise one.	CS2	
	I was satisfied with the shopping channel combination.	CS3	
	I didn't regret using the shopping channel combination.	CS4	
Customer co-creation behaviour	Information Seeking		(Yi and Gong, 2013)
	I asked others for information on what the channel offered.	ISk1	
	I searched for information on how to access the channel.	ISk2	
	I paid attention to how others behaved to use the channel well.	ISk3	
	Information Sharing		
	I clearly explained to the company what I wanted the company to do.	Ish1	
	I gave the company proper information.	Ish2	
	I provided the necessary information to facilitate the performance of the company.	Ish3	
	I answered all the product-related questions that were inquired by the company.	Ish4	
	Responsible Behaviour		
	I performed all the tasks that are required.	RB1	
	I adequately completed all the expected behaviours.	RB2	
	I followed the directives or orders given by the company.	RB3	
	Personal Interaction		
	I was friendly to the employee and other customers.	PI1	
	I was kind to the employee and other customers.	PI2	
	I was courteous to the employee and other customers.	PI3	
	I didn't act rudely to the employee or other customers.	PI4	
	Feedback		
	If I had a useful idea on how to improve the service, I would let the company know.	FB1	
	When I received good service, I commented about it.	FB2	
	When I experienced a problem, I let the company know about it.	FB3	
	Advocacy		
	I said positive things about the channel to others.	AV1	
	I recommended the channel to others.	AV2	
	I encouraged friends and relatives to use the channel.	AV3	
Help			
I would assist other customers if they needed my help.	HP1		
I would help other customers if they seemed to have problems.	HP2		
I taught other customers to use the channel correctly.	HP3		
I gave advice to other customers.	HP4		
Tolerance			
If the channel did not deliver as expected, I would be willing to put up with it.	TL1		
If the employee or system made a mistake during service delivery, I would be willing to be patient.	TL2		

	If I had to wait longer than I normally expected to receive service, I would be willing to adapt.	TL3	
Customer emotional response	Pleasure		(Bigné, Mattila and Andreu, 2008)
	Angry – Content	PS1	
	Unhappy – Happy	PS2	
	Displeased – Pleased	PS3	
	Sad – Joyful	PS4	
	Disappointed – Delighted	PS5	
	Bored – Entertained	PS6	
	Arousal		
	Cheerful – Depressed	AS1	
	Quiet – Anxious	AS2	
	Calm – Enthusiastic	AS3	
Active – Passive	AS4		
Surprised – Indifferent	AS5		
Customer experiential values	Utilitarian Value – Monetary savings		(Rintamäki, et al., 2006)
	I saved money because I used the channel.	MS1	
	The products on the channel were inexpensive.	MS2	
	I got my shopping activities done cheaper than if I had done them elsewhere.	MS3	
	Utilitarian Value- Convenience		
	I was able to get everything I needed at one stop.	CV1	
	I was able to complete my shopping activities without disruptive queuing or others.	CV2	
	I was able to complete my shopping activities conveniently.	CV3	
	Hedonic Value – Entertainment		
	Using the channel “got me away from it all”.	ET1	
	Using the channel made me feel like I was in another world.	ET2	
	I got so involved that I forgot everything else.	ET3	
	Hedonic Value – Exploration		
	I felt adventurous and wanted to try different ways to complete my task.	EP1	
	I gained insights and new ideas to complete my task.	EP2	
	I wanted to explore many options while completing my task.	EP3	
	Social Value – Status		
	Using the channel fit the impression that I wanted to give to others.	ST1	
	I was eager to tell my friends or acquaintances about the channel.	ST2	
	I felt that I belong to the customer segment of the channel.	ST3	
Social Value – Self-esteem			
I found the channel to be consistent with my style.	SE1		
I felt like a smart shopper.	SE2		
The experience from using the channel gave me something that was personally important or pleasing for me.	SE3		
Individual context	Need of interaction		(Meuter et al., 2005)
	Contact with products that I would like to buy makes shopping enjoyable.	NI1	
	Contact with products that I would like to buy is important to me.	NI2	
	It bothers me to use a machine for shopping when I could engage with a live person instead.	NI3	
	Technological anxiety		
	I feel apprehensive about using technology for my shopping.	TA1	
	Technology terms sound like confusing jargon to me.	TA2	
	I have avoided using technology for my shopping because it is unfamiliar to me.	TA3	
	I hesitate to use most forms of technology for my shopping because I fear to make mistakes that I cannot correct.	TA4	
	Inertia		
Trying new channels would be a bother for me.	IN1		
The cost in time, effort and grief to switch channels is high for me.	IN2		

	It's just not worth the hassle for me to switch channels for my shopping activities.	IN3	
--	--	-----	--

Table 10 Measurement Items for Survey 1

Survey 2 employs 67 items from thirteen constructs to examine the customer coping journey (Table 12). Blame attribution, coping potential and future expectation are measured to reflect failure appraisals of the respondents. The measurements of these appraisals are from previous service failure literature (McCollough, Berry and Yadav, 2000; Maxham III and Netemeyer, 2002; Gelbrich, 2010). The scales of coping strategies are derived from Zheng, Luo and Ritchie (2021). The construct consists of four dimensions, including problem-focused, self-supported emotional, social-supported emotional and disengagement coping. Four constructs are examined as outcomes of the customer coping journey. Post-coping satisfaction with oneself is measured by the scale adapted from Kim and Baker (2020), while the measurement of post-coping satisfaction with the company is rooted in Karatepe and Ekiz (2004). For behavioural outcomes, the thesis uses scales from Maxham III and Netemeyer (2002) and Zeithaml, Berry and Parasuraman (1996) to measure word-of-mouth intention and repurchase intention, respectively.

Furthermore, pre-failure customer co-creation behaviour, pre-failure customer emotional response and pre-failure customer experiential values are also measured to examine the impact of the pre-failure customer purchasing journey on the customer coping journey. The scales are different from Survey 1 to reduce the length of the questionnaire to be comprehensible for the respondents. The scale of the pre-failure customer co-creation behaviour is derived from Chan, Yim and Lam (2010). Pre-failure customer emotional response is measured with the items developed by Yüksel and Yüksel (2007). Utilitarian value and hedonic values are measured by scales adapted from Babin and Attaway (2000) and Yüksel (2007) to reflect pre-failure customer experiential values. Lastly, failure severity and COVID restrictions are also measured and treated as control variables of the study. The scale of failure severity is originated from Maxham III and Netemeyer (2002), while the scale of COVID restriction is developed based on the English lockdown laws (Brown and Kirk-Wade, 2021).

Construct	Items	Label	Source
Blame attribution	The company was responsible for the problem I experienced.	BA1	(Maxham III and Netemeyer, 2002)
	The problem that I encountered was all the company's fault.	BA2	
	The company should be blamed for this problem.	BA3	
Coping potential	I believed I could cope with the situation.	CP1	(Gelbrich, 2010)
	I knew I would find a way to alter the situation.	CP2	
Future expectation	I would not be surprised if I encounter some kind of problem again when using the product in the future.	FE1	(McCollough, Berry and Yadav, 2000)

	I would consider myself lucky if I do not experience some kind of problem with the product again.	FE2	
	I considered the odds of running into a problem again pretty high.	FE3	
Coping strategies (Zheng,Luo and Ritchie, 2021)	<i>Problem-focused coping</i> I tried to come up with a strategy about how to solve the problem.	PF1	(Zheng,Luo and Ritchie, 2021)
	I thought about the best way to handle the problem.	PF2	
	I concentrated my efforts on doing something about the problem.	PF3	
	I took action to make the situation better.	PF4	
	<i>Self-supported emotional coping</i> I accepted the reality that the failure has happened.	SfSp1	
	I learned to live with the problem.	SfSp2	
	I tried to look at the brighter side of the problem.	SfSp3	
	I looked for the good in what happened.	SfSp4	
	<i>Social-supported emotional coping</i> I tried to get advice from other people about what to do in such case.	ScSp1	
	I got help and advice from other people who have had similar experiences.	ScSp2	
	I got emotional support from others regarding the failure incident.	ScSp3	
	I got comfort and understanding from someone regarding the failure incident.	ScSp4	
	<i>Disengagement coping</i> I gave up trying to deal with the failure incident.	DE1	
	I gave up the attempt to cope with the failure incident.	DE2	
	I said to myself “this is not real”.	DE3	
	I refused to believe that the failure incident has happened.	DE4	
Post-coping satisfaction with oneself	I am satisfied with the way I have handled the failure incident.	SaSf1	(Kim and Baker, 2020)
	I feel favourably about how I have handled the failure incident.	SaSf2	
	I like how I have handled the product failure incident.	SaSf3	
Post-coping satisfaction with the company	My satisfaction with this company has increased after the failure incident.	SaSc1	(Karatepe and Ekiz, 2004)
	My impression of this company has improved after the failure incident.	SaSc2	
	I now have a more positive attitude toward this company after the failure incident.	SaSc3	
Word-of-mouth intention	I would say something positive about this company.	WM1	(Maxham III and Netemeyer, 2002)
	I would recommend this company to my family and friends.	WM2	
	If my family or friends were looking for this product category, I would tell them to try this company.	WM3	
Repurchase intention	I would continue using this company.	RP1	(Zeithaml, Berry and Parasuraman, 1996)
	I would consider this company as my first choice whenever I need this product category again in the future.	RP2	
	If there were similar products provided by competitors, I would continue buying the products from this company.	RP3	
Pre-failure customer co-creation behaviour	I spent a lot of time-sharing information about my needs and opinions with the company.	CC1	(Chan,Yim and Lam, 2010)
	I put a lot of effort into expressing my personal needs to the company.	CC2	
	I provided suggestions to the company for improving the product performance.	CC3	
	I had a high level of participation in the production process.	CC4	
	I was very much involved in deciding how the product should be produced.	CC5	
	<i>Pleasure</i>	PS1	

Pre-failure customer emotional response	Unhappy – Happy		(Yüksel and Yüksel, 2007)
	Annoyed – Pleased	PS2	
	Unsatisfied – Satisfied	PS3	
	Melancholic – Contended	PS4	
	<i>Arousal</i>		
	Relaxed – Stimulated	AR1	
	Calm – Excited	AR2	
	Sleepy – Wide awake	AR3	
Unaroused – Aroused	AR4		
Pre-failure customer experiential value	Utilitarian Value		(Babin and Attaway, 2000)
	While shopping, I found just I was looking for.	UT1	
	It was a good shopping experience because it was very quick.	UT2	
	The shopping truly felt like an escape.	UT3	(Yüksel, 2007)
Hedonic Value			
This shopping was truly a joy.	HD1		
I enjoyed being immersed in exciting new products or services.	HD2		
	While shopping, I felt a sense of adventure.	HD3	
Failure severity	Minor problems – Major problem	FS1	(Maxham III and Netemeyer, 2002)
	Small inconveniences – Big inconveniences	FS2	
	Minor aggravation – Major aggravation	FS3	
COVID restrictions	There were restrictions on leaving the house in my area of residence.	CD1	Developed based on English lockdown laws (Brown and Kirk-Wade, 2021)
	Leaving the house was only permitted in specific professions (e.g., health care) or circumstances (e.g., grocery shopping).	CD2	
	Leaving the house was only permitted in small groups (i.e., up to 5 persons).	CD3	
	There were restrictions on public life in my area of residence.	CD4	
	Educational facilities (Universities, Schools, Nursery schools) were closed.	CD5	
	Restaurants, Bars, Cafés, and similar facilities were closed.	CD6	
	Local public transport was restricted.	CD7	
	Availability of household products was restricted.	CD8	
	Availability of food was restricted.	CD9	

Table 11 Measurement Items for Survey 2

All items in table 11 and table 12 are measured in seven-point Likert scales, which are commonly used to assess attitudes and observations of respondents (Buttle, 1996; Rahi, 2017). The answer options are ranged from “1 – strongly disagree” to “7 – strongly agree”, except the customer emotional response scales that use the two extremes of each item as the anchors. Seven-point Likert scale contains an optimal among of answer choices and suitable for web-based questionnaires (Miller, 1994; Finstad, 2010). Reliability and accuracy of the data are reduced when the number of scales drops below or rises above seven (Symonds, 1924; Thomas and Lewis, 1993; Johns, 2010).

4.4 Sampling

Population refers to all people or elements that researchers wish to understand while sampling is the process of selecting a portion of the population for an investigation (Hair, Page and

Brunsveld, 2019). Because, in most cases, it is not practical to gather information from every individual of a population. Therefore, researchers use samples to make inferences about the population of the investigate (Hibberts,Burke and Hudson, 2012). Sampling reduces time and cost of data collection, making an study feasible (Cooper,Schindler and Sun, 2006; Malhotra,Nunan and Birks, 2017). Sampling is a crucial procedure in the research design that determines quality of the data (Groves *et al.*, 2009). Sampling can be mainly classified into probability and non-probability sampling (Taherdoost, 2016).

Probability sampling relies on a probabilistic mechanism and gives all units an equal chance to be selected (Saunders, 2019). This approach ensures representativeness of a sample to its population. Typical probability sampling techniques include simple random sampling, systematic sampling, stratified random sampling and cluster sampling (Hibberts,Burke and Hudson, 2012; Malhotra,Nunan and Birks, 2017). In contrast to probability sampling, non-probability sampling is an approach in which the chance or probability of each unit to be selected is not known or confirmed (Rahi, 2017). Three common non-probability sampling methods in social science research are convenience sampling, quota sampling, snowball sampling and purposive sampling (Hibberts,Burke and Hudson, 2012). Table 12 summarises advantages and disadvantages of the eight sampling methods.

Sampling Technique	Advantages	Disadvantages
Probability Sampling		
Simple random sampling: Every unit within a population has an equal chance of being included in the sample.	Easily understood procedures and projectable results	Difficult to construct sampling frame, lower precision and no assurance for representativeness
Systematic sampling: Researchers select every n th unit from lists that represent an appropriate sampling frame to include in the sample	Easier to implement comparing to simple random method as sample frame is not required	Representativeness depends upon the order in the sampling frame
Stratified random sampling: A population is divided into mutually exclusive groups and then a simple random or systematic technique is employed to select units from each of the groups.	Precise and include all sub-populations	Expensive and not feasible to for many cases when variables cannot be divided
Cluster sampling: The technique involves a random selection of clusters rather than individuals.	Easy to implement and cost effective	Imprecise, difficult to analysis results and requires a large sample size
Non-probability Sampling		
Convenience sampling: A sample is selected from population that is close at hand and easily accessible to researchers.	Most convenient, least time-consuming and least expensive	Potential selective bias and a sample may not be representative of the population
Quota sampling: Researchers identify groups within a population and use convenience sampling technique to select units from each of the groups.	Sample can be controlled for certain characteristics	Potential selective bias and a sample may not be representative of the population

Snowball sampling: Each participant who volunteers to take part in the research study is asked to identify one or more additional people who meet certain criteria and might be willing to participate in the research study.	Highly useful when a target population has rare characteristics	Time-consuming
Purposive sampling: Researchers deliberately select particular individuals who can provide important information that cannot obtain from others.	Convenient, cost-saving and not time-consuming	Findings are subjective and cannot be generalised.

Adapted from Hibberts, Burke and Hudson (2012) and Malhotra, Nunan and Birks (2017)

Table 12 Common Sampling Techniques

The target population of the thesis is the individuals who have experienced a purchasing journey or a coping journey within the last six month prior the surveys. The timeframe is set to ensure that the participants can recall their memories (Herhausen *et al.*, 2019). It is impracticable to collect data from the entire population. Therefore, the researchers employ convenience sampling method to recruit participants and collect data for hypothesis testing and examining the phenomena. The method is appropriate as the probability of selection for each unit of the population cannot be determined and the choice of participating are upon the prospective participants (Taherdoost, 2016; Saunders, 2019). Convenient sampling also allows the researchers to collect data within the time and budget constraints. The questionnaires of the thesis are distributed by the help of a market research company to recruit participants from a pool of customers in UK. The final sample of the first and second survey consist of 425 (table 13) and 497 respondents (table 14), respectively. The size of the samples is adequate for running inferential analysis and identifying the strength of the inter-correlation between the variables (Hair *et al.*, 2014; Malhotra, Nunan and Birks, 2017).

Demographic Characteristics	Frequency (n = 425)	Percentage
Gender		
Male	207	48.7
Female	218	51.3
Age		
18 – 29 years	80	18.8
30 – 39 years	130	30.6
40 – 54 years	125	29.4
55 years or over	90	21.2
Area of residence		
Urbanised area	147	34.6
Urban cluster	215	50.6
Rural	63	14.8
Educational attainment		
GCSEs or below	99	23.3
A-Level or equivalent	116	27.3
University graduate	142	33.4
Graduate degree or above	68	16.0
Personal annual income		
£10,000 or less	82	19.3
£10,001 - £20,000	70	16.5
£20,001 - £30,000	83	19.5

£30,001 - £40,000	86	20.2
£40,001 - £50,000	49	11.5
More than £50,000	55	12.9

Table 13 Demographic profile of respondents for survey 1

Demographic Characteristics	Frequency (n = 497)	Percentage
Gender		
Male	246	49.5
Female	250	50.3
Age		
18 – 29 years	126	25.4
30 – 39 years	114	22.9
40 – 54 years	118	23.7
55 years or over	139	28.0
Area of residence		
Urbanised area	215	43.3
Urban cluster	193	38.8
Rural	89	17.9
Educational attainment		
GCSEs or below	133	28.6
A-Level or equivalent	136	27.4
University graduate	158	31.8
Graduate degree or above	70	14.1
Personal annual income		
£10,000 or less	79	15.9
£10,001 - £20,000	131	26.4
£20,001 - £30,000	119	23.9
£30,001 - £40,000	75	15.1
£40,001 - £50,000	44	8.9
More than £50,000	49	9.9

Table 14 Demographic profile of respondents for survey 2

4.5 Data Analysis

Each of the studies in this thesis is analysed separately using individual models and different approaches. Study 1 employs linear regression analysis (section 4.5.1) and latent class analysis (section 4.5.2) to examine the customer purchasing journey and moderating effect of customer channel use. To be specific, bivariate linear regression analysis is used in two steps. Firstly, the researchers use the approach to investigate relationships between each aspect of the three customer journey dimensions and customer journey satisfaction. Secondly, the approach is adopted again to test moderating effect of customer channel use on the investigated relationships in the first part. SPSS Statistics version 27 is used to perform all the regression analyses. Study 1 also employs latent class analysis (LCA) in Latent GOLD version 5.1 to group the respondents into classes according as their channel use prior testing for its moderating effect. Whilst study 2 uses structural equation modelling (SEM) and follows the three-step process suggested by (Hair *et al.*, 2014) and (Gaskin, 2017). The process consists of reliability and validity tests using confirmatory factor analysis (CFA), collinearity and common method bias

and hypothesis testing. The analysis steps of Study 2 are explained in section 4.5.3 to 4.5.5. SPSS Statistics version 27 and SPSS Amos version 27 are employed for data analysis of Study 2.

4.5.1 Linear regression analysis and moderation analysis

Regression analysis is a powerful and flexible statistical procedure for studying relationships between one dependent variable and one or more independent variables (Malhotra, Nunan and Birks, 2017). Linear regression summarises the relationships in straight lines (Schroeder, 2017). The linearity of the relationship makes the implication and interpretation easy and effective (Su, Yan and Tsai, 2012). There are two types of linear regression analysis. Bivariate regression derives a mathematical relationship between one dependent variable and one independent variable, while multiple regression considers more than one independent variable in the equation.

This thesis utilises bivariate linear regression analysis to examine relationships between customer journey satisfaction and each dimension of customer co-creation behaviour, customer emotional response and customer experiential value (table 15). The method first plots the values of the dependent variable on the vertical axis and an independent variable on the horizontal axis. Then, the best-fitting straight line that minimise the sum of squared error, which is the vertical distances of all the points from the line, is drawn. This technique is called the ordinary least square (OLS) (Wilson, Keating and Beal, 2016). The slope of the regression line is interpreted as the change in the dependent variable for one unit of change in the independent variable (Malhotra, Nunan and Birks, 2017). In the hypothesis testing procedure, the null hypothesis assumes the slope to be zero, suggesting there is no relationship between the two variables. Next, the slope of the regression that is derived from the collected data is compared against the assumed value. If there is a sufficient difference between the two values, the null hypothesis is rejected. Thus, the researchers may conclude that the two variables are related. However, if the slope of the regression is not significantly different from zero, the researchers accept the null hypothesis and conclude that there is no relationship between the dependent variable and the independent variable (Schroeder, 2017).

Construct	Eigenvalues			% of Variance			C.R.			Items	Factors loading		
	Pre	Purchase	Post	Pre	Purchase	Post	Pre	Purchase	Post		Pre	Purchase	Post
Dependent Variable													
Customer journey satisfaction	3.2			80.04			0.92			CS1	0.89		
										CS2	0.92		
										CS3	0.93		
										C4	0.84		
Independent Variables													
Information seeking	2.43	2.58	2.50	80.93	86.07	83.48	0.87	0.92	0.90	ISk1	0.87	0.91	0.91
										ISk2	0.90	0.94	0.89
										ISk3	0.93	0.94	0.94
Information sharing	3.25	3.21	3.35	81.29	80.23	83.69	0.92	0.91	0.93	ISh1	0.81	0.83	0.87
										ISh2	0.93	0.93	0.94
										ISh3	0.94	0.92	0.93
										ISh4	0.92	0.90	0.91
Responsible behaviour	2.65	2.67	2.68	88.48	88.68	89.32	0.93	0.94	0.94	RB1	0.94	0.95	0.94
										RB2	0.95	0.96	0.96
										RB3	0.93	0.91	0.94
Personal interaction	3.33	3.46	3.49	83.34	86.40	87.36	0.93	0.95	0.95	PI1	0.91	0.94	0.93
										PI2	0.93	0.94	0.95
										PI3	0.95	0.95	0.95
										PI4	0.86	0.89	0.91
Feedback	2.04	2.29	2.30	67.86	76.24	76.73	0.77	0.84	0.85	FB1	0.76	0.85	0.84
										FB2	0.87	0.90	0.90
										FB3	0.84	0.87	0.88
Advocacy	2.65	2.74	2.71	88.38	91.35	90.34	0.93	0.95	0.95	AV1	0.92	0.94	0.94
										AV2	0.96	0.97	0.96
										AV3	0.94	0.96	0.95
Help	2.55	2.81	2.89	63.83	70.16	72.33	0.81	0.86	0.87	HP1	0.78	0.84	0.93
										HP2	0.82	0.85	0.86
										HP3	0.81	0.84	0.85
										HP4	0.80	0.82	0.87
Tolerance	2.07	2.38	2.38	69.09	79.15	79.09	0.76	0.86	0.86	TL1	0.73	0.83	0.83
										TL2	0.86	0.92	0.92
										TL3	0.89	0.92	0.92
Pleasure	3.91	4.01	4.52	65.09	68.04	75.28	0.89	0.90	0.93	PS1	0.76	0.80	0.75
										PS2	0.85	0.87	0.82

										PS3	0.86	0.86	0.82
										PS4	0.82	0.85	0.79
										PS5	0.86	0.85	0.81
										PS6	0.67	0.70	0.53
Arousal	2.44	2.42	2.48	63.67	65.99	66.00	0.73	0.72	0.74	AS1	0.78	0.80	0.76
										AS2	0.71	0.76	0.70
										AS3	0.70	0.67	0.70
										AS4	0.71	0.60	0.71
										AS5	0.74	0.70	0.77
Monetary saving	2.24	2.37	2.48	74.67	78.89	82.54	0.83	0.87	0.9	MS1	0.89	0.89	0.92
										MS2	0.82	0.87	0.88
										MS3	0.88	0.91	0.92
Convenience	2.5	2.49	2.61	83.42	83.14	86.93	0.9	0.9	0.92	CV1	0.89	0.89	0.92
										CV2	0.92	0.93	0.95
										CV3	0.93	0.92	0.93
Entertainment	2.39	2.55	2.66	79.63	54.95	88.81	0.87	0.91	0.94	ET1	0.68	0.88	0.91
										ET2	0.89	0.96	0.96
										ET3	0.82	0.93	0.95
Exploration	2.48	2.61	2.66	82.61	86.97	88.67	0.89	0.92	0.90	EP1	0.91	0.93	0.93
										EP2	0.95	0.95	0.95
										EP3	0.87	0.92	0.95
Status	2.48	2.49	2.56	82.69	83.03	85.29	0.89	0.89	0.91	ST1	0.91	0.90	0.92
										ST2	0.92	0.93	0.95
										ST3	0.90	0.90	0.91
Self-esteem	2.58	2.49	2.62	85.83	83.05	87.32	0.91	0.90	0.92	SE1	0.93	0.91	0.93
										SE2	0.92	0.91	0.95
										SE3	0.93	0.92	0.93

Table 15 Investigating variables of Study 1

To ensure the validity of the results, multicollinearity is tested (Osborne and Waters, 2002). Multicollinearity refers to a high degree of correlation between independent variables. It occurs when two or more independent variables measure the same underlying construct. The issue reduces the precision of the results as the effect size of the variable may be interfered by its correlation with other independent variables (Tabachnick, Fidell and Ullman, 2007). Multicollinearity can be detected by checking tolerance and variance inflation factor (VIF) coefficients. Tolerance measures the extent to which the variability of one independent variable is not explained by the other independent variables, while the VIF coefficient is an inversed value of the tolerance value. The value of tolerance and VIF coefficient should be greater than 0.10 and below 10, respectively, to indicate no concern about multicollinearity between the independent variables (Hair, Black, Babin, & Anderson, 2013). Table 16 shows the multicollinearity statistics of Study 1. All tolerance and VIF coefficients have met the criteria. Therefore, multicollinearity is not a concern of the study.

Independent variables	Pre-purchase phase		Purchase phase		Post-purchase phase	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
Information seeking	0.50	2.00	0.41	2.44	0.45	2.20
Information sharing	0.39	2.60	0.34	2.97	0.16	6.44
Responsible behaviour	0.41	2.43	0.34	2.97	0.18	5.60
Personal Interaction	0.57	1.74	0.62	1.61	0.42	2.40
Feedback	0.41	2.47	0.35	2.89	0.33	2.99
Advocacy	0.38	2.63	0.34	2.91	0.35	2.87
Helping	0.36	2.75	0.36	2.81	0.33	3.09
Tolerance	0.57	1.76	0.52	1.91	0.40	2.50
Pleasure	0.59	1.70	0.51	1.85	0.51	1.95
Arousal	0.79	1.26	0.71	1.42	0.73	1.38
Monetary	0.54	1.87	0.58	1.74	0.43	2.32
Convenience	0.48	2.07	0.44	2.29	0.37	2.70
Entertainment	0.40	2.52	0.40	2.53	0.34	2.92
Exploration	0.31	3.18	0.23	4.38	0.23	4.31
Status	0.20	4.98	0.15	6.61	0.14	7.20
Self-esteem	0.25	3.93	0.21	4.78	0.21	4.83

Table 16 Multicollinearity statistics of Study 1

After the main effects are tested, PROCESS macro for SPSS (Hayes, 2018) is employed to investigate the moderating effect of the customer segmentation on the relationships between the independent variables and the dependent variable. Moderation analysis tests whether the magnitude of the main effects depend on a third variable. PROCESS macro is a computational tool

that combine many steps of the test into one simple-to-use procedure. The tool reduces time and cognitive effort of researchers in learning multiple tools to conduct only a single specialized task (Hayes, 2012). The moderation analysis also relies on the OLS technique to test the significance and probe the interactions of the moderator in the model (Hayes, Montoya and Rockwood, 2017). The analysis estimates the effect of an independent variable on the dependent variable as a function of a moderating variable and test whether there is any statistical difference among the effects at various values of the moderator (Hayes, 2018). The results do not only demonstrate whether the customer channel use has a moderating effect or not but also indicate the significance and magnitude of each independent variable on the level of journey satisfaction of each customer group (Hayes and Montoya, 2017).

4.5.2 Latent class analysis

The latent class analysis (LCA) is employed to group the respondents according to their journey pattern before investigating the customer segmentation as a moderator of the main effects. LCA is a model-based approach that determines the number of segments and calculates the posterior probability of membership for each individual (Haughton, Legrand and Woolford, 2009). The analysis posits that some of the parameters of an investigated statistical model differ across unobserved subgroups. Therefore, an examination of differences in the parameters reveals latent segments within the population and classifies individuals into the homogenous subgroups based on the specified indicators (Vermunt and Magidson, 2002). Researchers may set the analysis to generate a range of solutions with a varying number of clusters before determining the best solution. The preferred solution is usually a model that has the minimum Bayesian Information Criterion (BIC) value (Haughton et al., 2009; Nylund, Asparouhov, & Muthén, 2007).

The three-step approach (Bolck, Croon and Hagenaars, 2004) is also performed to examine customer characteristics of the identified classes. The procedure has become a common approach to model the association between covariates and classes (Nylund, Asparouhov and Muthén, 2007; Vermunt, 2010; Bakk, Tekle and Vermunt, 2013; Vermunt and Magidson, 2016). It treats heterogeneity as a phenomenon that took place between segments rather than individual customers (Meyerding, Bauchowitz and Lehberger, 2019). The three-step LCA is performed using the following three steps (Vermunt, 2010; Bakk, Tekle and Vermunt, 2013). Firstly, a latent class model is estimated. This involves a determination about the number of classes, the distribution of

the items within the class, the relaxation of the local independence for certain pairs of items and all other model specification issues. Secondly, cases are assigned into one of the classes based on their posterior class membership probabilities, which are obtained from their observed responses and the estimated parameter in step one. Lastly, cross-tabulations are used to examine the relationships between the external variables and the classes while accounting for the classification error in step two.

LCA has advantages over traditional cluster analysis as it is based on rigorous statistical tests. More specifically, it assumes that the data is generated from a mixture of probability distributions rather than minimising a log-likelihood function (Vermunt and Magidson, 2005). The use of a statistical model makes the choice of the cluster criterion less arbitrary comparing to standard non-hierarchical cluster techniques. The formal criteria and probabilistic nature of the LCA reduce biases in the estimations of the number of classes and the class membership. The probabilistic approach also considers that there is a possibility of misclassification, which the error can be calculated and reported (Vermunt and Magidson, 2002). Furthermore, LCA makes it simpler for researchers to deal with observed variables of different scaling and measurement levels (McCutcheon, 2002).

4.5.3 Reliability and validity analysis

Reliability refers to the consistency between measurement items and what the scale intends to measure, while validity concerns the degree of accuracy that the measurement represent the concept of study (Hair *et al.*, 2014). Prior the structural path analysis, researchers map a measurement model with the statistical technique of CFA to specify observed variables to constructs based on the postulated framework (Albright and Park, 2009). CFA seeks to confirm the extent to which the operationalised variables hold true in the studying context (Hallebone and Priest, 2008). It verifies whether the number of constructs and the loadings of the observed variables conform to what is expected based on theory or previous empirical work (Malhotra, Nunan and Birks, 2017). This thesis uses composite reliability (C.R.), factor loading, average variance extracted (AVE), square root of AVE and correlation coefficients to measure reliability and validity of the constructs and observed variables.

C.R. measures reliability of the measurement scales. The estimate is computed from the squared sum of the factor loadings for each construct and the sum of the error variance of a construct (Hair

et al., 2014). As a general guideline (Malhotra, Nunan and Birks, 2017), the C.R. value of 0.70 or higher are preferable but the estimates between 0.60 and 0.70 are also acceptable if the validity of the model is satisfied. Validity is measured in two dimensions, namely, convergent validity and discriminant validity. Convergent validity refers to the extent to which the items within the same construct are measuring the same concept (Myers, Goodboy and 201, 2013). It is estimated by factor loadings and AVE. All factor loadings should be statistically significant and higher than 0.50, preferably above 0.70, to indicate that the observed variables are convergent and measuring the same construct (Malhotra, Nunan and Birks, 2017). Another measure to assess convergent validity is AVE, which is calculated for each construct by dividing the total standardised factor loadings by the number of items (Fornell and Larcker, 1981). The measure estimates the variance in the observed variables that is explained by the latent construct (Malhotra, Nunan and Birks, 2017). AVE should not be less than 0.50 to verify the validity of the construct (Hair *et al.*, 2014). Table 17 reports the factor loading of each item and C.R. and AVE of the constructs in the main model.

Construct	C.R.	AVE	Item	Factor loading
Blame attribution	0.89	0.73	BA1	0.88
			BA2	0.93
			BA3	0.90
Coping potential	0.73	0.57	CP1	0.89
			CP2	0.89
Future expectation	0.80	0.58	FE1	0.86
			FE2	0.85
			FE3	0.84
Problem-focused coping (Zheng, Luo and Ritchie, 2021)	0.86	0.67	PF1	0.76
			PF2	0.88
			PF3	0.87
			PF4	0.84
Self-supported emotional coping	0.77	0.53	SfSp1	0.59
			SfSp2	0.77
			SfSp3	0.87
			SfSp4	0.75
Social-supported emotional coping	0.85	0.74	ScSp1	0.83
			ScSp2	0.89
			ScSp3	0.89
			ScSp4	0.83
Disengagement coping	0.85	0.73	DE1	0.81
			DE2	0.88
			DE3	0.82
			DE4	0.86
Post-coping satisfaction with oneself	0.85	0.65	SaSf1	0.89
			SaSf2	0.88
			SaSf3	0.87

Post-coping satisfaction with the company	0.89	0.72	SaSc1	0.89
			SaSc2	0.91
			SaSc3	0.91
Word-of-mouth intention	0.88	0.79	WM1	0.91
			WM2	0.94
			WM3	0.92
Repurchase intention	0.88	0.79	RP1	0.88
			RP2	0.92
			RP3	0.91

Note: Model fit of the CFA model: CMIN/DF = 2.108; CFI = 0.947; RMSEA = 0.047

Table 17 Reliability and convergent validity

Discriminant validity assesses the extent to which the construct is distinct from other constructs in the model and thus makes a unique contribution (Anderson and Gerbing, 1988). The logic of the discriminant validity test is that a construct should explain its observed variables better than any other construct (Malhotra, Nunan and Birks, 2017). Therefore, the square root of the AVE has to be greater than the correlations between the variables to satisfy convergent validity (Hair *et al.*, 2014). The estimates are calculated based on the finalised CFA model and presented in Table 11. The values in the diagonal of table are the square root of the AVE and those below the diagonal are the correlations between the constructs. All estimates in table 18 have satisfied the criteria, indicating there is no reliability, convergent validity and discriminant validity issue in the study.

	1	2	3	4	5	6	7	8	9	10	11
Blame attribute	0.85										
Coping potential	0.42	0.76									
Future expectation	0.41	0.27	0.76								
Problem-focused	0.47	0.59	0.29	0.82							
Self-supported emotional	0.10	0.49	0.27	0.23	0.73						
Social-supported emotional	0.01	0.02	0.33	0.08	0.30	0.86					
Disengagement	-0.07	-0.18	0.35	-0.19	0.29	0.63	0.86				
Satisfaction with oneself	0.31	0.57	0.15	0.58	0.25	-0.11	-0.25	0.81			
Satisfaction with company	0.01	0.34	0.11	0.13	0.51	0.21	0.05	0.41	0.85		
WOM	-0.02	0.38	0.03	0.22	0.42	0.21	0.02	0.47	0.77	0.89	
Repurchase	-0.06	0.31	-0.01	0.12	0.42	0.20	0.09	0.32	0.70	0.87	0.89

Note: Figures in the diagonal are the square root of the average variance extracted (AVE) and those below the diagonal are the correlations between the constructs.

Table 18 Convergent validity test

In addition to the reliability and validity tests, model fit indices are also examined to evaluate the extent to which the research model and the observed data of the variables matched. There are three main types of fit indices (Malhotra, Nunan and Birks, 2017). Absolute fit indices evaluate each model independently and measure how well the model can reproduce or deviate from the observed data. Common absolute fit indices include goodness-of-fit-index (GFI), chi-square (χ^2) and the root mean square error of approximation (RMSEA). In contrast to the absolute fit indices, the incremental fit indices and the parsimony fit indices assess only similarities but not differences between the model and the observed data. The incremental fit indices (e.g. comparative fit index (CFI) and relative non-centrality index (RNI)) evaluate model fits against some alternative model, while the parsimony fit indices (e.g. parsimony normed-fit index (PNFI)) assess fit in relation to model complexity. Following the guideline (Hair *et al.*, 2014), the value of χ^2 , the associated degrees of freedom, one absolute index (i.e. RMSEA) and one incremental index (i.e. CFI) are reported to confirm the model fit. The adopted cut-off thresholds of each index are presented in Table 19.

Sample size	More than 250
Number of observed variables	More than 30
CMIN/DF	$2 < x < 5$
CFI	Above 0.90
RMSEA	Less than 0.07 with CFI of 0.90 or higher

Adopted from Hooper, Coughlan and Mullen (2008) and Hair *et al.* (2014).

Table 19 Goodness-of-fit indices

4.5.4 Common method variance

Common method variance (CMV) can be a potential issue for research using the self-administered web-based questionnaire approach to collect data (Baumgartner and Steenkamp, 2001; Podsakoff *et al.*, 2003). The issue refers to a systematic error variance that arises from the use of the same method to measure variables of the study (Richardson, Simmering and Sturman, 2009). CMV distorts the true relationship between the measured variables and threatens the validity of the conclusions (Bagozzi and Yi, 1990; Jakobsen and Jensen, 2015). The issue can influence the construct reliability, mediate correlations between latent constructs and leading researchers to incorrectly rejecting or failing to reject the null hypothesis (MacKenzie and Podsakoff, 2012; Kock, Berbekova and Assaf, 2021).

The nature of self-administered questionnaires has posed several potential sources of common method variance. Firstly, the repeating wording and format of a questionnaire heightens the perceived similarity among the measurement items and reduces the attentiveness of the respondents when answering them (Podsakoff *et al.*, 2003; MacKenzie and Podsakoff, 2012). Secondly, the consistency of the Likert scale can lead to falsely observed covariations among the constructs (Fuller *et al.*, 2016). Lastly, the length of the questionnaire can also threaten the validity of the conclusions (Podsakoff *et al.*, 2003; MacKenzie and Podsakoff, 2012). A lengthy questionnaire requires cognitive effort from the respondents that may lessen their comprehension and judgement in the process. Whilst a short questionnaire can reduce fatigue and carelessness of the respondents, it may increase other forms of biases, such as respondents speculate their answers by assessing previous questions.

There are two sets of remedies that researchers can take to reduce the possible occurrence of CMV. One relates to the design of the questionnaire that minimise the ability of respondents in providing biased responses, while another concerns about statistical remedies to identify possible CMV in the data (Podsakoff *et al.*, 2003; MacKenzie and Podsakoff, 2012). Regards the questionnaire design, vague terminology, complex wording and compound questions are avoided to maximise comprehension and clarity of the questionnaire (Krosnick, 1991). In addition, the questionnaire is also pre-launched in a pilot test to identify ambiguous points and enhance the precision of the data collection tool. For the post-hoc test, a common latent factor technique is applied to compare the standardised regression weights of all items for the models with and without the latent factor (Eichhorn, 2014). The technique adds a new latent variable that links all the indicators to it. All paths are set to be equal and the variance of the common factor is constrained to be 1. The approach has advantages over other methods, as it models the influence of the method factor at the measurement level and does not require an equivalence of the influence of the method factor on each measure (MacKenzie and Podsakoff, 2012). A significant difference between factor loadings implies that common latent factor accounts for the excessed variance of the measured variables. However, all the differences in this study are less than the suggested upper limit of 0.20 (Serrano Archimi *et al.*, 2018), indicating that common method variance is not a concern of the study. In other words, the results of the analysis are attributions of the hypothesised relationships not common method effects.

4.5.5 Structural path analysis and multigroup analysis

After the measurement model has been finalised and satisfied CFA, new arrows are drawn to depict the hypothesised relationships of the study. This newly integrated model is known as a structural model. Structural path analysis is employed to estimate a series of dependence relationships among the constructs in the structural model. Although the analysis itself cannot establish causality, it provides evidence of systematic covariation (Hair *et al.*, 2014). Generally, SEM is mainly used for a confirmatory rather than exploratory purposes. Therefore, it is crucial that the hypothesised relationships are derived from theory or previous empirical studies (Malhotra, Nunan and Birks, 2017). Furthermore, a structural model also has to satisfy the fit indices in Table 12 to show a good match between the collected data and the proposed framework (Hooper, Coughlan and Mullen, 2008; Hair *et al.*, 2014). SEM offers several advantages over other multivariate analyses (Malhotra, Nunan and Birks, 2017). The use of latent constructs in SEM reduces measurement errors of the constructs and improves the statistical valuation of the relationships in the model. The analysis explicitly incorporates the measurement errors and yields the bias-adjusted results. Furthermore, SEM can also provide an explanation for the covariance among the observed variables. It represents means, variances and covariances of observed data in terms of structural parameter determined by the postulated model.

Next, a multigroup analysis is applied to the structural model to perform moderation tests. The analysis enables researchers to estimate path coefficients of two or more models and compare the hypothesised relationships by controlling a certain factor (Arbuckle, 2011). This study considers six moderators of the customer coping journey, including pre-failure co-creation behaviour, pre-failure pleasure, pre-failure arousal, pre-failure utilitarian experiential, pre-failure hedonic experiential value and customer channel use. The first five moderators are converted into binary variables using a median split method, while the channels are grouped into human-based and technology-based channels (Table 20). Then, a metric invariance is established to ensure loading equivalence of the two respondent groups of each moderator. The process is necessary to make sure that the association between the items and the latent constructs are not depending on group membership or measurement occasion (Mellenbergh, 1989). In other words, the expected values, the covariances between items and the unexplained variance unrelated to the latent constructs should be equal across groups when the item scores are normally distributed. Therefore, the factor loadings equivalence is established when the difference between the unconstrained model and

measurement weight model is insignificant (i.e., $p\text{-value} > 0.05$). However, some authors have suggested that full invariance is sometime not practical and partial invariance is an adequate requisite (Byrne,Shavelson and Muthén, 1989; Steenkamp and Baumgartner, 1998). Once a metric invariance is established, the moderation effect can be analysed on the path of interest (Arbuckle, 2011).

Moderator	Group cluster	Model	CMIN	DF	CMIN/DF	CFI	RMSEA	Model comparison	ΔDF	ΔCMIN	P
Customer co-creation behaviour	Low (263/52.9%) High (234/47.1%)	Unconstrained model	2152.01	1036	2.08	0.89	0.05				
		Full measurement weights model	2189.66	1058	2.07	0.89	0.05	Compare with unconstrained model	22	41.48	0.01
		Partial measurement weights model	2170.01	1055	2.06	0.89	0.05	Compare with unconstrained model	18	19.05	0.39
		Structural weights model	2595.68	1105	2.35	0.86	0.05	Compare with measurement weights model	51	189.64	0.00
Customer emotional response – Pleasure	Low (251/50.5%) High (246/49.5%)	Unconstrained model	2154.01	1036	2.08	0.89	0.05				
		Full measurement weights model	2195.49	1058	2.08	0.89	0.05	Compare with unconstrained model	22	41.48	0.01
		Partial measurement weights model	2173.06	1054	2.06	0.89	0.05	Compare with unconstrained model	18	19.05	0.39
		Structural weights model	2362.70	1105	2.14	0.88	0.05	Compare with measurement weights model	51	189.64	0.00
Customer emotional response – Arousal	Low (287/57.7%) High (210/42.3%)	Unconstrained model	2286.64	1036	2.21	0.88	0.05				
		Full measurement weights model	2315.82	1058	2.19	0.88	0.05	Compare with unconstrained model	22	29.19	0.14
		Structural weights model	2406.6	1105	2.18	0.88	0.05	Compare with measurement weights model	47	90.34	0.00
Customer experiential value – Utilitarian value	Low (254/51.1%) High (243/48.9%)	Unconstrained model	2215.45	1036	2.14	0.88	0.05				
		Full measurement weights model	2245.78	1058	2.12	0.88	0.05	Compare with unconstrained model	22	30.33	0.11
		Structural weights model	2383.52	1105	2.16	0.87	0.05	Compare with measurement weights model	47	137.74	0.00
Customer experiential value – Hedonic value	Low (254/51.1%) High (243/48.9%)	Unconstrained model	2231.58	1036	2.15	0.87	0.05				
		Full measurement weights model	2260.81	1058	2.14	0.88	0.05	Compare with unconstrained model	22	29.24	0.14
		Structural weights model	2426.01	1105	2.20	0.87	0.05	Compare with measurement weights model	47	165.19	0.00
Channel	Human-based (208/41.9%) Technology-based (217/43.7%)	Unconstrained model	1994.64	1036	1.93	0.87	0.05				
		Full measurement weights model	2029.80	1058	1.92	0.87	0.05	Compare with unconstrained model	22	35.16	0.04
		Partial measurement weights model	2012.75	1056	1.93	0.87	0.05	Compare with unconstrained model	20	18.11	0.58
		Structural weights model	2107.16	1148	1.91	0.87	0.05	Compare with measurement weights model	49	94.41	0.00

Table 20 Metric invariance

4.6 Research Ethics

The research in social and behavioural science often involves human participation, and thus subjects to potential ethical issues that may arise in different stages of the project. Research ethics is defined as “a matter of principled sensitivity to the rights of others. Being ethical limits the choices we can make in the pursuit of truth. Ethics say that while the truth is good, respect for human dignity is better, even if, in the extreme case, the respect of human nature leaves one ignorant of human nature” (Cavan, 1977). The concern over ethical considerations in social science research often relates to an abuse of human subject in an experiment (Oldendick, 2012). Researchers may face the dilemma of gathering insightful information and respecting rights of participants. In such situations, researchers must put the rights of the participants above the research objectives (Aronson and Carlsmith, 1990; Cohen, 2018).

At the most fundamental level, market research must cause no harm, be respectful and get consent (Joe,Raben and Phillips, 2016). Researchers are obligated to take all reasonable precautions to ensure that participants will not be harmed or adversely affected by the project. Illegal and possible anti-social activities must be discouraged (Oldendick, 2012). The extent of acceptable actions may vary through cultural contexts geographic areas. Thus, researchers must have awareness of the differences and be respectful (Mertens and Ginsberg, 2009). Researchers must also respect the autonomy and privacy rights of those recruited for research participation. A great emphasis should be put on eliminating any risk of breaching confidentiality of the participants (Joe,Raben and Phillips, 2016). It is moral and necessary to obtain consent from the participants that their involvement in the research is informed, rational and voluntary (Fisher and Anushko, 2008). Prospective participants must be provided with all information about the project that are expected to influence their willingness to join. They should understand that they have the right to reject without compromise of care (Hammer, 2017). Researchers are also required to provide contact details that are readily accessible and traceable for their identity (Joe,Raben and Phillips, 2016).

This thesis follows the ethical protocol developed by Newcastle University (Newcastle University, 2017). The researchers have acquired a project approval from the university prior the start date of the data collection. The university ethics committee has assessed the nature of the research and approved that it does not violate privacy, anonymity and confidentiality procedures. Both questionnaires of the thesis are designed to comply to the standards of informed consent. The first page of the questionnaires provides full information about the objectives, methods and intended use of the research. The statement affirms that the collected data will be confidential

and not exposed. Participants are asked for consent that their involvement is informed and voluntary. They are also advised that they may withdraw their participation at any point of the survey. The identity and contact details of the corresponding researcher are also given in case participants need assistance or additional information. The introductory part of the questionnaires ensures that participants are competent in the subject of the research and have sufficient information about the study to be able to make an appropriate decision about taking part.

Chapter 4 has discussed the research methodology and ethics of the thesis. It explained the philosophical standpoint and the approach of the research. The next chapter presents the results and findings of the two empirical studies, which used the data collection and data analysis methods explained in this chapter.

Chapter 5. Results and Findings

This chapter reports the results and findings of the two empirical studies of the thesis. Section 5.1 is devoted to study 1. It presents the results of the regression analysis, customer segmentation and moderation tests. Section 5.2 displays the path analysis and moderation tests of study 2.

5.1 Study 1: Antecedents of Customer Journey Satisfaction

5.1.1 Regression analysis

The values of the tolerance and variance inflation factor (VIF) associated with each independent variable were greater than 0.1 and below 10, respectively (table 21). Thus, there was no concern about multicollinearity between the predictors (Hair *et al.*, 2014).

Independent variables	Pre-purchase phase		Purchase phase		Post-purchase phase	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
Information seeking	0.50	2.00	0.410	2.44	0.454	2.20
Information sharing	0.37	2.60	0.336	2.97	0.155	6.44
Responsible behaviour	0.41	2.43	0.336	2.97	0.179	5.60
Personal Interaction	0.57	1.74	0.621	1.61	0.417	2.40
Feedback	0.41	2.47	0.347	2.89	0.334	2.99
Advocacy	0.38	2.63	0.344	2.91	0.349	2.87
Helping	0.36	2.75	0.356	2.81	0.324	3.09
Tolerance	0.57	1.76	0.523	1.91	0.401	2.50
Pleasure	0.59	1.70	0.512	1.85	0.513	1.95
Arousal	0.79	1.26	0.705	1.42	0.727	1.38
Monetary	0.54	1.87	0.575	1.74	0.432	2.32
Convenience	0.48	2.07	0.438	2.29	0.371	2.70
Entertainment	0.40	2.52	0.395	2.53	0.343	2.92
Exploration	0.31	3.18	0.228	4.38	0.232	4.31
Status	0.20	5.0	0.151	6.61	0.139	7.20
Self-esteem	0.25	3.9	0.209	4.78	0.207	4.83

Table 21 Collinearity statistics of independent variables

Table 22 presents the results related to the explanatory power, significance and impact of each dimension of the customer co-creation behaviour, customer response and customer experiential values on the level of customer journey satisfaction. The dependent variable is not explicitly stated in the result table because all of the independent variables and covariates listed in the tables are examined against the dependent variable. The adjusted R^2 and standardised beta value of the significant variables ranged from 0.38 to 0.01 and 0.64 to 0.10 respectively. The variables that had the highest explanatory power, with the adjusted R^2 value greater than 0.20, were convenience in all phases and pleasure and personal interaction in the pre-purchase phase of the journey. The perceived monetary value during search, personal interaction and obtained

pleasure from the purchase and the customer's recognition of his or her role as a value co-creator throughout the journey also partially explained the variance in the customer journey satisfaction, with the adjusted R^2 value between 0.19 and 0.16. In terms of the impact, the perceived monetary saving in the purchase and the perceived convenience in the search and the buying phase had a standardised beta value larger than 0.60 and were the most influential factors of the customer journey satisfaction. The factors that had moderate impact, with the standardised beta value between 0.49 and 0.40, included aftersales convenience, monetary saving during search, pleasure and personal interaction in the pre-purchase and the purchase phase and the customer's responsible behaviour throughout the journey. In general, the eighteen variables that had the highest explanatory power also had the highest impact on the customer journey satisfaction. These variables were mostly the perceived utilitarian values, pleasure and customer participation behaviours. In the other words, the customer journey satisfaction was mainly influenced and explained by the perceived monetary savings, convenience, pleasure, personal interaction and responsible behaviour of the customer across different stages of the journey. On the other hand, the seven variables that had no significant impact on the customer journey satisfaction were exploration in the post-purchase phase and information seeking behaviour and arousal in all phases of the journey, and hence, were excluded in the next step of analysis.

Independent variables	Pre-purchase phase		Purchase phase		Post-purchase phase	
	Standardised β	Adjusted R ²	Standardised β	Adjusted R ²	Standardised β	Adjusted R ²
Information seeking	-0.08 ^{ns}	0.00	0.00 ^{ns}	0.00	-0.01 ^{ns}	0.00
Information sharing	0.24 ^{***}	0.06	0.32 ^{***}	0.10	0.35 ^{***}	0.12
Responsible behaviour	0.42 ^{***}	0.18	0.43 ^{***}	0.18	0.40 ^{***}	0.16
Personal interaction	0.46 ^{***}	0.21	0.41 ^{***}	0.16	0.35 ^{***}	0.12
Feedback	0.37 ^{***}	0.14	0.35 ^{***}	0.12	0.32 ^{***}	0.10
Advocacy	0.36 ^{***}	0.13	0.30 ^{***}	0.09	0.27 ^{***}	0.07
Helping	0.19 ^{***}	0.03	0.17 ^{***}	0.03	0.14 ^{**}	0.02
Tolerance	0.16 ^{**}	0.02	0.20 ^{***}	0.04	0.20 ^{***}	0.04
Pleasure	0.48 ^{***}	0.23	0.44 ^{***}	0.19	0.35 ^{***}	0.12
Arousal	-0.01 ^{ns}	0.00	-0.04 ^{ns}	0.00	0.01 ^{ns}	0.00
Monetary	0.40 ^{***}	0.16	0.64 ^{***}	0.11	0.34 ^{***}	0.11
Convenience	0.62 ^{***}	0.38	0.62 ^{***}	0.38	0.49 ^{***}	0.24
Entertainment	0.16 ^{**}	0.02	0.10 [*]	0.01	0.08 ^{ns}	0.00
Exploration	0.15 ^{**}	0.02	0.11 [*]	0.01	0.11 [*]	0.01
Status	0.14 ^{**}	0.02	0.14 ^{**}	0.02	0.19 ^{***}	0.03
Self-esteem	0.27 ^{***}	0.07	0.27 ^{***}	0.07	0.24 ^{***}	0.05

Notes: ns = not significant, *p < 0.05, **p < 0.01, ***p < 0.001 (2-tailed)

Table 22 Results of the regression analysis

5.1.2 Customer segmentation

Latent class analysis was performed to segment customers based on their dominant channel choice in the pre-purchase, purchase and post-purchase phase of the journey. The analysis was set to generate a range of solutions with a varying number of clusters from one to six. Table 23 shows the different statistical criteria of each solution. The preferred solution is usually a model that has the minimum Bayesian Information Criterion (BIC) value (Nylund,Asparouhov and Muthén, 2007; Haughton,Legrand and Woolford, 2009). The analysis indicated that the BIC value was the lowest at the three-cluster solution and steadily rose as the number of clusters increased. The selected model was further confirmed by evaluating its interpretability and class separation (Collins and Lanza, 2009; Wedel and Kamakura, 2012). Although one of the clusters represented less than ten percent of the respondents, the profiles of the three clusters were clearly distinct and meaningful. Therefore, the three-cluster model was selected as the most appropriate solution.

		LL	BIC (LL)	Npar	p-value	Class. Err.
Model 1	1-Cluster	-1318.14	2708.91	12	0.00	0.00
Model 2	2-Cluster	-1074.90	2301.10	25	0.00	0.02
Model 3	3-Cluster	-995.12	2220.22	38	0.05	0.03
Model 4	4-Cluster	-973.65	2255.95	51	0.69	0.03
Model 5	5-Cluster	-964.95	2317.24	64	0.84	0.03
Model 6	6-Cluster	-958.38	2382.77	77	0.88	0.03

Table 23 Log-likelihood statistics for model selection

The Wald statistic was employed to test the significance of the model indicators (table 24). The results showed that the associated p-values were lower than 0.05, thus indicating that channel usage in the pre-purchase, purchase and post-purchase phase of the journey were discriminating indicators among the identified segments (Vermunt and Magidson, 2005). The channel choice of the customer in the purchase stage has the highest explanatory power, with an R² value of 0.69, while the channel choice in the pre-purchase and post-purchase stage had lower values of 0.57 and 0.49 respectively. The statistic revealed that the channel behaviour of the three different customer segments was most variant in the purchase stage of the journey. In addition, for a thorough examination, the Wald test of paired comparisons was also checked. The results confirmed that the channel usage of the three customer segments was significantly different in all phases of the journey (table 25).

	Web site-reliant customers (n = 212) 50%	Physical store-reliant customers (n = 182) 43%	Omni-channel customers (n = 31) 7%	Wald	p-value	R²
Pre-purchase channel				151.88	0.00	0.57
Physical stores	0.05	0.83	0.08			
Web sites	0.94	0.15	0.21			
Social media	0.01	0.00	0.12			
Mobile application	0.00	0.00	0.35			
Telephone or Mail order	0.00	0.02	0.24			
Purchase channel				146.01	0.00	0.69
Physical stores	0.07	0.95	0.12			
Web sites	0.91	0.03	0.09			
Social media	0.00	0.01	0.17			
Mobile application	0.01	0.00	0.29			
Telephone or Mail order	0.01	0.01	0.33			
Post-purchase channel				174.12	0.00	0.49
Physical stores	0.09	0.85	0.13			
Web sites	0.83	0.09	0.01			
Social media	0.03	0.02	0.16			
Mobile application	0.02	0.00	0.28			
Telephone or Mail order	0.03	0.04	0.42			

Table 24 Latent-class cluster profiles (n = 425)

Indicator	Wald	df	p-value
Pre-purchase channel			
Web site-reliant and Physical store-reliant customers	107.96	4	0.00
Web site-reliant and Omnichannel customers	17.29	4	0.00
Physical store-reliant and Omnichannel customers	26.29	4	0.00
Purchase channel			
Web site-reliant and Physical store-reliant customers	73.92	4	0.00
Web site-reliant and Omnichannel customers	39.52	4	0.00
Physical store-reliant and Omnichannel customers	30.61	4	0.00
Post-purchase channel			
Web site-reliant and Physical store-reliant customers	128.85	4	0.00
Web site-reliant and Omnichannel customers	75.86	4	0.00
Physical store-reliant and Omnichannel customers	60.58	4	0.00

Table 25 The Wald test of paired comparisons

The identified segments were profiled and labelled according to the significant indicators. Cluster 1 was labelled “web site-reliant customers” as the customers in this segment heavily used web sites for all pre-purchase, purchase and post-purchase activities. This segment was the largest and represented half of the sample. The probability that the online-reliant customers would use web sites was highest in the pre-purchase phase, but relatively lower in the purchase and post-purchase phase. This trend suggested that the online-reliant customers were most dependent on web sites for information search and slightly more flexible in the two later shopping stages.

Cluster 2 was labelled “physical store-reliant customers”. This segment was the second largest by size and contained about 43% of the respondents. The customers in this segment heavily relied on physical stores for all search, purchase and aftersales activities. In contrast to the online-reliant customers, the offline-reliant customers were most dependent on their dominant channel choice in the purchase stage, but somewhat more open in the post-purchase and pre-purchase phase.

Lastly, cluster 3 was labelled “omnichannel customers” due to the great variety in channel usage of the customers throughout the journey. This customer group was the smallest and represented only approximately 7% of the participants. The customers in this segment were unique compared to the other two groups. They did not have a single outstanding channel choice and rather utilised multiple channels at all stages of the journey. However, there were some noticeable trends in their channel behaviour. The omnichannel customers were more likely to use human-interactive channels, such as physical stores, telephone and mail order, and less likely to engage with technology-interactive channels, namely web sites and mobile applications, as the journey proceeded. Furthermore, it was observable that there was no clear trend for the usage of social media, which was a technology-based platform for human interactions.

For a further exploration, the three-step approach was employed to examine differences in customer characteristics among the three segments. The significant covariates, with a p-value lower than or equal to 0.05, are listed in Table 26. Thus, the level of inertia, gender, income, educational level and residential area, which were not statistically different across the customer segments, were excluded from the table.

Covariate	Web site-reliant customers (n = 212) 50%	Physical store-reliant customers (n = 182) 43%	Omni- channel customers (n = 31) 7%	p-value
Technology anxiety	3.36	4.18	4.68	0.00
Need for touch	4.37	4.99	4.65	0.00
Age				0.02
29 years or below	0.13	0.23	0.31	
30 – 39 years	0.29	0.29	0.52	
40 – 54 years	0.34	0.28	0.09	
55 years or above	0.24	0.20	0.07	

Table 26 Significant covariate parameters of the model

The results showed that the omnichannel customers and the physical store-reliant customers had a higher level of technology anxiety than the average of 3.81, while the web site-reliant customers were the least fearful to engage with the technology-based platforms. The need for

touch was also a significant determinant of customer channel choice. The term referred to the importance of the haptic sensory system for customers when evaluating product choices (Peck and Childers, 2003). The analysis revealed that the physical store-reliant customers had the highest need for touch with the score of 4.99, while the web-site reliant customers showed the lowest demand for touch. In respect to the demographics, age was the only factor that significantly varied among the three types of channel users. Whilst the majority of the omnichannel customer segment was represented by younger customers aged below 40, the distribution of age groups was more balanced in the other two groups.

5.1.3 Moderation effects

Moderating effects of customer segment A regression analysis was performed to test whether the impact of different dimensions of the customer co-creation behaviour, customer response and customer experiential values on customer journey satisfaction varied across the three customer segments. Table 27 shows the magnitude and significance of this moderator. The results showed that all dimensions, except exploration in the pre-purchase phase, convenience in the pre-purchase and purchase phase and pleasure in all phases, had an inconsistent impact on the journey satisfaction of the web site-reliant, the physical store-reliant and the omnichannel customers. The impact of personal interaction varied the most across the three customer segments. A consideration of customer segment improved the explanatory power of the personal interaction on the variance of customer journey satisfaction by 0.07 in the pre-purchase and the purchase phase and by 0.06 in the post-purchase phase. The moderation effect of customer segment was highest in the post-purchase phase and lowest in the pre-purchase phase. In other words, customers who had different journey patterns were mostly distinct in terms of the importance of personal interaction in all phases and other dimensions in the post-purchase phase on their journey satisfaction.

Independent variable	Change in R ²		
	Pre-purchase phase	Purchase phase	Post-purchase phase
Information sharing	0.03***	0.01*	0.03**
Responsible behaviour	0.02*	0.02*	0.04***
Personal Interaction	0.07***	0.07***	0.06***
Feedback	0.01*	0.03***	0.04***
Advocacy	0.03**	0.02*	0.03***
Helping	0.02*	0.03**	0.03**
Tolerance	0.02*	0.04***	0.04***
Pleasure	0.01 ^{ns}	0.00 ^{ns}	0.01 ^{ns}
Monetary	0.02*	0.03**	0.04***
Convenience	0.00 ^{ns}	0.00 ^{ns}	0.02**
Entertainment	0.02*	0.03**	0.01 ^{ns}
Exploration	0.01 ^{ns}	0.03**	0.04***
Status	0.01*	0.03**	0.04***
Self-esteem	0.02*	0.04***	0.04***

Notes: ns = not significant, *p < 0.05, **p < 0.01, ***p < 0.001 (2-tailed)

Table 27 Moderating effect of the customer segmentation

5.2 Study 2: The Customer Coping Journey

5.2.1 Path analysis

The values of the model fit indices ($\chi^2 = 2.92$; CFI = 0.90; SRMR = 0.07; RMSEA = 0.06) indicated a very good fit of the structural model (Hu and Bentler, 1999). The results of the path coefficient analyses are shown in table 28. In the pre-coping phase, blame attribution slightly influenced all four customer coping strategies (H2.1a,b,c,d confirmed). Coping potential and future expectation did not affect the social-supported emotional (H2.2c rejected) or problem-focused coping strategy (H2.3a rejected). An increase in blame toward the company motivated the act of problem-focused strategy, while it discouraged the emotional and disengagement coping approach. Coping potential moderately and positively influenced the problem-focused and self-supported emotional coping strategies, and it slightly reduced the disengagement approach. Future expectation positively contributed to the emotional and disengagement coping strategies. It showed the highest effect on disengagement and the lowest effect on the self-supported emotional coping approach.

The analysis confirmed the role of the customer coping strategies as antecedents of customer post-coping satisfaction with oneself and the company. All paths between the customer coping strategies and the post-coping satisfaction were significant (H2.4a; H2.5a,b; H2.6a,b; H2.7a,b accepted) except the relationship between problem-focused coping and customer post-coping satisfaction with the company (H2.4b rejected). The results revealed that the problem-focused and self-supported emotional coping strategies contributed to customers' post-coping satisfaction with themselves, whilst the employment of social-supported emotional coping and the disengagement approach curtailed the positive evaluation. On the other hand, the impression

of the customers about the companies after coping was driven by both emotional coping approaches but deterred by the act of denial and surrender. In general, the disengagement coping strategy harmed both dimensions of the post-coping satisfaction. Furthermore, it is also noteworthy that the self-supported approach had a stronger influence than the social-supported approach on both types of post-coping satisfaction.

In the post-coping phase, the results confirmed the positive relationships between customer post-coping satisfaction and customer post-coping intentions. Customer satisfaction with the company was associated with both word-of-mouth and repurchase intention (H2.9a,b accepted), while customer gratification with themselves only related to word-of-mouth intention (H2.8a accepted), but not repurchase intention (H2.8b rejected). Customer impression of the company showed larger degrees of effects on both post-coping behavioural intentions, ranging from 0.77 to 0.76, while the impact of customer satisfaction with oneself on word-of-mouth intention was only 0.21.

Path		Est.	Sig
Blame attribution	→ Problem-focused	0.18	***
Blame attribution	→ Self-supported emotional	-0.23	***
Blame attribution	→ Social-supported emotional	-0.25	***
Blame attribution	→ Disengagement	-0.26	***
Coping potential	→ Problem-focused	0.49	***
Coping potential	→ Self-supported emotional	0.50	***
Coping potential	→ Social-supported emotional	0.00	ns
Coping potential	→ Disengagement	-0.18	***
Future expectation	→ Problem-focused	0.02	ns
Future expectation	→ Self-supported emotional	0.35	***
Future expectation	→ Social-supported emotional	0.53	***
Future expectation	→ Disengagement	0.61	***
Problem-focused	→ Satisfaction with oneself	0.51	***
Problem-focused	→ Satisfaction with company	-0.02	ns
Self-supported emotional	→ Satisfaction with oneself	0.27	***
Self-supported emotional	→ Satisfaction with company	0.54	***
Social-supported emotional	→ Satisfaction with oneself	-0.10	*
Social-supported emotional	→ Satisfaction with company	0.20	***
Disengagement	→ Satisfaction with oneself	-0.18	***
Disengagement	→ Satisfaction with company	-0.19	***
Satisfaction (oneself)	→ WOM	0.21	***
Satisfaction (oneself)	→ Repurchase	0.06	ns
Satisfaction (company)	→ WOM	0.77	***
Satisfaction (company)	→ Repurchase	0.76	***

Note: Significant at p-value: ns $\geq .1$; # $\leq .1$; * $\leq .05$; ** $\leq .01$; *** $\leq .001$.

Table 28 Path coefficient analyses

Regarding the control variables, the analysis indicated that the perceived level of failure severity marginally influenced the adoption of problem-focused and emotional coping strategies. The more significant the incident was, the greater extent to which the customers used a problem-focused and social-supported coping strategy, while the opposite was true for the adoption of a

self-support emotional coping strategy. As for the covid restrictions, the results showed that only the problem-focused coping behaviour was slightly increased when the restrictions were tougher.

Path		Est.	Sig
Failure severity	→ Problem-focused	0.02	***
Failure severity	→ Self-supported emotional	-0.28	***
Failure severity	→ Social-supported emotional	0.09	#
Failure severity	→ Disengagement	0.06	ns
Covid restrictions	→ Problem-focused	0.19	***
Covid restrictions	→ Self-supported emotional	-0.09	ns
Covid restrictions	→ Social-supported emotional	0.00	ns
Covid restrictions	→ Disengagement	-0.07	ns

Note: Significant at p-value: ns \geq .1; # \leq .1; * \leq .05; ** \leq .01; *** \leq .001.

Table 29 The analysis of control variables

5.2.2 Moderation effects

The moderation hypothesis was also tested. Prior to embarking on the multigroup analysis, the respondents were clustered in two groups for each moderator test. For pre-failure customer co-creation behaviour, customer emotional response and customer experiential values, the respondents were split into low and high group using the median values of the variables. For channel use, the respondents were divided into human-based channel users and technology-based channel users, depending on the channel that they were using in the most problematic phase of the purchasing journey. The descriptive analysis revealed the post-purchase phase to be the most problematic stage, while the purchase and pre-purchase stage were slightly less troublesome (table 29).

Purchasing journey phase	Reported frequency	Average problematic score (%)
Pre-purchase phase	387	28.02
Purchase phase	408	32.33
Post-purchase phase	432	36.68

Note: The sum of frequency exceeded the number of participants (n=497) because an individual may report more than one problematic purchasing journey phase. A higher problematic score indicated a more troublesome journey phase.

Table 30 Problematic purchasing journey phase

Arousal, utilitarian experiential value and hedonic experiential value satisfied full metric invariance, while the rest fulfilled partial metric invariance. Multigroup analysis was employed to test all moderators. The results revealed that the pre-failure customer journey (H2.10; H2.11; H2.12 accepted) moderated all phases of the coping journey. Customer co-creation behaviour demonstrated the strongest and most various moderating effect, followed by pleasure, hedonic value, arousal and utilitarian value respectively. In general, customer co-creation behaviour, customer emotional responses and hedonic values moderated all phases, while the impact of utilitarian value restricted to the pre-coping and coping phase of the coping journey. The results

revealed that blaming company for the failure incident diminished an employment of emotional coping and disengagement strategy only if the customer highly involved in the production or service delivery process, while pre-failure arousal and hedonic value also intensified the relationships. The effect of future expectation on emotional coping and disengagement were also stronger as pre-failure co-creation behaviour, utilitarian value or hedonic value increased. The analysis also indicated that customers who scarcely co-created with the company adopted problem-focused strategy more intensively, while the highly participated customer group relied more on self-supported emotional coping when they believed they could cope from the adverse situation. In the meantime, an increase of coping potential discouraged disengagement behaviour only when pre-failure customer co-creation behaviour and arousal was low or utilitarian value was high. Regarding the influence of coping strategies on post-coping satisfactions, disengagement approach reduced post-coping satisfaction with the company of those who experienced minimal level of pre-failure co-creation behaviour or arousal, while the positive effect of problem-focused coping strategy on satisfaction with oneself intensified as co-creation behaviour increased.

The channels that the customers used at the most problematic phase (H2.13 accepted) also moderated some relationships in the pre-coping and coping phase of the customer coping. More specifically, the channels that the customers used at the most problematic phase moderated some relationships in the pre-coping and coping phase of the customer coping journey. Blame attribution influenced all four coping strategies of the customers who used human-based channels, but only affected the self-supported emotional coping dimension of those who used technology-based channels. Coping potential also motivated the technology-based channel users to adopt a self-supported emotional approach to a greater degree, while future expectation showed stronger impacts on emotional coping and a disengagement approach among the human-based channel users. In addition, the positive influence of problem-focused and self-supported emotional approaches on post-coping satisfaction with oneself were more prominent among the human-based channel users and technology-based channel users, respectively. The results of the multigroup analysis are summarised in table 30.

Chapter 5 has reported the results and findings of study 1 and study 2. The next chapter discusses the findings from the examination of the two research frameworks. It integrates the new findings of this thesis with the existing knowledge in the customer journey literature to infer the current knowledge about the topic.

Path	Moderation Tests ($\Delta \chi^2$, Sig.)											
	Pre-failure co-creation behaviour		Pre-failure emotional response (Pleasure)		Pre-failure emotional response (Arousal)		Pre-failure experiential value (Utilitarian)		Pre-failure experiential value (Hedonic)		Channel	
	Low	High	Low	High	Low	High	Low	High	Low	High	Human-based	Tech-based
Blame attribution → Problem-focused							6.23*				4.95*	
							0.36***		0.08ns		0.38***	
Blame attribution → Self-supported emotional	38.96***		14.17***								3.54#	
	-0.10ns	-1.54***	-0.77***	-0.045ns							-0.44***	-0.16#
Blame attribution → Social-supported emotional	48.94***		3.41#		4.11*				11.62***		15.36***	
	-0.07ns	-1.54***	-0.55***	-0.21**	-0.18#	-0.41***			-0.12ns	-0.53***	-0.74***	-0.07ns
Blame attribution → Disengagement	44.760***		3.59#						8.09**		11.40***	
	-0.05ns	-1.94***	-0.63***	-0.20**					-0.16#	-0.50***	-0.71***	-0.08ns
Coping potential → Problem-focused	16.16***											
	0.74***	0.30***										
Coping potential → Self-supported emotional	3.11#										3.80#	
	0.44***	0.79***									0.34**	0.65***
Coping potential → Social-supported emotional					4.93*		3.65#		7.65**			
					-0.08ns	0.27*	0.29**	-0.08ns	-0.32***	0.28*		
Coping potential → Disengagement	17.11***				6.67**		8.94**					
	-0.57***	0.44**			-0.33***	0.06ns	0.20*	-0.27**				
Future expectation → Problem-focused			8.88**		3.93*		4.16*					
			0.23**	-0.11ns	0.10#	-0.10ns	0.09ns	-0.13ns				
Future expectation → Self-supported emotional	14.84***		17.40***						3.02#		5.44*	
	0.25***	1.22***	0.72***	0.18*					0.19**	0.41***	0.49***	0.16#
Future expectation → Social-supported emotional	23.70***		13.83***				3.55#		14.61***		4.23*	
	0.24**	1.30***	0.81***	0.39***			0.54***	0.61***	0.27***	0.69***	0.71***	0.39***
Future expectation → Disengagement	24.36***		13.87***				6.74**		14.19***		6.46*	
	0.35***	1.80***	0.97***	0.47***			0.57***	0.75***	0.39***	0.79***	0.91***	0.36***
Problem-focused → Satisfaction (oneself)	8.54***										9.16**	
	0.42***	0.65***									0.64***	0.37***
Problem-focused → Satisfaction (company)					30.98***				7.68**			
					-0.05ns	0.03ns			-0.20**	0.11ns		
Self-supported emotional → Satisfaction (oneself)			5.22*								2.74#	
			0.37***	0.23***							0.15#	0.33***
Self-supported emotional → Satisfaction (company)	3.06#		11.31***		2.93#							
	0.39***	0.60***	0.71***	0.37***	0.54***	0.47***						
Social-supported emotional → Satisfaction (oneself)			4.013*						19.56***			
			0.03ns	-0.22***					-0.32***	0.13#		
Social-supported emotional → Satisfaction (company)			3.48#				3.64#					
			0.10ns	0.31***			0.03ns	0.27***				
Disengagement → Satisfaction (oneself)			5.490*						8.79**			
			-0.33***	-0.12#					-0.01ns	-0.37***		
Disengagement → Satisfaction (company)	3.30#				7.87**							
	-0.35***	-0.10ns			-0.33***	0.10ns						
Satisfaction (oneself) → WOM	29.11***		14.05***		4.11*							
	0.36***	-0.14*	0.12*	0.19***	0.13**	0.32***						
Satisfaction (oneself) → Repurchase					5.59*							
					-0.01ns	0.16**						
Satisfaction (company) → WOM	25.48***											
	0.68***	0.96***										
Satisfaction (company) → Repurchase	19.26***								2.84#			
	0.69***	0.92***							0.72***	0.79***		

Note: Significant at p-value: ns or highlighted in black $\geq .1$; # $\leq .1$; * $\leq .05$; ** $\leq .01$; *** $\leq .001$.

Table 31 Moderation tests

Chapter 6. Discussion

The customer journey has been recognised as a powerful approach to examine and understand customers from the perspective of customers (Crosier and Handford, 2012). The approach usually divides the process and the collection of touchpoints that a customer goes through to consume a product or a service of a company into three phases, namely pre-purchase, purchase and post-purchase (Moon *et al.*, 2016; Mikolajová and Olšanová, 2017; Rosenbaum, Otalora and Ramírez, 2017). The dissection helps researchers and practitioners to gain insights into the complex customer behaviour and sophisticated touchpoint network in omnichannel retail environment (Micheaux and Bosio, 2019; Patti, van Dessel and Hartley, 2020). Previous studies and practices have used the customer journey to identify customer needs (e.g. Rawson, Duncan and Jones (2013) and Canfield and Basso (2017)), identify disruptions in a service delivery process (e.g. Halvorsrud, Kvale and Følstad (2016) and Panzera *et al.* (2017)), classify customer segmentations (e.g. De Keyser, Schepers and Konuş (2015) and Nakano and Kondo (2018)) and learn about impact of technological advancements (e.g. Farah and Ramadan (2017) and Kannan and Li (2017)).

The acknowledgement of the advantages of the customer journey has led to a significant growth in the publications pertaining to the topic. However, the concept has been studied and applied across diverse fields in parallel, resulted in confusions regards the scope, components and outcomes of the customer journey. Therefore, this thesis has constructed a systematic literature review and two empirical studies in hope to methodologically develop knowledge of the topic and move the field forward with a more unified and integrative understanding. The systematic literature review has identified the scope and components of the customer journey by aggregating and classifying the existing knowledge into five themes. Then, two empirical studies are developed based on the findings to investigate the influence of each component on the outcomes of the customer journey. To be specific, study 1 examines the impacts of customer co-creation behaviour, customer emotional response, customer experiential values and customer channel use on the customer purchasing journey in the service satisfaction context. Then, study 2 investigates the influence of the pre-failure customer co-creation behaviour, customer emotional response, customer experiential values and customer channel use on the customer journey in the service failure context. The rest of this section proceeds to discuss the findings of the two studies in detail. Section 6.1 focuses on the findings of study 1, to fill the second research gap identified in this thesis regarding the unclear understanding about the customer journey in the service satisfaction context. Section 6.2 is dedicated to the findings of study 2, which addresses the third research gap regarding the deficient understanding of the

customer journey in the service failure context. Lastly section 6.3 integrates all the findings and infers the current knowledge about the customer journey.

6.1 The Customer Journey in the Service Satisfaction Context

In the service satisfactory context, customer journey satisfaction was driven by various aspects of customer co-creation behaviour, customer emotional response and customer experiential values in all three phases of the journey. Study 1 clarified the relationships between the components of the customer journey and customer journey satisfaction in the service satisfaction situations. The findings suggested the utilitarian values to be the most influential factors, followed by pleasure, personal interaction and responsible behaviour. Utilitarian values stressed on functional and product-centric benefits of a consumption (Rintamäki *et al.*, 2006). Customers received utilitarian values when their task-related needs are fulfilled (Babin, Darden and Griffin, 1994). Elements that stimulate customers' perceived utilitarian values included, but not limited to, convenience, variety, quality and reasonable price rate (Sarkar, 2011). Pleasure in search and purchase also moderately contributed to customer journey satisfaction. Consumption was not always passive and uninteresting but could also be a social and recreational activity (Compeau *et al.*, 2016; Warnaby and Medway, 2018). Previous studies had recognised pleasure as a critical factor that increased customer shopping satisfaction and drove them to spend more time and money with the brand (Blut, Teller and Floh, 2018; Elmashhara and Soares, 2020). Furthermore, study 1 also suggested that customer participation in the process, through responsible behaviour and personal interaction, also added to a positive evaluation of the purchase journey. Customer participation played an increasing critical role in the omnichannel retail environment (Yrjölä, Spence and Saarijärvi, 2018), where the customers were empowered with technological tools and control over their shopping journey (Hübner, Kuhn and Wollenburg, 2016; Stein and Ramaseshan, 2016). A cooperative involvement of the customer in the process enabled value co-creation and personalised service experiences (Cossío-Silva *et al.*, 2016). Customers received the optimal services and solutions by participating in the co-creation process (Petri and Jacob, 2016). The clarified influences of the various aspects of customer journey on customer journey satisfaction facilitated the understanding and management of customers for researchers and companies.

Study 1 confirmed the heterogeneity among the customers and reinforced the importance of customer segmentation. The study suggested that the customers in omnichannel retail environment could be classified into three different clusters according to their purchasing journey pattern. The two major segments that accounted for the majority of the samples were the website-reliant and the physical store-reliant customers. Websites and physical stores were

established retail channels that had long history in retailing before the Internet evolved to be facilitating technology and enabled a creation of new platforms (Zhang *et al.*, 2010; Campbell-Kelly and Garcia-Swartz, 2013). Customers have been employing these conventional mediums to search information, buy products and services and seek aftersales supports (Alba *et al.*, 1997; Balasubramanian, Raghunathan and Mahajan, 2005; Venkatesan, Kumar and Ravishanker, 2007; Brynjolfsson, Hu and Rahman, 2009). Despite the increasing emergence of new touchpoints, the existence of single-channel segments has been persistent (Herhausen *et al.*, 2019; Valentini, Neslin and Montaguti, 2020).

Customers use different channels for specific reasons (Gao, Melero and Sese, 2019). For example, this thesis revealed that the physical store-reliant customers had a high level of technology anxiety and need for touch. Therefore, they avoided using electronic platforms and continually visited stores throughout their shopping journey. Physical stores are crucial touchpoints, especially for products that need inspection and trial for an informed purchase decision (Zhang, Chang and Neslin, 2021). A store visit helps customers to eliminate perceived risk related to digital technology, reduce perceived psychological distance and increase confidence in their judgement (Jha *et al.*, 2019; Santos and Gonçalves, 2019). On the other hand, the website-reliant customers who showed a low level of technology anxiety intensively depended on websites for all shopping activities, especially in the pre-purchase phase. The relatively heavier use of websites in the search stage reflected the advantage of the channel in providing a quick and cost-efficient access to details and reviews of different product and service options (Shankar, Smith and Rangaswamy, 2003; Ribbink *et al.*, 2004). Furthermore, the customers were also likely to interact with channels that they were more familiar with to reduce the associated effort and perceived risk (Anderl *et al.*, 2016; Hickman, Kharouf and Sekhon, 2019). Therefore, the website-reliant and the physical-store reliant represented the majority of the sample.

In the meantime, the omnichannel customer segment was the smallest among the three customer groups. The cluster emerged as a result of the blurring boarder and frictionless transfer between different platforms. The customers in this segment did not show a clear preference on a single channel. They rather assessed their experience and reconsidered their channel choice through the entire course of the journey (Anderl, Schumann and Kunz, 2016). In general, they selected channels that offered the highest perceived value-in-use, met their needs and suited their goals (Ballestar, Grau-Carles and Sainz, 2018; Barwitz and Maas, 2018). Despite the size and complexity of the customer segment, companies must not overlook the omnichannel shoppers as this group could be more prevalent in the future (Valentini, Neslin and Montaguti, 2020).

A heatmap (figure 31) was constructed to highlight the significant dimensions of customer co-creation behaviour, customer response and customer experiential values on journey satisfaction of the website-reliant, the physical store-reliant and the omnichannel customers. The darkest areas marked the most influential factors and the white areas represented insignificant factors. The heatmap was beneficial in pinpointing and prioritising the areas that researchers and practitioners should put their attention and investment on.

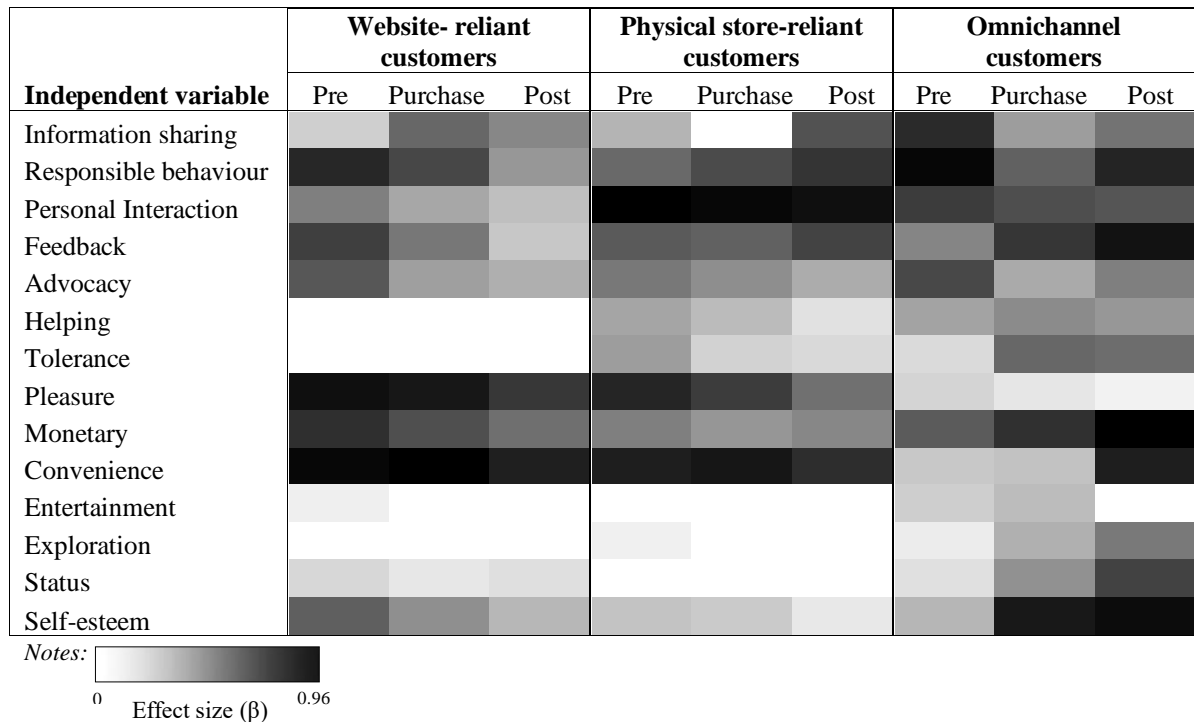


Table 32 Critical factors of customer journey satisfaction

The most impactful factors that influenced the journey satisfaction of the website-reliant customers were convenience and pleasure in the pre-purchase and purchase phase. Customers favoured websites, especially in search, due to the convenience they offered, which included speed, ease of navigating and personalised suggestions (Verhoef, Neslin and Vroomen, 2007; Dekimpe, Geyskens and Gielens, 2019). Pleasure and ease of use also stimulated the use of digital platforms and contributed to positive customer evaluation (Legris, Ingham and Collerette, 2003). Therefore, companies should pay particular attention to the information content, navigation structure and graphic design of their websites to influence their customers' use of the online channel and journey satisfaction (Montoya-Weiss, Voss and Grewal, 2003). Repetitious and irrelevant digital content should be avoided to reduce the perceived psychological and temporal costs to the customers (Mencarelli, Rivière and Lombart, 2021; Nagpal and Petersen, 2021). Consistent with a previous study (Nakano and Kondo, 2018), the website users demonstrated a high level of price-consciousness. Websites usually offered more competitive prices due to lower operation costs (Gensler, Neslin and Verhoef, 2017). Thus,

customers utilised the online platform to get an extra discount and enjoy monetary benefits. The importance of responsible behaviour, or the role knowledge, in journey satisfaction was possibly explained by the high degree of control that customers had when using websites (Aw, 2020). Helping, tolerance and exploration at all stages of the journey and entertainment during purchase and aftersales showed no significant impact on the satisfaction of the website-reliant customers. Overall, the pre-purchase phase was the most important phase while factors in the post-purchase phase showed less effect on the journey satisfaction. In general, in accordance with the well-established technology acceptance model that theorised perceived usefulness and ease of use as determinants of customer behaviour (Davis, 1989), utilitarian values were expected to play important roles in the journey satisfaction of the customers in this segment (Arora and Sahney, 2019; Aw *et al.*, 2021). Therefore, brands should emphasise the practical usability aspect of the websites to enhance the journey satisfaction of the website-reliant customers.

Although the physical store-reliant customers also appreciated convenience, pleasure and responsible behaviour, this segment was distinct from the website-reliant group in all other areas. The most impactful factor on the journey satisfaction of the physical store-reliant customers was personal interaction at all stages of the journey. The results could be explained by the benefits of a physical store visit, which included assistance and interactions with employees (Arora and Sahney, 2019). Customers who valued personal contact tended to favour physical stores and distrust channels that lacked human interactions (Riquelme and Román, 2014; Flavián, Gurrea and Orús, 2016). For a further comparison with the website-reliant segment, the physical store-reliant customers valued monetary value slightly less while putting more emphasis on the citizenship dimensions of the customer co-creation behaviour, which showed no significant effect on the website-reliant customers. The results emphasised the relational benefits of shopping activities. The customers visited physical venues not only to fulfil their shopping goals but also to have social interaction and build relationships with the service provider (Rohm and Swaminathan, 2004; Grönroos, 2009). Looking at the hedonic value in the pre-purchase phase, it was notable that the website-reliant customers valued entertainment, while the physical store-reliant customers valued exploration. A store visit provides customer sensory experience through the opportunity to touch and try on, immerse themselves in the store atmosphere, and facilitate an engagement with salespeople to obtain information and affirmation (Gauri *et al.*, 2021). The factors that had no effect on the journey satisfaction of physical store-reliant customers were entertainment and status in all phases and exploration in the purchase and post-purchase phases of the journey. Unlike the website-reliant

customers, the physical store-reliant customers considered the three phases of the journey in a more equal manner. To satisfy the physical store-reliant customers, it is essential to train employees to provide helpful in-store assistance and offer personalised service, as well as enabling customers to express their opinions to enhance their sense of belonging. The additional values provided by salespersons are the most critical antecedents of the journey satisfaction and intentions of the physical store-reliant customers (Rapp *et al.*, 2015).

Omnichannel customers were the most complicated and sensitive among the three customer segments. Their journey satisfaction was influenced by more factors and to greater degrees compared to the website-reliant and the physical store-reliant customers. The customers in this segment combined multiple channels to minimise associated shopping costs and maximise the potential benefits (Gensler, Verhoef and Böhm, 2012). Thus, a higher exposure and more related channels were possible causes of their sensitivity and complication. The most impactful factors were monetary value, self-esteem and feedback in the post-purchase phase, and responsible behaviour in the pre-purchase phase. Although there was no specific dimension that stood out and dominated the evaluation of the omnichannel customers, it was notable that the most impactful journey stage was the post-purchase phase whilst the pre-purchase phase had the least effect. The most prominent factors in search were all related to the participation aspect of customer co-creation behaviour. It was essential for the omnichannel customers to share information, have role knowledge and interact with employees to ensure successful transactions and secure journey satisfaction. The greater impact of customer co-creation behaviour reflected the power and control that the omnichannel customers have over their journey (Stein and Ramaseshan, 2016). In contrast to the website-reliant and physical store-reliant segment, convenience and pleasure ranked at the bottom of the list for the omnichannel customers. The findings did not indicate that the omnichannel customers did not appreciate convenience and pleasure, but they did so to a significantly lower degree than the other dimensions of customer co-creation behaviour, customer emotional response and customer experiential value. Furthermore, customers in this segment also gave more consideration to entertainment and exploration than the other two segments. The importance of monetary value and exploration indicated the enjoyment that the omnichannel customers had in using multiple channels to obtain and use promotions (Valentini, Neslin and Montaguti, 2020). Although many researchers have suggested a positive association between the usage of multiple channels and customer profitability (Thomas and Sullivan, 2005; Kumar, Bezawada and Trivedi, 2018; Zhang, Chang and Neslin, 2021), companies have to be careful about the risk of losing customers through the transitions (Neslin, 2022). In general, retailers dealing with omnichannel customers have to

ensure frictionless transfer between different channels, facilitate customer participation and they must not overlook the importance of seamless experience in the aftersales stage. Companies may reinforce channel integration by focusing on channel breadth, transparency, consistent content and marketing, customer freedom in choosing channels, and channel synchronisation (Sousa and Voss, 2006; Rodríguez-Torrice *et al.*, 2020). The costs that are incurred from exploration or channel switching can lower journey satisfaction and inhibit the omnichannel customers from continuing their shopping (Noble, Griffith and Weinberger, 2005).

6.2 The Customer Journey in the Service Failure Context

Study 2 extended customer coping behaviour in the service failure context to cover all phases of the customer journey. The extension offered a holistic overview of the customer coping process and examined factors that influenced post-failure customer experience. The customer coping journey followed the practice of the previous customer journey literature and dissected the process that customers went through after encountering failure incidents into three main phases (Dhebar, 2013; Van Vaerenbergh *et al.*, 2019). The pre-coping phase depicted the influence of customer appraisals on blame attribution, coping potential and future expectations in determining their reactions to failure incidents. The assessments on these aspects explained the variability of responses to service failures among the customers (Gabbott, Tsarenko and Wai Hoe, 2010; Folkman, 2013). The results showed that customers employed problem-focused and self-supported emotional coping strategies while reducing the passive coping approach such as disengagement when feeling efficacious in overcoming the unpleasant event. Customers gained confidence when their perceived resources outbalanced the situational demands (Duhachek and Kelting, 2009). The strong belief in coping led the customers to view the situations as challenges that could be controlled (Brown, 1993), and they thus made an attempt to resolve the issues (El-Manstrly, Ali and Line, 2021). Moreover, the use of self-supported emotional coping in addition to a problem-focused strategy was to help restoring coping resources and sustaining the coping efforts (Folkman, 2011). In contrast, if the customers expected a reoccurrence of the failure incident, they were more likely to adopt emotional coping and disengagement strategies. Previous studies explained that problem-focused coping was often employed in situations that were controllable (Folkman, 2013; Goode, 2020), while customers tended to reinterpret or disconnect from the situation when they perceived it to be chronic or not resolvable (Sengupta, Balaji and Krishnan, 2015; El-Manstrly, Ali and Line, 2021). This study also confirmed that customers were unlikely to engage in problem solving if they thought they were incapable of fixing the issues.

The influence of failure severity and covid-19 measures was also taken into account when investigating the relationships in the pre-coping phase. The two factors were controlled to limit their possible extraneous influences, which could affect the true relationships between the three customer appraisals and the customer coping strategies (Carlson and Wu, 2011). The analysis confirmed small effects of both controlled variables on customer coping decisions. Severe damage slightly discouraged the customer from adopting a self-supported emotional coping strategy. Serious incidents can make customers perceive a lack in their capabilities and resources in solving the issue, and thus deter them from positively reframing or accepting the situation (Zheng,Luo and Ritchie, 2021). Repeated thoughts about the incident can increase the psychological distress of the customers (Ireland,Boustead and Ireland, 2005). In the meantime, strict social restrictions also brought about an increase in the adoption of a problem-focused coping strategy. The pandemic had exposed consumers to a prolonged stress (Saladino,Algeri and Auriemma, 2020). The unstable and difficult situation led to greater perceived uncertainty and risk by consumers (Betsch,Wieler and Habersaat, 2020). Customers were more eager to participate in a failure recovery process when they perceived the source of the incident to be uncontrollable (Istijanto, 2021). The participation gives a sense of control to the customers, enhances their post-recovery satisfaction and stimulates behavioural intentions (Gohary,Hamzelu and Alizadeh, 2016; Zhang *et al.*, 2021). Therefore, companies should consider a co-recovery strategy and include customers in the recovery process to ensure their expectation is met. Furthermore, technologies also played significant roles in helping companies to stay connected and communicate with their customers during the lockdowns (Choi, 2020; Zhao and Bacao, 2020; Shankar *et al.*, 2021). An effective use of online platforms to solve service failure can reduce customer retaliation and negative word-of-mouth, while enhancing customer experience (Agnihotri,Kulshreshtha and Tripathi, 2021; Wang *et al.*, 2021). Customers evaluate their situations to decide their actions after service failures (Duhachek, 2005; Goode, 2020). Hence, an account of external situational factors is valid to investigate the true relationship between the independent and dependent variable.

Although previous studies showed that the diverse coping approaches helped the customers to improve their situations (Carver and Connor-Smith, 2009), this study suggested that the four strategies led to different post-coping evaluations and behavioural intentions. Problem-focused and self-supported emotional approaches induced customer satisfaction with themselves. This was because doing something by themselves boosted their sense of achievement (VandeWalle,Cron and Slocum Jr, 2001). However, the social-supported emotional and disengagement approaches reduced the sense of competence as sharing the negative moment

with others or avoiding the issue made the customers linger in negativity (Holahan, Moos and Schaefer, 1996; Strizhakova, Tsarenko and Ruth, 2012). Although social-supported emotional coping did not contribute to customer satisfaction with oneself, mental support and understanding from the society could reduce stress and improve customer evaluation of the company (Sengupta, Balaji and Krishnan, 2015). On the other hand, disengagement harmed all aspects of post-coping satisfaction. The disconnection or avoidance of the issues may have helped individuals to manage their daily life but reliance on this coping style over time could lead to mental health issues (Choi, Mohammad and Kim, 2019; Fliess and Volkers, 2020). Lastly, in accordance with previous studies (Gabbott, Tsarenko and Wai Hoe, 2010; Van Vaerenbergh *et al.*, 2019), the results showed that if the customers were satisfied with the overall coping experience, they intended to spread positive word-of-mouth and repurchase from the company. Although failures are unavoidable, customers can still feel pleased if their post-failure experience is satisfactory (Tsarenko and Strizhakova, 2013; Taylor *et al.*, 2020).

Path	Co-Creation Behaviour	Pleasure	Arousal	Utilitarian Value	Hedonic Value	Failing Channel
Blame attribution → Problem-focused						
Blame attribution → Self-supported emotional						
Blame attribution → Social-supported emotional						
Blame attribution → Disengagement						
Coping potential → Problem-focused						
Coping potential → Self-supported emotional						
Coping potential → Social-supported emotional						
Coping potential → Disengagement						
Future expectation → Problem-focused						
Future expectation → Self-supported emotional						
Future expectation → Social-supported emotional						
Future expectation → Disengagement						
Problem-focused → Satisfaction (oneself)						
Problem-focused → Satisfaction (company)						
Self-supported emotional → Satisfaction (oneself)						
Self-supported emotional → Satisfaction (company)						
Social-supported emotional → Satisfaction (oneself)						

Social-supported emotional → Satisfaction (company)						
Disengagement → Satisfaction (oneself)						
Disengagement → Satisfaction (company)						
Satisfaction (oneself) → WOM						
Satisfaction (oneself) → Repurchase						
Satisfaction (company) → WOM						
Satisfaction (company) → Repurchase						

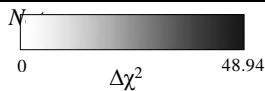


Table 33 Moderating Effect of Pre-Failure Customer Journey

Furthermore, study 2 also examined how a purchasing journey that a customer took before a failure incident affected his or her experience afterward. A heatmap (figure 32) summarised the moderating effect of pre-failure customer behaviour, pre-failure pleasure, pre-failure arousal, pre-failure utilitarian value, pre-failure hedonic value and failing channel on the customer coping journey. The darkest area marked the paths that were most affected while the white areas indicated not significant moderating effect of the pre-failure customer journey.

Customer co-creation behaviour prior the failure incident had a crucial role in portending post-failure customer experience, especially in the pre-coping and post-coping phase. Negative appraisals on blame attribution, coping potential and future expectation induced emotional and disengagement coping actions in a greater extent when the customers had a high contribution in the production or service provision procedure. The customers took pride in their work (Childers *et al.*, 2001; Harris *et al.*, 2006). The participation in the production and delivery process heightened customer expectation on the service outcomes, and thus generated a bigger negative confirmation when it failed (Heidenreich *et al.*, 2015). Co-production did not increase the tolerance of the customers when a service failure happened but, in the opposite, increased recovery expectation and harmed service satisfaction (Dong, Evans and Zou, 2008; Bagherzadeh *et al.*, 2020). However, previous studies have suggested the use of co-created service recovery, which the company and the customer jointly found a solution together, in overturning the outcomes (Wei, Ang and Anaza, 2019). Customers believed they received the most favourable solution from a joint recovery (Hazée, Van Vaerenbergh and Armirotto, 2017). The results of this thesis also showed that the highly involved customers were likely to advocate and repurchase more than the lowly engaged customers when the post-failure satisfaction with company was high. Therefore, companies should include the engaged customers in the recovery

process. More importantly, they should tailor their recovery strategies according to the level of customer co-creation behaviour to enhance customer experience after failure incidents.

Positive emotions, such as pleasure and arousal, that customers had before failure incidents offered psychological resources when they need to cope from negative consumption events. The results showed that the customers who perceived a low level of pleasure reacted more aggressively when they blamed the companies or expected the failure incidents to reoccur. A healthy mental state provided psychological capitals and enhanced resilience of the customers (Yang *et al.*, 2018; Harrison-Walker, 2019; Saavedra Torres, Rawal and Bagherzadeh, 2020). An affection that customers had toward the companies suppressed their desire for retaliation and increased the likelihood of forgiveness (Lee *et al.*, 2021). In addition, the results of this thesis also emphasised that the positive emotional responses were beneficial to both customers and companies in minimising the adverse effect of negative consumption events. The findings revealed that pre-failure pleasure led the customers to feel less dissatisfied with themselves if they decided to detach from the issues. Similarly, disengagement coping strategy also did not cause the highly aroused customers to negatively evaluate the company. On the contrary, they would advocate and repurchase if they were satisfied with the company. The broaden-and-build theory explained these phenomena as positive feedback loops of positive emotions (Fredrickson, 1998). One positive emotion encouraged other different positive emotions and behaviours, which built individual's personal resources and improved the odds of successful coping (Huppert *et al.*, 2004; Cavanaugh, Bettman and Luce, 2015).

The moderating effect of pre-failure customer experiential value was most prominent on the relationships between the prospective failure appraisals and the emotional and disengagement coping strategies. Customers who had perceived a high level of hedonic value before failure incidents adopted a greater extent of emotional and disengagement coping actions when encountered negative consumption experiences. The high pre-failure perceived value resulted in a greater dissonance when a service failure occurs (Jafarzadeh *et al.*, 2021). The wide gap between the pre-failure experience and the service failure experience intensified the feelings of injustice and worsened failure appraisals of the customers, and consequently led them to seek emotional supports or avoid the issue (Balaji, Khong and Chong, 2016). Customers were more likely to disengage and reject the reality in a stressful situation (Tsarenko and Strizhakova, 2013). Furthermore, social-supported emotional coping approach also positively influenced post-failure satisfaction with company and oneself when the pre-failure utilitarian and hedonic value was high, respectively. Although talking about issues may make the individual linger to the negative feelings (Pavia and Mason, 2004), reminiscing about positive pre-failure

experiential values improved the service evaluations. Another interesting finding of this thesis was the efficiency of pre-failure utilitarian value in reducing the adoption of disengagement coping strategy. Customers who perceived a high level of practicality, convenience, monetary saving of the shopping journey prior failure incidents were less likely to avoid the issue when they thought they were capable to cope from the unfavourable situation. However, if they expected the failure incidents to repeat, they would disengage in a greater extent than the low-level group. Therefore, communication and reassurance after service failures that enhance perceived coping potential of the failure incident are particularly crucial when the utilitarian value is the focus of the shopping journey.

Regarding the failing channel, the results showed that the human-based channel users and the technology-based channel users experienced the coping journey differently. The browsing history of the customers and the characteristics of the channels play a significant influence in determining future customer behaviour (Goić, Jerath and Kalyanam, 2021). This could be because the two customer channel segments held dissimilar values and were varied by socio-demographics (Barwitz & Maas, 2018; Tueanrat, Papagiannidis, & Alamanos, 2021a). In general, blame attribution demonstrated stronger influences on the coping behaviour of the human-based channels users. The findings conformed with a previous study that suggested a stronger association of blame with humans than systems (Belanche et al., 2020). The adoption and impact of the self-supported emotional approach were more prominent among the technology-based channel users. The results reflected high levels of self-reliance and self-efficacy of the online and self-service customers (Pavlou & Fygenson, 2006). On the other hand, they could also indicate a lack of emotional support from robots and the technology-based platforms (Vatan and Dogan, 2021). Furthermore, an engagement in problem-solving also lowered post-coping satisfaction with the companies of the technology-based channel users. Similarly, previous studies suggested that customers were more dissatisfied if they experienced a process failure when using non-humanoid channels (S. Choi, Mattila, & Bolton, 2020). Customers perceived the technology-based channels to be lacking in warmth and less sincere (Y. Hu, Min, & Su, 2021), and thus they expected human employees to address them when they had issues (Belanche et al., 2020).

6.3 Overall Discussion

This thesis is an attempt to develop a systematic understanding about the customer journey and clarify the confusion as regards its scope, components and outcomes. To move the field forward with a more unified and integrated understanding of the topic, the thesis started by conducting a systematic literature review to aggregate and organise the existing knowledge about the topic.

The review identified service satisfaction and service failure as the two major contexts of the customer journey. In both situations, customers interact with multiple touchpoints across the three journey stages and generate data that helps researchers and practitioners to gain a better understanding about them from their perspective. The systematic literature review has classified those data into customer co-creation behaviour, customer response and customer channel use.

Customer co-creation behaviour in the customer journey concerns customer involvement in forming and tailoring his or her experience. Customers co-create their experiences by exchanging, integrating and sharing resources with other actors in the service network (Aarikka-Stenroos and Jaakkola, 2012; Vargo and Lusch, 2016). Customers interact with human, technological and physical interfaces, directly and indirectly, at every phase of the journey and form service experiences (Meyer and Schwager, 2007; Payne, Storbacka and Frow, 2008; Walls *et al.*, 2011). Next, customer response focuses on the reactions of customers to touchpoints in the customer journey. The response consists of emotional and cognitive aspects (Crosier and Handford, 2012; Klaus, 2013), which are investigated as emotional response and experiential value in this thesis respectively. Customer behaviour literature has recognised positive emotions as antecedents of customer satisfaction and future behavioural intentions (Martin *et al.*, 2008; Jang and Namkung, 2009; Sukhu *et al.*, 2019). Customer emotional response can be mainly divided into two dimensions. Pleasure refers to happiness and enjoyment, while arousal concerns the excitement and stimulation received from the consumption (Mehrabian and Russell, 1974). Another aspect of customer response is experiential value. Customers perceive values from direct and distanced interactions with touchpoints of the company (Mathwick, Malhotra and Rigdon, 2001). In general, customers are satisfied when their perceived values achieve or exceed their expectations (Lee, Lanting and Rojdamrongratana, 2017). Experiential value consists of three dimensions, namely utilitarian value, hedonic value and social value (Rintamäki *et al.*, 2006). The management of customer experience requires an understanding of these experiential value dimensions (Rintamäki and Saarijärvi, 2021). Lastly, channel is another crucial aspect of the customer journey. This theme is concerned with interaction mediums in the customer journey. Technological advances have multiplied channel choices that customers can use to purchase from and communicate with companies (Majra *et al.*, 2016). In today's market, customers can easily switch and integrate channels to suit their needs (Hu and Tracogna, 2020). Customers tend to behave heterogeneously and use different channels for specific reasons (Barwitz and Maas, 2018; Gao, Melero and Sese, 2019).

After the systematic literature review clarified the scope and components of the customer journey, two empirical works, study 1 and study 2, were developed to examine the significance and roles of the three customer-related aspects in the customer journey of the service satisfaction and service failure context. Study 1 extends the knowledge about customer experience in the service satisfaction situations by investigating the three customer-related themes as antecedents of customer journey satisfaction. The result suggested that perceived convenience and perceived monetary saving in all three phases of the journey are the most impactful antecedents of customer journey satisfaction, while responsible behaviour and personal interaction are the most significant aspects of customer co-creation behaviour that stimulate a positive evaluation. The active and collaborative behaviour of the customers contributed to their well-being (Yen, Teng and Tzeng, 2020). Their participation in the journey ensures more customised experiences that satisfy their needs and expectations (Kandampully, Zhang and Jaakkola, 2018; Piyathasanan *et al.*, 2018). Pleasure during search and purchase also has an important role in determining customer journey satisfaction. Happy employees can transmit positive emotions to customers (Lechner and Paul, 2019; Liu, Chi and Gremler, 2019). Emotional contagion posits that customers can detect positive emotions of employees, which in turn contributes to their service evaluations (Hatfield, Cacioppo and Rapson, 1993). This effect is not limited to face-to-face interactions with human employees - smiley emojis and expressions of surprise and happiness by robots can also create similar outcomes (Woo and Chan, 2020; Chuah and Yu, 2021). Furthermore, study 1 also confirmed the heterogeneity among the customers who used different channels in the journey. The results suggested that customers could be classified into website-reliant, physical store-reliant and omnichannel customers. The customers in different segments showed dissimilar channel preference throughout the journey. Each customer group had a different level of technology anxiety, need for touch and age. These distinctions led them to behave and experience the service diversely in both service satisfaction and service failure context. Therefore, it is often ineffective to use the same marketing content and strategies to target all customer groups (Konus, Verhoef and Neslin, 2008). Customer segmentation is an approach for companies to achieve effective customer management (Floh *et al.*, 2014; De Keyser, Schepers and Konuş, 2015). The classification of customers into groups according to certain characteristics enables better matches between service provisions and customer needs (Hallikainen, Alamäki and Laukkanen, 2019; Schneider and Zielke, 2020). However, this does not signify that companies should operate different channels in silos. In contrast, customers value seamless movement between various interaction platforms and expect to receive similar services and information across diverse channels (Faulds *et al.*, 2018; Gao, Melero and Sese, 2019). An efficient channel

management should maximise synergies between channels (van der Veen and van Ossenbruggen, 2015; Hu and Tracogna, 2020). Social data offers unprecedented opportunities for companies to gain opinions and feedback from the market and consumers (Lo Presti, Maggiore and Marino, 2020; Cuomo *et al.*, 2021), while new technologies, such as intellectual intelligence, also help companies to analyse the voluminous data that is beyond human capabilities to obtain a deeper and better understanding of their customers (Huang and Rust, 2021; Rana *et al.*, 2021).

Next, study 2 has extended the knowledge about the customer journey after service failures. It proposed a framework for the customer coping journey that expanded customer coping behaviour to cover all three phases of the customer journey. The study examined the influence of the different components of the pre-failure customer journey on the customer coping journey. The results suggested that pre-failure customer co-creation behaviour boosted customer intention to advocate and repurchase when post-satisfaction with the company was high. However, companies also need to be mindful that these highly involved customers tended to disengage more than the low participation group if they expected a reoccurrence of the failure incidents. Previous studies suggested co-recovery as the key to satisfying and retaining the customers (Dong, Evans and Zou, 2008; Roggeveen, Tsiros and Grewal, 2012; Park and Ha, 2016; Hazée, Van Vaerenbergh and Armiroto, 2017). The involvement of the highly participating customers in the recovery process offered tailored solutions that meet their needs (Heidenreich *et al.*, 2015). Thus, companies have to know their customers and mirror their strategies to the level of customer participation. Companies can also encourage customer co-creation behaviour by matching their level of intervention and services with customers' goals in each phase of the journey (Thomas, Epp and Price, 2019; Wollenburg, Holzapfel and Hübner, 2019), while avoiding actions that can lead to co-destruction, such as contextual rigidity, incoherent marketing communication and a lack of user-friendly interaction platforms (Zhang *et al.*, 2018; Järvi *et al.*, 2020; Sjödin *et al.*, 2020). As far as customer emotional response is concerned, although arousal was not a significant antecedent in the service satisfaction context, study 2 revealed that both dimensions of emotional response served as buffers in reducing the negative consequences of failure incidents. According to the broaden-and-build theory of positive emotions (Fredrickson, 1998; Fredrickson and Joiner, 2018), experiences of positive emotions broaden awareness of the individuals and nourish the growth of personal resources that help them to cope with negative events and enhance their overall emotional well-being. Perceived utilitarian values before the incidents also had a significant role in restraining the customers from disengaging and avoiding the issue. However, the rational customers would

withdraw if they expected a recurrence of the failure incidents. Therefore, companies need to systematically track the development of the negative events and have recovery mechanisms in place to promptly address the issues (Rosenbaum, Otalora and Ramírez, 2017). As regards hedonic value, it was notable that its effect differed from positive emotions. Whilst pleasure and arousal provided psychological resources to cope with unfavourable situations, a high level of perceived hedonic value before failure incidents heightened recovery expectations and narrowed the tolerance of the customers. Thus, companies need to enhance both the cognitive and emotional responses of the customers to offer an outstanding customer experience in both service contexts. New technologies such as the Internet of Things, augmented reality and virtual assistants have dramatically transformed the service setting and customer experience (Flavián, Ibáñez-Sánchez and Orús, 2019; Hoyer *et al.*, 2020). Companies have to be aware of these developments and be responsive to changes in their roles to perform well (Paluch and Tuzovic, 2019). Furthermore, Study 2 also showed the heterogeneity between the human-based channel users and the technology-based channel users in the pre-coping phase and the coping phase of the customer coping journey. The knowledge about customer channel use in the previous stages or journeys helps companies to predict future customer behaviour and interactions (Goić, Jerath and Kalyanam, 2021).

In general, the findings of this thesis have emphasised the importance of monitoring customer co-creation behaviour, customer response and customer channel use across the three phases of the customer journey. The insights into the development of these elements lead to better understanding of customer experience in both service satisfaction and service failure contexts. The customer journey is a critical concept that helps researchers and practitioners to understand complex customer behaviour and manage a vast network of touchpoints in the omnichannel retail environment (Stein and Ramaseshan, 2016). The approach dissects the complicated subjects into comprehensible and manageable components that facilitate the understanding and scrutiny of the customer experience (Richardson, 2010; Patti, van Dessel and Hartley, 2020). The holistic nature of customer journeys also enables researchers and companies to go beyond momentary snapshots of the event and investigate the dynamic of the process, which yields a better understanding about the formation of customer experience over time (Edelman and Singer, 2015; Lemon and Verhoef, 2016). A successful adoption of the concept can improve operation effectiveness, increase sales performance, and strengthen the competitive advantage of the companies (Rawson, Duncan and Jones, 2013; Halvorsrud, Kvale and Følstad, 2016; Ieva and Ziliani, 2018a). The next chapter concludes the thesis with theoretical and practical contributions of the research findings, limitations and future research suggestions.

Chapter 7. Conclusion

The customer journey has been gaining attention from both academia and practitioners over the past decade. The customer journey literature has been growing at a rapid rate, especially in the last four years, when more than half of the literature was published. However, the knowledge about the topic has appeared to be incoherent due to its diverse theoretical background. Therefore, this thesis aims to develop a systematic understanding of the customer journey and placed the identified underlying themes of the customer journey into contexts. This chapter summarises the findings, contributions and limitations of the systematic review and the two studies of the thesis.

The systematic review together with the quantitative content analysis made it possible to aggregate and integrate the current body of knowledge by identifying the underlying themes of the domain. The results revealed five themes, namely service satisfaction, failure and recovery, co-creation, customer response, channels and technological disruption and summarised the knowledge of each topic in the context of the customer journey. The contribution of this review is threefold. Firstly, the review has clarified the business concepts that are related to the customer journey literature. Secondly, it has made recommendation for future study to advance the knowledge about the customer journey. Lastly, it has advanced the knowledge of the customer journey for academia and practitioners

Next, three of the identified themes that considered the perspective of customers were further examined in two service contexts. The first study examined customer co-creation behaviour, customer emotional response and customer experiential value as antecedents of customer journey satisfaction in the service satisfactory context. The study measured the contribution of the factors in all three phases of the journey. The findings suggested convenience and monetary saving were the most influential antecedents, while pleasure, responsible behaviour and personal interaction also showed moderate influence on customer journey satisfaction. The rest of the factors, except information seeking and arousal, demonstrated small contributions to the evaluation of the customers. For a further examination, the respondents were classified according to their channel choices to investigate a moderating effect of customer channel use. Latent class analysis revealed three customer segments including website-reliant customers, physical store-reliant customers and omnichannel customers. The customers in different segments showed varied levels of technology anxiety, need for touch and age. The further analysis also supported the heterogeneity among the three customer segments. Customer satisfaction journey of the website-reliant customers was mainly influenced by perceived

utilitarian experiential values, pleasure and responsible behaviour. The physical store visitors valued personal interactions the most but also appreciated the citizenship aspect of co-creation behaviour. Lastly, the results indicated that the omnichannel customers were the most sensitive group and considered more factors than the other two segments when evaluating their journey.

The second study examined the moderating effect of pre-failure customer co-creation behaviour, customer emotional response, customer experiential value and customer channel use on post-failure customer experience. Firstly, the customer coping journey was introduced to resemble the internal process that customers went through after confronted with a negative consumption event. Similar to the regular purchasing journey, the customer coping journey was divided into three phases, consisting of pre-coping, coping and post-coping phase. In the pre-coping phase, customers appraised blame attribution, coping potential and future expectation of the failure incident. The appraisals shaped customer coping strategies in the coping phase. This thesis considered four coping approaches, including problem-focused, self-supported emotional, social-supported emotional and disengagement actions. The post-coping phase measured post-failure satisfaction and behavioural intentions of the customer, which reflected the evaluation of their experience in the two previous phases. The structural equation modelling supported all the relationship paths in the model. Next, multigroup analyses were executed to examine the moderating effect of the pre-failure customer journey on the customer coping journey. The results confirmed the influence of pre-failure customer co-creation behaviour, pre-failure customer emotional response, pre-failure customer experiential value and pre-failure customer channel use on post-failure customer experience. A high level of customer participation in the production or service delivery process and a high level of perceived hedonic value prior a failure incident increased customer recovery expectation when encountering a service error. Whilst the perceived utility before the negative event discouraged the customers from disengaging only when they believed the incident would not reoccur and they could cope from the unfavourable situation. On the other hand, positive emotions prior service failures offered psychological resources and improve post-failure satisfaction of the customers. Lastly, the results showed that the customers experienced the coping journey differently if they used dissimilar channels. The coping behaviour of the human-based channel users was influenced by their appraisals on blame attribution and future expectation, while the act of the technology-based channel users was more related to coping potential.

In summary, the thesis identified five business and marketing topics that were building blocks in understanding the customer journey. The findings of the two studies demonstrated the significance of customer co-creation behaviour, customer emotional response, customer

experiential value and customer channel use in influencing service evaluations of the customers in the service satisfactory and service failure context. The systematically aggregated and developed knowledge about the customer journey in this thesis offered a theoretical groundwork for future development of the domain and provided practical implications to better understand and manage customer experience.

7.1 Theoretical Contributions

The findings of the thesis contribute to the customer journey literature, omnichannel literature and service failure and recovery literature in several ways. Firstly, the systematic literature review in this thesis has contributed to the customer journey literature by aggregating and organising the fragmented body of knowledge in the field. The term “customer journey” has been applied in many contexts and related to various marketing aspects (Chen, Kyaw and Ross, 2008; Klaus, 2013; Muskat *et al.*, 2013; Åkesson, Edvardsson and Tronvoll, 2014; Lim, Al-Aali and Heinrichs, 2015; Fornari *et al.*, 2016; Canfield and Basso, 2017; Panzera *et al.*, 2017). The ambiguous and multiple historical roots of the topic have led to the diverse uses and applications of the customer journey that made the literature appear incoherent (Følstad and Kvale, 2018b). Hence, this thesis has adopted the systematic literature review approach to methodically organise the existing knowledge into themes. The quantitative content analysis has identified five main aspects of the customer journey, namely service satisfaction, failure and recovery, customer response, co-creation, channel and technology disruptions. The dendrogram lists keywords that have been studied in each theme and it shows relationships between them, while the heatmap illustrates the distribution of the customer journey literature and highlights areas that need further attention from researchers. The results offer a theoretical foundation for future research and enable researchers to examine the customer journey in a more systematic manner. The analysis of the literature helps connect the knowledge and identify the gaps to advance research in the domain of the customer journey.

Secondly, the thesis has advanced the current customer journey models by examining the influence and dynamic of the identified themes through different phases of the entire journey. The empirical studies of the thesis are built upon the findings of the systematic literature review to broaden the knowledge in a consistent manner. The review identified customer co-creation behaviour, customer emotional response, customer perceived experiential value and customer channel use as the major components of the customer journey that represent the customer’s perspective, and thus this thesis has proceeded to investigate their roles in the linear customer journey model. The results clarify the relationships between the customer journey and other business constructs in the two service contexts. Study 1 demonstrates the influence of the

identified themes on customer journey satisfaction in the service satisfaction context, while study 2 reveals the influence of the constructs on customer coping strategy in the service failure context. The investigation of customer co-creation behaviour, customer emotional response, customer perceived experiential value and customer channel use in the same framework allows the researcher to scrutinise and compare the variables under the same conditions. The findings reveal the significance of each theme in shaping outcomes of the customer journey. As customers are constantly adjusting their goals and expectations through different stages of the journey (Hu and Tracogna, 2020), neglecting the temporal change could limit the understanding and effectiveness of customer journey management (Van Vaerenbergh *et al.*, 2019; Berman, 2020). The studies examine the role of each construct in all phases of the journeys and confirm the dynamic in the significance and the degree of influence of all constructs. The results emphasise the importance of elucidating the time and situational context when studying customer journeys. Researchers that wish to gain a holistic understanding of customer experience also need to consider all phases of the journey. Understanding both the critical components of the customer journey and their dynamic through different phases are keys to gaining insights into the formation of strong and positive service evaluation by the customers (Åkesson,Edvardsson and Tronvoll, 2014).

The third contribution of the thesis to the customer journey literature is that it extends the research context beyond purchasing journeys. Study two applies customer coping strategy to cover the three phases of the customer journey to explore the internal process that customers go through after service failures. The customer journey is known for its usefulness in providing detailed and insightful information about the customers to researchers and practitioners (Halvorsrud,Kvale and Følstad, 2016; Stein and Ramaseshan, 2016). It has advantages in depicting and tracking the needs and experiences of customers through the interaction course with the company (Halvorsrud,Kvale and Følstad, 2016; Varnali, 2019). However, previous studies have mostly been restricted to the purchasing context, which hinders the usefulness of the framework (Muskat *et al.*, 2013; Moon *et al.*, 2016; Ponsignon,Smart and Phillips, 2018; Micheaux and Bosio, 2019; Berman, 2020). Therefore, the customer coping journey in study two demonstrates the versatility of the framework and widens the view in customer journey research.

Moreover, the thesis has also advanced the knowledge in the customer journey field by integrating customer journeys from two service contexts. The application of the customer journey into the service satisfaction and the service failure context helps to unfold the development of customer experience in the settings. Additionally, the thesis has linked the two

customer journeys together by examining the moderating effect of customer co-creation behaviour, customer emotional response, customer experiential value and customer channel choice before failure incidents on customer coping experience. The findings have verified their relationships and emphasised the fact that customer experience is continuous. The integration of the two journeys also provides a more complete understanding of customer behaviour. Furthermore, the application of the customer journey into a new context other than purchasing also demonstrates the benefits and versatility of the approach (Tueanrat, Papagiannidis and Alamanos, 2021b). In general, the thesis has advanced the knowledge in the customer journey field by identifying the main components of the customer journey, investigating their roles in shaping the journey outcomes and demonstrating the application of the customer journey framework in broader contexts.

Furthermore, the thesis contributes to the omnichannel literature by employing the latent class analysis to investigate customer channel behaviour in the service satisfaction context at greater depth. It recognises that customers may use more than one channel in a journey phase, and thus, it employs dominant channels rather than sole channel choices that customers use in each phase of the journey as the inputs of the latent class analysis. This approach leads to two major findings. Firstly, the analysis shows the persisting prominence of physical stores and websites in the customer journey despite the emergence of new channels. The majority of the respondents have reported heavily relying on physical stores and websites for their shopping activities. However, the acknowledgement that customers can use multiple channels in a single phase, not just between stages, also leads to the discovery of behavioural changes. Although the physical store-reliant and website-reliant customers intensively use their dominant channels, they also consider other channels to a certain extent through the journey. Their degree of reliance varies through different phases of the journey. The physical store-reliant customers mostly visit offline shops during the purchase phase, while the website-reliant customers utilise the internet for searches in the pre-purchase phase. The investigation offers a more holistic reflection of the complicated omnichannel journey and the nature of the omnichannel customers, who can move freely from one channel to another and easily utilise multiple channels simultaneously (Nunes and Cespedes, 2003).

Lastly, the customer coping journey has contributed to the service failure and recovery literature by shifting the focus to the customers and considering customer responses to service failures beyond voice and exit. Current research on customer behaviour in the service failure literature has primarily considered complaint behaviour (Blodgett and Anderson, 2000; Bougie, Pieters and Zeelenberg, 2003; Chebat and Slusarczyk, 2005; Koussaifi, Hart and Lillystone, 2020; Le

and Ho, 2020), which is only one branch of the options that customers can take. Therefore, this thesis has broadened the customer reaction spectrum by adopting the coping typologies from the psychology field (Folkman and Lazarus, 1980; Duhachek, 2005). This approach offers a better reflection on the internal process that customers go through to cope with an unpleasant consumption situation and provides insights into post-failure customer experience. In addition, this thesis has also examined the sub-dimensions of emotional coping strategies (self-supported and social-supported approaches) and post-coping satisfaction (with oneself and with the company) to clarify ambiguities related to the constructs (Gabbott, Tsarenko and Wai Hoe, 2010; Tsarenko and Strizhakova, 2013). The investigation of the elements that express the viewpoints of the customers in this thesis contributes to the understanding of the customers concerning their journeys at the behavioural, emotional and cognitive level. Although previous studies have investigated service failure and service recovery as an experience journey (Van Vaerenbergh *et al.*, 2019; Bagherzadeh *et al.*, 2020), the researchers focused on the reactions of companies rather than the efforts of customers. Thus, the customer coping journey has been introduced to serve as an approach for researchers and practitioners to visualise and diagnose the complex customer experience process in the post-failure period. The shift in the research focus from service recovery to customer coping behaviour has also broadened the research subject to include failure incidents that are not noticed by companies and have been underexplored in the service recovery literature.

7.2 Practical Implications

The thesis provides insights into the development of customer experience in the service satisfactory and service failure context. The customer journeys illustrate the internal processes that customers go through and touchpoints that customers interact with to form their service evaluations (Lemon and Verhoef, 2016; Følstad and Kvale, 2018b). The studies enable companies to understand the processes from the customer's standpoint. The regular purchasing journey in study 1 offers a view on the significant factors that customers consider in each phase of the journey when evaluating the services, while study 2 resembles the customer coping journey that contains stages and aspects that influence post-failure customer experience. The results emphasise that customer experience is holistic and shaped by various elements overtime. Actions, emotions and perceptions at one point can affect the entire experience. The pre-failure customer journey also moderates customer experience after service failures. Therefore, the studies call for attention of companies to take a wider view and suggests that it is inadequate to examine a single snapshot to draw an effective business strategy.

Tracking the development of customer experience can be complicated due to the complexity of customer behaviour and the extensive network of touchpoints in the omnichannel retail environment (Flavián, Gurrea and Orús, 2016; Kuehnl, Jozic and Homburg, 2019; Schneider and Zielke, 2020). This thesis simplifies the practice by identifying the key aspects of the customer journey and establishing relationships between them. The results propose customer co-creation behaviour, customer response and customer channel use to be the three main dimensions that reflect the perspective of customers and are significantly related to customer experience in both service satisfactory and service failure situations. Companies need to systematically track the development of the three elements throughout the course of interaction with their customers. The insights into the influence of the elements are building blocks to understand their customers and improve their service delivery system. Furthermore, an enormous amount of customer data is being generated as customers proceed with their journey (Ying *et al.*, 2021). Companies must be strategic with the data collection and sufficiently invest in technological tools that will help them harvest opportunities and benefits of the big data. The analysis of the customer data will help companies to efficaciously segment their customers (Huang and Rust, 2021), tailor their services to match with customer expectations and improve their overall performance (Anshari *et al.*, 2019; Shamim *et al.*, 2021). This thesis also provides empirical evidence that customers behave heterogeneously upon their level of co-creation behaviour, emotional response, cognitive response and channel use.

A high level of customer participation in the production and service delivery process played a significant role in boosting customer satisfaction in both service satisfactory and service failure situation. In the regular purchasing journey, customers particularly value their responsible behaviour and personal interaction with the company. A reduction of the unnecessary bureaucracy and a provision of user-friendly interfaces can encourage customers to actively engage with the company (Järvi *et al.*, 2020). Customers usually feel more comfortable to take part if they have control over their pace, level of involvement and privacy (Åkesson, Edvardsson and Tronvoll, 2014). Although the service dominant perspective that considers customers as operant resources reduces the control of companies in their operations (Bijmolt *et al.*, 2019), companies are responsible in orchestrating their touchpoints to jointly facilitate the co-creation process and matching their services to be more in line with customer preferences (Dellaert, 2019; Wollenburg, Holzapfel and Hübner, 2019). Furthermore, companies need to be aware that the highly involved customers behave differently from the lowly engaged group in the service failure situation. The active customers are more likely to advocate and repurchase when they are happy with the company after the failure incidents. Nevertheless, they also tend to disengage

if expecting the unfavourable events to happen again. Therefore, it is crucial for companies to promptly address the issues and show their efforts in improving the situations in hope to restore trust and rebuild their relationship with the customers (Basso and Pizzutti, 2016). Companies should have a service recovery mechanism that can be readily implemented in the crisis time to avoid double deviation that is a result of an unsatisfied service recovery (Joireman *et al.*, 2013). In addition, companies should consider a co-recovery strategy with the highly involved customers after service failures. Previous studies have shown the efficiency of the collaboration in improving customer satisfaction and future intentions (Hazée, Van Vaerenbergh and Armiroto, 2017; Tronvoll and Edvardsson, 2019).

Customer response is another critical aspect of the customer journey. The element consists of emotional and cognitive dimension, which companies need to pay attention to both to enhance service evaluations of their customers. Customers perceive a range of emotions and constantly evaluate their perceived experiential values throughout their journeys (Anderl *et al.*, 2016; Kuuru and Närvänen, 2019). The results of this thesis suggest that perceived utilitarian values are the most influential factors that customers consider when assessing services in the service satisfactory context. Companies need to regularly check their customer feedback to control service failures and improve their service quality (Shin *et al.*, 2017; Leem and Eum, 2021). The thesis argues that an enhancement in convenience and monetary saving can increase perceived utilitarian values of customers, and hence boost their journey satisfaction. In the service failure context, a high level of perceived utilitarian value before the incident also discourages customers from withdrawing when the failure incident is perceived as temporary. However, a high level of pre-failure perceived hedonic value can enlarge cognitive dissonance, increase customer recovery expectation and narrow customer tolerance. Therefore, it is crucial for companies to develop both cognitive and emotional customer response in the customer journey. Positive emotions will provide psychological resources for customers to cope from negative events and enhance their mental well-being. Employees, space and symbols are all critical aspects of service environment that contribute to pleasure and excitement of customers (Barari and Furrer, 2018; Hemetsberger, Kreuzer and Klien, 2019).

Lastly, companies should pay attention to customer channel choice in the journey. The latent class analysis shows that customers who use different channels are distinct in terms of psychological needs, age group and antecedents of journey satisfaction. The customer segmentation enables the researcher to specifically identify the critical antecedents of journey satisfaction for each customer group. The website-reliant customers consider utilitarian experiential values the most, while physical store-reliant and omnichannel customers give

priority to personal interaction and seamless experience respectively. The identification of critical contributors to customer journey satisfaction pinpoints the service attributes that companies should focus on to enhance the experience of each customer segment. Furthermore, the channel that customers use prior failure incidents also portend their coping journey. The results indicate that failure appraisals influence coping strategies and post-failure satisfactions of the human-based channel users and the technology-based channel users differently. The analysis calls for companies to customise their recovery mechanisms to match with different customer groups. In general, it is crucial for companies to track customer channel use in the journey to gain better understanding about their customers. Companies must be mindful about the customer fragmentation and attentive to the diverse customer needs when designing communication or marketing campaigns. It is important for companies to tailor their approaches for diverse customer segments to ensure the effectiveness of the strategies (Bi *et al.*, 2020; Schneider and Zielke, 2020). The thesis facilitates the practice by providing insights into the customer heterogeneity. Companies can use the findings to assist their decision making and customer management.

7.3 Limitations and Future Research Suggestions

Nevertheless, the thesis is subjected to some limitations. Firstly, it is important to recognised that the thesis is built on the systematic literature review, which involves some constraints. The scope and perspective of the review have been shaped by the working definition of the customer journey that is adopted from the previous review on terminologies of the customer journey (Følstad & Kvale, 2018b). The definition has put an emphasis on the structure and component perspective of the customer journey. In addition, the review did not utilise customer experience as an additional search term to reduce noises in the search results. Such an inclusion would increase the volume by more than tenfold. However, the restricted keywords have narrowed the focus of the review and left out papers that potentially contribute to the multidimensional customer responses perspective of the customer journey. Furthermore, due to the nature of the dendrogram, the results reflect the common themes and the current research trend of the retrieved literature set. The themes and their features may evolve as the customer journey literature grows. Therefore, the review could be replicated in the future to evaluate the development of the field.

Secondly, the thesis has narrowly focused on the linear customer journey. Both studies have assumed that customers travel in a sequence and only in one direction, from the pre-purchase, purchase to the post-purchase phase of the journey, with a definite start and end point. However, the recent development in technologies has altered customer shopping behaviours and their

journey structure (Farah and Ramadan, 2017; Kannan and Li, 2017). Customers do not always move in a unidirectional flow with a clear functional goal. They instead have an erratic and opportunistic journey within which no clear transitions between phases can be defined (Mangiaracina, Brugnoli and Perego, 2009; Wolny and Charoensuksai, 2014; Moon *et al.*, 2016). Therefore, future research could experiment with a more flexible and dynamic sequence of the customer journey and investigate the factors that were influencing it. In addition, future research may investigate each journey phase in more detail by specifying certain activities or interactions of interest.

Thirdly, the simple regression analysis has limited the understanding about the relationships between constructs. Although the analysis method is appropriate and adequate to estimate the relationship between each customer journey element and customer journey satisfaction, the approach calculates each relationship independently. Future research can consider multiple regression analysis to analyse the relative influences of the independent variables, or use structural equation modelling and examine more outcome variables for more comprehensive understanding about customer experience. In addition, it would be interesting to adopt an experimental study approach to manipulate various situational factors and collect data for the studies.

Fourthly, the empirical studies have been set in the UK retail market and restricted to a few variables for its interpretability. Although the general conclusions of the systematic literature review can be widely applied in diverse contexts, the adaptability of the empirical studies may be subject to the cultural and business settings due to different customer values and situational factors (Grewal and Roggeveen, 2020; Mishra, Singh and Koles, 2021). Future studies could replicate the analyses in other environments and under dissimilar conditions to compare the results. There are several other relevant variables that researchers can consider in further study to advance knowledge in the customer journey literature. Future research can build on the proposed models and include additional factors to extend the knowledge of the domain. In the service satisfaction context, more psychological needs and traits of customers can be examined to understand the distinctions in goals and expectations of the different groups. Product type and industry can also be specified for in depth analysis. In the service failure context, researchers may consider failure types, the relationship between customer and company and double deviation to advance understanding of customer coping behaviour. Furthermore, this thesis solely focuses on positive emotions, leaving the impact of negative emotions unexamined in both service contexts. Therefore, it is recommended for researchers to look at both pleasure and pain in the customer journey for a more holistic understanding.

Lastly, the data of study 1 and study 2 are collected in different time period. To be specific, survey 1 has been completed before the pandemic outbreak, while the responses of survey 2 have been collected during the spread of covid-19. Although the impact of social restrictions has been considered and controlled in survey 2, the responses are self-reported. The pandemic has disrupted both consumption and production (Sheth, 2020). New rules and regulations are imposed, forcing customers to alter their habits and adapt to new service environment (Wang *et al.*, 2021). Therefore, the applications of the results should be made with caution and awareness of the limitation. Future studies can potentially repeat the investigation in the post-pandemic world.

Appendices

Appendix A: Questionnaire for Study 1

(FILTER QUESTION)

Customer journey describes the experiences of customers as they go through the three main stages of shopping, namely, pre-purchase (searching for a product), purchase (the actual transaction of buying a product) and post-purchase (seeking for customer support after the purchase).

Have you experienced shopping that involved all three phases of the customer journey in the past three months?

- Yes
- No

(THE START OF THE ACTUAL SURVEY)

Please answer the questions in this questionnaire by recalling your most recent shopping experience of a product (e.g. a mobile phone, a bike, etc.) that involved all three phases of the customer journey (i.e. searching for a product, purchasing a product and seeking for support after the purchase).

Which retailer did you buy the product from? _____

What product did you buy from this retailer? _____

How much did you spend on the purchase? _____

How old are you?

- 24 years or below
- 25 - 29 years
- 30 - 39 years
- 40 - 54 years
- 55 years or above

What is your gender?

- Male
- Female

What is the highest level of education that you have completed?

- Primary school or below
- GCSEs or equivalent
- A-Levels or equivalent
- University undergraduate programme
- University post-graduate programme or above

What was your total personal income before taxes during the past 12 months?

- Less than £12,350
- £12,350 - £20,260
- £20,261 - £28,345
- £28,345 - £40,380
- £40,381 - £52,800
- More than £52,800

Which area are you living?

- Urban area
- Suburban area
- Rural area

SECTION 1: SHOPPING CHANNELS

What percentage did you use the following channels for pre-purchase activities (e.g., First encounter with the product and searching for product information) of your recent shopping. Please fill a number in each text box below. The total sum must add up to 100.

Physical stores: _____

Websites: _____

Social media: _____

Mobile phone application: _____

Telephone OR Mail order: _____

What percentage did you use the following channels for purchase activities (e.g., Placing orders and making payments) of your recent shopping. Please fill a number in each text box below. The total sum must add up to 100.

Physical stores: _____

Websites: _____

Social media: _____

Mobile phone application: _____

Telephone OR Mail order: _____

What percentage did you use the following channels for post-purchase activities (e.g., Requesting support or returning product) of your recent shopping. Please fill a number in each text box below. The total sum must add up to 100.

Physical stores: _____

Websites: _____

Social media: _____

Mobile phone application: _____

Telephone OR Mail order: _____

According to the previous questions, you predominantly used [*Channel A, Channel B and Channel C*] for pre-purchase, purchase and post-purchase activities, respectively, in your recent shopping.

Given the information, please indicate the extent to which you agree with the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
This was the best channel combination I could have used for shopping.							
I was satisfied with the shopping channel combination.							
My choice of shopping channel combination was a wise one.							
I didn't regret using the shopping channel combination.							

SECTION 2: PRE-PURCHASE PHASE (First encounter and searching for information)

Please indicate the extent to which you agree that you have adopted the following behaviour when using [Channel A] for the pre-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I asked others for information on what the channel offered.							
I searched for information on how to access the channel.							
I paid attention to how others behaved to use the channel well.							
I clearly explained to the company what I wanted the company to do.							
I gave the company proper information.							
I provided the necessary information to facilitate the performance of the company.							
I answered all the product-related							

questions that were inquired by the company.							
I performed all the tasks that are required.							
I adequately completed all the expected behaviours.							
I followed the directives or orders gave by the company.							

Please indicate the extent to which you agree that you have adopted the following behaviours when using [Channel A] for the pre-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I was friendly to the employee and other customers.							
I was kind to the employee and other customers.							
I was courteous to the employee and other customers.							
I didn't act rudely to the employee or other customers.							
If I had a useful idea on how to improve the service, I would let the company know.							
When I received good service, I commended about it.							
When I experienced a problem, I let the company know about it.							
I said positive things about the channel to others.							
I recommended the channel to others.							
I encouraged friends and relatives to use the channel.							

Please indicate the extent to which you agree that you have adopted the following behaviours when using [Channel A] for the pre-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I would assist other customers if they needed my help.							
I would help other customers if they seemed to have problems.							
I taught other customers to use the channel correctly.							
I gave advice to other customers.							
If the channel did not deliver as expected, I would be willing to put up with it.							
If the employee or system made a mistake during service delivery, I would be willing to be patient.							
If I had to wait longer than I normally expected to receive service, I would be willing to adapt.							

Please indicate how accurately the following words describe your feelings toward [Channel A] as your channel choice for the pre-purchase activities of your recent shopping experience.

Angry							Content
Unhappy							Happy
Displeased							Pleased
Sad							Joyful
Disappointed							Delighted
Bored							Entertained
Cheerful							Depressed

Quiet								Anxious
Enthusiastic								Calm
Nervous								Relaxed
Active								Passive
Surprised								Indifferent

Please indicate the extent to which you agree with the following statements as your reasons for using [Channel A] for the pre-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I could get prompt responses from the company.							
I could get the company promises to deliver on time.							
The process was standardised and simplified.							
I was capable to tell the exact time of service completion.							
I could have clear and understandable interactions with the company.							
The channel was easy to use.							
The shopping activities took less time when using the channel.							
The channel was a convenient way to shop.							
I could get up-to-date and error-free information.							
The language was easily understandable.							
The information was explained in a meaningful way.							
I could get as much information as I needed.							

Please indicate the extent to which you agree with the following statements as your reasons for using [Channel A] for the pre-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I could meet social and friendly employees.							
The employees were capable enough to deliver error-free services.							
The employees were willing to solve my problems.							
The employees always helped me out.							
I was allowed to communicate with other customers freely.							
The presence of other customers irritated me.							
The presence of other customers gave me social surroundings.							
The number of customers affected my perceived reputation of the brand.							
The recommendation made by other customers affected me.							

Please indicate the extent to which you agree with the following statements as your reasons for using [Channel A] for the pre-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The promotional offers were attractive.							
The products offered on the channel had competitive prices.							
The company was capable to handle my shopping activities when using the channel.							

I could access to a range of product that met my specific requirements.							
I could get product tailored to meet my needs.							
I could get help at the time of emergencies.							
The display had high quality.							
The appearance was visually appealing.							
The layout was proper.							

Please indicate how well the following statements describe your experience using the [Channel A] for the pre-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I saved money because I used the channel.							
The products on the channel were inexpensive.							
I got my shopping activities done cheaper than if I had done them elsewhere.							
I was able to get everything I needed at one stop.							
I was able to complete my shopping activities without disruptive queuing or others.							
I was able to complete my shopping activities conveniently.							
Using the channel "got me way from it all".							
Using the channel made me feel like I was in another world.							

I got so involved that I forgot everything else.							
--	--	--	--	--	--	--	--

Please indicate how well the following statements describe your experience using the [Channel A] for the pre-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I felt adventurous and wanted to try different ways to complete my task.							
I gained insights and new ideas to complete my task.							
I wanted to explore many options while completing my task.							
Using the channel fit the impression that I wanted to give to others.							
I was eager to tell my friends or acquaintances about the channel.							
I felt that I belong to the customer segment of the channel.							
I found the channel to be consistent with my style.							
I felt like a smart shopper.							
The experience from using the channel gave me something that was personally important or pleasing for me.							

SECTION 3: PURCHASE PHASE (The actual transaction of buying a product)

Please indicate the extent to which you agree that you have adopted the following behaviour when using [Channel B] for the purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I asked others for information on what the channel offered.							
I searched for information on how to access the channel.							
I paid attention to how others behaved to use the channel well.							
I clearly explained to the company what I wanted the company to do.							
I gave the company proper information.							
I provided the necessary information to facilitate the performance of the company.							
I answered all the product-related questions that were inquired by the company.							
I performed all the tasks that are required.							
I adequately completed all the expected behaviours.							
I followed the directives or orders gave by the company.							

Please indicate the extent to which you agree that you have adopted the following behaviours when using [Channel B] for the purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I was friendly to the employee and other customers.							

I was kind to the employee and other customers.							
I was courteous to the employee and other customers.							
I didn't act rudely to the employee or other customers.							
If I had a useful idea on how to improve the service, I would let the company know.							
When I received good service, I commended about it.							
When I experienced a problem, I let the company know about it.							
I said positive things about the channel to others.							
I recommended the channel to others.							
I encouraged friends and relatives to use the channel.							

Please indicate the extent to which you agree that you have adopted the following behaviours when using [Channel B] for the purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I would assist other customers if they needed my help.							
I would help other customers if they seemed to have problems.							
I taught other customers to use the channel correctly.							
I gave advice to other customers.							
If the channel did not deliver as expected, I							

would be willing to put up with it.							
If the employee or system made a mistake during service delivery, I would be willing to be patient.							
If I had to wait longer than I normally expected to receive service, I would be willing to adapt.							

Please indicate how accurately the following words describe your feelings toward [Channel B] as your channel choice for the purchase activities of your recent shopping experience.

Angry							Content
Unhappy							Happy
Displeased							Pleased
Sad							Joyful
Disappointed							Delighted
Bored							Entertained
Cheerful							Depressed
Quiet							Anxious
Enthusiastic							Calm
Nervous							Relaxed
Active							Passive
Surprised							Indifferent

Please indicate the extent to which you agree with the following statements as your reasons for using [Channel B] for the purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I could get prompt responses from the company.							
I could get the company promises to deliver on time.							

The process was standardised and simplified.							
I was capable to tell the exact time of service completion.							
I could have clear and understandable interactions with the company.							
The channel was easy to use.							
The shopping activities took less time when using the channel.							
The channel was a convenient way to shop.							
I could get up-to-date and error-free information.							
The language was easily understandable.							
The information was explained in a meaningful way.							
I could get as much information as I needed.							

Please indicate the extent to which you agree with the following statements as your reasons for using [*Channel B*] for the purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I could meet social and friendly employees.							
The employees were capable enough to deliver error-free services.							
The employees were willing to solve my problems.							
The employees always helped me out.							

I was allowed to communicate with other customers freely.							
The presence of other customers irritated me.							
The presence of other customers gave me social surroundings.							
The number of customers affected my perceived reputation of the brand.							
The recommendation made by other customers affected me.							

Please indicate the extent to which you agree with the following statements as your reasons for using [Channel B] for the purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The promotional offers were attractive.							
The products offered on the channel had competitive prices.							
The company was capable to handle my shopping activities when using the channel.							
I could access to a range of product that met my specific requirements.							
I could get product tailored to meet my needs.							
I could get help at the time of emergencies.							
The display had high quality.							
The appearance was visually appealing.							
The layout was proper.							

Please indicate how well the following statements describe your experience using the [Channel B] for the purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I saved money because I used the channel.							
The products on the channel were inexpensive.							
I got my shopping activities done cheaper than if I had done them elsewhere.							
I was able to get everything I needed at one stop.							
I was able to complete my shopping activities without disruptive queuing or others.							
I was able to complete my shopping activities conveniently.							
Using the channel "got me way from it all".							
Using the channel made me feel like I was in another world.							
I got so involved that I forgot everything else.							

Please indicate how well the following statements describe your experience using the [Channel B] for the purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I felt adventurous and wanted to try different ways to complete my task.							

I gained insights and new ideas to complete my task.							
I wanted to explore many options while completing my task.							
Using the channel fit the impression that I wanted to give to others.							
I was eager to tell my friends or acquaintances about the channel.							
I felt that I belong to the customer segment of the channel.							
I found the channel to be consistent with my style.							
I felt like a smart shopper.							
The experience from using the channel gave me something that was personally important or pleasing for me.							

Of the colours listed below, please select the colour "orange".

- Black
- Yellow
- Orange
- Green
- Brown
- Blue
- White
- Red
- Purple
- Pink

SECTION 4: POST-PURCHASE PHASE (Customer support after the purchase)

Please indicate the extent to which you agree that you have adopted the following behaviour when using [Channel C] for the post-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I asked others for information on what the channel offered.							
I searched for information on how to access the channel.							
I paid attention to how others behaved to use the channel well.							
I clearly explained to the company what I wanted the company to do.							
I gave the company proper information.							
I provided the necessary information to facilitate the performance of the company.							
I answered all the product-related questions that were inquired by the company.							
I performed all the tasks that are required.							
I adequately completed all the expected behaviours.							
I followed the directives or orders gave by the company.							

Please indicate the extent to which you agree that you have adopted the following behaviours when using [Channel C] for the post-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I was friendly to the employee and other customers.							

I was kind to the employee and other customers.							
I was courteous to the employee and other customers.							
I didn't act rudely to the employee or other customers.							
If I had a useful idea on how to improve the service, I would let the company know.							
When I received good service, I commended about it.							
When I experienced a problem, I let the company know about it.							
I said positive things about the channel to others.							
I recommended the channel to others.							
I encouraged friends and relatives to use the channel.							

Please indicate the extent to which you agree that you have adopted the following behaviours when using [Channel C] for the post-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I would assist other customers if they needed my help.							
I would help other customers if they seemed to have problems.							
I taught other customers to use the channel correctly.							
I gave advice to other customers.							
If the channel did not deliver as expected, I							

would be willing to put up with it.							
If the employee or system made a mistake during service delivery, I would be willing to be patient.							
If I had to wait longer than I normally expected to receive service, I would be willing to adapt.							

Please indicate how accurately the following words describe your feelings toward [Channel C] as your channel choice for the post-purchase activities of your recent shopping experience.

Angry							Content
Unhappy							Happy
Displeased							Pleased
Sad							Joyful
Disappointed							Delighted
Bored							Entertained
Cheerful							Depressed
Quiet							Anxious
Enthusiastic							Calm
Nervous							Relaxed
Active							Passive
Surprised							Indifferent

Please indicate the extent to which you agree with the following statements as your reasons for using [Channel C] for the post-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I could get prompt responses from the company.							
I could get the company promises to deliver on time.							
The process was standardised and simplified.							

I was capable to tell the exact time of service completion.							
I could have clear and understandable interactions with the company.							
The channel was easy to use.							
The shopping activities took less time when using the channel.							
The channel was a convenient way to shop.							
I could get up-to-date and error-free information.							
The language was easily understandable.							
The information was explained in a meaningful way.							
I could get as much information as I needed.							

Please indicate the extent to which you agree with the following statements as your reasons for using [Channel C] for the post-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I could meet social and friendly employees.							
The employees were capable enough to deliver error-free services.							
The employees were willing to solve my problems.							
The employees always helped me out.							
I was allowed to communicate with other customers freely.							
The presence of other customers irritated me.							

The presence of other customers gave me social surroundings.							
The number of customers affected my perceived reputation of the brand.							
The recommendation made by other customers affected me.							

Please indicate the extent to which you agree with the following statements as your reasons for using [*Channel C*] for the post-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The promotional offers were attractive.							
The products offered on the channel had competitive prices.							
The company was capable to handle my shopping activities when using the channel.							
I could access to a range of product that met my specific requirements.							
I could get product tailored to meet my needs.							
I could get help at the time of emergencies.							
The display had high quality.							
The appearance was visually appealing.							
The layout was proper.							

Please indicate how well the following statements describe your experience using the [*Channel C*] for the post-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree

I saved money because I used the channel.							
The products on the channel were inexpensive.							
I got my shopping activities done cheaper than if I had done them elsewhere.							
I was able to get everything I needed at one stop.							
I was able to complete my shopping activities without disruptive queuing or others.							
I was able to complete my shopping activities conveniently.							
Using the channel “got me way from it all”.							
Using the channel made me feel like I was in another world.							
I got so involved that I forgot everything else.							

Please indicate how well the following statements describe your experience using the [Channel C] for the post-purchase activities of your recent shopping experience.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I felt adventurous and wanted to try different ways to complete my task.							
I gained insights and new ideas to complete my task.							
I wanted to explore many options while completing my task.							
Using the channel fit the impression that I							

wanted to give to others.							
I was eager to tell my friends or acquaintances about the channel.							
I felt that I belong to the customer segment of the channel.							
I found the channel to be consistent with my style.							
I felt like a smart shopper.							
The experience from using the channel gave me something that was personally important or pleasing for me.							

SECTION 5: INDIVIDUAL CONTEXT

Please indicate the extent to which you agree with the following statements

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Trying new channels would be a bother for me.							
The cost in time, effort and grief to switch channels is high for me.							
It's just not worth the hassle for me to switch channels for my shopping activities.							
I feel apprehensive about using technology for my shopping.							
Technology terms sound like confusing jargon to me.							
I have avoided using technology for my shopping because it is unfamiliar to me.							
I hesitate to use most forms of technology for my shopping							

because I fear to make mistakes that I cannot correct.							
Contact with products that I would like to buy makes shopping enjoyable.							
Contact with products that I would like to buy is important to me.							
It bothers me to use a machine for shopping when I could engage with a live person instead.							
I intensively use the product I bought.							
I am intensively involved with the product I bought.							
I feel like I am an expert of the product I bought.							
I am intensively interested in the product I bought, relative to other people.							

Please indicate the extent to which you agree with the following statements

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
My present job gives me a sense of accomplishment.							
My job is exciting.							
My job is satisfying.							
I am really doing something worthwhile in my job.							

Do you have any comments on the questionnaire? _____

Appendix B: Questionnaire for Study 2

How old are you?

- 24 years or below
- 25 - 29 years
- 30 - 39 years
- 40 - 54 years
- 55 years or above

Gender What is your gender?

- Female
- Male
- Other

Education What is the highest level of education that you have completed?

- Primary school or below
- GCSEs or equivalent
- A-Level or equivalent
- University undergraduate programme
- University post-graduate programme or above

Residence What is your area of residence?

- Urbanised Area (50,000 or more people)
- Urban Cluster (at least 2,500 and less than 50,000 people)
- Rural (all other areas)

Income What is your personal annual income before taxes and other deductions?

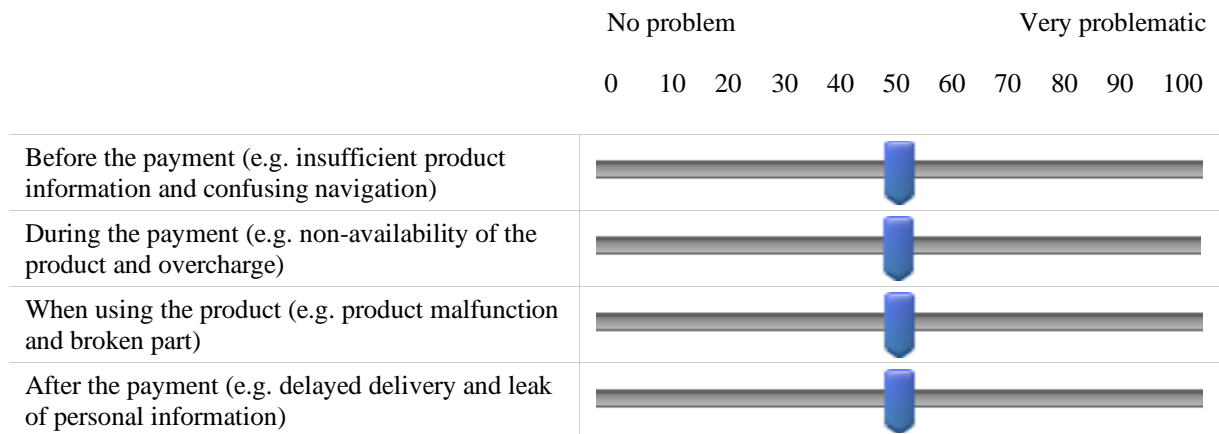
- Below £10,000
- £10,001 - £20,000
- £20,001 - £30,000
- £30,001 - £40,000
- £40,000 - £50,000
- Above £50,000

A customer journey failure, simply defined, is a complication in a shopping process or consumption that adversely affects the entire experience with a product or a brand. A failure incident may occur at any shopping stage, whether before the payment (e.g. insufficient product information and confusing navigation), during the payment (e.g. non-availability of the product and overcharge), while using the product (product malfunction and broken part), or after the payment (e.g. wrong item delivered and leak of personal information).

Please answer the questions in this questionnaire by recalling the most recent customer journey failure that you have experienced in the past six months (between July 2020 and December 2020).

When did the failure occur? Please click on the arrow to select the month that the failure incident took place.

Problematic stages Please slide the arrow on each row to rate how problematic the following stage was for your recent shopping experience. Even though the arrows have already correctly positioned, you may need to click on them to turn blue to confirm your answers.



The rest of this questionnaire contains questions regarding the failure incident that you have selected.

Considering the selected failure incident, please tick on all the channels that you used for the pre-purchase (before the payment), purchase (during the payment) and post-purchase (after the payment) activities. You may select more than one channel per shopping stage.

	Physical stores	Websites	Mobile application	Social media	Self-service kiosk	Call centre with an employee	Instant message application or Live chat	Chat bot or Automation of call centre	Email or Letter
Pre-purchase activities (e.g first encounter with the product and searching for product information)									
Purchase activities (e.g placing orders and making payments)									
Post-purchase activities (e.g requesting support or									

returning product)									
--------------------	--	--	--	--	--	--	--	--	--

Please indicate the extent to which you agree that you have done the following behaviours prior to the failure incident.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I spent a lot of time-sharing information about my needs and opinions with the company.							
I put a lot of effort into expressing my personal needs to the company.							
I provided suggestions to the company for improving the product performance.							
I had a high level of participation in the production process.							
I was very much involved in deciding how the product should be produced.							

Please indicate how accurately the following words describe your emotions toward the product prior to the failure incident.

Unhappy							Happy
Annoyed							Pleased
Unsatisfied							Satisfied
Melancholic							Contented
Relaxed							Stimulated
Calm							Excited
Sleepy							Wide awake
Unaroused							Aroused

Please indicate how accurately the following statements describe your shopping experience with this particular product prior to the failure incident.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
While shopping, I found just I was looking for.							
I could not buy what I really needed.							
It was a good shopping experience because it was very quick.							
The shopping truly felt like an escape.							
This shopping was truly a joy.							
I enjoyed being immersed in exciting new products or services.							
While shopping, I felt a sense of adventure.							

Based on your first impression about the failure incident, please indicate how accurately the following statements describe the severity of the incident that you experienced.

The failure incident caused me...

minor problems							major problems
small inconveniences							big inconveniences
minor aggravation							major aggravation

Please indicate how accurately the following statements describe your first impression about the failure incident.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I thought I could cope with the situation.							
I knew I would find a way to alter the situation.							
The company was responsible for the problem I experienced.							
The problem that I encountered was all the company's fault.							
The company should be blamed for this problem.							
In general, I would not be surprised if I encounter some kind of problem again when using the product in the future.							
I would consider myself lucky if I do not experience some kind of problem with the product again.							
I considered the odds of running into a problem again pretty high.							

Please indicate how accurately the following words describe your feelings when encountering with the failure incident.

Anxious							Calm
Threatened							Safe
Upset							Pleased

Please indicate the extent to which you agree that you had done the following behaviours to resolve the failure incident.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I tried to come up with a strategy about how to solve the problem.							
I thought about the best way to handle the problem.							
I concentrated my efforts on doing something about the problem.							
I took action to make the situation better.							
I accepted the reality that the failure has happened.							
I learned to live with the problem.							
I tried to look at the brighter side of the problem.							
I looked for the good in what happened.							

Please indicate the extent to which you agree that you had done the following behaviours to resolve the failure incident.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I tried to get advice from other people about what to do in such case.							
I got help and advice from other people who have had similar experiences.							
I got emotional support from others regarding the failure incident.							

I got comfort and understanding from someone regarding the failure incident.							
I gave up trying to deal with the failure incident.							
I gave up the attempt to cope with the failure incident.							
I said to myself "this is not real".							
I refused to believe that the failure incident has happened.							

Please indicate how accurately the following statements describe your state of mind after responded to the failure incident.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I am satisfied with the way I have handled the failure incident.					
I feel favourably about how I have handled the failure incident.					
I like how I have handled the product failure incident.					
My satisfaction with this company has increased after the failure incident.					
My impression of this company has improved after the failure incident.					
I now have a more positive attitude toward this company after the failure incident.					

Please indicate how accurately the following statements describe your intentions with the company after the failure incident.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I would say something positive about this company.							

I would recommend this company to my family and friends.							
If my family or friends were looking for this product category, I would tell them to try this company.							
I would continue using this company.							
I would consider this company as my first choice whenever I need this product category again in the future.							
If there were similar products provided by competitors, I would continue buying the products from this company.							

Please indicate the degree to which you agree with the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Even if I won a great deal of money on the pools, I would continue to work somewhere.							
Having a job is very important to me.							
I should hate to be on the dole.							
I would soon get very bored if I had no work to do.							
The most important things that happen to me involve work.							
If unemployment benefit was really high, I would still prefer to work.							

During the past few months, there may have been some restrictions due to the on-going pandemic that potentially affect your daily life and shopping experience. Please indicate the extent to which you agree with the following statements about your situation during the time of the failure.

During the time of the failure incident...

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
There were restrictions on leaving the house in my area of residence.							
Leaving the house was only permitted in specific professions (e.g., health care) or circumstances (e.g., grocery shopping).							
Leaving the house was only permitted in small groups (i.e., up to 5 persons).							
There were restrictions on public life in my area of residence.							
Educational facilities (Universities, Schools, Nursery schools) were closed.							
Restaurants, Bars, Cafés, and similar facilities were closed.							
Local public transport was restricted.							
Availability of household products was restricted.							
Availability of food was restricted.							

References

- Aarikka-Stenroos, L. and Jaakkola, E. (2012) 'Value co-creation in knowledge intensive business services: A dyadic perspective on the joint problem solving process', *Industrial Marketing Management*, 41(1), pp. 15-26.
- Acquila-Natale, E. and Iglesias-Pradas, S. (2021) 'A matter of value? Predicting channel preference and multichannel behaviors in retail', *Technological Forecasting and Social Change*, 162, p. 120401.
- Agnihotri, D., Kulshreshtha, K. and Tripathi, V. (2021) 'Emergence of social media as new normal during COVID-19 pandemic: a study on innovative complaint handling procedures in the context of banking industry', *International Journal of Innovation Science*, ahead-of-print(ahead-of-print).
- Ahearne, M., Bhattacharya, C.B. and Gruen, T. (2005) 'Antecedents and consequences of customer-company identification: Expanding the role of relationship marketing', *Journal of applied psychology*, 90(3), p. 574.
- Aichner, T. and Gruber, B. (2017) 'Managing customer touchpoints and customer satisfaction in B2B mass customization: A case study', *International Journal of Industrial Engineering and Management*, 8(3), pp. 131-140.
- Åkesson, M., Edvardsson, B. and Tronvoll, B. (2014) 'Regular issue paper: Customer experience from a self-service system perspective', *Journal of Service Management*, 25(5), pp. 677-698.
- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A. and Wood, S. (1997) 'Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Electronic Marketplaces', *Journal of Marketing*, 61(3), pp. 38-53.
- Albright, J.J. and Park, H. (2009) *Confirmatory Factor Analysis using Amos, LISREL, Mplus, SAS/STAT CALIS*. Indiana University.
- 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*, 33(3), pp. 457-474.
- Anderl, E., Schumann, J.H. and Kunz, W. (2016) 'Helping Firms Reduce Complexity in Multichannel Online Data: A New Taxonomy-Based Approach for Customer Journeys', *Journal of Retailing*, 92(2), pp. 185-203.
- Anderson, J.C. and Gerbing, D.W. (1988) 'Structural equation modeling in practice: A review and recommended two-step approach', *Psychological bulletin*, 103(3), p. 411.
- Anshari, M., Almunawar, M.N., Lim, S.A. and Al-Mudimigh, A. (2019) 'Customer relationship management and big data enabled: Personalization & customization of services', *Applied Computing and Informatics*, 15(2), pp. 94-101.
- Aoki, K., Obeng, E., Borders, A.L. and Lester, D.H. (2019) 'Can brand experience increase customer contribution: How to create effective sustainable touchpoints with customers?', *Journal of Global Scholars of Marketing Science*, 29(1), pp. 51-62.
- Arbuckle, J.L. (2011) *IBM SPSS Amos 20 user's guide*. Mount Pleasant: Amos Development Corporation.
- Aronson, E. and Carlsmith, J.M. (1990) *Methods of research in social psychology*. 2nd ed.. edn. New York: New York : McGraw-Hill.
- Arora, S. and Sahney, S. (2019) 'Examining consumers' webrooming behavior: an integrated approach', *Marketing Intelligence & Planning*, 37(3), pp. 339-354.
- Aw, E.C.-X. (2020) 'Understanding consumers' paths to webrooming: A complexity approach', *Journal of Retailing and Consumer Services*, 53, p. 101991.
- Aw, E.C.-X., Basha, N.K., Ng, S.I. and Ho, J.A. (2021) 'Searching online and buying offline: Understanding the role of channel-, consumer-, and product-related factors in determining webrooming intention', *Journal of Retailing and Consumer Services*, 58, p. 102328.

- Babin, B.J. and Attaway, J.S. (2000) 'Atmospheric Affect as a Tool for Creating Value and Gaining Share of Customer', *Journal of Business Research*, 49(2), pp. 91-99.
- Babin, B.J., Darden, W.R. and Griffin, M. (1994) 'Work and/or fun: measuring hedonic and utilitarian shopping value', *Journal of consumer research*, 20(4), pp. 644-656.
- Bagherzadeh, R., Rawal, M., Wei, S. and Saavedra Torres, J.L. (2020) 'The journey from customer participation in service failure to co-creation in service recovery', *Journal of Retailing and Consumer Services*, 54, p. 102058.
- Bagozzi, R.P. (1980) *Causal models in marketing*. New York, NY: Wiley.
- Bagozzi, R.P., Gopinath, M. and Nyer, P.U. (1999) 'The role of emotions in marketing', *Journal of the academy of marketing science*, 27(2), pp. 184-206.
- Bagozzi, R.P. and Yi, Y. (1990) 'Assessing method variance in multitrait-multimethod matrices: The case of self-reported affect and perceptions at work', *Journal of Applied Psychology*, 75(5), p. 547.
- Bahoo, S., Alon, I. and Paltrinieri, A. (2020) 'Corruption in international business: A review and research agenda', *International Business Review*, 29(4), p. 101660.
- Bakk, Z., Tekle, F.B. and Vermunt, J.K. (2013) 'Estimating the Association between Latent Class Membership and External Variables Using Bias-adjusted Three-step Approaches', *Sociological Methodology*, 43(1), pp. 272-311.
- Balaji, M.S., Khong, K.W. and Chong, A.Y.L. (2016) 'Determinants of negative word-of-mouth communication using social networking sites', *Information & Management*, 53(4), pp. 528-540.
- Balasubramanian, S., Raghunathan, R. and Mahajan, V. (2005) 'Consumers in a multichannel environment: Product utility, process utility, and channel choice', *Journal of interactive marketing*, 19(2), pp. 12-30.
- Ballestar, M.T., Grau-Carles, P. and Sainz, J. (2018) 'Customer segmentation in e-commerce: Applications to the cashback business model', *Journal of Business Research*, 88, pp. 407-414.
- Barari, M. and Furrer, O. (2018) 'The customer experience ecosystem in two cultural contexts', *Journal of Financial Services Marketing*, 23(3-4), pp. 234-243.
- Barari, M., Ross, M. and Surachartkumtonkun, J. (2020) 'Negative and positive customer shopping experience in an online context', *Journal of Retailing and Consumer Services*, 53, p. 101985.
- Barari, M., Ross, M., Thaichon, S. and Surachartkumtonkun, J. (2020) 'A meta-analysis of customer engagement behaviour', *International Journal of Consumer Studies*.
- Barbu, C.M., Florea, D.L., Dabija, D.-C. and Barbu, M.C.R. (2021) 'Customer experience in fintech', *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), pp. 1415-1433.
- Barile, S., Ciasullo, M.V., Troisi, O. and Sarno, D. (2017) 'The role of technology and institutions in tourism service ecosystems: Findings from a case study', *TQM Journal*, 29(6), pp. 811-833.
- Barker, D. (2011) 'Customer data integration: Reaching more consumers with certainty', *Journal of Database Marketing and Customer Strategy Management*, 18(3), pp. 214-219.
- Barnes, D.C., Mesmer-Magnus, J., Scribner, L.L., Krallman, A. and Guidice, R.M. (2021) 'Customer delight during a crisis: understanding delight through the lens of transformative service research', *Journal of Service Management*, 32(1), pp. 129-141.
- Barwitz, N. and Maas, P. (2018) 'Understanding the Omnichannel customer journey: determinants of interaction choice', *Journal of interactive marketing*, 43, pp. 116-133.
- Bassegy, M. (1995) *Creating education through research: a global perspective of educational research for the 21st century*. Kirklington Moor Press in conjunction with the British Educational Research Association.
- Basso, K. and Pizzutti, C. (2016) 'Trust recovery following a double deviation', *Journal of Service Research*, 19(2), pp. 209-223.
- Baumgartner, H. and Steenkamp, J.-B.E.M. (2001) 'Response Styles in Marketing Research: A Cross-National Investigation', *Journal of Marketing Research*, 38(2), pp. 143-156.

- Baumgartner, T., Heinrichs, M., Vonlanthen, A., Fischbacher, U. and Fehr, E. (2008) 'Oxytocin Shapes the Neural Circuitry of Trust and Trust Adaptation in Humans', *Neuron*, 58(4), pp. 639-650.
- Baxendale, S., Macdonald, E.K. and Wilson, H.N. (2015) 'The Impact of Different Touchpoints on Brand Consideration', *Journal of Retailing*, 91(2), pp. 235-253.
- Beaudry, A. and Pinsonneault, A. (2005) 'Understanding User Responses to Information Technology: A Coping Model of User Adaptation', *MIS Quarterly*, 29(3), pp. 493-524.
- Becker, L. and Jaakkola, E. (2020) 'Customer experience: fundamental premises and implications for research', *Journal of the Academy of Marketing Science*, 48, pp. 630-648.
- Belanche, D., Casaló, L.V., Flavián, C. and Schepers, J. (2020) 'Robots or frontline employees? Exploring customers' attributions of responsibility and stability after service failure or success', *Journal of Service Management*, 31(2), pp. 267-289.
- Beltagui, A., Candi, M. and Riedel, J.C. (2012) 'Design in the experience economy: Using emotional design for service innovation', in *Interdisciplinary Approaches to Product Design, Innovation, & Branding in International Marketing*. Wagon Lance, Bigley: Emerald Group Publishing Limited, pp. 111-135.
- Berger, P. and Luckmann, T. (1967) 'The reality of social construction: Treatise in sociology of knowledge'. Garden City, NY: Anchor.
- Berman, B. (2020) 'Paths to Purchase: The Seven Steps of Customer Purchase Journey Mapping', *Rutgers Business Review*, 5(1), pp. 84-100.
- Betsch, C., Wieler, L.H. and Habersaat, K. (2020) 'Monitoring behavioural insights related to COVID-19', *The Lancet*, 395(10232), pp. 1255-1256.
- Bettencourt, L.A. (1997) 'Customer voluntary performance: Customers as partners in service delivery', *Journal of retailing*, 73(3), pp. 383-406.
- Bhatnagar, A. and Ghose, S. (2004) 'A latent class segmentation analysis of e-shoppers', *Journal of business research*, 57(7), pp. 758-767.
- Bhatnagar, A. and Papatla, P. (2016) 'Increasing online sales by facilitating spillover shopping', *Journal of Retailing and Consumer Services*, 29, pp. 58-69.
- Bhide, M., Negi, S., Subramaniam, L.V. and Gupta, H. (2009) 'Customer-focused service management for contact centers', *IBM Journal of Research & Development*, 53(6), pp. 9:1-9:12.
- Bi, J.-W., Liu, Y., Fan, Z.-P. and Zhang, J. (2020) 'Exploring asymmetric effects of attribute performance on customer satisfaction in the hotel industry', *Tourism Management*, 77, p. 104006.
- Bigné, J.E., Mattila, A.S. and Andreu, L. (2008) 'The impact of experiential consumption cognitions and emotions on behavioral intentions', *Journal of Services Marketing*, 22(4), pp. 303-315.
- Bijmolt, T.H., Broekhuis, M., de Leeuw, S., Hirche, C., Rooderkerk, R.P., Sousa, R. and Zhu, S.X. (2019) 'Challenges at the marketing–operations interface in omni-channel retail environments', *Journal of Business Research*.
- Bitner, M.J., Booms, B.H. and Tetreault, M.S. (1990) 'The service encounter: diagnosing favorable and unfavorable incidents', *Journal of marketing*, 54(1), pp. 71-84.
- Blackie, R. (2015) 'Do you know what you're doing in social', *Journal of Direct, Data and Digital Marketing Practice*, 16(4), pp. 282-284.
- Blackmon, K. and Maylor, H. (2005) 'Researching business and management', *HM Blackmon, Researching Business and Management. China: Palgrave MacMillan*.
- Blodgett, J.G. and Anderson, R.D. (2000) 'A Bayesian Network Model of the Consumer Complaint Process', *Journal of Service Research*, 2(4), pp. 321-338.
- Blodgett, J.G., Wakefield, K.L. and Barnes, J.H. (1995) 'The effects of customer service on consumer complaining behavior', *Journal of Services Marketing*, 9(4), pp. 31-42.
- Blut, M., Teller, C. and Floh, A. (2018) 'Testing Retail Marketing-Mix Effects on Patronage: A Meta-Analysis', *Journal of Retailing*, 94(2), pp. 113-135.

- Bolck, A., Croon, M. and Hageaars, J. (2004) 'Estimating Latent Structure Models with Categorical Variables: One-Step Versus Three-Step Estimators', *Political Analysis*, 12(1), pp. 3-27.
- Bolton, R.N. and Drew, J.H. (1991) 'A Multistage Model of Customers' Assessments of Service Quality and Value', *Journal of Consumer Research*, 17(4), pp. 375-384.
- Bolton, R.N., Gustafsson, A., McColl-Kennedy, J., Sirianni, N.J. and Tse, D.K. (2014) 'Small details that make big differences: A radical approach to consumption experience as a firm's differentiating strategy', *Journal of Service Management*, 25(2), pp. 253-274.
- Booth, A. (2004) 'Formulating answerable questions', *Evidence Based Practice: An Information Professional's Handbook*. Eds. Andrew Booth and Anne Brice. London: Facet, 200, pp. 61-70.
- Botschen, G. and Wegerer, P.K. (2017) 'Brand-driven retail format innovation: a conceptual framework', *International Journal of Retail and Distribution Management*, 45(7-8), pp. 874-891.
- Bougie, R., Pieters, R. and Zeelenberg, M. (2003) 'Angry Customers don't Come Back, They Get Back: The Experience and Behavioral Implications of Anger and Dissatisfaction in Services', *Journal of the Academy of Marketing Science*, 31(4), pp. 377-393.
- Braidford, P. and Stone, I. (2016) 'Providing business support to SMEs—how to encourage firms' engagement', *Zarządzanie Publiczne*, (4 (38)), pp. 45-61.
- Brakus, J.J., Schmitt, B.H. and Zarantonello, L. (2009) 'Brand experience: what is it? How is it measured? Does it affect loyalty?', *Journal of Marketing*, 73(3), pp. 52-68.
- Bredo, E. and Feinberg, W. (1982) *Knowledge and Values in Social and Educational Research*. Philadelphia: Temple University Press.
- Breidbach, C.F., Brodie, R. and Hollebeek, L. (2014) 'Beyond virtuality: From engagement platforms to engagement ecosystems', *Managing Service Quality*, 24(6), pp. 592-611.
- Brodie, R.J., Ilic, A., Juric, B. and Hollebeek, L. (2013) 'Consumer engagement in a virtual brand community: An exploratory analysis', *Journal of business research*, 66(1), pp. 105-114.
- Brown, J. and Kirk-Wade, E. (2021) *Coronavirus: A history of English lockdown laws*. London, UK: House of Commons Library. [Online]. Available at: <https://commonslibrary.parliament.uk/research-briefings/cbp-9068/>.
- Brynjolfsson, E., Hu, Y. and Rahman, M.S. (2009) 'Battle of the Retail Channels: How Product Selection and Geography Drive Cross-Channel Competition', *Management Science*, 55(11), pp. 1755-1765.
- Brynjolfsson, E., Hu, Y.J. and Rahman, M.S. (2013) 'Competing in the age of omnichannel retailing', *MIT Sloan Management Review*, 54(4), pp. 23-29.
- Buchanan, L., Simmons, C.J. and Bickart, B.A. (1999) 'Brand equity dilution: retailer display and context brand effects', *Journal of Marketing Research*, 36(3), pp. 345-355.
- Busdieker, K.H. (2016) 'Why the Customer Journey Matters to Retailers', *Marketing Insights*, (Fall/ Winter 2016), pp. 1-4.
- Buttle, F. (1996) 'SERVQUAL: review, critique, research agenda', *European Journal of Marketing*, 30(1), pp. 8-32.
- Byrne, B.M., Shavelson, R.J. and Muthén, B. (1989) 'Testing for the equivalence of factor covariance and mean structures: the issue of partial measurement invariance', *Psychological bulletin*, 105(3), p. 456.
- Calder, B.J., Phillips, L.W. and Tybout, A.M. (1981) 'Designing research for application', *Journal of consumer research*, 8(2), pp. 197-207.
- Campbell-Kelly, M. and Garcia-Swartz, D.D. (2013) 'The History of the Internet: The Missing Narratives', *Journal of Information Technology*, 28(1), pp. 18-33.
- Campbell, C., Sands, S., Ferraro, C., Tsao, H.-Y. and Mavrommatis, A. (2020) 'From data to action: How marketers can leverage AI', *Business Horizons*, 63(2), pp. 227-243.
- Campbell, D.T. and Stanley, J.C. (2015) *Experimental and quasi-experimental designs for research*. Ravenio Books.

- Canabal, A. and White III, G.O. (2008) 'Entry mode research: Past and future', *International Business Review*, 17(3), pp. 267-284.
- Canfield, D.D.S. and Basso, K. (2017) 'Integrating Satisfaction and Cultural Background in the Customer Journey: A Method Development and Test', *Journal of International Consumer Marketing*, 29(2), pp. 104-117.
- Carlson, J., O'Cass, A. and Ahrholdt, D. (2015) 'Assessing customers' perceived value of the online channel of multichannel retailers: A two country examination', *Journal of Retailing and Consumer Services*, 27, pp. 90-102.
- Carlson, K.D. and Wu, J. (2011) 'The Illusion of Statistical Control: Control Variable Practice in Management Research', *Organizational Research Methods*, 15(3), pp. 413-435.
- Carlson, N.R., Miller, H.L., Heth, C.D., Donahoe, J.W. and Martin, G.N. (2014) *Psychology : The Science of Behavior*. Seventh edn. Essex, UK: Pearson.
- Carson, D., Gilmore, A., Perry, C. and Gronhaug, K. (2001) *Qualitative marketing research*. Sage.
- Carver, C.S. and Connor-Smith, J. (2009) 'Personality and Coping', *Annual Review of Psychology*, 61(1), pp. 679-704.
- Carver, C.S. and Scheier, M.F. (1994) 'Situational coping and coping dispositions in a stressful transaction', *Journal of personality and social psychology*, 66(1), p. 184.
- Cassab, H. and MacLachlan, D.L. (2009) 'A consumer-based view of multi-channel service', *Journal of Service Management*, 20(1), pp. 52-75.
- Cavan, S. 83 (1977) 'DOUGLAS, JACK D. "Investigative Social Research: Individual and Team Field Research" (Book Review)'. Chicago: Chicago: University of Chicago Press, p. 809.
- Cavanaugh, L.A., Bettman, J.R. and Luce, M.F. (2015) 'Feeling Love and Doing More for Distant Others: Specific Positive Emotions Differentially Affect Prosocial Consumption', *Journal of Marketing Research*, 52(5), pp. 657-673.
- Chan, K.W., Yim, C.K. and Lam, S.S. (2010) 'Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures', *Journal of marketing*, 74(3), pp. 48-64.
- Chatterjee, P. and Kumar, A. (2017) 'Consumer willingness to pay across retail channels', *Journal of Retailing and Consumer Services*, 34, pp. 264-270.
- Chaussabel, D. and Sher, A. (2002) 'Mining microarray expression data by literature profiling', *Genome biology*, 3(10), pp. 1-16.
- Chebat, J.-C., Davidow, M. and Codjovi, I. (2005) 'Silent voices: why some dissatisfied consumers fail to complain', *Journal of service research*, 7(4), pp. 328-342.
- Chebat, J.-C. and Slusarczyk, W. (2005) 'How emotions mediate the effects of perceived justice on loyalty in service recovery situations: an empirical study', *Journal of Business Research*, 58(5), pp. 664-673.
- Chell, E. (1998) 'Critical Incident Technique', in Symon, G. and Cassel, C. (eds.) *Qualitative Methods and Analysis in Organizational Research: A Practical Guide*. Thousand Oaks, CA: Sage, pp. 51 - 72.
- Chen, J.V., Kyaw, P.L.N. and Ross, W.H., Jr. (2008) 'The customer journey when purchasing a new mobile phone: Testing a dual mediation model', *Journal of Direct, Data and Digital Marketing Practice*, 10(2), pp. 116-132.
- Cheng, M., Anderson, C.K., Zhu, Z. and Choi, S.C. (2018) 'Service online search ads: from a consumer journey view', *Journal of Services Marketing*, 32(2), pp. 126-141.
- Chiang, A.-H. and Trimi, S. (2020) 'Impacts of service robots on service quality', *Service Business*, 14(3), pp. 439-459.
- Childers, T.L., Carr, C.L., Peck, J. and Carson, S. (2001) 'Hedonic and utilitarian motivations for online retail shopping behavior', *Journal of Retailing*, 77(4), pp. 511-535.
- Chitturi, R., Raghunathan, R. and Mahajan, V. (2008) 'Delight by Design: The Role of Hedonic versus Utilitarian Benefits', *Journal of Marketing*, 72(3), pp. 48-63.

- Cho, S.-B., Jang, Y.J. and Kim, W.G. (2017) 'The Moderating Role of Severity of Service Failure in the Relationship among Regret/Disappointment, Dissatisfaction, and Behavioral Intention', *Journal of Quality Assurance in Hospitality & Tourism*, 18(1), pp. 69-85.
- Choi, H.-M., Mohammad, A.A.A. and Kim, W.G. (2019) 'Understanding hotel frontline employees' emotional intelligence, emotional labor, job stress, coping strategies and burnout', *International Journal of Hospitality Management*, 82, pp. 199-208.
- Choi, T.-M. (2020) 'Innovative "Bring-Service-Near-Your-Home" operations under Corona-Virus (COVID-19/SARS-CoV-2) outbreak: Can logistics become the Messiah?', *Transportation Research Part E: Logistics and Transportation Review*, 140, p. 101961.
- Chuah, S.H.-W. and Yu, J. (2021) 'The future of service: The power of emotion in human-robot interaction', *Journal of Retailing and Consumer Services*, 61, p. 102551.
- Church, A.H. (1993) 'Estimating the effect of incentives on mail survey response rates: A meta-analysis', *Public opinion quarterly*, 57(1), pp. 62-79.
- Clarke, D.W., Perry, P. and Denson, H. (2012) 'The sensory retail environment of small fashion boutiques', *Journal of Fashion Marketing and Management*, 16(4), pp. 492-510.
- Clatworthy, S. (2011a) 'Service innovation through touch-points: Development of an innovation toolkit for the first stages of new service development', *International Journal of Design*, 5(2), pp. 15-28.
- Clatworthy, S. (2011b) 'Service innovation through touch-points: Development of an innovation toolkit for the first stages of new service development', *International Journal of Design*, 5(2).
- Claycomb, C., Lengnick-Hall, C.A. and Inks, L.W. (2001) 'The customer as a productive resource: a pilot study and strategic implications', *Journal of Business strategies*, 18(1), pp. 47-47.
- Cobanoglu, C., Moreo, P.J. and Warde, B. (2001) 'A Comparison of Mail, Fax and Web-Based Survey Methods', *International Journal of Market Research*, 43(4), pp. 1-15.
- Cohen, L. (2018) *Research methods in education*. Eighth edition.. edn. New York : Routledge.
- Collins, L.M. and Lanza, S.T. (2009) *Latent Class and Latent Transition Analysis: With Applications in the Social, Behavioral, and Health Sciences*. John Wiley & Sons.
- Compas, B.E., Connor-Smith, J.K., Saltzman, H., Thomsen, A.H. and Wadsworth, M.E. (2001) 'Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research', *Psychological Bulletin*, 127(1), pp. 87-127.
- Compeau, L.D., Monroe, K.B., Grewal, D. and Reynolds, K. (2016) 'Expressing and defining self and relationships through everyday shopping experiences', *Journal of Business Research*, 69(3), pp. 1035-1042.
- Cooper, D.R., Schindler, P.S. and Sun, J. (2006) *Business research methods*. Mcgraw-hill New York.
- Cossío-Silva, F.-J., Revilla-Camacho, M.-Á., Vega-Vázquez, M. and Palacios-Florencio, B. (2016) 'Value co-creation and customer loyalty', *Journal of Business Research*, 69(5), pp. 1621-1625.
- Couper, M.P., Traugott, M.W. and Lamias, M.J. (2001) 'Web Survey Design and Administration', *Public Opinion Quarterly*, 65(2), pp. 230-253.
- Creswell, J.W., Plano Clark, V., Gutmann, M.L. and Hanson, W.E. (2003) 'An expanded typology for classifying mixed methods research into designs', *A. Tashakkori y C. Teddlie, Handbook of mixed methods in social and behavioral research*, pp. 209-240.
- Creswell, J.W. and Poth, C.N. (2016) *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Crosier, A. and Handford, A. (2012) 'Customer journey mapping as an advocacy tool for disabled people: A case study', *Social Marketing Quarterly*, 18(1), pp. 67-76.
- Croteau, A.M. and Li, P. (2003) 'Critical success factors of CRM technological initiatives', *Canadian Journal of Administrative Sciences*, 20(1), pp. 21-34.

- Crotty, M. and Crotty, M.F. (1998) *The foundations of social research: Meaning and perspective in the research process*. Sage.
- Cui, X., Xie, Q., Zhu, J., Shareef, M.A., Goraya, M.A.S. and Akram, M.S. (2022) 'Understanding the omnichannel customer journey: The effect of online and offline channel interactivity on consumer value co-creation behavior', *Journal of Retailing and Consumer Services*, 65, p. 102869.
- Cuomo, M.T., Tortora, D., Foroudi, P., Giordano, A., Festa, G. and Metallo, G. (2021) 'Digital transformation and tourist experience co-design: Big social data for planning cultural tourism', *Technological Forecasting and Social Change*, 162, p. 120345.
- D'Andrade, R. (1991) 'The identification of schemas in naturalistic data', in Horowitz, M.J. (ed.) *Person schemas and maladaptive interpersonal patterns*. Chicago: University of Chicago Press, pp. 279-301.
- Dabić, M., Vlačić, B., Paul, J., Dana, L.-P., Sahasranamam, S. and Glinka, B. (2020) 'Immigrant entrepreneurship: A review and research agenda', *Journal of Business Research*, 113, pp. 25-38.
- Danaher, P.J. and Van Heerde, H.J. (2018) 'Delusion in attribution: Caveats in using attribution for multimedia budget allocation', *Journal of Marketing Research*, 55(5), pp. 667-685.
- Davi, A., Haughton, D., Nasr, N., Shah, G., Skaletsky, M. and Spack, R. (2005) 'A review of two text-mining packages: SAS TextMining and WordStat', *The American Statistician*, 59(1), pp. 89-103.
- Davis, F.D. (1989) 'Perceived usefulness, perceived ease of use, and user acceptance of information technology', *MIS quarterly*, pp. 319-340.
- Davlembayeva, D., Papagiannidis, S. and Alamanos, E. (2019) 'Mapping the economics, social and technological attributes of the sharing economy', *Information Technology & People*, 33(3), pp. 841-872.
- de Bellis, E. and Johar, G. (2020) 'Autonomous Shopping Systems: Identifying and Overcoming Barriers to Consumer Adoption', *Journal of Retailing*.
- De Keyser, A., Schepers, J. and Konuş, U. (2015) 'Multichannel customer segmentation: Does the after-sales channel matter? A replication and extension', *International Journal of Research in Marketing*, 32(4), pp. 453-456.
- De Leeuw, E.D. (1992) *Data quality in mail, telephone and face to face surveys*. Amsterdam: TT-Publikaties.
- De Vries, G., Rietkerk, M. and Kooger, R. (2019) 'The hassle factor as a psychological barrier to a green home', *Journal of Consumer Policy*, pp. 1-8.
- Dekimpe, M.G., Geyskens, I. and Gielens, K. (2019) 'Using technology to bring online convenience to offline shopping', *Marketing Letters*, pp. 1-5.
- Del Bucchia, C., Miltgen, C.L., Russell, C.A. and Burlat, C. (2020) 'Empowerment as latent vulnerability in techno-mediated consumption journeys', *Journal of Business Research*.
- Della Porta, D. and Keating, M. (2008) *Approaches and methodologies in the social sciences: A pluralist perspective*. Cambridge University Press.
- Dellaert, B.G. (2019) 'The consumer production journey: marketing to consumers as co-producers in the sharing economy', *Journal of the Academy of Marketing Science*, 47(2), pp. 238-254.
- Demmers, J., Weltevreden, J.W. and van Dolen, W.M. (2020) 'Consumer Engagement with Brand Posts on Social Media in Consecutive Stages of the Customer Journey', *International Journal of Electronic Commerce*, 24(1), pp. 53-77.
- Demoulin, N.T. and Djelassi, S. (2016) 'An integrated model of self-service technology (SST) usage in a retail context', *International Journal of Retail & Distribution Management*, 44(5), pp. 540-559.
- Denyer, D. and Tranfield, D. (2009) 'Producing a systematic review', in Buchanan, D. and Bryman, A. (eds.) *The Sage handbook of organizational research methods*. London: SAGE Publications Ltd, pp. 671-689.

- Dhebar, A. (2013) 'Toward a compelling customer touchpoint architecture', *Business Horizons*, 56(2), pp. 199-205.
- Dong, B., Evans, K.R. and Zou, S. (2008) 'The effects of customer participation in co-created service recovery', *Journal of the Academy of Marketing Science*, 36(1), pp. 123-137.
- Dong, B. and Sivakumar, K. (2017) 'Customer participation in services: domain, scope, and boundaries', *Journal of the Academy of Marketing Science*, 45(6), pp. 944-965.
- Donthu, N. and Gustafsson, A. (2020) 'Effects of COVID-19 on business and research', *Journal of business research*, 117, p. 284.
- Donthu, N., Kumar, S. and Pattnaik, D. (2020) 'Forty-five years of journal of business research: a bibliometric analysis', *Journal of Business Research*, 109, pp. 1-14.
- Dorsey, J.D., Ashley, C. and Oliver, J.D. (2016) 'Triggers and outcomes of customer-to-customer aisle rage', *Journal of Retailing and Consumer Services*, 32, pp. 67-77.
- Duhachek, A. (2005) 'Coping: A multidimensional, hierarchical framework of responses to stressful consumption episodes', *Journal of Consumer research*, 32(1), pp. 41-53.
- Duhachek, A. and Kelting, K. (2009) 'Coping repertoire: Integrating a new conceptualization of coping with transactional theory', *Journal of Consumer Psychology*, 19(3), pp. 473-485.
- Earley, S. (2021) 'Using the customer journey to optimise the marketing technology stack', *Applied Marketing Analytics*, 6(3), pp. 190-210.
- Easterby-Smith, M., Thorpe, R. and Jackson, P.R. (2012) *Management research*. Sage.
- Edelman, D.C. and Singer, M. (2015) 'Competing on customer journeys', *Harvard Business Review*, 93(11), pp. 88-100.
- Eichhorn, B.R. (2014) 'Common method variance techniques', *Cleveland State University, Department of Operations & Supply Chain Management. Cleveland, OH: SAS Institute Inc*, pp. 1-11.
- Eid, R. and El-Gohary, H. (2015) 'The role of Islamic religiosity on the relationship between perceived value and tourist satisfaction', *Tourism Management*, 46, pp. 477-488.
- El-Manstrly, D., Ali, F. and Line, N. (2021) 'Severe service failures and online vindictive word of mouth: The effect of coping strategies', *International Journal of Hospitality Management*, 95, p. 102911.
- Ellway, B.P.W. (2014) 'The voice-to-technology (V2T) encounter and the call centre servicescape: Navigation, spatiality and movement', *Journal of Service Management*, 25(3), pp. 349-368.
- Elmashhara, M.G. and Soares, A.M. (2020) 'Entertain me, I'll stay longer! The influence of types of entertainment on mall shoppers' emotions and behavior', *Journal of Consumer Marketing*, 37(1), pp. 87-98.
- Ennew, C.T. and Binks, M.R. (1999) 'Impact of participative service relationships on quality, satisfaction and retention: an exploratory study', *Journal of business research*, 46(2), pp. 121-132.
- Evanschitzky, H., Iyer, G.R., Pillai, K.G., Kenning, P. and Schütte, R. (2015) 'Consumer trial, continuous use, and economic benefits of a retail service innovation: The case of the personal shopping assistant', *Journal of Product Innovation Management*, 32(3), pp. 459-475.
- Fan, W. and Yan, Z. (2010) 'Factors affecting response rates of the web survey: A systematic review', *Computers in Human Behavior*, 26(2), pp. 132-139.
- Farah, M.F. and Ramadan, Z.B. (2017) 'Disruptions versus more disruptions: How the Amazon dash button is altering consumer buying patterns', *Journal of Retailing and Consumer Services*, 39, pp. 54-61.
- Farah, M.F. and Ramadan, Z.B. (2020) 'Viability of Amazon's driven innovations targeting shoppers' impulsiveness', *Journal of Retailing and Consumer Services*, 53, p. 101973.
- Farah, M.F., Ramadan, Z.B. and Harb, D.H. (2019) 'The examination of virtual reality at the intersection of consumer experience, shopping journey and physical retailing', *Journal of Retailing and Consumer Services*, 48, pp. 136-143.

- Faulds, D.J., Mangold, W.G., Raju, P. and Valsalan, S. (2018) 'The mobile shopping revolution: Redefining the consumer decision process', *Business Horizons*, 61(2), pp. 323-338.
- Fellsson, M. and Salomonson, N. (2016) 'The expected retail customer: Value co-creator, co-producer or disturbance?', *Journal of Retailing and Consumer Services*, 30, pp. 204-211.
- Fiestas, J.C. and Tuzovic, S. (2021) 'Mobile-assisted showroomers: Understanding their purchase journey and personalities', *Journal of Retailing and Consumer Services*, 58, p. 102280.
- Finstad, K. (2010) 'The usability metric for user experience', *Interacting with Computers*, 22(5), pp. 323-327.
- Fisher, C.B. and Anushko, A.E. (2008) 'Research ethics in social science', in Alasuutari, P., Bickman, L. and Brannen, J. (eds.) *The SAGE handbook of social research methods*. London: SAGE Publications, pp. 95-109.
- Flavián, C., Gurrea, R. and Orús, C. (2016) 'Choice confidence in the webrooming purchase process: The impact of online positive reviews and the motivation to touch', *Journal of Consumer Behaviour*, 15(5), pp. 459-476.
- Flavián, C., Ibáñez-Sánchez, S. and Orús, C. (2019) 'The impact of virtual, augmented and mixed reality technologies on the customer experience', *Journal of Business Research*, 100, pp. 547-560.
- Fliess, S. and Volkers, M. (2020) 'Trapped in a service encounter', *Journal of Service Management*, 31(1), pp. 79-114.
- Floh, A., Zauner, A., Koller, M. and Rusch, T. (2014) 'Customer segmentation using unobserved heterogeneity in the perceived-value–loyalty–intentions link', *Journal of Business Research*, 67(5), pp. 974-982.
- Folkes, V.S. (1984) 'Consumer reactions to product failure: An attributional approach', *Journal of consumer research*, 10(4), pp. 398-409.
- Folkman, S. (2013) 'Stress: Appraisal and Coping', in Gellman, M.D. and Turner, J.R. (eds.) *Encyclopedia of Behavioral Medicine*. New York, NY: Springer New York, pp. 1913-1915.
- Folkman, S. and Lazarus, R.S. (1980) 'An Analysis of Coping in a Middle-Aged Community Sample', *Journal of Health and Social Behavior*, 21(3), pp. 219-239.
- Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A. and Gruen, R.J. (1986) 'Dynamics of a stressful encounter: cognitive appraisal, coping, and encounter outcomes', *Journal of personality and social psychology*, 50(5), p. 992.
- Følstad, A. and Kvale, K. (2018a) 'Applying Transactional NPS for Customer Journey Insight: Case Experiences and Lessons Learned', *Services Marketing Quarterly*, 39(3), pp. 208-224.
- Følstad, A. and Kvale, K. (2018b) 'Customer journeys: a systematic literature review', *Journal of Service Theory and Practice*, 28(2), pp. 196-227.
- Forbes, L.P., Kelley, S.W. and Hoffman, K.D. (2005) 'Typologies of e-commerce retail failures and recovery strategies', *Journal of Services Marketing*, 19(5), pp. 280-292.
- Fornari, E., Fornari, D., Grandi, S., Menegatti, M. and Hofacker, C.F. (2016) 'Adding store to web: migration and synergy effects in multi-channel retailing', *International Journal of Retail and Distribution Management*, 44(6), pp. 658-674.
- Fornell, C. and Larcker, D.F. (1981) 'Structural equation models with unobservable variables and measurement error: Algebra and statistics'. SAGE Publications Sage CA: Los Angeles, CA.
- Forsythe, S., Liu, C., Shannon, D. and Gardner, L.C. (2006) 'Development of a scale to measure the perceived benefits and risks of online shopping', *Journal of interactive marketing*, 20(2), pp. 55-75.
- Frasquet, M., Mollá, A. and Ruiz, E. (2015) 'Identifying patterns in channel usage across the search, purchase and post-sales stages of shopping', *Electronic Commerce Research and Applications*, 14(6), pp. 654-665.
- Fredrickson, B.L. (1998) 'What Good Are Positive Emotions?', *Rev Gen Psychol*, 2(3), pp. 300-319.
- Fredrickson, B.L. and Joiner, T. (2018) 'Reflections on Positive Emotions and Upward Spirals', *Perspectives on Psychological Science*, 13(2), pp. 194-199.

- Fricker, R.D. and Schonlau, M. (2002) 'Advantages and Disadvantages of Internet Research Surveys: Evidence from the Literature', *Field Methods*, 14(4), pp. 347-367.
- Fuller, C.M., Simmering, M.J., Atinc, G., Atinc, Y. and Babin, B.J. (2016) 'Common methods variance detection in business research', *Journal of Business Research*, 69(8), pp. 3192-3198.
- Gabbott, M., Tsarenko, Y. and Wai Hoe, M. (2010) 'Emotional Intelligence as a Moderator of Coping Strategies and Service Outcomes in Circumstances of Service Failure', *Journal of Service Research*, 14(2), pp. 234-248.
- Gallarza, M.G., Fayos Gardó, T. and Calderón García, H. (2017) 'Experiential tourist shopping value: Adding causality to value dimensions and testing their subjectivity', *Journal of Consumer Behaviour*, 16(6), pp. 76-92.
- Gao, L., Melero, I. and Sese, F.J. (2019) 'Multichannel integration along the customer journey: a systematic review and research agenda', *The Service Industries Journal*, pp. 1-32.
- Gaskin, J. (2017) *Excel StatTools, Stats Tools Package*. Available at: <http://statwiki.kolobkcreations.com> (Accessed: 22 June).
- Gasparin, I., Panina, E., Becker, L., Yrjölä, M., Jaakkola, E. and Pizzutti, C. (2022) 'Challenging the "integration imperative": A customer perspective on omnichannel journeys', *Journal of Retailing and Consumer Services*, 64, p. 102829.
- Gatter, S., Hüttl-Maack, V. and Rauschnabel, P.A. (2022) 'Can augmented reality satisfy consumers' need for touch?', *Psychology & Marketing*, 39(3), pp. 508-523.
- Gaur, S.S., Herjanto, H. and Makkar, M. (2014) 'Review of emotions research in marketing, 2002–2013', *Journal of Retailing and Consumer Services*, 21(6), pp. 917-923.
- Gauri, D.K., Jindal, R.P., Ratchford, B., Fox, E., Bhatnagar, A., Pandey, A., Navallo, J.R., Fogarty, J., Carr, S. and Howerton, E. (2021) 'Evolution of retail formats: Past, present, and future', *Journal of Retailing*, 97(1), pp. 42-61.
- Gelbrich, K. (2010) 'Anger, frustration, and helplessness after service failure: coping strategies and effective informational support', *Journal of the Academy of Marketing Science*, 38(5), pp. 567-585.
- Gensler, S., Neslin, S.A. and Verhoef, P.C. (2017) 'The showrooming phenomenon: it's more than just about price', *Journal of Interactive Marketing*, 38, pp. 29-43.
- Gensler, S., Verhoef, P.C. and Böhm, M. (2012) 'Understanding consumers' multichannel choices across the different stages of the buying process', *Marketing Letters*, 23(4), pp. 987-1003.
- George, M. and Wakefield, K.L. (2018) 'Modeling the consumer journey for membership services', *Journal of Services Marketing*.
- Ghauri, P., Grønhaug, K. and Strange, R. (2020) *Research methods in business studies*. Cambridge University Press.
- Gilal, F.G., Zhang, J., Paul, J. and Gilal, N.G. (2019) 'The role of self-determination theory in marketing science: An integrative review and agenda for research', *European Management Journal*, 37(1), pp. 29-44.
- Gill, J. and Johnson, P. (2010) *Research methods for managers*. Sage.
- Gohary, A., Hamzelu, B. and Alizadeh, H. (2016) 'Please explain why it happened! How perceived justice and customer involvement affect post co-recovery evaluations: A study of Iranian online shoppers', *Journal of Retailing and Consumer Services*, 31, pp. 127-142.
- Goić, M., Jerath, K. and Kalyanam, K. (2021) 'The Roles of Multiple Channels in Predicting Website Visits and Purchases: Engagers versus Closers', *International Journal of Research in Marketing*.
- Goldkuhl, G. (2012) 'Pragmatism vs interpretivism in qualitative information systems research', *European Journal of Information Systems*, 21(2), pp. 135-146.
- Goldstein, S.M., Johnston, R., Duffy, J. and Rao, J. (2002) 'The service concept: the missing link in service design research?', *Journal of Operations Management*, 20(2), pp. 121-134.

- Goode, S. (2020) 'Confront, Accept or Reinterpret? Coping Mediation Effects on Attribution in Cloud Service Failure', *Journal of Organizational Computing and Electronic Commerce*, 30(4), pp. 335-360.
- Göritz, A.S. (2006) 'Incentives in web studies: Methodological issues and a review', *International Journal of Internet Science*, 1(1), pp. 58-70.
- Gosling, S.D., Vazire, S., Srivastava, S. and John, O.P. (2004) 'Should we trust web-based studies? A comparative analysis of six preconceptions about internet questionnaires', *American psychologist*, 59(2), p. 93.
- Goyal, K. and Kumar, S. (2020) 'Financial literacy: A systematic review and bibliometric analysis', *International Journal of Consumer Studies*.
- Gremler, D.D. (2004) 'The Critical Incident Technique in Service Research', *Journal of Service Research*, 7(1), pp. 65-89.
- Grewal, D. and Roggeveen, A.L. (2020) 'Understanding Retail Experiences and Customer Journey Management', *Journal of Retailing*, 96(1), pp. 3-8.
- Grewal, D., Roggeveen, A.L. and Nordfält, J. (2016) 'Roles of retailer tactics and customer-specific factors in shopper marketing: Substantive, methodological, and conceptual issues', *Journal of Business Research*, 69(3), pp. 1009-1013.
- Grinnell Jr, R.M. and Unrau, Y.A. (2010) *Social work research and evaluation: Foundations of evidence-based practice*. Oxford University Press.
- Grissemann, U.S. and Stokburger-Sauer, N.E. (2012) 'Customer co-creation of travel services: The role of company support and customer satisfaction with the co-creation performance', *Tourism management*, 33(6), pp. 1483-1492.
- Grönroos, C. (2009) 'Marketing as promise management: regaining customer management for marketing', *Journal of Business & Industrial Marketing*, 24(5/6), pp. 351-359.
- Groth, M., Mertens, D.P. and Murphy, R.O. (2005) 'Customers as good soldiers: Extending organizational citizenship behavior research to the customer domain', *Journal of Management*, 31(1), pp. 415-433.
- Groves, R.M., Fowler, F.J., Couper, M., Lepkowski, J.M., Singer, E. and Tourangeau, R. (2009) *Survey methodology*. 2nd ed.. edn. Hoboken, N.J. : Wiley.
- Gupta, P., Sachan, A. and Kumar, R. (2020) 'Different stages of the e-service delivery system process: belief–attitude–intention framework', *International Journal of Retail & Distribution Management*, 48(7), pp. 687-706.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2014) *Multivariate data analysis*. Pearson new international edition edn. Harlow, Essex: Pearson Education.
- Hair, J.F., Page, M. and Brunsveld, N. (2019) *Essentials of business research methods*. Routledge.
- Haj-Salem, N. and Chebat, J.-C. (2014) 'The double-edged sword: The positive and negative effects of switching costs on customer exit and revenge', *Journal of Business Research*, 67(6), pp. 1106-1113.
- Hall, A. and Towers, N. (2017) 'Understanding how Millennial shoppers decide what to buy: Digitally connected unseen journeys', *International Journal of Retail and Distribution Management*, 45(5), pp. 498-517.
- Hallebone, E. and Priest, J. (2008) *Business and management research: paradigms and practices*. Macmillan International Higher Education.
- Hallikainen, H., Alamäki, A. and Laukkanen, T. (2019) 'Individual preferences of digital touchpoints: A latent class analysis', *Journal of Retailing and Consumer Services*, 50, pp. 386-393.
- Halvorsrud, R., Kvale, K. and Følstad, A. (2016) 'Improving service quality through customer journey analysis', *Journal of Service Theory and Practice*, 26(6), pp. 840-867.
- Hamilton, R., Ferraro, R., Haws, K.L. and Mukhopadhyay, A. (2020) 'Traveling with Companions: The Social Customer Journey', *Journal of Marketing*, 96(1), pp. 3-8.

- Hamilton, R., Thompson, D., Bone, S., Chaplin, L.N., Griskevicius, V., Goldsmith, K., Hill, R., John, D.R., Mittal, C., O'Guinn, T., Piff, P., Roux, C., Shah, A. and Zhu, M. (2019) 'The effects of scarcity on consumer decision journeys', *Journal of the Academy of Marketing Science*, 47(3), pp. 532-550.
- Hammer, M.J. (2017) *Oncology nursing forum*.
- Harris, K.E., Grewal, D., Mohr, L.A. and Bernhardt, K.L. (2006) 'Consumer responses to service recovery strategies: The moderating role of online versus offline environment', *Journal of Business Research*, 59(4), pp. 425-431.
- Harrison-Walker, L.J. (2019) 'The effect of consumer emotions on outcome behaviors following service failure', *Journal of Services Marketing*, 33(3), pp. 285-302.
- Hasson, F., Keeney, S. and McKenna, H. (2000) 'Research guidelines for the Delphi survey technique', *Journal of advanced nursing*, 32(4), pp. 1008-1015.
- Hatfield, E., Cacioppo, J.T. and Rapson, R.L. (1993) 'Emotional Contagion', *Current Directions in Psychological Science*, 2(3), pp. 96-100.
- Haughton, D., Legrand, P. and Woolford, S. (2009) 'Review of three latent class cluster analysis packages: Latent Gold, poLCA, and MCLUST', *The American Statistician*, 63(1), pp. 81-91.
- Hausmann, A. and Schuhbauer, S. (2021) 'The role of information and communication technologies in cultural tourists' journeys: the case of a World Heritage Site', *Journal of Heritage Tourism*, 16(6), pp. 669-683.
- Hayes, A.F. (2012) 'PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling', [Online]. Available at: <http://www.afhayes.com/public/process2012.pdf>.
- Hayes, A.F. (2018) *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. 2nd edn. New York, US: Guilford Press.
- Hayes, A.F. and Montoya, A.K. (2017) 'A Tutorial on Testing, Visualizing, and Probing an Interaction Involving a Multicategorical Variable in Linear Regression Analysis', *Communication Methods and Measures*, 11(1), pp. 1-30.
- Hayes, A.F., Montoya, A.K. and Rockwood, N.J. (2017) 'The analysis of mechanisms and their contingencies: PROCESS versus structural equation modeling', *Australasian Marketing Journal (AMJ)*, 25(1), pp. 76-81.
- Hazée, S., Van Vaerenbergh, Y. and Armirotto, V. (2017) 'Co-creating service recovery after service failure: The role of brand equity', *Journal of Business Research*, 74, pp. 101-109.
- He, H. and Harris, L. (2020) 'The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy', *Journal of Business Research*, 116, pp. 176-182.
- Heidenreich, S., Wittkowski, K., Handrich, M. and Falk, T. (2015) 'The dark side of customer co-creation: exploring the consequences of failed co-created services', *Journal of the Academy of Marketing Science*, 43(3), pp. 279-296.
- Helouani, W.B. (2021) 'How Can Firms Effectively Use Technology in Customer Journey Management', *Technology Innovation Management Review*, 11(7/8), pp. 33-47.
- Hemetsberger, A., Kreuzer, M. and Klien, M. (2019) 'From caterpillar to butterfly: experiencing spirituality via body transformation', *Journal of Marketing Management*, 35(5-6), pp. 540-564.
- Herhausen, D., Kleinlercher, K., Verhoef, P.C., Emrich, O. and Rudolph, T. (2019) 'Loyalty Formation for Different Customer Journey Segments', *Journal of Retailing*, 95(3), pp. 9-29.
- Hess, R.L., Ganesan, S. and Klein, N.M. (2007) 'Interactional service failures in a pseudorelationship: The role of organizational attributions', *Journal of Retailing*, 83(1), pp. 79-95.
- Hibberts, M., Burke, J.R. and Hudson, K. (2012) 'Common Survey Sampling Techniques', in L., G. (ed.) *Handbook of Survey Methodology for the Social Sciences*. Springer.
- Hickman, E., Kharouf, H. and Sekhon, H. (2019) 'An omnichannel approach to retailing: demystifying and identifying the factors influencing an omnichannel experience', *The International Review of Retail, Distribution and Consumer Research*, 30(3), pp. 266-288.

- Hildebrand, C. and Schlager, T. (2019) 'Focusing on others before you shop: exposure to Facebook promotes conventional product configurations', *Journal of the Academy of Marketing Science*, 47(2), pp. 291-307.
- Hilken, T., Heller, J., Chylinski, M., Keeling, D.I., Mahr, D. and de Ruyter, K. (2018) 'Making omnichannel an augmented reality: the current and future state of the art', *Journal of Research in Interactive Marketing*, 12(4), pp. 509-523.
- Ho, Y.-J., Dewan, S. and Ho, Y.-C. (2020) 'Distance and local competition in mobile geofencing', *Information Systems Research*, 31(4), pp. 1421-1442.
- Holahan, C.J., Moos, R.H. and Schaefer, J.A. (1996) *Coping, stress resistance, and growth: Conceptualizing adaptive functioning*. Oxford, England: John Wiley & Sons.
- Holbrook, M.B. and Hirschman, E.C. (1982) 'The experiential aspects of consumption: Consumer fantasies, feelings, and fun', *Journal of consumer research*, 9(2), pp. 132-140.
- Hollebeek, L.D., Clark, M.K., Andreassen, T.W., Sigurdsson, V. and Smith, D. (2020) 'Virtual reality through the customer journey: Framework and propositions', *Journal of Retailing and Consumer Services*, 55, p. 102056.
- Holloway, B.B., Wang, S. and Parish, J.T. (2005) 'The role of cumulative online purchasing experience in service recovery management', *Journal of Interactive Marketing*, 19(3), pp. 54-66.
- Hooper, D., Coughlan, J. and Mullen, M.R. (2008) 'Structural equation modelling: Guidelines for determining model fit', *Electronic journal of business research methods*, 6(1), pp. 53-60.
- Hosseini, S., Merz, M., Röglinger, M. and Wenninger, A. (2018) 'Mindfully going omnichannel: An economic decision model for evaluating omnichannel strategies', *Decision Support Systems*, 109, pp. 74-88.
- Hoyer, W.D., Kroschke, M., Schmitt, B., Kraume, K. and Shankar, V. (2020) 'Transforming the Customer Experience Through New Technologies', *Journal of Interactive Marketing*, 51, pp. 57-71.
- Hsu, L.-C., Wang, K.-Y., Chih, W.-H. and Lin, W.-C. (2021) 'Modeling revenge and avoidance in the mobile service industry: moderation role of technology anxiety', *The Service Industries Journal*, 41(15-16), pp. 1029-1052.
- Hu, L.t. and Bentler, P.M. (1999) 'Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives', *Structural equation modeling: a multidisciplinary journal*, 6(1), pp. 1-55.
- Hu, T.-I. and Tracogna, A. (2020) 'Multichannel customer journeys and their determinants: Evidence from motor insurance', *Journal of Retailing and Consumer Services*, 54, p. 102022.
- Huang, C.-C. (2021) 'Aging consumers and their brands: the customer journey perspective', *Asia Pacific Journal of Marketing and Logistics*.
- Huang, M.-H. (2001) 'The theory of emotions in marketing', *Journal of Business and Psychology*, 16(2), pp. 239-247.
- Huang, M.-H. and Rust, R.T. (2021) 'A strategic framework for artificial intelligence in marketing', *Journal of the Academy of Marketing Science*, 49(1), pp. 30-50.
- Hübner, A., Kuhn, H. and Wollenburg, J. (2016) 'Last mile fulfilment and distribution in omnichannel grocery retailing: a strategic planning framework', *International Journal of Retail & Distribution Management*, 44(3), pp. 228-247.
- Hudson, L.A. and Ozanne, J.L. (1988) 'Alternative ways of seeking knowledge in consumer research', *Journal of consumer research*, 14(4), pp. 508-521.
- Hunt, D.M., Geiger-Oneto, S. and Varca, P.E. (2012) 'Satisfaction in the context of customer co-production: a behavioral involvement perspective', *Journal of Consumer Behaviour*, 11(5), pp. 347-356.
- Hunt, S.D. (1991) *Modern marketing theory: Critical issues in the philosophy of marketing science*. South-Western Pub.

- Huppert, F.A., Baylis, N., Keverne, B. and Fredrickson, B.L. (2004) 'The broaden-and-build theory of positive emotions', *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 359(1449), pp. 1367-1377.
- Huré, E., Picot-Coupey, K. and Ackermann, C.L. (2017) 'Understanding omni-channel shopping value: A mixed-method study', *Journal of Retailing and Consumer Services*, 39, pp. 314-330.
- Ieva, M. and Ziliani, C. (2018a) 'Mapping touchpoint exposure in retailing: Implications for developing an omnichannel customer experience', *International Journal of Retail & Distribution Management*, 46(3), pp. 304-322.
- Ieva, M. and Ziliani, C. (2018b) 'The role of customer experience touchpoints in driving loyalty intentions in services', *The TQM Journal*, 30(5), pp. 444-457.
- Iglesias, V. (2009) 'The attribution of service failures: effects on consumer satisfaction', *The Service Industries Journal*, 29(2), pp. 127-141.
- Ireland, J.L., Boustead, R. and Ireland, C.A. (2005) 'Coping style and psychological health among adolescent prisoners: a study of young and juvenile offenders', *Journal of Adolescence*, 28(3), pp. 411-423.
- Istijanto (2021) 'Impacts of the COVID-19 pandemic on airline passengers' recovery satisfaction: An experimental study', *Transportation Research Interdisciplinary Perspectives*, 12, p. 100487.
- Jacobson, J., Hodson, J. and Mittelman, R. (2022) 'Popularity contest: The advertising practices of popular animal influencers on Instagram', *Technological Forecasting and Social Change*, 174, p. 121226.
- Jafarzadeh, H., Tafti, M., Intezari, A. and Sohrabi, B. (2021) 'All's well that ends well: Effective recovery from failures during the delivery phase of e-retailing process', *Journal of Retailing and Consumer Services*, 62, p. 102602.
- Jakobsen, M. and Jensen, R. (2015) 'Common Method Bias in Public Management Studies', *International Public Management Journal*, 18(1), pp. 3-30.
- Jang, S. and Namkung, Y. (2009) 'Perceived quality, emotions, and behavioral intentions: Application of an extended Mehrabian–Russell model to restaurants', *Journal of Business Research*, 62(4), pp. 451-460.
- Järvi, H., Keränen, J., Ritala, P. and Vilko, J. (2020) 'Value co-destruction in hotel services: Exploring the misalignment of cognitive scripts among customers and providers', *Tourism Management*, 77, p. 104030.
- Javornik, A., Duffy, K., Rokka, J., Scholz, J., Nobbs, K., Motala, A. and Goldenberg, A. (2021) 'Strategic approaches to augmented reality deployment by luxury brands', *Journal of Business Research*, 136, pp. 284-292.
- Jenkinson, A. (2007) 'Evolutionary implications for touchpoint planning as a result of neuroscience: A practical fusion of database marketing and advertising', *Journal of Database Marketing & Customer Strategy Management*, 14(3), pp. 164-185.
- Jha, S., Balaji, M., Stafford, M.B.R. and Spears, N. (2019) 'Haptic information processing and need for touch in product evaluation', *Journal of Consumer Marketing*, 37(1), pp. 55-64.
- Jia, J. and Wang, J. (2016) 'Do customer participation and cognitive ability influence satisfaction?', *The Service Industries Journal*, 36(9-10), pp. 416-437.
- Jocevski, M., Arvidsson, N., Miragliotta, G., Ghezzi, A. and Mangiaracina, R. (2019) 'Transitions towards omni-channel retailing strategies: a business model perspective', *International Journal of Retail & Distribution Management*, 47(2), pp. 78-93.
- Joe, K., Raben, F. and Phillips, A. (2016) 'The ethical issues of survey and market research', in *The SAGE Handbook of Survey Methodology*. SAGE. Available at: <https://methods.sagepub.com/book/the-sage-handbook-of-survey-methodology>.
- Johns, R. (2010) 'Likert items and scales', *Survey question bank: Methods fact sheet*, 1(1), pp. 11-28.

- Johnson, R.B., Onwuegbuzie, A.J. and Turner, L.A. (2007) 'Toward a definition of mixed methods research', *Journal of mixed methods research*, 1(2), pp. 112-133.
- Joireman, J., Grégoire, Y., Devezer, B. and Tripp, T.M. (2013) 'When do customers offer firms a “second chance” following a double deviation? The impact of inferred firm motives on customer revenge and reconciliation', *Journal of Retailing*, 89(3), pp. 315-337.
- Jones, M.V., Coviello, N. and Tang, Y.K. (2011) 'International entrepreneurship research (1989–2009): a domain ontology and thematic analysis', *Journal of business venturing*, 26(6), pp. 632-659.
- Kaczorowskaspyszalska, D. (2017) 'Consumer perspective of omnichannel commerce', *Omnichannel commerce z punktu widzenia konsumenta.*, 21(2), pp. 95-108.
- Kahiya, E.T. (2018) 'Five decades of research on export barriers: Review and future directions', *International Business Review*, 27(6), pp. 1172-1188.
- Kandampully, J., Zhang, T. and Jaakkola, E. (2018) 'Customer experience management in hospitality', *International Journal of Contemporary Hospitality Management*, 30(1), pp. 21-56.
- Kannan, P.K. and Li, H. (2017) 'Digital marketing: A framework, review and research agenda', *International Journal of Research in Marketing*, 34(1), pp. 22-45.
- Kannan, P.K., Reinartz, W. and Verhoef, P.C. (2016) 'The path to purchase and attribution modeling: Introduction to special section', *International Journal of Research in Marketing*, 33(3), pp. 449-456.
- Kanuri, V.K. and Andrews, M. (2019) 'The Unintended Consequence of Price-Based Service Recovery Incentives', *Journal of Marketing*, 83(5), pp. 57-77.
- Kao, Y.-F., Huang, L.-S. and Wu, C.-H. (2008) 'Effects of Theatrical Elements on Experiential Quality and Loyalty Intentions for Theme Parks', *Asia Pacific Journal of Tourism Research*, 13(2), pp. 163-174.
- Karatepe, O.M. and Ekiz, E.H. (2004) 'The effects of organizational responses to complaints on satisfaction and loyalty: a study of hotel guests in Northern Cyprus', *Managing Service Quality: An International Journal*, 14(6), pp. 476-486.
- Keat, R. and Urry, J. (2011) *Social Theory as Science (Routledge Revivals)*. Routledge.
- Kelley, S.W., Donnelly Jr, J.H. and Skinner, S.J. (1990) 'Customer participation in service production and delivery', *Journal of retailing*, 66(3), p. 315.
- Kerr, G. and Kelly, L. (2019) 'Travel insurance: the attributes, consequences, and values of using travel insurance as a risk-reduction strategy', *Journal of Travel & Tourism Marketing*, 36(2), pp. 191-203.
- Khanna, M., Jacob, I. and Yadav, N. (2014) 'Identifying and analyzing touchpoints for building a higher education brand', *Journal of Marketing for Higher Education*, 24(1), pp. 122-143.
- Kim, J. and Forsythe, S. (2008) 'Adoption of virtual try-on technology for online apparel shopping', *Journal of Interactive Marketing*, 22(2), pp. 45-59.
- Kim, K. and Baker, M.A. (2020) 'Paying it forward: The influence of other customer service recovery on future co-creation', *Journal of Business Research*, 121, pp. 604-615.
- Kimura, M. (2022) 'Customer segment transition through the customer loyalty program', *Asia Pacific Journal of Marketing and Logistics*, 34(3), pp. 611-626.
- Klaus, P. (2013) 'The case of Amazon.com: Towards a conceptual framework of online customer service experience (OCSE) using the emerging consensus technique (ECT)', *Journal of Services Marketing*, 27(6), pp. 443-457.
- Knoll, J. and Matthes, J. (2017) 'The effectiveness of celebrity endorsements: a meta-analysis', *Journal of the Academy of Marketing Science*, 45(1), pp. 55-75.
- Kock, F., Berbekova, A. and Assaf, A.G. (2021) 'Understanding and managing the threat of common method bias: Detection, prevention and control', *Tourism management (1982)*, 86, p. 104330.
- Koetz, C. (2019) 'Managing the customer experience: a beauty retailer deploys all tactics', *Journal of Business Strategy*, 40(1), pp. 10-17.

- Konus, U., Verhoef, P.C. and Neslin, S.A. (2008) 'Multichannel shopper segments and their covariates', *Journal of Retailing*, 84(4), pp. 398-413.
- Kotni, V.D.P. (2017) 'Paradigm Shift from Attracting Footfalls for Retail Store to Getting Hits for E-stores: An Evaluation of Decision-making Attributes in E-tailing', *Global Business Review*, 18(5), pp. 1215-1237.
- Koussaifi, H., Hart, D.J. and Lillystone, S. (2020) 'Customer complaint journey mapping: a qualitative approach', *British Food Journal*, 122(12), pp. 3711-3726.
- Kranzbühler, A.M., Kleijnen, M.H., Morgan, R.E. and Teerling, M. (2018) 'The multilevel nature of customer experience research: an integrative review and research agenda', *International Journal of Management Reviews*, 20(2), pp. 433-456.
- Kranzbühler, A.M., Kleijnen, M.H. and Verlegh, P.W. (2019) 'Outsourcing the pain, keeping the pleasure: effects of outsourced touchpoints in the customer journey', *Journal of the Academy of Marketing Science*, 47(2), pp. 308-327.
- Krey, N., tom Dieck, M.C., Wu, S. and Fountoulaki, P. (2021) 'Exploring the Influence of Touch Points on Tourist Experiences at Crisis Impacted Destinations', *Journal of Travel Research*, p. 00472875211053657.
- Krosnick, J.A. (1991) 'Response strategies for coping with the cognitive demands of attitude measures in surveys', *Applied Cognitive Psychology*, 5(3), pp. 213-236.
- Kuehnl, C., Jozic, D. and Homburg, C. (2019) 'Effective customer journey design: consumers' conception, measurement, and consequences', *Journal of the Academy of Marketing Science*, 47(3), pp. 551-568.
- Kumar, A., Bezawada, R. and Trivedi, M. (2018) 'The effects of multichannel shopping on customer spending, customer visit frequency, and customer profitability', *Journal of the Association for Consumer Research*, 3(3), pp. 294-311.
- Kumar, A., Paul, J. and Unnithan, A.B. (2020) 'Masstige' marketing: A review, synthesis and research agenda', *Journal of Business Research*, 113, pp. 384-398.
- Kuo, Y.-F., Hu, T.-L. and Yang, S.-C. (2013) 'Effects of inertia and satisfaction in female online shoppers on repeat-purchase intention: The moderating roles of word-of-mouth and alternative attraction', *Managing Service Quality: An International Journal*, 23(3), pp. 168-187.
- Kuuru, T.-K. and Närvänen, E. (2019) 'Embodied interaction in customer experience: a phenomenological study of group fitness', *Journal of Marketing Management*, 35(13-14), pp. 1241-1266.
- Ladhari, R., Souiden, N. and Dufour, B. (2017) 'The role of emotions in utilitarian service settings: The effects of emotional satisfaction on product perception and behavioral intentions', *Journal of Retailing and Consumer Services*, 34, pp. 10-18.
- Lambie, J.A. and Marcel, A.J. (2002) 'Consciousness and the varieties of emotion experience: A theoretical framework', *Psychological review*, 109(2), p. 219.
- Lazarus, R.S. (1991) *Emotion and adaptation*. New York, NY, US: Oxford University Press.
- Lazarus, R.S. (1993) 'Coping theory and research: Past, present, and future', *Fifty years of the research and theory of RS Lazarus: An analysis of historical and perennial issues*, pp. 366-388.
- Lazarus, R.S. (2006) *Stress and emotion: A new synthesis*. New York: Springer publishing company.
- Lazarus, R.S. and Folkman, S. (1984) *Stress, appraisal, and coping*. Springer publishing company.
- Le, A.N.H. and Ho, H.X. (2020) 'The Behavioral Consequences of Regret, Anger, and Frustration in Service Settings', *Journal of Global Marketing*, 33(2), pp. 84-102.
- Lechner, A.T. and Paul, M. (2019) 'Is this smile for real? The role of affect and thinking style in customer perceptions of frontline employee emotion authenticity', *Journal of Business Research*, 94, pp. 195-208.
- 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*, 12(1), pp. 16-26.

- Lee, H.J. (2017) 'Personality determinants of need for interaction with a retail employee and its impact on self-service technology (SST) usage intentions', *Journal of Research in Interactive Marketing*, 11(3), pp. 214-231.
- Lee, J.-S., Kim, J., Hwang, J. and Cui, Y. (2021) 'Does love become hate or forgiveness after a double deviation? The case of hotel loyalty program members', *Tourism Management*, 84, p. 104279.
- Lee, K.W., Lanting, M.C.L. and Rojdamrongratana, M. (2017) 'Managing customer life cycle through knowledge management capability: a contextual role of information technology', *Total Quality Management & Business Excellence*, 28(13-14), pp. 1559-1583.
- Leem, B.-H. and Eum, S.-W. (2021) 'Using text mining to measure mobile banking service quality', *Industrial Management & Data Systems*, 121(5), pp. 993-1007.
- Lefever, S., Dal, M. and Matthíasdóttir, Á. (2007) 'Online data collection in academic research: advantages and limitations', *British Journal of Educational Technology*, 38(4), pp. 574-582.
- Legrís, P., Ingham, J. and Collette, P. (2003) 'Why do people use information technology? A critical review of the technology acceptance model', *Information & management*, 40(3), pp. 191-204.
- Lemon, K.N. and Verhoef, P.C. (2016) 'Understanding customer experience throughout the customer journey', *Journal of Marketing*, 80(6), pp. 69-96.
- Lengnick-Hall, C.A., Claycomb, V.C. and Inks, L.W. (2000) 'From recipient to contributor: examining customer roles and experienced outcomes', *European journal of marketing*, 34(3/4), pp. 359-383.
- Li, H. and Kannan, P.K. (2014) 'Attributing conversions in a multichannel online marketing environment: An empirical model and a field experiment', *Journal of Marketing Research*, 51(1), pp. 40-56.
- Lii, Y.S., Chien, C.S., Pant, A. and Lee, M. (2013) 'The challenges of long-distance relationships: the effects of psychological distance between service provider and consumer on the efforts to recover from service failure', *Journal of Applied Social Psychology*, 43(6), pp. 1121-1135.
- Lim, J.S., Al-Aali, A. and Heinrichs, J.H. (2015) 'Impact of satisfaction with e-retailers' touch points on purchase behavior: the moderating effect of search and experience product type', *Marketing Letters*, 26(2), pp. 225-235.
- Lincoln, Y.S. and Guba, E.G. (1985) *Naturalistic inquiry*. Sage.
- Liu, X.-Y., Chi, N.-W. and Gremler, D.D. (2019) 'Emotion Cycles in Services: Emotional Contagion and Emotional Labor Effects', *Journal of Service Research*, 22(3), pp. 285-300.
- Lo Presti, L., Maggiore, G. and Marino, V. (2020) 'Mobile chat servitization in the customer journey: from social capability to social suitability', *The TQM Journal*, 32(6), pp. 1139-1158.
- Locander, J.A., White, A. and Newman, C.L. (2020) 'Customer responses to frontline employee complaining in retail service environments: The role of perceived impropriety', *Journal of Business Research*, 107, pp. 315-323.
- Lowe, J., Maggioni, I. and Sands, S. (2018) 'Critical success factors of temporary retail activations: A multi-actor perspective', *Journal of Retailing and Consumer Services*, 40, pp. 74-81.
- Lu, Y., Papagiannidis, S. and Alamanos, E. (2018) 'Internet of Things: A systematic review of the business literature from the user and organisational perspectives', *Technological Forecasting and Social Change*, 136, pp. 285-297.
- Luceri, B., Bijmolt, T.T., Bellini, S. and Aiolfi, S. (2022) 'What drives consumers to shop on mobile devices? Insights from a Meta-Analysis', *Journal of Retailing*, 98(1), pp. 178-196.
- Lynch, S. and Barnes, L. (2020) 'Omnichannel fashion retailing: examining the customer decision-making journey', *Journal of Fashion Marketing and Management: An International Journal*.
- MacKenzie, S.B. and Podsakoff, P.M. (2012) 'Common Method Bias in Marketing: Causes, Mechanisms, and Procedural Remedies', *Journal of Retailing*, 88(4), pp. 542-555.

- Majra, H., Saxena, R., Jha, S. and Jagannathan, S. (2016) 'Structuring Technology Applications for Enhanced Customer Experience: Evidence from Indian Air Travellers', *Global Business Review*, 17(2), pp. 351-374.
- Malhotra, N.K., Nunan, D. and Birks, D.F. (2017) *Marketing Research: An applied approach*. Harlow, United Kingdom: Pearson Education.
- 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*, 14(3).
- Manser Payne, E., Peltier, J.W. and Barger, V.A. (2017) 'Omni-channel marketing, integrated marketing communications and consumer engagement: A research agenda', *Journal of Research in Interactive Marketing*, 11(2), pp. 185-197.
- Manthiou, A., Hickman, E. and Klaus, P. (2020) 'Beyond good and bad: Challenging the suggested role of emotions in customer experience (CX) research', *Journal of Retailing and Consumer Services*, 57, p. 102218.
- Manthiou, A. and Klaus, P. (2022) 'The interplaying factors of the robotic tourism experience: The customer journey's touchpoints, context, and qualities', *Technological Forecasting and Social Change*, 177, p. 121552.
- Marikyan, D., Papagiannidis, S. and Alamanos, E. (2019) 'A systematic review of the smart home literature: A user perspective', *Technological Forecasting and Social Change*, 138, pp. 139-154.
- Marino, V. and Presti, L.L. (2018) 'Engagement, satisfaction and customer behavior-based CRM performance', *Journal of Service Theory and Practice*, 28(5), pp. 682-707.
- Martín-Martín, A., Orduna-Malea, E., Thelwall, M. and López-Cózar, E.D. (2018) 'Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories', *Journal of Informetrics*, 12(4), pp. 1160-1177.
- Martin, D., O'Neill, M., Hubbard, S. and Palmer, A. (2008) 'The role of emotion in explaining consumer satisfaction and future behavioural intention', *Journal of Services Marketing*, 22(3), pp. 224-236.
- Mathwick, C., Malhotra, N. and Rigdon, E. (2001) 'Experiential value: conceptualization, measurement and application in the catalog and Internet shopping environment', *Journal of retailing*, 77(1), pp. 39-56.
- Maxham III, J.G. (2001) 'Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions', *Journal of Business Research*, 54(1), pp. 11-24.
- Maxham III, J.G. and Netemeyer, R.G. (2002) 'A Longitudinal Study of Complaining Customers' Evaluations of Multiple Service Failures and Recovery Efforts', *Journal of Marketing*, 66(4), pp. 57-71.
- McColl-Kennedy, J.R., Gustafsson, A., Jaakkola, E., Klaus, P., Radnor, Z.J., Perks, H. and Friman, M. (2015) 'Fresh perspectives on customer experience', *Journal of Services Marketing*, 29(6-7), pp. 430-435.
- McColl-Kennedy, J.R., Zaki, M., Lemon, K.N., Urmetzer, F. and Neely, A. (2019) 'Gaining customer experience insights that matter', *Journal of Service Research*, 22(1), pp. 8-26.
- McCullough, M.A., Berry, L.L. and Yadav, M.S. (2000) 'An Empirical Investigation of Customer Satisfaction after Service Failure and Recovery', *Journal of Service Research*, 3(2), pp. 121-137.
- McCutcheon, A.L. (2002) 'Basic Concepts and Procedures in Single- and Multiple-Group Latent Class Analysis', in McCutcheon, A.L. and Hagenars, J.A. (eds.) *Applied Latent Class Analysis*. Cambridge: Cambridge University Press, pp. 56-86.
- McKechnie, D.S., Grant, J. and Shabbir Golawala, F. (2011) 'Partitioning service encounters into touchpoints to enhance quality', *International Journal of Quality and Service Sciences*, 3(2), pp. 146-165.
- Mehrabian, A. and Russell, J.A. (1974) *An approach to environmental psychology*. Cambridge, US: The MIT Press.

- Mele, C. and Russo-Spena, T. (2021) 'The architecture of the phygital customer journey: a dynamic interplay between systems of insights and systems of engagement', *European Journal of Marketing*.
- Melero, I., Javier Sese, F. and Verhoef, P.C. (2016) 'Recasting the customer experience in today's omni-channel environment', *Universia Business Review*, 2016(50), pp. 18-37.
- Mellenbergh, G.J. (1989) 'Item bias and item response theory', *International Journal of Educational Research*, 13(2), pp. 127-143.
- Mencarelli, R., Rivière, A. and Lombart, C. (2021) 'Do myriad e-channels always create value for customers? A dynamic analysis of the perceived value of a digital information product during the usage phase', *Journal of Retailing and Consumer Services*, 63, p. 102674.
- Mertens, D.M. and Ginsberg, P.E. (2009) *The handbook of social research ethics*. Thousand Oaks, CA
Los Angeles
London: Thousand Oaks, CA : Sage Publications.
- Meuter, M.L., Bitner, M.J., Ostrom, A.L. and Brown, S.W. (2005) 'Choosing among alternative service delivery modes: An investigation of customer trial of self-service technologies', *Journal of marketing*, 69(2), pp. 61-83.
- Meuter, M.L., Ostrom, A.L., Bitner, M.J. and Roundtree, R. (2003) 'The influence of technology anxiety on consumer use and experiences with self-service technologies', *Journal of Business Research*, 56(11), pp. 899-906.
- Meuter, M.L., Ostrom, A.L., Roundtree, R.I. and Bitner, M.J. (2000) 'Self-Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters', *Journal of Marketing*, 64(3), pp. 50-64.
- Meyer, C. and Schwager, A. (2007) 'Understanding customer experience', *Harvard Business Review*, 85(2), pp. 116-126.
- Meyerding, S.G., Bauchowitz, A. and Lehberger, M. (2019) 'Consumer preferences for beer attributes in Germany: A conjoint and latent class approach', *Journal of Retailing and Consumer Services*, 47, pp. 229-240.
- Micheaux, A. and Bosio, B. (2019) 'Customer journey mapping as a new way to teach data-driven marketing as a service', *Journal of Marketing Education*, 41(2), pp. 127-140.
- Mikolajová, K. and Olšanová, K. (2017) 'How to engage children into the world of traditional car brands? Exploration of specific touchpoints between future buyers in the car industry and established brands', *Central European Business Review*, 6(3), pp. 27-40.
- Miller, G.A. (1994) 'The magical number seven, plus or minus two: Some limits on our capacity for processing information', *Psychological Review*, 101(2), pp. 343-352.
- Miller, J.L., Craighead, C.W. and Karwan, K.R. (2000) 'Service recovery: a framework and empirical investigation', *Journal of operations Management*, 18(4), pp. 387-400.
- Miquel-Romero, M.-J., Frasquet, M. and Molla-Descals, A. (2020) 'The role of the store in managing postpurchase complaints for omnichannel shoppers', *Journal of Business Research*, 109, pp. 288-296.
- Mishra, R., Singh, R.K. and Koles, B. (2020) 'Consumer decision-making in Omnichannel retailing: Literature review and future research agenda', *International Journal of Consumer Studies*, pp. 1-28.
- Mishra, R., Singh, R.K. and Koles, B. (2021) 'Consumer decision-making in Omnichannel retailing: Literature review and future research agenda', *International Journal of Consumer Studies*, 45(2), pp. 147-174.
- Mitchell, M.L. and Jolley, J.M. (2010) *Research design explained*. 7th edn. Belmont, CA: Wadsworth.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G. and The PRISMA Group (2009) 'Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement', *PLoS med*, 6(7), p. e1000097.

- Montoya-Weiss, M.M., Voss, G.B. and Grewal, D. (2003) 'Determinants of online channel use and overall satisfaction with a relational, multichannel service provider', *Journal of the Academy of Marketing Science*, 31(4), pp. 448-458.
- 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 & Ergonomics in Manufacturing & Service Industries*, 26(4), pp. 501-514.
- Muskat, M., Muskat, B., Zehrer, A. and Johns, R. (2013) 'Generation Y: Evaluating services experiences through mobile ethnography', *Tourism Review*, 68(3), pp. 55-71.
- Myers, S.A., Goodboy, A.K. and 201, M.o.C. (2013) 'Using equity theory to explore adult siblings' use of relational maintenance behaviors and relational characteristics', *Communication Research Reports*, 30(4), pp. 275-281.
- Nagpal, M. and Petersen, J.A. (2021) 'Keyword Selection Strategies in Search Engine Optimization: How Relevant is Relevance?', *Journal of Retailing*, 97(4), pp. 746-763.
- Nakano, S. and Kondo, F.N. (2018) 'Customer segmentation with purchase channels and media touchpoints using single source panel data', *Journal of Retailing and Consumer Services*, 41, pp. 142-152.
- Nakata, C., Izberk-Bilgin, E., Sharp, L., Spanjol, J., Cui, A.S., Crawford, S.Y. and Xiao, Y. (2019) 'Chronic illness medication compliance: a liminal and contextual consumer journey', *Journal of the Academy of Marketing Science*, 47(2), pp. 192-215.
- Nam, H. and Kannan, P. (2020) 'Digital Environment in Global Markets: Cross-Cultural Implications for Evolving Customer Journeys', *Journal of International Marketing*, 28(1), pp. 28-47.
- Neslin, S.A. (2022) 'The omnichannel continuum: Integrating online and offline channels along the customer journey', *Journal of Retailing*, 98(1), pp. 111-132.
- Neslin, S.A., Grewal, D., Leghorn, R., Shankar, V., Teerling, M.L., Thomas, J.S. and Verhoef, P.C. (2006) 'Challenges and opportunities in multichannel customer management', *Journal of service research*, 9(2), pp. 95-112.
- Newcastle University (2017) *Ethics Toolkit for Principal Investigators*. Available at: <https://www.ncl.ac.uk/research/researchgovernance/ethics/ethicstoolkit/> (Accessed: 20 November).
- Ngarmwongnoi, C., Oliveira, J.S., AbedRabbo, M. and Mousavi, S. (2020) 'The implications of eWOM adoption on the customer journey', *Journal of Consumer Marketing*, 37(7), pp. 749-759.
- Nicholson, M., Clarke, I. and Blakemore, M. (2002) 'One brand, three ways to shop': situational variables and multichannel consumer behaviour', *The International Review of Retail, Distribution and Consumer Research*, 12(2), pp. 131-148.
- Niglas, K. (2010) 'The Multidimensional Model of Research Methodology: An Integrated Set of Continua', in Tashakkori, A. and Teddlie, C. (eds.) *Handbook of mixed methods in social and behavioral research*. 2 edn. Thousand Oaks, CA: Sage, pp. 215-236.
- Noble, S.M., Griffith, D.A. and Weinberger, M.G. (2005) 'Consumer derived utilitarian value and channel utilization in a multi-channel retail context', *Journal of Business Research*, 58(12), pp. 1643-1651.
- Nöjd, S., Trischler, J.W., Otterbring, T., Andersson, P.K. and Wästlund, E. (2020) 'Bridging the valuescape with digital technology: A mixed methods study on customers' value creation process in the physical retail space', *Journal of Retailing and Consumer Services*, 56, p. 102161.
- Norton, D.W. and Pine II, B.J. (2013) 'Using the customer journey to road test and refine the business model', *Strategy and Leadership*, 41(2), pp. 12-17.
- Nosek, B.A., Banaji, M.R. and Greenwald, A.G. (2002) 'Harvesting implicit group attitudes and beliefs from a demonstration web site', *Group Dynamics: Theory, Research, and Practice*, 6(1), p. 101.
- Nunes, P.F., Bellin, J., Lee, I. and Schunck, O. (2013) 'Converting the nonstop customer into a loyal customer', *Strategy and Leadership*, 41(5), pp. 48-53.

- Nunes, P.F. and Cespedes, F.V. (2003) 'The customer has escaped', *Harvard business review*, 81(11), pp. 96-105.
- Nylund, K.L., Asparouhov, T. and Muthén, B.O. (2007) 'Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study', *Structural equation modeling: A multidisciplinary Journal*, 14(4), pp. 535-569.
- Nyström, A.G. and Mickelsson, K.J. (2019) 'Digital advertising as service: introducing contextually embedded selling', *Journal of Services Marketing*, 33(4), pp. 396-406.
- Oldendick, R.W. (2012) 'Survey research ethics', in *Handbook of survey methodology for the social sciences*. New York, NY: Springer, pp. 23-35.
- Oliver, R.L. (1980) 'A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions', *Journal of Marketing Research*, 17(4), pp. 460-469.
- Oliver, R.L. (1997) *Satisfaction: A Behavioral Perspective on the Consumer*. New York, US: Irwin-McGraw-Hill.
- Olson, E.D., Arendt, S.W., FitzPatrick, E., Hauser, S., Rainville, A.J., Rice, B. and Lewis, K.L. (2019) 'Marketing Mechanisms Used for Summer Food Service Programs', *Journal of Nonprofit & Public Sector Marketing*, pp. 1-23.
- Osborne, J.W. and Waters, E. (2002) 'Four assumptions of multiple regression that researchers should always test', *Practical assessment, research, and evaluation*, 8(1), p. 2.
- Ozgen, O. and Duman Kurt, S. (2012) 'Pre-recovery and post-recovery emotions in the service context: a preliminary study', *Managing Service Quality: An International Journal*, 22(6), pp. 592-605.
- Pallant, J.L., Sands, S. and Karpen, I.O. (2020) 'The 4Cs of mass customization in service industries: a customer lens', *Journal of Services Marketing*, 34(4), pp. 499-511.
- Palmer, A. and Bejou, D. (2016) 'Retrospective: service failure and loyalty: an exploratory empirical study of airline customers', *Journal of Services Marketing*, 30(5), pp. 480-484.
- Paluch, S. and Tuzovic, S. (2019) 'Persuaded self-tracking with wearable technology: carrot or stick?', *Journal of Services Marketing*, 33(4), pp. 436-448.
- Pandey, A. and Kulshrestha, R. (2021) 'Service blueprint 4.0: a service design for hotels beyond COVID-19', *Worldwide Hospitality and Tourism Themes*, 13(5), pp. 610-621.
- Pantano, E. and Gandini, A. (2018) 'Shopping as a “networked experience”': an emerging framework in the retail industry', *International Journal of Retail & Distribution Management*, 49(7), pp. 690-704.
- Panzer, A.D., Bryant, C.A., Hawkins, F., Goff, R., Napier, A., Schneider, T., Kirby, R.S., Coulter, M.L., Sappenfield, W.M., Baldwin, J. and O'Rourke, K. (2017) 'Mapping a WIC Mother's Journey: A Preliminary Analysis', *Social Marketing Quarterly*, 23(2), pp. 137-154.
- Parasuraman, A. (2006) 'Invited Commentary—Modeling Opportunities in Service Recovery and Customer-Managed Interactions', *Marketing Science*, 25(6), pp. 590-593.
- Park, J. and Ha, S. (2016) 'Co-creation of service recovery: Utilitarian and hedonic value and post-recovery responses', *Journal of Retailing and Consumer Services*, 28, pp. 310-316.
- Parker, P.D., Martin, A.J., Colmar, S. and Liem, G.A. (2012) 'Teachers' workplace well-being: Exploring a process model of goal orientation, coping behavior, engagement, and burnout', *Teaching and Teacher Education*, 28(4), pp. 503-513.
- Pascale, C.-M. (2010) 'Epistemology and the politics of knowledge', *The Sociological Review*, 58(2_suppl), pp. 154-165.
- Patti, C.H., van Dessel, M.M. and Hartley, S.W. (2020) 'Reimagining customer service through journey mapping and measurement', *European Journal of Marketing*.
- Paul, J. (2019) 'Marketing in emerging markets: a review, theoretical synthesis and extension', *International Journal of Emerging Markets*.
- Paul, J. and Benito, G.R. (2018) 'A review of research on outward foreign direct investment from emerging countries, including China: what do we know, how do we know and where should we be heading?', *Asia Pacific Business Review*, 24(1), pp. 90-115.

- Paul, J. and Criado, A.R. (2020) 'The art of writing literature review: What do we know and what do we need to know?', *International Business Review*, 29(4), p. 101717.
- Paul, J. and Mas, E. (2019) 'Toward a 7-P framework for international marketing', *Journal of Strategic Marketing*, pp. 1-21.
- Paul, J., Parthasarathy, S. and Gupta, P. (2017) 'Exporting challenges of SMEs: A review and future research agenda', *Journal of world business*, 52(3), pp. 327-342.
- Paul, J. and Rosado-Serrano, A. (2019) 'Gradual internationalization vs born-global/international new venture models', *International Marketing Review*, 36(6), pp. 830-858.
- Paul, J. and Singh, G. (2017) 'The 45 years of foreign direct investment research: Approaches, advances and analytical areas', *The World Economy*, 40(11), pp. 2512-2527.
- Pavia, T.M. and Mason, M.J. (2004) 'The Reflexive Relationship between Consumer Behavior and Adaptive Coping', *Journal of Consumer Research*, 31(2), pp. 441-454.
- Payne, A.F., Storbacka, K. and Frow, P. (2008) 'Managing the co-creation of value', *Journal of the Academy of Marketing Science*, 36(1), pp. 83-96.
- Peck, J. and Childers, T.L. (2003) 'Individual differences in haptic information processing: The "need for touch" scale', *Journal of Consumer Research*, 30(3), pp. 430-442.
- Péladeau, N. and Stovall, C. (2005) *Application of Provalis Research Corp. 's statistical content analysis text mining to airline safety reports*. Global Aviation Information Network. [Online]. Available at: https://flightsafety.org/files/Provalis_text_mining_report.pdf (Accessed: 22 April 2018).
- Peltier, J., Zahay, D. and Krishen, A.S. (2013) 'A hierarchical IMC data integration and measurement framework and its impact on CRM system quality and customer performance', *Journal of Marketing Analytics*, 1(1), pp. 32-48.
- 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*, 12(1), pp. 10-15.
- Petri, J. and Jacob, F. (2016) 'The customer as enabler of value (co)-creation in the solution business', *Industrial Marketing Management*, 56, pp. 63-72.
- Pham, M.T. and Avnet, T. (2004) 'Ideals and Oughts and the Reliance on Affect versus Substance in Persuasion', *Journal of Consumer Research*, 30(4), pp. 503-518.
- Pham, M.T. and Higgins, E.T. (2005) 'Promotion and prevention in consumer decision-making: The state of the art and theoretical propositions', *Inside consumption*, pp. 30-65.
- Piccoli, G., Brohman, M.K., Watson, R.T. and Parasuraman, A. (2009) 'Process completeness: Strategies for aligning service systems with customers' service needs', *Business Horizons*, 52(4), pp. 367-376.
- Pinsonneault, A. and Kraemer, K. (1993) 'Survey research methodology in management information systems: an assessment', *Journal of management information systems*, 10(2), pp. 75-105.
- Piyathanasan, B., Mathies, C., Patterson, P.G. and de Ruyter, K. (2018) 'Continued value creation in crowdsourcing from creative process engagement', *Journal of Services Marketing*, 32(1), pp. 19-33.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003) 'Common method biases in behavioral research: a critical review of the literature and recommended remedies', *Journal of applied psychology*, 88(5), p. 879.
- Ponsignon, F., Durrieu, F. and Bouzdine-Chameeva, T. (2017) 'Customer experience design: a case study in the cultural sector', *Journal of Service Management*, 28(4), pp. 763-787.
- Ponsignon, F., Smart, A. and Phillips, L. (2018) 'A customer journey perspective on service delivery system design: insights from healthcare', *International Journal of Quality & Reliability Management*, 35(10), pp. 2328-2347.
- Pop, R.-A., Săplăcan, Z., Dabija, D.-C. and Alt, M.-A. (2022) 'The impact of social media influencers on travel decisions: the role of trust in consumer decision journey', *Current Issues in Tourism*, 25(5), pp. 823-843.

- Prahalad, C.K. and Ramaswamy, V. (2004) 'Co-creation experiences: The next practice in value creation', *Journal of interactive marketing*, 18(3), pp. 5-14.
- Prayag, G., Hosany, S., Muskat, B. and Del Chiappa, G. (2017) 'Understanding the relationships between tourists' emotional experiences, perceived overall image, satisfaction, and intention to recommend', *Journal of Travel Research*, 56(1), pp. 41-54.
- Prayag, G. and Ozanne, L.K. (2018) 'A systematic review of peer-to-peer (P2P) accommodation sharing research from 2010 to 2016: progress and prospects from the multi-level perspective', *Journal of Hospitality Marketing & Management*, 27(6), pp. 649-678.
- Provalis Research (2015) *WORDSTAT 7 User's Guide*. Provalis Research.
- Rahi, S. (2017) 'Research design and methods: A systematic review of research paradigms, sampling issues and instruments development', *International Journal of Economics & Management Sciences*, 6(2), pp. 1-5.
- Ramadan, Z.B. (2021) "'Alexafying" shoppers: The examination of Amazon's captive relationship strategy', *Journal of Retailing and Consumer Services*, 62, p. 102610.
- Ramadan, Z.B., Farah, M.F. and Kassab, D. (2019) 'Amazon's approach to consumers' usage of the Dash button and its effect on purchase decision involvement in the US market', *Journal of Retailing and Consumer Services*, 47, pp. 133-139.
- Rana, J., Gaur, L., Singh, G., Awan, U. and Rasheed, M.I. (2021) 'Reinforcing customer journey through artificial intelligence: a review and research agenda', *International Journal of Emerging Markets*.
- Rana, J. and Paul, J. (2020) 'Health motive and the purchase of organic food: A meta-analytic review', *International Journal of Consumer Studies*, 44(2), pp. 162-171.
- Randhawa, K., Wilden, R. and Hohberger, J. (2016) 'A bibliometric review of open innovation: Setting a research agenda', *Journal of Product Innovation Management*, 33(6), pp. 750-772.
- Rapp, A., Baker, T.L., Bachrach, D.G., Ogilvie, J. and Beitelspacher, L.S. (2015) 'Perceived customer showrooming behavior and the effect on retail salesperson self-efficacy and performance', *Journal of Retailing*, 91(2), pp. 358-369.
- Rauschnabel, P.A., Babin, B.J., tom Dieck, M.C., Krey, N. and Jung, T. (2022) 'What is augmented reality marketing? Its definition, complexity, and future'. Elsevier, pp. 1140-1150.
- Rawson, A., Duncan, E. and Jones, C. (2013) 'The truth about customer experience', *Harvard Business Review*, 91(9), pp. 90-98.
- Ribbink, D., van Riel, A.C.R., Liljander, V. and Streukens, S. (2004) 'Comfort your online customer: quality, trust and loyalty on the internet', *Managing Service Quality: An International Journal*, 14(6), pp. 446-456.
- Richardson, A. (2010) 'Using customer journey maps to improve customer experience', *Harvard business review*, 15(1), pp. 2-5.
- Richardson, H.A., Simmering, M.J. and Sturman, M.C. (2009) 'A Tale of Three Perspectives: Examining Post Hoc Statistical Techniques for Detection and Correction of Common Method Variance', *Organizational Research Methods*, 12(4), pp. 762-800.
- Riffe, D., Lacy, S. and Fico, F. (2014) *Analyzing Media Messages : Using Quantitative Content Analysis in Research*. 3 edn. Routledge.
- Riivits-Arkonsuo, I., Kaljund, K. and Leppiman, A. (2014) 'Consumer Journey from First Experience to Brand Evangelism', *Research in Economics & Business: Central & Eastern Europe*, 6(1), pp. 5-28.
- Rintamäki, T., Kanto, A., Kuusela, H. and Spence, M.T. (2006) 'Decomposing the value of department store shopping into utilitarian, hedonic and social dimensions: Evidence from Finland', *International Journal of Retail & Distribution Management*, 34(1), pp. 6-24.
- Rintamäki, T. and Saarijärvi, H. (2021) 'An integrative framework for managing customer value propositions', *Journal of Business Research*, 134, pp. 754-764.
- Riquelme, I.P. and Román, S. (2014) 'The relationships among consumers' ethical ideology, risk aversion and ethically-based distrust of online retailers and the moderating role of

consumers' need for personal interaction', *Ethics and Information Technology*, 16(2), pp. 135-155.

Rodríguez-Torraco, P., Cabezudo, R.S.J. and San-Martín, S. (2017) 'Tell me what they are like and I will tell you where they buy. An analysis of omnichannel consumer behavior', *Computers in Human Behavior*, 68, pp. 465-471.

Rodríguez-Torraco, P., Trabold Apadula, L., San-Martín, S. and San José Cabezudo, R. (2020) 'Have an omnichannel seamless interaction experience! Dimensions and effect on consumer satisfaction', *Journal of Marketing Management*, 36(17-18), pp. 1731-1761.

Roggeveen, A.L., Tsiros, M. and Grewal, D. (2012) 'Understanding the co-creation effect: when does collaborating with customers provide a lift to service recovery?', *Journal of the Academy of Marketing Science*, 40(6), pp. 771-790.

Rohm, A.J. and Swaminathan, V. (2004) 'A typology of online shoppers based on shopping motivations', *Journal of business research*, 57(7), pp. 748-757.

Romaniuk, J., Beal, V. and Uncles, M. (2013) 'Achieving Reach in a Multi-Media Environment How a Marketer's First Step Provides the Direction for the Second', *Journal of Advertising Research*, 53(2), pp. 221-230.

Romano, B., Sands, S. and Pallant, J.I. (2020) 'Augmented reality and the customer journey: An exploratory study', *Australasian Marketing Journal*, 29(4), pp. 354-363.

Rosado-Serrano, A., Paul, J. and Dikova, D. (2018) 'International franchising: A literature review and research agenda', *Journal of Business Research*, 85, pp. 238-257.

Rosenbaum, M.S. and Massiah, C.A. (2007) 'When customers receive support from other customers: Exploring the influence of intercustomer social support on customer voluntary performance', *Journal of service research*, 9(3), pp. 257-270.

Rosenbaum, M.S., Otolara, M.L. and Ramírez, G.C. (2017) 'How to create a realistic customer journey map', *Business Horizons*, 60(1), pp. 143-150.

Rosenbaum, M.S., Ramírez, G.C. and Matos, N. (2019) 'A neuroscientific perspective of consumer responses to retail greenery', *The Service Industries Journal*, 39(15-16), pp. 1034-1045.

Rosenmayer, A., McQuilken, L., Robertson, N. and Ogden, S. (2018) 'Omni-channel service failures and recoveries: refined typologies using Facebook complaints', *Journal of Services Marketing*.

Rudkowski, J., Heney, C., Yu, H., Sedlezky, S. and Gunn, F. (2020) 'Here Today, Gone Tomorrow? Mapping and modeling the pop-up retail customer journey', *Journal of Retailing and Consumer Services*, 54, pp. 1-25.

Saavedra Torres, J.L., Rawal, M. and Bagherzadeh, R. (2020) 'Role of brand attachment in customers' evaluation of service failure', *Journal of Product & Brand Management*, 30(3), pp. 377-391.

Saladino, V., Algeri, D. and Auriemma, V. (2020) 'The Psychological and Social Impact of Covid-19: New Perspectives of Well-Being', *Frontiers in Psychology*, 11.

Salagrama, R., Prashar, S. and Tata, S.V. (2021) 'Examining the influence of forgiveness and its antecedents on consumer behavior: the moderating role of service failure severity', *International Journal of Emerging Markets*, ahead-of-print(ahead-of-print).

Salipante, P., Notz, W. and Bigelow, J. (1982) 'A matrix approach to literature reviews', *Research in organizational behavior*, 4, pp. 321-348.

Sánchez-Fernández, J., Muñoz-Leiva, F., Montoro-Ríos, F.J. and Ibáñez-Zapata, J.Á. (2010) 'An analysis of the effect of pre-incentives and post-incentives based on draws on response to web surveys', *Quality & Quantity*, 44(2), pp. 357-373.

Santana, S., Thomas, M. and Morwitz, V.G. (2020) 'The Role of Numbers in the Customer Journey', *Journal of Retailing*, 96(1), pp. 138-154.

Santos, S. and Gonçalves, H.M. (2019) 'Multichannel consumer behaviors in the mobile environment: Using fsQCA and discriminant analysis to understand webrooming motivations', *Journal of Business Research*, 101, pp. 757-766.

- Sarkar, A. (2011) 'Impact of utilitarian and hedonic shopping values on individual's perceived benefits and risks in online shopping', *International management review*, 7(1), p. 58.
- Saunders, M.N. (2019) *Research methods for business students*. Eighth Edition.. edn. Harlow, England: Harlow, England : Pearson.
- Savigny, H. (2007) 'Ontology and Epistemology in Political Marketing: Keeping it Real?', *Journal of political marketing*, 6(2-3), pp. 33-47.
- Scheuren, F. (2004) *What is a Survey?* American Statistical Association.
- Schibrowsky, J.A., Peltier, J.W. and Nill, A. (2007) 'The state of internet marketing research: A review of the literature and future research directions', *European Journal of Marketing*, 41(7/8), pp. 722-733.
- Schlegelmilch, B.B. and Simbrunner, P. (2019) 'Moral licensing and moral cleansing applied to company-NGO collaborations in an online context', *Journal of Business Research*, 95, pp. 544-552.
- Schmitt, A., Raisch, S. and Volberda, H.W. (2018) 'Strategic renewal: Past research, theoretical tensions and future challenges', *International Journal of Management Reviews*, 20(1), pp. 81-98.
- Schmitt, B.H. (1999) *Experimental Marketing: How to get Customers to Sense, Feel, Think, Act and Relate to Your Company and Brands*. New York: The Free Press.
- Schneider, P.J. and Zielke, S. (2020) 'Searching offline and buying online - An analysis of showrooming forms and segments', *Journal of Retailing and Consumer Services*, 52, p. 101919.
- Schnider, K.R., Elhai, J.D. and Gray, M.J. (2007) 'Coping style use predicts posttraumatic stress and complicated grief symptom severity among college students reporting a traumatic loss', *Journal of Counseling Psychology*, 54(3), p. 344.
- Schoefer, K., Wäppling, A., Heirati, N. and Blut, M. (2019) 'The moderating effect of cultural value orientations on behavioral responses to dissatisfactory service experiences', *Journal of Retailing and Consumer Services*, 48, pp. 247-256.
- Scholz, M., Brenner, C. and Hinz, O. (2019) 'AKEGIS: automatic keyword generation for sponsored search advertising in online retailing', *Decision Support Systems*, 119, pp. 96-106.
- Schröder, N., Falke, A., Hruschka, H. and Reutterer, T. (2019) 'Analyzing the Browsing Basket: A Latent Interests-Based Segmentation Tool', *Journal of Interactive Marketing*, 47, pp. 181-197.
- Schroeder, L.D. (2017) *Understanding regression analysis : an introductory guide*. 2nd edition.. edn. Los Angeles, CA : SAGE Publications, Inc.
- Schweidel, D.A., Bart, Y., Inman, J.J., Stephen, A.T., Libai, B., Andrews, M., Rosario, A.B., Chae, I., Chen, Z., Kupor, D., Longoni, C. and Thomaz, F. (2022) 'How consumer digital signals are reshaping the customer journey', *Journal of the Academy of Marketing Science*.
- Sengupta, A.S., Balaji, M. and Krishnan, B.C. (2015) 'How customers cope with service failure? A study of brand reputation and customer satisfaction', *Journal of Business Research*, 68(3), pp. 665-674.
- Serrano Archimi, C., Reynaud, E., Yasin, H.M. and Bhatti, Z.A. (2018) 'How Perceived Corporate Social Responsibility Affects Employee Cynicism: The Mediating Role of Organizational Trust', *Journal of Business Ethics*, 151(4), pp. 907-921.
- Shamim, S., Yang, Y., Zia, N.U. and Shah, M.H. (2021) 'Big data management capabilities in the hospitality sector: Service innovation and customer generated online quality ratings', *Computers in Human Behavior*, 121, p. 106777.
- Shankar, V., Kalyanam, K., Setia, P., Golmohammadi, A., Tirunillai, S., Douglass, T., Hennessey, J., Bull, J.S. and Waddoups, R. (2021) 'How Technology is Changing Retail', *Journal of Retailing*, 97(1), pp. 13-27.
- Shankar, V., Smith, A.K. and Rangaswamy, A. (2003) 'Customer satisfaction and loyalty in online and offline environments', *International Journal of Research in Marketing*, 20(2), pp. 153-175.

- Shaver, K.G. and Drown, D. (1986) 'On causality, responsibility, and self-blame: A theoretical note', *Journal of personality and social psychology*, 50(4), p. 697.
- Shavitt, S. and Barnes, A.J. (2020) 'Culture and the Consumer Journey', *Journal of Retailing*, 96(1), pp. 40-54.
- Sheth, J. (2020) 'Impact of Covid-19 on consumer behavior: Will the old habits return or die?', *Journal of Business Research*, 117, pp. 280-283.
- Shetty, A.S. and Kalghatgi, J.R. (2018) 'How to win back the disgruntled consumer? The omni-channel way', *Journal of Business and Retail Management Research (JBRMR)*, 12(4).
- Shimazu, A. and Schaufeli, W.B. (2007) 'Does Distraction Facilitate Problem-focused Coping with Job Stress? A 1 year Longitudinal Study', *Journal of Behavioral Medicine*, 30(5), pp. 423-434.
- Shin, H., Ellinger, A.E., Mothersbaugh, D.L. and Reynolds, K.E. (2017) 'Employing proactive interaction for service failure prevention to improve customer service experiences', *Journal of Service Theory and Practice*, 27(1), pp. 164-186.
- Siebert, A., Gopaldas, A., Lindridge, A. and Simões, C. (2020) 'Customer Experience Journeys: Loyalty Loops Versus Involvement Spirals', *Journal of Marketing*, 84(4), pp. 45-66.
- Sihombing, S.O. (2002) 'PARADIGMS IN CONSUMER BEHAVIOR', *Gadjah Mada International Journal of Business*, 4(2).
- Silver, R.L., Boon, C. and Stones, M.H. (1983) 'Searching for meaning in misfortune: Making sense of incest', *Journal of Social issues*, 39(2), pp. 81-101.
- Simoni, M., Sorrentino, A., Leone, D. and Caporuscio, A. (2022) 'Boosting the pre-purchase experience through virtual reality. Insights from the cruise industry', *Journal of Hospitality and Tourism Technology*, 13(1), pp. 140-156.
- Singh, J., Nambisan, S., Bridge, R.G. and Brock, J.K.-U. (2020) 'One-Voice Strategy for Customer Engagement', *Journal of Service Research*, pp. 1-24.
- Singh, R. (2021) "“Hey Alexa—order groceries for me” – the effect of consumer–VAI emotional attachment on satisfaction and repurchase intention", *European Journal of Marketing*, ahead-of-print(ahead-of-print).
- Sjödin, D., Parida, V., Kohtamäki, M. and Wincent, J. (2020) 'An agile co-creation process for digital servitization: A micro-service innovation approach', *Journal of Business Research*, 112, pp. 478-491.
- Smith, A.K., Bolton, R.N. and Wagner, J. (1999) 'A model of customer satisfaction with service encounters involving failure and recovery', *Journal of marketing research*, 36(3), pp. 356-372.
- Smith, C.A. (1991) 'The self, appraisal, and coping', in *Handbook of social and clinical psychology: The health perspective*. Elmsford, NY, US: Pergamon Press, pp. 116-137.
- Snyder, H. (2019) 'Literature review as a research methodology: An overview and guidelines', *Journal of Business Research*, 104, pp. 333-339.
- So, J., Achar, C., Han, D., Agrawal, N., Duhachek, A. and Maheswaran, D. (2015) 'The psychology of appraisal: Specific emotions and decision-making', *Journal of Consumer Psychology*, 25(3), pp. 359-371.
- Sousa, R. and Voss, C.A. (2006) 'Service Quality in Multichannel Services Employing Virtual Channels', *Journal of Service Research*, 8(4), pp. 356-371.
- Steenkamp, J.-B.E.M. and Baumgartner, H. (1998) 'Assessing Measurement Invariance in Cross-National Consumer Research', *Journal of Consumer Research*, 25(1), pp. 78-90.
- Stein, A. and Ramaseshan, B. (2016) 'Towards the identification of customer experience touch point elements', *Journal of Retailing and Consumer Services*, 30, pp. 8-19.
- Stein, A. and Ramaseshan, B. (2019) 'The customer experience–loyalty link: moderating role of motivation orientation', *Journal of Service Management*, 31(1), pp. 51-78.
- Steinhoff, L. and Zondag, M.M. (2021) 'Loyalty programs as travel companions: Complementary service features across customer journey stages', *Journal of Business Research*, 129, pp. 70-82.

- Steward, M.D., Narus, J.A., Roehm, M.L. and Ritz, W. (2019) 'From transactions to journeys and beyond: The evolution of B2B buying process modeling', *Industrial Marketing Management*, 83, pp. 288-300.
- Stocchi, L., Pourazad, N., Michaelidou, N., Tanusondjaja, A. and Harrigan, P. (2022) 'Marketing research on Mobile apps: past, present and future', *Journal of the Academy of Marketing Science*, 50(2), pp. 195-225.
- Stockwell, S. (2015) 'Using live data and social amplification to drive fan engagement', *Journal of Direct, Data and Digital Marketing Practice*, 16(4), pp. 275-277.
- Stone, M., Machtynger, L. and Machtynger, J. (2015) 'Managing customer insight creatively through storytelling', *Journal of Direct, Data and Digital Marketing Practice*, 17(2), pp. 77-83.
- Straker, K., Wrigley, C. and Rosemann, M. (2015) 'Typologies and touchpoints: Designing multi-channel digital strategies', *Journal of Research in Interactive Marketing*, 9(2), pp. 110-128.
- Strizhakova, Y., Tsarenko, Y. and Ruth, J.A. (2012) "'I'm Mad and I Can't Get That Service Failure Off My Mind": Coping and Rumination as Mediators of Anger Effects on Customer Intentions', *Journal of Service Research*, 15(4), pp. 414-429.
- Su, X., Yan, X. and Tsai, C.-L. (2012) 'Linear regression', *WIREs Computational Statistics*, 4(3), pp. 275-294.
- Sukhu, A., Choi, H., Bujisic, M. and Bilgihan, A. (2019) 'Satisfaction and positive emotions: A comparison of the influence of hotel guests' beliefs and attitudes on their satisfaction and emotions', *International Journal of Hospitality Management*, 77, pp. 51-63.
- Sultan, A.J. (2018) 'Orchestrating service brand touchpoints and the effects on relational outcomes', *Journal of Services Marketing*, 32(6), pp. 777-788.
- Sultan, A.J. (2019) 'Identifying brand touchpoints to increase switching costs in the banking industry', *International Journal of Bank Marketing*, 38(3), pp. 718-736.
- Surachartkumtonkun, J., McColl-Kennedy, J.R. and Patterson, P.G. (2014) 'Unpacking Customer Rage Elicitation: A Dynamic Model', *Journal of Service Research*, 18(2), pp. 177-192.
- Symonds, C.P. (1924) 'THE PATHOLOGICAL ANATOMY OF DISSEMINATED SCLEROSIS', *Brain*, 47(1), pp. 36-56.
- Tabachnick, B.G., Fidell, L.S. and Ullman, J.B. (2007) *Using multivariate statistics*. Pearson Boston, MA.
- Taherdoost, H. (2016) 'Sampling methods in research methodology; how to choose a sampling technique for research: How to Choose a Sampling Technique for Research', *International Journal of Academic Research in Management*, 5(2), pp. 18-27.
- Tax, S.S., Brown, S.W. and Chandrashekar, M. (1998) 'Customer Evaluations of Service Complaint Experiences: Implications for Relationship Marketing', *Journal of Marketing*, 62(2), pp. 60-76.
- 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*, 16(4), pp. 454-470.
- Taylor, C.R., Kitchen, P.J., Sarkees, M.E. and Lolk, C.O. (2020) 'Addressing the Janus face of customer service: a typology of new age service failures', *European Journal of Marketing*, 54(10), pp. 2295-2316.
- Teclaw, R., Price, M.C. and Osatuke, K. (2012) 'Demographic Question Placement: Effect on Item Response Rates and Means of a Veterans Health Administration Survey', *Journal of Business and Psychology*, 27(3), pp. 281-290.
- Teddlie, C. and Tashakkori, A. (2009) *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage.
- Thomas, F.M., Charlton, S.G., Lewis, I. and Nandavar, S. (2021) 'Commuting before and after COVID-19', *Transportation Research Interdisciplinary Perspectives*, 11, p. 100423.

- Thomas, J.S. and Sullivan, U.Y. (2005) 'Managing marketing communications with multichannel customers', *Journal of Marketing*, 69(4), pp. 239-251.
- Thomas, R.B. and Lewis, J. (1993) 'A comparison of selection at list time and time-stratified sampling for estimating suspended sediment loads', *Water Resources Research*, 29(4), pp. 1247-1256.
- Thomas, T.C., Epp, A.M. and Price, L.L. (2019) 'Journeying Together: Aligning Retailer and Service Provider Roles with Collective Consumer Practices', *Journal of Retailing*, 96(1), pp. 9-24.
- Tranfield, D., Denyer, D. and Smart, P. (2003) 'Towards a methodology for developing evidence-informed management knowledge by means of systematic review', *British journal of management*, 14(3), pp. 207-222.
- Trischler, J. and Zehrer, A. (2012) 'Service design: Suggesting a qualitative multistep approach for analyzing and examining theme park experiences', *Journal of Vacation Marketing*, 18(1), pp. 57-71.
- Tronvoll, B. and Edvardsson, B. (2019) 'Exploring Customers' Experiences of Service Co-Recovery', *Service Science*, 11(3), pp. 189-200.
- Tsarenko, Y. and Strizhakova, Y. (2013) 'Coping with service failures', *European Journal of Marketing*, 47(1/2), pp. 71-92.
- Tsarenko, Y. and Tojib, D. (2012) 'The role of personality characteristics and service failure severity in consumer forgiveness and service outcomes', *Journal of Marketing Management*, 28(9-10), pp. 1217-1239.
- Tseng, M.M., Qin Hai, M. and su, C.J. (1999) 'Mapping customers' service experience for operations improvement', *Business Process Management Journal*, 5(1), pp. 50-64.
- Tueanrat, Y., Papagiannidis, S. and Alamanos, E. (2021a) 'A conceptual framework of the antecedents of customer journey satisfaction in omnichannel retailing', *Journal of Retailing and Consumer Services*, 61, p. 102550.
- Tueanrat, Y., Papagiannidis, S. and Alamanos, E. (2021b) 'Going on a journey: A review of the customer journey literature', *Journal of Business Research*, 125, pp. 336-353.
- Tuli, F. (2011) 'The basis of distinction between qualitative and quantitative research in social science: Reflection on ontological, epistemological and methodological perspectives', *Ethiopian Journal of Education and Sciences*, 6(1).
- Tupikovskaja-Omovie, Z. and Tyler, D. (2020) 'Clustering consumers' shopping journeys: eye tracking fashion m-retail', *Journal of Fashion Marketing and Management: An International Journal*.
- Tupikovskaja-Omovie, Z. and Tyler, D. (2021) 'Eye tracking technology to audit google analytics: Analysing digital consumer shopping journey in fashion m-retail', *International Journal of Information Management*, 59, p. 102294.
- Tyrväinen, O. and Karjaluo, H. (2019) 'A Systematic Literature Review and Analysis of Mobile Retailing Adoption', *Journal of Internet Commerce*, 18(2), pp. 221-247.
- Ulin, P.R., Robinson, E.T. and Tolley, E.E. (2005) 'Qualitative methods in public health', *Med Sci Sports Exerc*, 37(7), p. 1249.
- Vaghela, B. (2014) 'The voice as a relationship milestone', *Journal of Direct, Data and Digital Marketing Practice*, 16(2), pp. 98-101.
- Vahidzadeh, R., Bertanza, G., Scaffoni, S. and Vaccari, M. (2020) 'Regional industrial symbiosis: A review based on social network analysis', *Journal of Cleaner Production*, 280, p. 124054.
- Vakeel, K.A., Sivakumar, K., Jayasimha, K.R. and Dey, S. (2018) 'Service failures after online flash sales: role of deal proneness, attribution, and emotion', *Journal of Service Management*, 29(2), pp. 253-276.
- Vakulenko, Y., Shams, P., Hellström, D. and Hjort, K. (2019) 'Service innovation in e-commerce last mile delivery: Mapping the e-customer journey', *Journal of Business Research*, 101, pp. 461-468.

- Valentini, S., Neslin, S.A. and Montaguti, E. (2020) 'Identifying omnichannel deal prone segments, their antecedents, and their consequences', *Journal of Retailing*, 96(3), pp. 310-327.
- van Baal, S. and Dach, C. (2005) 'Free riding and customer retention across retailers' channels', *Journal of Interactive Marketing*, 19(2), pp. 75-85.
- Van Birgelen, M., De Jong, A. and De Ruyter, K. (2006) 'Multi-channel service retailing: The effects of channel performance satisfaction on behavioral intentions', *Journal of Retailing*, 82(4), pp. 367-377.
- Van Bruggen, G.H., Antia, K.D., Jap, S.D., Reinartz, W.J. and Pallas, F. (2010) 'Managing marketing channel multiplicity', *Journal of Service Research*, 13(3), pp. 331-340.
- van der Veen, G. and van Ossenbruggen, R. (2015) 'Mapping Out the Customer's Journey: Customer Search Strategy as a Basis for Channel Management', *Journal of Marketing Channels*, 22(3), pp. 202-213.
- Van Vaerenbergh, Y., Varga, D., De Keyser, A. and Orsingher, C. (2019) 'The service recovery journey: Conceptualization, integration, and directions for future research', *Journal of Service Research*, 22(2), pp. 103-119.
- VandeWalle, D., Cron, W.L. and Slocum Jr, J.W. (2001) 'The role of goal orientation following performance feedback', *Journal of applied psychology*, 86(4), p. 629.
- Vargo, S.L. and Lusch, R.F. (2016) 'Institutions and axioms: an extension and update of service-dominant logic', *Journal of the Academy of Marketing Science*, 44(1), pp. 5-23.
- Varnali, K. (2019) 'Understanding customer journey from the lenses of complexity theory', *The Service Industries Journal*, 39(11-12), pp. 820-835.
- Vatan, A. and Dogan, S. (2021) 'What do hotel employees think about service robots? A qualitative study in Turkey', *Tourism Management Perspectives*, 37, p. 100775.
- Venkatesan, R., Kumar, V. and Ravishanker, N. (2007) 'Multichannel shopping: causes and consequences', *Journal of Marketing*, 71(2), pp. 114-132.
- Verhoef, P.C., Kannan, P.K. and Inman, J.J. (2015) 'From multi-channel retailing to omnichannel retailing: introduction to the special issue on multi-channel retailing', *Journal of retailing*, 91(2), pp. 174-181.
- Verhoef, P.C., Neslin, S.A. and Vroomen, B. (2007) 'Multichannel customer management: Understanding the research-shopper phenomenon', *International journal of research in marketing*, 24(2), pp. 129-148.
- Vermunt, J.K. (2010) 'Latent class modeling with covariates: Two improved three-step approaches', *Political analysis*, pp. 450-469.
- Vermunt, J.K. and Magidson, J. (2002) 'Latent Class Cluster Analysis', in Hagenaars, J. and McCutcheon, A.L. (eds.) *Applied Latent Class Analysis*. Cambridge: Cambridge University Press.
- Vermunt, J.K. and Magidson, J. (2005) 'Factor Analysis With Categorical Indicators: A Comparison Between Traditional and Latent Class Approaches', in van der Ark, L.A., Croon, M.A. and Sijisma, K. (eds.) *New Developments in Categorical Data Analysis for the Social and Behavioral Sciences*. Lawrence Erlbaum Associates Publishers, pp. 41-62.
- Vermunt, J.K. and Magidson, J. (2016) *Technical Guide for Latent GOLD 5.1: Basic, Advanced, and Syntax*. Belmont, MA: Statistical Innovations Inc.
- Viejo-Fernández, N., Sanzo-Pérez, M.J. and Vázquez-Casielles, R. (2019) 'Different kinds of research shoppers, different cognitive-affective consequences', *Spanish Journal of Marketing-ESIC*, 23(1), pp. 45-68.
- Viejo-Fernández, N., Sanzo-Pérez, M.J. and Vázquez-Casielles, R. (2020) 'Is showrooming really so terrible? start understanding showroomers', *Journal of Retailing and Consumer Services*, 54, pp. 1-16.
- Vo-Thanh, T., Zaman, M., Hasan, R., Akter, S. and Dang-Van, T. (2022) 'The service digitalization in fine-dining restaurants: a cost-benefit perspective', *International Journal of Contemporary Hospitality Management*, (ahead-of-print).

- Voorhees, C.M., Fombelle, P.W., Gregoire, Y., Bone, S., Gustafsson, A., Sousa, R. and Walkowiak, T. (2017) 'Service encounters, experiences and the customer journey: Defining the field and a call to expand our lens', *Journal of Business Research*, 79, pp. 269-280.
- Vredeveld, A.J. and Coulter, R.A. (2019) 'Cultural experiential goal pursuit, cultural brand engagement, and culturally authentic experiences: sojourners in America', *Journal of the Academy of Marketing Science*, 47(2), pp. 274-290.
- Walls, A.R., Okumus, F., Wang, Y. and Kwun, D.J.-W. (2011) 'An epistemological view of consumer experiences', *International Journal of Hospitality Management*, 30(1), pp. 10-21.
- Wang, C.L. (2021) 'New frontiers and future directions in interactive marketing: Inaugural Editorial', *Journal of Research in Interactive Marketing*, 15(1), pp. 1-9.
- Wang, Y., Zhang, M., Li, S., McLeay, F. and Gupta, S. (2021) 'Corporate Responses to the Coronavirus Crisis and their Impact on Electronic-Word-of-Mouth and Trust Recovery: Evidence from Social Media', *British Journal of Management*, n/a(n/a).
- Warnaby, G. and Medway, D. (2018) 'Marketplace icons: shopping malls', *Consumption Markets & Culture*, 21(3), pp. 275-282.
- Wedel, M., Bigné, E. and Zhang, J. (2020) 'Virtual and augmented reality: Advancing research in consumer marketing', *International Journal of Research in Marketing*, 37(3), pp. 443-465.
- Wedel, M. and Kamakura, W.A. (2012) *Market segmentation: Conceptual and Methodological Foundations*. Springer.
- Wei, S., Ang, T. and Anaza, N.A. (2019) 'Recovering co-created service failures: the missing link of perceived justice and ethicalness', *Journal of Services Marketing*, 33(7), pp. 921-935.
- Weiner, B. (2000) 'Attributional thoughts about consumer behavior', *Journal of Consumer research*, 27(3), pp. 382-387.
- Westbrook, R.A. (1980) 'Intrapersonal Affective Influences on Consumer Satisfaction with Products', *Journal of Consumer Research*, 7(1), pp. 49-54.
- Weun, S., Beatty, S.E. and Jones, M.A. (2004) 'The impact of service failure severity on service recovery evaluations and post-recovery relationships', *Journal of Services Marketing*, 18(2), pp. 133-146.
- Wilson-Nash, C., Goode, A. and Currie, A. (2020) 'Introducing the socialbot: a novel touchpoint along the young adult customer journey', *European Journal of Marketing*.
- Wilson, J.H., Keating, B.P. and Beal, M. (2016) *Regression Analysis: Understanding and Building Business and Economic Models Using Excel, Second Edition*. Business Expert Press.
- Wind, Y.J. and Hays, C.F. (2016) 'Research implications of the “beyond advertising” paradigm: a model and roadmap for creating value through all media and non-media touchpoints', *Journal of Advertising Research*, 56(2), pp. 142-158.
- Wirtz, J. and Mattila, A.S. (2004) 'Consumer responses to compensation, speed of recovery and apology after a service failure', *International Journal of Service Industry Management*, 15(2), pp. 150-166.
- Witell, L., Kristensson, P., Gustafsson, A. and Löfgren, M. (2011) 'Idea generation: customer co-creation versus traditional market research techniques', *Journal of Service Management*, 22(2), pp. 140-159.
- Wollenburg, J., Holzapfel, A. and Hübner, A. (2019) 'Omni-channel customer management processes in retail: An exploratory study on fulfillment-related options', *Logistic Research*, 12(7), pp. 1-15.
- Wolny, J. and Charoensuksai, N. (2014) 'Mapping customer journeys in multichannel decision-making', *Journal of Direct, Data and Digital Marketing Practice*, 15(4), pp. 317-326.
- Wong, G., Greenhalgh, T., Westhorp, G., Buckingham, J. and Pawson, R. (2013) 'RAMESES publication standards: meta-narrative reviews', *BMC medicine*, 11(1), p. 20.
- Woo, K.-s. and Chan, B. (2020) "“Service with a smile” and emotional contagion: A replication and extension study', *Annals of Tourism Research*, 80, p. 102850.

- Xie, E., Reddy, K. and Liang, J. (2017) 'Country-specific determinants of cross-border mergers and acquisitions: A comprehensive review and future research directions', *Journal of World Business*, 52(2), pp. 127-183.
- Yachin, J.M. (2018) 'The 'customer journey': Learning from customers in tourism experience encounters', *Tourism management perspectives*, 28, pp. 201-210.
- Yang, K. and Forney, J.C. (2013) 'The moderating role of consumer technology anxiety in mobile shopping adoption: differential effects of facilitating conditions and social influences', *Journal of Electronic Commerce Research*, 14(4), p. 334.
- Yang, X., Garcia, K.M., Jung, Y., Whitlow, C.T., McRae, K. and Waugh, C.E. (2018) 'vmPFC activation during a stressor predicts positive emotions during stress recovery', *Social Cognitive and Affective Neuroscience*, 13(3), pp. 256-268.
- Yap, S.-F., Xu, Y. and Tan, L. (2021) 'Coping with crisis: The paradox of technology and consumer vulnerability', *International Journal of Consumer Studies*, 45(6), pp. 1239-1257.
- Yeh, Y.-F., Jen, T.-H. and Hsu, Y.-S. (2012) 'Major strands in scientific inquiry through cluster analysis of research abstracts', *International Journal of Science Education*, 34(18), pp. 2811-2842.
- Yen, C.-H., Teng, H.-Y. and Tzeng, J.-C. (2020) 'Innovativeness and customer value co-creation behaviors: Mediating role of customer engagement', *International Journal of Hospitality Management*, 88, p. 102514.
- Yen, C.-L. (2012) 'A Discussion of Paradigms and Research Methods', *Journal of WuFeng University*, 19.
- Yeo, S.F., Tan, C.L., Kumar, A., Tan, K.H. and Wong, J.K. (2022) 'Investigating the impact of AI-powered technologies on Instagrammers' purchase decisions in digitalization era—A study of the fashion and apparel industry', *Technological Forecasting and Social Change*, 177, p. 121551.
- Yi, S. and Baumgartner, H. (2004) 'Coping with negative emotions in purchase-related situations', *Journal of Consumer psychology*, 14(3), pp. 303-317.
- Yi, Y. and Gong, T. (2008) 'If employees "go the extra mile," do customers reciprocate with similar behavior?', *Psychology & Marketing*, 25(10), pp. 961-986.
- Yi, Y. and Gong, T. (2013) 'Customer value co-creation behavior: Scale development and validation', *Journal of Business research*, 66(9), pp. 1279-1284.
- Ying, S., Sindakis, S., Aggarwal, S., Chen, C. and Su, J. (2021) 'Managing big data in the retail industry of Singapore: Examining the impact on customer satisfaction and organizational performance', *European Management Journal*, 39(3), pp. 390-400.
- Yrjölä, M., Spence, M.T. and Saarijärvi, H. (2018) 'Omni-channel retailing: propositions, examples and solutions', *The International Review of Retail, Distribution and Consumer Research*, 28(3), pp. 259-276.
- Yüksel, A. (2007) 'Tourist shopping habitat: Effects on emotions, shopping value and behaviours', *Tourism Management*, 28(1), pp. 58-69.
- Yüksel, A. and Yüksel, F. (2007) 'Shopping risk perceptions: Effects on tourists' emotions, satisfaction and expressed loyalty intentions', *Tourism management*, 28(3), pp. 703-713.
- Yumurtacı Hüseyinoğlu, I.Ö., Galipoğlu, E. and Kotzab, H. (2017) 'Social, local and mobile commerce practices in omni-channel retailing: Insights from Germany and Turkey', *International Journal of Retail and Distribution Management*, 45(7-8), pp. 711-729.
- Zanger, V., Meißner, M. and Rauschnabel, P.A. (2022) 'Beyond the gimmick: How affective responses drive brand attitudes and intentions in augmented reality marketing', *Psychology & Marketing*, n/a(n/a).
- Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996) 'The Behavioral Consequences of Service Quality', *Journal of Marketing*, 60(2), pp. 31-46.
- Zhai, C. and Massung, S. (2016) *Text data management and analysis : a practical introduction to information retrieval and text mining*. First edition.. edn. New York : Association for Computing Machinery ; San Rafael, California : Morgan & Claypool.

- Zhang, J., Farris, P.W., Irvin, J.W., Kushwaha, T., Steenburgh, T.J. and Weitz, B.A. (2010) 'Crafting Integrated Multichannel Retailing Strategies', *Journal of Interactive Marketing*, 24(2), pp. 168-180.
- Zhang, J.Z., Chang, C.-W. and Neslin, S.A. (2021) 'How Physical Stores Enhance Customer Value: The Importance of Product Inspection Depth', *Journal of Marketing*, 86(2), pp. 166-185.
- Zhang, T., Lu, C., Torres, E. and Chen, P.-J. (2018) 'Engaging customers in value co-creation or co-destruction online', *Journal of Services Marketing*, 32(1), pp. 57-69.
- Zhang, Y., Yuan, Y., Su, J. and Xiao, Y. (2021) 'The effect of employees' politeness strategy and customer membership on customers' perception of co-recovery and online post-recovery satisfaction', *Journal of Retailing and Consumer Services*, 63, p. 102740.
- Zhao, Y. and Bacao, F. (2020) 'What factors determining customer continuingly using food delivery apps during 2019 novel coronavirus pandemic period?', *International Journal of Hospitality Management*, 91, p. 102683.
- Zheng, D., Luo, Q. and Ritchie, B.W. (2021) 'Afraid to travel after COVID-19? Self-protection, coping and resilience against pandemic 'travel fear'', *Tourism Management*, 83, p. 104261.
- Zhou, R., Wang, X., Zhang, L. and Guo, H. (2017) 'Who tends to answer open-ended questions in an e-service survey? The contribution of closed-ended answers', *Behaviour & Information Technology*, 36(12), pp. 1274-1284.
- Zhu, Z., Nakata, C., Sivakumar, K. and Grewal, D. (2013) 'Fix It or Leave It? Customer Recovery from Self-service Technology Failures', *Journal of Retailing*, 89(1), pp. 15-29.
- Zimmermann, R. and Auinger, A. (2022) 'Developing a conversion rate optimization framework for digital retailers—case study', *Journal of Marketing Analytics*, pp. 1-11.
- Zomerdijk, L.G. and Voss, C.A. (2010) 'Service design for experience-centric services', *Journal of Service Research*, 13(1), pp. 67-82.
- Zomerdijk, L.G. and Voss, C.A. (2011) 'NSD processes and practices in experiential services', *Journal of Product Innovation Management*, 28(1), pp. 63-80.
- Zourrig, H., Chebat, J.-C. and Toffoli, R. (2009) 'Consumer revenge behavior: a cross-cultural perspective', *Journal of Business Research*, 62(10), pp. 995-1001.