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A Framework to Improve the Digital Customer Experience in Complex Services

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ABSTRACT

Complex services systems (CSS) involve multiple stakeholders and processes. Therefore, digitalization in CSS is not straightforward and is especially challenging in terms of delivering a smooth customer experience (CX) along their journey. In this paper, we investigate these challenges in the insurance context by interviewing Belgian customers. Our analysis reveals three complexity dimensions—offering, access, and relational – and we propose a framework to enhance digital CX in each customer journey phase. This study contributes context-specific CX insights and offers guidance to researchers and practitioners for improving digital CX in CSS. Moreover, we add to the emerging literature on managing CX in the business-to-business-to-consumer (B2B2C) distribution model.

GRAPHICAL ABSTRACT
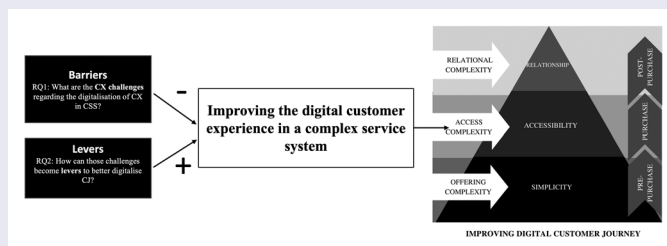
Introduction

The 21st-century digital sphere has a profound impact on the customer experience (CX) (Lemon & Verhoef, 2016; Verhoef et al., 2021). For the purpose of interacting with service providers, digitalization has led to a proliferation of the number of options (Bolton et al., 2022). In this regard, instead of simplifying customers' lives, services have become more complex.

To understand the customer's perspective of their experience, the concept of Complex Service Systems (CSS) provides a central framework (Epetimehin, 2011; Heinze & Matt, 2018). CSS encompass diverse areas, such as public services (Schenk et al., 2021), insurance services (Heinze & Matt, 2018), and healthcare services (Kannampallil et al., 2011).

Both the service industry perspective and service marketing theory play crucial roles in the successful management and marketing of services, with the former focusing on operational aspects and service delivery, and the latter encompassing broader marketing strategies and techniques to effectively promote and manage intangible service offerings, including the management of CX (Gronroos, 2007). As digital technology assumes paramount importance for discovering, purchasing and consuming services (Parise et al., 2016), organizations need to ensure that digitalizing CX comes with desired outcomes (Douthwaite et al., 2001; Heidenreich & Kraemer, 2016; Heidenreich & Spieth, 2013). CX can be broken down to the sum of the customer's journey with a service provider across the purchasing cycle, embodying various touchpoints (Lemon & Verhoef, 2016).

Service scholars have invested significant effort in classifying variables and constructs intertwined with CX (Arici et al., 2022; Becker & Jaakkola, 2020; Bueno et al., 2019; De Keyser et al., 2020). Furthermore, the realm of CX research has predominantly concentrated on direct business-to-consumer (B2C) distribution, with indirect channels (e.g., business-to-business-to-consumer (B2B2C)) receiving comparatively less attention (Lemon & Verhoef, 2016). A striking statistic from De Keyser et al. (2020) reveals that 91% of studies exclusively focus on B2C. This literature imbalance underscores the need for in-depth investigations into how CX dynamics unfold in a business-to-business (B2B) context, or the hybrid landscape of B2B2C, especially given the growing prominence of the B2B2C distribution model in various contexts (Alliedmarketresearch, 2023; Gittell, 2002; Mingione & Leoni, 2020).

Our review of the existing literature highlights a substantial gap in understanding CX within highly complex settings. The context-specificity inherent in CSS provides a unique opportunity to enhance our understanding of CX from the customer's viewpoint (Stremersch et al., 2022). In order to address these gaps, we formulate the research questions: (1) What are the CX challenges entailed in the digitalization of CSS? (2) How can these challenges become levers for digitalizing the customer journey?

In particular, we aim to develop a framework that identifies and effectively addresses challenges arising from digitalization. An in-depth understanding of how customers navigate the complexities of CSS in the digital age will enable adapted strategies and the design of service offerings that align with evolving customer needs and preferences. This knowledge can help service providers and managers create more customer-centric and

value-driven experiences, ultimately leading to improved value co-creation outcomes. To delve into these questions, we turn our empirical lens toward the insurance sector, a quintessential case of CSS characterized by intricate interdependencies and multiple decision-making levels (Briscoe et al., 2012). Moreover, the insurance domain is particularly susceptible to various external influences, ranging from regulatory dynamics to competitive pressures and technological advancements (Spohrer et al., 2007; Standaert & Muylle, 2022).

Given the need for a comprehensive and in-depth understanding of contextual factors impacting experiences from customers' perspectives, we adopt a qualitative research approach (Brinkmann & Kvale, 2018). We aim for an in depth understanding of the intricate challenges, perceptions, and experiences of customers in the complex B2B2C environment. Our distinctive contribution lies in identifying context-specific challenges rooted in customer perspectives regarding the digitalization of CSS. We categorize these challenges in alignment with different phases of the customer journey. Furthermore, we develop a framework tailored to guide researchers and practitioners aiming to enhance digital CX within the realm of CSS.

Literature review

The customer service experience has received increased attention in recent years due to the growth of service-based economies. With technological advances, many industries, including healthcare, insurance, and banking, are becoming more complex, leading to challenges in delivering a satisfactory CX. As a result, there is growing interest in understanding the factors that impact CX in CSS and how organizations can effectively manage them to improve CX in CSS. In this section, we review the literature on CX and CSS and review customer journey issues and then integrate all literature streams in a final section, in which we also identify the main gaps.

Customer experience (CX)

CX is critical to service delivery: positive CX is essential for customer retention (Hennig-Thurau & Klee, 1997), loyalty (Shaikh et al., 2023), and advocacy (Smith & Wheeler, 2002), while negative CX can lead to customer dissatisfaction, churn, and negative word-of-mouth (Becker & Jaakkola, 2020). CX consists of "non-deliberate, spontaneous responses and reactions to offering-related stimuli embedded within a specific context" (Becker & Jaakkola, 2020, p. 637).

Furthermore, scholars generally agree that CX is a multidimensional concept that progressively and spontaneously influences how customers

perceive their business interactions (De Keyser et al., 2020). In particular, CX has been dimensionalized into touchpoints, context, and qualities (TCQ) (De Keyser et al., 2020). Touchpoints are the various interaction points between the customer and the brand or firm and can take different forms, such as website visits, phone calls, or face-to-face meetings. Lemon & Verhoef (2016) categorize touchpoints into four groups: brand-owned, partner-owned, customer-owned, and social/external/independent. Customers may encounter these touchpoints in each stage of their experience. Second, context refers to the situational factors that influence the uniqueness of each CX and includes individual, social, market, and environmental factors (De Keyser et al., 2020). Qualities encompass the attributes that demonstrate the customers' responses to interactions with the service provider and can range from emotions and perceptions to satisfaction level and trust. In summary, TCQ influence customers' decisions to pursue the journey and shape their overall relationship with a service provider. Given the contextual specificity of CX, further research is needed to understand its intricacies in the CSS domain fully.

Complex services systems (CSS)

CSS refers to the complex, interconnected networks of people, organizations, technologies, and processes that deliver services (Benedettini & Neely, 2012). These systems can be highly interdependent and involve multiple levels of decision-making and coordination (Briscoe et al., 2012). They can also be influenced by various external factors, such as regulation, competition, and technological advances (Spohrer et al., 2007). Benedettini and Neely (2012) shed light on different sources of complexity, categorizing them as general and individual complexities from a management perspective. While they define general complexity as the complexity inherent in the service, individual complexity is attributed to specific business decisions.

Furthermore, according to Benedettini and Neely (2012), the nature of service complexity is determined by its complicatedness and difficulty. First, complicatedness refers to the multiplicity of service components and their interrelatedness. In other words, the large number of stakeholders involved and their interdependence in interactions. Second, difficulty refers to the effort, time, or resources required to achieve the final goal. In addition, difficulty reflects uncertainty, which is the inability to accurately predict or rely on something. These two elements of complexity can be summarized as follows: a complicated service involves many different functions, whereas a difficult service involves more sophisticated functions (Benedettini & Neely, 2012).

Perceived complexity is manifested in CSS by difficulties in understanding the service or the need for professional help in the purchasing process (Eckardt

& Räthke-Döppner, 2010; Holm et al., 2012; Mikolon et al., 2015; Regan & Tennyson, 2000), challenging CX from the customer perspective but also from the service provider's. These customer perceptions of CSS are often linked to previous interactions with the service provider (Mikolon et al., 2015).

Since part of the complexity of the service is due to the number of stakeholders involved, a direct distribution model is not common (Dominique-Ferreira, 2018). Instead, the B2B2C distribution model, which combines the features of both business-to-business (B2B) and business-to-consumer (B2C) models (He & Zhang, 2022), is often adopted in complex services. This model allows intermediaries to provide a comprehensive service to customers while enabling service providers to access a large customer base efficiently. However, these business partners or intermediaries may have competing interests with the business (Briscoe et al., 2012), and may even resist digitalization out of fear of being replaced by it (Accenture, 2022). Because they are physically closer, intermediaries can have a stronger connection of trust with customers (Eckardt & Räthke-Döppner, 2010; Regan & Tennyson, 2000). In addition, recent research has demonstrated their significant role as service facilitators (Rydback, 2022). In this context, firms consider both businesses (B2B) and consumers (B2C) as customers to be managed and dealt with (Iankova et al., 2019). For example, in the insurance context, service providers need to address not only the CX of their end customers, but also the relationship quality with their partners and intermediaries (Gittell, 2002). Therefore, the number of stakeholders involved is likely to challenge CX, as it affects the context of interactions, the number and types of touchpoints, and ultimately, the qualities of CX.

Increasingly, experiences are co-created, as customers interact with numerous participants, such as staff, businesses, or other customers (e.g., Kim et al., 2020). In the co-creation process, communication, accessibility, transparency, and understanding of the risks/benefits are fundamental (Prahalad & Ramaswamy, 2004). In this context, co-created value can be considered the ultimate goal of improving our capacity to design and scale services for societal purposes (e.g., efficiency, effectiveness, and sustainability) (Maglio & Spohrer, 2008). As a service provider-customer interaction is an opportunity to engage customers to become co-creators of the value (Grönroos, 2008), these stakeholders should be in constant dialogue to identify a highly adaptive system in a B2B2C setting (Mingione & Leoni, 2020). While most current CX studies focus on B2B or B2C, the B2B2C multi-stakeholder co-creation context is still under-researched (De Keyser et al., 2020).

Digitalization, expectations, and barriers across the customer journey

Customers engage with businesses through various touchpoints across multiple channels and media platforms, which is referred to as their

journey (Lemon & Verhoef, 2016). The CX construct does not encompass a customer's overall perception of the customer journey. Instead, it evaluates the experience of a specific customer interaction within the journey (Gahler et al., 2023). A growing body of literature addresses how technology impacts the customer journey, both positively and negatively (Herhausen et al., 2019; Parise et al., 2016; Zaki, 2019). The nature/modality of touchpoints through which customers connect with businesses can be human or digital (De Keyser et al., 2020), resulting in potentially complex customer journeys (Lemon & Verhoef, 2016). Customers may have different needs at different journey steps, indicating that firms can use various digital technologies to support these needs (Hamilton & Price, 2019).

For example, technology allows customers to communicate with firms anytime (Verhoef et al., 2021). Therefore, the availability of digital channels raises customer expectations (Schreuer, 2000), and their interactions with big tech players lead them to always expect seamless digital experiences regardless of service complexity, including in financial services (Standaert & Muylle, 2022). However, sometimes technology creates challenges for customers (Golf-Papez et al., 2022; Jo Bitner, 2001; Kennedy, 2006), resulting in a multifaceted perception of technology along the customer journey. These changes require service providers to involve multiple business functions and even collaborate with external partners to ensure the creation and delivery of a satisfying CX (Verhoef et al., 2021).

The customer journey consists of myriad potential touchpoints between the firm and the customer, and marketing scholarship largely agrees that the customer journey can be operationalized into three phases: pre-purchase, purchase, and post-purchase (Kranzbühler et al., 2018; Lemon & Verhoef, 2016; Vakulenko et al., 2019; Voorhees et al., 2017). According to Lemon & Verhoef (2016), the pre-purchase phase encompasses the entire period prior to purchasing a product. More specifically, it begins when individuals become aware of their wants or needs, actively (re)search potential offerings, and evaluate the available options (Hamilton & Price, 2019). The purchase phase is when a customer buys a particular offering. This phase has historically taken place in a physical store, but is increasingly digitalized as firms sell through e-commerce websites, online platforms, and social media (Vakulenko et al., 2019). It is characterized by making selections, placing orders, and completing payment transactions. After the purchase is made and the individual is able or entitled to use the product and/or service, the post-purchase phase begins and lasts until the product or service is no longer used. This phase includes product use, consumption, post-purchase engagement, and customer service-related requests (Lemon & Verhoef, 2016). The intensity of use varies according to the product or service purchased. For example, it can be unclear if,

when, and how services are actively used when purchasing an insurance product.

Firms need to achieve customer satisfaction through impeccable offerings and customer-centric procedures (Standaert & Muylle, 2022). Kuehnl et al. (2019) observe that in addition to improving the brand experience, a consistent digital customer journey strongly impacts customer loyalty and sentiment toward the brand. As technology is only understood in relation to users and the context in which they operate (Morgan-Thomas et al., 2020), adopting a customer perspective when using technology is crucial. Indeed, increased customer centricity contributes to higher value for the business and its customers (Loshin & Reifer, 2013), enabling an understanding of their needs and challenges.

Based on behavioral reasoning theory, Claudy et al. (2015) define two categories of barriers that customers face with technological innovations. First, there are functional barriers, where consumers evaluate the consequences of adoption in terms of use, value, and risk. Second, psychological barriers arise mainly when technology adoption conflicts with consumers' prior beliefs. Claudy et al. (2015) further suggest that barriers to technology adoption are context-specific. While studies have advanced our understanding of what motivates or hinders technology use in the customer journey in its entirety, it remains unclear what supports or inhibits customers when interacting through technology at each specific stage of the customer journey (Kranzbühler et al., 2018).

Indeed, although identifying the barriers associated with technology adoption, past studies do not specify which barriers are associated with each customer journey phase. When moving toward digitalizing a service, this could be perceived as a barrier for CSS regarding where to start in terms of identifying which journey phase is appropriate for digitalization, and how. Therefore, our study aims to deepen our understanding of the barriers associated with each customer journey phase to help service providers design consistent journeys free of challenges.

Digitalizing complex service systems

Our synthesis of the literature review and how it applies to our study is presented in Figure 1. In summary, CSS requires a more cautious approach to managing digital CX throughout the customer journey, particularly in how customers perceive it (Dalla Pozza et al., 2017; Mikolon et al., 2015; Regan & Tennyson, 2000). The market context within this framework encompasses the B2B2C distribution model, which implies an indirect approach to managing CX (Zolkiewski et al., 2017).

Indeed, unlike traditional B2C models, where businesses directly engage with end customers, the B2B2C model involves intermediaries and partners
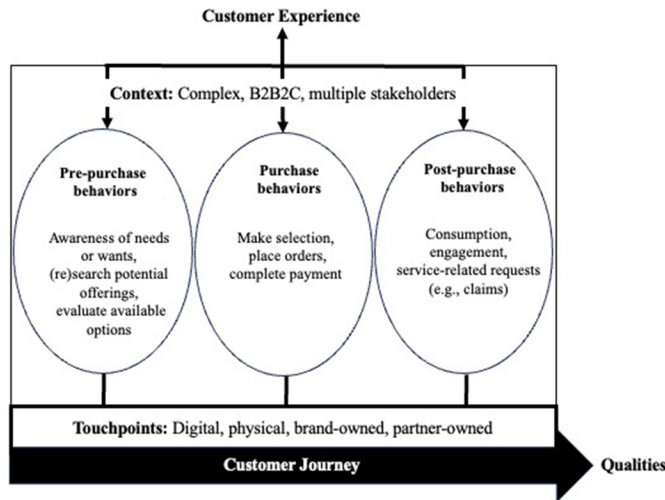
Customer Experience

Context: Complex, B2B2C, multiple stakeholders

Pre-purchase behaviors

Awareness of needs or wants, (re)search potential offerings, evaluate available options

Purchase behaviors

Make selection, place orders, complete payment

Post-purchase behaviors

Consumption, engagement, service-related requests (e.g., claims)

Touchpoints: Digital, physical, brand-owned, partner-owned

Customer Journey

Qualities

Figure 1. Theoretical framework.

in the process (Mingione & Leoni, 2020). This indirect model adds a layer of complexity, as CX is influenced not only by the primary business but also by one or various intermediaries along the distribution chain (Goplakrishnan & Ajitha, 2022). Coordinating these multiple entities and aligning their strategies toward a seamless CX can be challenging. Moreover, the digital landscape amplifies this complexity (Verhoef et al., 2021). Successful digitalization requires a deep comprehension of customer needs and challenges at every touchpoint throughout the customer journey (Lemon & Verhoef, 2016). The B2B2C journey is not as straightforward for customers as when they buy directly from a business (Mingione & Leoni, 2020). Customers may come across various digital and non-digital touchpoints throughout their journey; some are directly overseen by the focal organization, while others are managed by intermediaries (Lemon & Verhoef, 2016). This distribution of control, as well as the larger number of stages and touchpoints, add to the complicated nature of CX management. That's why, ensuring consistent and satisfactory experiences across these diverse touchpoints is a significant challenge.

Due to its complexity, successful digitalization necessitates a thorough understanding of customer needs and challenges. CX is a dynamic process that flows from pre-purchase activities, such as searching, to the actual purchase and post-purchase interactions. This process is iterative and influenced by past experiences and external factors. At each stage, customers encounter (digital) touchpoints, some of which are within the firm's control and others in the control of partners (e.g., intermediaries), see Figure 1. This study focuses on all these concepts to examine the challenges customers face throughout their journey that impact their experience with

CSS digitalization. Moreover, it aims to provide insights into how these challenges can be interpreted as needs that service providers must meet.

Methodology

Study context

Given CX is context-specific, it is important to note that we conducted this study in an insurance setting, which is a clear instance of a CSS. Indeed, insurance is a highly complex environment for customers due to the very nature of the products and services (Eckardt & Räthke-Döppner, 2010; Mikolon et al., 2015). For example, before making a purchase decision, customers need to consider several factors, such as the amount of coverage, the insured activities, and other elements that may affect the monthly liability insurance premiums (Mikolon et al., 2015). As a result, insurance consumption patterns and engagement throughout the customer journey may be highly influenced by perceived complexity, intangibility, and risk. In short, the insurance industry is known to be inherently complex (Benedettini & Neely, 2012).

Research has highlighted the importance of developing, adopting, and leveraging digital technologies for the insurance industry (Bohnert et al., 2019; Eling & Lehmann, 2018; Riikkinen et al., 2018). However, this industry needs to take a more cautious approach to managing technology in the customer journey, particularly in how customers perceive and use it (Dalla Pozza et al., 2017; Mikolon et al., 2015; Regan & Tennyson, 2000). Indeed, the insurance industry needs to provide a better CX across all digital channels and optimize the customer journey (Eling & Lehmann, 2018). Designing a more successful customer journey and creating digital solutions that meet customer needs and expectations requires understanding the current challenges (Kranzbühler et al., 2018). For the insurance industry to remain competitive and successful, customer needs and challenges must be addressed (Lotz et al., 2018). In summary, insurance is a relevant CSS example to address the gap in customers' perspectives on service digitalization.

Data collection

We conducted semi-structured interviews with insurance customers in Belgium using a convenience sampling method to gain insights into their challenges and needs in a digital context throughout the customer journey. The questions were crafted to uncover challenges related to each journey phase respectively to develop our data-driven framework. The interview guide was structured in a way to address the whole experience following

each subsequent stage of the journey, one by one (i.e., pre-purchase, purchase, post-purchase), using questions such as "Can you tell me how you actually proceeded to the purchase of your insurance?" or "Which (digital) tools allow you to stay in touch with your insurer after the purchase?". These prompts were designed to encourage interviewees to share their experiences, challenges, and perceptions related to each distinct phase (Rubin & Rubin, 2011). This approach allowed us to gather insights closely tied to the different stages of the journey and facilitated a comprehensive analysis of the complexities and difficulties customers face at each stage. Another topic covered related to the relationships with their insurer and intermediary. We tried to capture personal opinions and minimize confirmation bias; we did not provide definitions, avoided sharing our viewpoints, and phrased the questions openly and non-leadingly (Gioia et al., 2012).

The inclusion criteria were having at least one insurance plan and using at least one digital device (i.e., smartphone, tablet, PC, or laptop). After conducting 22 interviews, data analysis indicated saturation was reached (Hamilton & Price, 2019). The interviews were conducted in various modes (face-to-face, video conference, telephone), depending on the participants' preferences. Twelve female and ten male participants took part, with an average age of 41 years (for more details on the characteristics of participants, see Table A1 in the appendix).

Data analysis

We manually transcribed all interviews and then employed the Gioia analysis methodology (Gioia et al., 2012). We chose this type of analysis to preserve and capture the informant-related terms and codes in the first-order analysis. We then conducted a second-order analysis using the research concepts, themes, and dimensions. This allowed us to demonstrate the connections between the data and the induction of new concepts. Next, the thematic analysis allowed for identifying the emerging themes and their relationships. Some thematic categories were kept, others dropped, and others split or grouped and concerted to address our research questions better (Grodal et al., 2021). When the authors interpreted some statements and terminology differently, we further studied the source material. We resolved opposing views through discussions to reach a consensus on coding certain terms or phrases.

We used the Gioia approach to construct a representation of the first- and second-order data analyses, provide evidence for our claims, and illustrate a systematic way of obtaining and analyzing the data. Organizing the data into two order categories not only facilitates their presentation in a more structured form, but also strengthens the qualitative integrity of the research (Gioia et al., 2012). This approach allowed for identifying

the data connections and the key challenges for digitalizing insurance services across the customer journey.

The first-order concepts involved 17 distinct codes (see Figure 2). We then constructed seven categories to create the second-order themes by grouping the most recurring and broadly related challenges reported. Next, we aggregated the second-order themes related to these challenges to form the higher-order challenges in a comprehensive model (Gioia et al., 2012). This inductive model represents the data structure's central concepts, themes, and dimensions and exemplifies the relational dynamics between these concepts as simple as possible to achieve qualitative rigor (Gioia et al., 2012).

Results

Identifying the challenges

To address our first research question, this section analyzes respondents' CSS challenges and how they relate to service digitalization (see Figure 2). The findings indicate that customers face several complexity challenges when dealing with CSS throughout different customer journey phases.

In the pre-purchase phase, customers encounter offer complexity, which includes the insurance paradox, choice overload, and excessive use of jargon in insurance policies. The lack of clarity about coverage and options, along with the overwhelming choices, makes it difficult for customers to make informed decisions. In the purchase phase, access complexity becomes prominent, characterized by opacity and a lack of findability of essential information, such as contract details and pricing breakdowns. This lack of access to key information hinders customers from understanding what they are paying for.

Finally, in the post-purchase phase, relational complexity emerges, with challenges in communication ambiguity and a lack of trust in the information the insurance provider provides. These challenges collectively impact the customer experience and can affect the insurance company's reputation. Understanding these complexity issues can help organizations improve their digitalization strategies and customer communication services to enhance overall customer satisfaction.

Offer complexity

The complexity of the offering is one of the respondents' most salient challenges when dealing with CSS and constitutes the first aggregate dimension (see Figure 2). It comprises various second-order themes in the specific insurance context, including insurance paradox, choice overload, and excessive use of jargon.
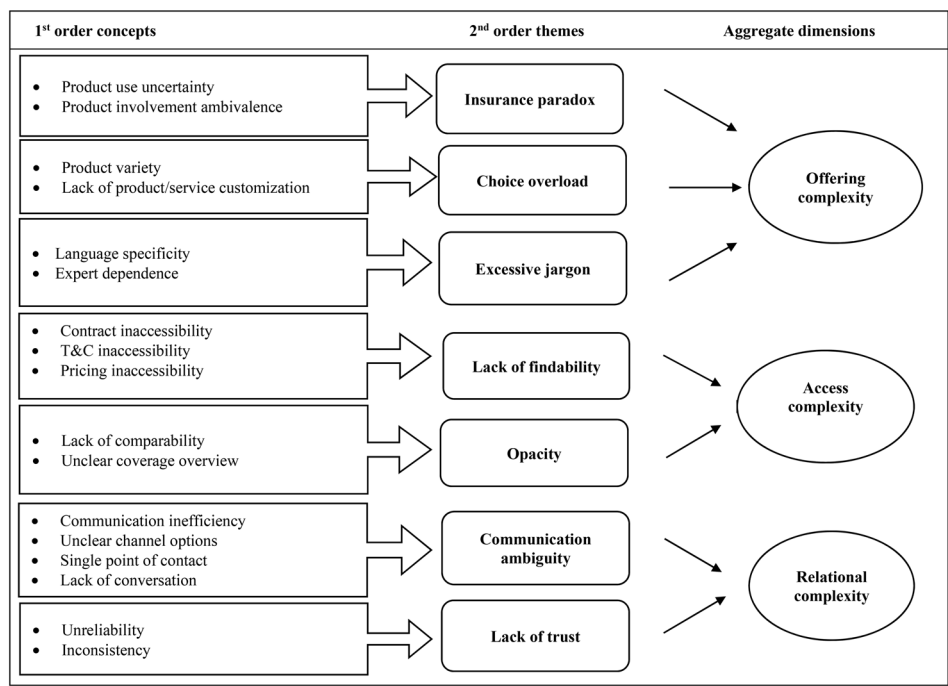
Figure 2. Inductive model.

Insurance paradox: Insurance products are not actively used on a daily basis, so they do not play a prominent role in people's lives. The paradox can even be taken further to the extent that insurance is a service that consumers do not want to (but have to) purchase and use, similar to healthcare. As respondent 17 stated, *"It's like throwing money down the drain; you'll never see it back."* In essence, respondents emphasized that they were not sure when they would need to use the product, defined as "product use uncertainty," and that they were unclear about what their policy covered. In addition, there is a long time lag between purchasing and using the service, which increases the complexity of the offering in the pre-purchase phase, as it is often unknown when an event will occur that will require this complex service. The latter is coded "product involvement ambivalence", which is quite common in the insurance sector. During their journey, customers go through phases of high and low involvement with their products: insurance can seem extremely important at the time of purchase, and highly superfluous over time if customers do not use it. This complexity affects CX.

Choice overload

Another perceived challenge contributing to the complexity of the offering is choice overload resulting from the wide variety of service types and

providers. This choice overload is a significant aspect of pre-purchase complexity, where "product variety" and "lack of customization" are the first-order concepts. The breadth of product offerings and the range of possible features make it a challenge to have a positive experience and understand everything related to the service they are about to purchase. Respondent 3 explained, *"I think that a person could be happier with insurance if it could fit more with who that person is. Adapting to the personal situation"*, and Respondent 4, "*So many different insurance companies, with so many different rates.*" As a result, potential customers may feel overwhelmed and undecided about which product fits better with their needs (coded "product variety"). In addition, the lack of customization means the general terms and conditions may or may not meet their specific needs.

Excessive use of jargon

Professionals use jargon, including technical or industry-specific terms (Nash, 1994). Some respondents reported that companies intentionally use technical terms, and many others said it was part of the complex pre-purchase experience. For example, one respondent stated, *"written formally, containing information that is not personalized, or information perceived as irrelevant and lengthy."* This respondent noted that product information is often jargon-laden with "language specificity" to the point that they cannot understand the offering but still need to decide. This challenge is most pronounced in the pre-purchase phase, when a customer may not have chosen a specific intermediary yet. Moreover, the language is not used daily and contains formal and legal terms that make it incomprehensible from the customer's point of view. In this respect, customers have become "expert dependent" in the B2B2C distribution model.

Access complexity

Access complexity is our second aggregate dimension and is a significant CX challenge. Adequate information must be available through the digital touchpoint in order to better understand the insurance product and the clauses of policies. For various reasons, access to relevant information is perceived as difficult, especially if an intermediary plays a key role in the distribution model. When purchasing insurance, customers want to be reassured that no information is overlooked and to be fully aware of how to access their policies online when needed. Respondents also emphasized their lack of knowledge about possible ways to buy insurance online. The two second-order themes in this dimension are lack of findability and opacity.

Lack of findability

Some aspects of this dimension are related to the intrinsic complexity of the service in general, but others are exaggerated due to digitalization. Respondents mentioned that it is unclear how they can access the policies online and keep track of the price breakdown during the purchase. They also expressed how difficult it is to be fully aware of their contract's terms and conditions (T&Cs). The first-order concepts of contract, T&C, and pricing inaccessibility are combined to form the second-order theme of lack of information findability. The critical information that customers expect to be easily accessible is reported to be unclear when purchasing their insurance. Respondent 18 stated, "*The need for access to information, in my case, translates into digital presence and having the information quickly accessible on the device that I'm using.*" The findability challenge leads to a lack of customer knowledge about coverage, personal liability, and reimbursement, which together make for a rather unpleasant experience. In addition, having access to personal data is a need expressed by many respondents who want to know where to find a specific piece of (personal) information during the purchase phase.

Opacity

Opacity has repeatedly emerged as a factor impacting CX. The summative dimensions of opacity are lack of comparability and unclear coverage overview. While before digitalization, the comparability task was expected to be performed by intermediaries, with digitalization, customers often expect online comparison tools. As a result, the data show that the goals of customers and complex service providers are not always aligned. Customers want clarity on how the price is built, what is included in their coverage, and how the price of a product changes when elements are removed or added; they can make their own decisions. The company's goal, however, is to collect customer data and capitalize on how this can be converted into sales leads. For example, Respondent 5 stated, "*Bringing you the data in a very simple way. And always accessible. As a client, I want to know at any moment what my insurance is, what's included, how much I can be reimbursed in case of incidents.*"

Due to the opacity of the inputs, respondents also reported a real struggle with knowing what they were paying for or how the prices were constructed. The opacity challenge is often perceived as intentional but is also context-dependent. In addition, intangible services make the ability to compare or know what to include even more complex than tangible products. For example, car insurance is intangible, but customers can understand what is covered and its economic value. Family insurance, on the other hand, can cover a variety of options, ranging from pets to health-related matters. This makes it difficult to compare policies and to anticipate one's needs.

Relational complexity

The third aggregate dimension identified in the data is the relational complexity between service providers and customers, especially in the post-purchase phase. Except for claims, where the most convenient interaction is required and expected, digital contact is often unnecessary after the insurance purchase. However, this perception varied widely among respondents. For an optimal experience, younger respondents, in particular, expect a multitude of (digital) touch points or the omni-presence of the provider. However, this is not always present and clear, and the B2B2C distribution model adds to this relational complexity. Respondents emphasized that they trust, communicate, and rely more on intermediaries than on complex service provider. Their uncertainty about using the service provider's digital touchpoint or the intermediary reflects this *communication ambiguity* and *lack of trust*, which adds to the relational complexity between complex service providers and their customers.

Communication ambiguity

Digitalization can provide new touchpoints, giving customers a sense of autonomy in interacting with the complex service provider. When this is not the case, communication ambiguity can arise, consisting of *communication inefficiency, unclear channel options, a single point of contact, and a lack of dialogue*. Some respondents prefer to have a single point of contact, "*one touchpoint, one customer support, it's all there.*" Others prefer multiple contact options and choose according to their situational needs. Respondent 15 mentioned, "*I want my online experience to be as efficient as possible. If I have a question, that it is addressed as quickly as possible*". Again, depending on the context, customers expect to be able to interact directly with the complex service provider (*via* the website, a personal conversation, or chat) or indirectly with the intermediary (*via* email, a mobile application, or an online portal).

Age is an important differentiator regarding the expected and required number of digital touchpoints. Most younger respondents (under 40) opt for an omnichannel digitalized interaction, while older respondents do not actively seek more than one defined and trusted touchpoint. Notably, social media is not considered valuable to the customer experience, not even among the younger age groups. In the claim phase, digital tools are not seen as a go-to resource, as customers want to be helped as quickly as possible and still prefer to interact with someone they trust, such as by phone or face-to-face. Responses varied depending on the situation; for example, if claiming travel insurance for a delayed flight, respondents prefer to use digital tools, such as filling out an online application, but if

their car breaks down on the highway, they prefer immediate assistance, making phone calls more convenient than digital touchpoints. In general, the need for human interaction is likely to prevail in highly emotional and stressful situations.

Lack of trust

Customers expect consistent and trustworthy information. This expectation is often not met in personal communications, especially when there is no single point of contact with the complex service provider. As Respondent 12 stated, *"The explanation can differ from person to person or office to office."* Other respondents expressed similar concerns about online customer service chat options. In addition, trust in the intermediary and lack of service encounters in this non-direct distribution setting contribute to the issue. Clearly, receiving significantly different information from frontline employees or technology touchpoints leads to inconsistency and an unreliable and unsatisfactory experience with the complex service provider. As a result, perceived unreliability and inconsistent information lead to a lack of trust. This issue directly impacts the insurer's reputation through word-of-mouth and reviews. The data show that some contextual factors influence a service provider's reputation, including digital, such as electronic word-of-mouth and reviews on non-brand owned websites, but also non-digital, such as advice from parents, family, friends, or prior personal experience.

Proposed levers

To address our second research question, we build on these key challenges and propose a framework that follows the customer journey, sequentially the pre-purchase, purchase, and post-purchase phases (Lemon & Verhoef, 2016).

Figure 3 shows that this sequencing is possible because the data clearly show that some challenges were more pertinent in certain journey phases, as explained above. We built the foundation for an actionable framework by translating customer-elicited challenges into related needs throughout the customer journey, ranging from fundamental levers to recommended ones.

Needs related to the pre-purchase phase: Simplicity

The pre-purchase phase was the most discussed phase among respondents and is often challenging as customers explore the brand's offering and decide whether or not to purchase (Vakulenko et al., 2019). The data show that customers perceive insurance as complex in this phase, as per our first aggregate dimension, and this affects their overall experience, particularly in terms of technology adoption (see bottom layer of Figure 3). Consistent with Benedettini and Neely (2012), we found that uncertainty,
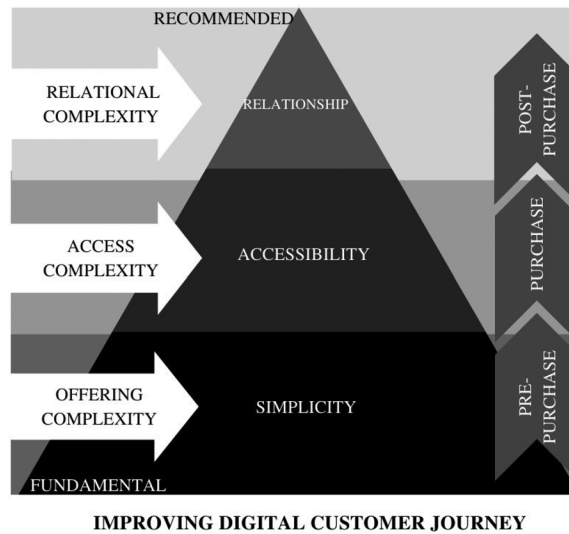
Figure 3. Improving the digital customer journey.

which is the inability to predict or rely on something accurately, also affects complexity (Benedettini & Neely, 2012). The need for simplicity is related to the difficulty dimension of complexity, which refers to investing time and effort to achieve the desired outcomes (Benedettini & Neely, 2012). When considering the "simplicity" lever, we examine how it contributes to alleviating the intricate nature of CSS. In the digital age, this lever is not merely about reducing complexity but involves user-friendly interfaces, minimizing cognitive load, and creating intuitive navigation paths. By simplifying interactions, users can navigate the intricate structures of modern CSSs more effectively, enhancing their overall experience.

From a socio-technical perspective, technology should support user needs and enable them to accomplish specific tasks through relevant and efficient features (Morgan-Thomas et al., 2020). Technology and actors should work hand in hand to reduce the complexity of the offering, especially, with the simplified information, where customers have unparalleled access to information before making purchase decisions online. This demands seamless and intuitive digital experiences. Insurance providers need to adapt by offering user-friendly digital interfaces that simplify the process of understanding and purchasing insurance products. For example, user experience design and clear communication can mitigate customers' apprehensions and encourage them to choose a service provider over another. CSS can effectively address complexity, uncertainty, and the need for simplicity through customer-centric digital transformation, build strong customer relationships, drive engagement, and facilitate well-informed decision-making in an increasingly competitive digital landscape (Standaert & Muylle, 2022).

Needs related to the purchase phase: Accessibility

In the purchase—or decision—phase, customers need to be assured that no information is overlooked before investing in a service (Lemon & Verhoef, 2016). The rationale behind the "accessibility" lever lies in its ability to address access complexity. Accessibility is a specific dimension of transparency (Dethier et al., In press; Liu et al., 2015), which focuses on ensuring that users can seamlessly engage with CSSs, irrespective of their individual abilities or constraints. The digital age has transformed the purchase phase into a dynamic, technology-driven process. Online platforms have facilitated a shift in customer behavior, where customers can quickly explore and evaluate options. In general, access to information, especially price, is a key concern in the purchase phase. Price is also known to be a differentiator in this phase (Voorhees et al., 2017), but according to our respondents, access to other information is also critical. Most participants cited the complexity of accessing information related to their contract, and the overall opacity of coverage details. This accessibility challenge makes it imperative for businesses considering digitalizing their services, especially in the insurance sector, to provide easily accessible, findable and understandable information about coverage, terms, and conditions. In the insurance context, like in many other services, accessibility also comes through the easy comparison of plans and features (Marano, 2016). Failure to meet these expectations can lead to customer frustration and lost opportunities. Therefore, most respondents mentioned that access affects their experience, a key element in the purchasing phase (see middle layer of Figure 3).

Needs related to the post-purchase phase: Relationship

Central to the success of CSSs in the digital age is their ability to build meaningful customer relationships. The "relationship" lever extends beyond transactional interactions and delves into personalized engagements facilitated by digital tools. By leveraging data-driven insights, CSSs can offer tailored experiences, anticipate user needs, and establish a bond that transcends the transactional, resulting in heightened customer loyalty and sustainable relationships. Digitalization has significantly reshaped the dynamics of customer-business relationships, particularly in the post-purchase phase. With the proliferation of digital technologies, CSSs have evolved into complex ecosystems that extend beyond traditional boundaries. The proposed levers, originally designed to manage complexity, have taken on new dimensions in the digital age. For instance, the "relationship" lever not only fosters customer loyalty but also leverages digital tools to establish personalized interactions, further enhancing the CX. A critical aspect of the post-purchase phase is guidance and assistance when using a service. However, the impact of digitalization on this phase goes far beyond mere

assistance—it has redefined how businesses interact with their customers and cultivate relationships. Indeed, a key complexity for customers in this phase is building rapport with their service provider, which is shown in our third aggregate dimension (see the top layer of Figure 3).

The intricacies of digital interactions magnify the complexity of building and maintaining this rapport. Technology serves as both an enabler and a potential barrier in this realm. Digitalization brings about a multitude of interaction channels, ranging from emails and chatbots to social media platforms. The diverse nature of these channels adds complexity to the customer-service provider relationship. For instance, how a customer interacts *via* email might differ greatly from their interactions on a social media platform. This behavioral diversity necessitates a keen understanding of the nuances associated with each channel, requiring businesses to tailor their communication strategies accordingly to foster desired relationship outcomes as positive CX.

However, this relational complexity is affected by the nature and occasion of the interaction. For example, experiences with claims or complaints can ultimately lead to better CX, added value, and increased customer satisfaction (Colgate & Norris, 2001). Managing CX is critical for firms to create value (Grundstrom & Karampela, 2018), and being actively present during the post-purchase phase and building a relationship with customers provides opportunities to improve CX. Digitalization has also introduced the concept of real-time engagement. Customers now expect prompt responses and personalized interactions. Such expectations place a premium on the responsiveness of businesses during the post-purchase phase. The speed at which businesses address queries, concerns, and even positive feedback contributes significantly to the perceived quality of CX. Data-driven personalization has also emerged as a key factor in fostering positive CX. To make the most of digitalization, businesses need to both adjust to these changes and actively use the opportunities they offer to build strong and long-lasting connections with their customers.

Discussion and conclusion

As service systems become increasingly complex, it is critical that providers continue to invest in improving the quality of their services by prioritizing CX. CX is a priority because service providers today sell an experience, not just the service they provide. By doing so, they can not only improve customer satisfaction and loyalty but also gain a competitive advantage in the marketplace. Against this background, we set out to address two research questions:

1. What are the CX challenges entailed in the digitalization of CSS?
2. How can these challenges become levers for digitalizing the customer journey?

Our findings revealed three CSS-specific dimensions of complexity that customers face in the context of digitalizing the customer journey: offering, access, and relational. In addition, we propose a three-dimensional framework to help CSS providers improve their digital CX: simplicity, accessibility and relationship.

Theoretical implications

As to our first research question, this work contributes to understanding the challenges customers face in digitalized customer journeys of CSS, and how they affect their experience. By taking a perspective that breaks down challenges at each journey stage, we offer a more precise and actionable view of ways to alleviate barriers to digitalization. First, we show that customers' perceptions of complexity before purchasing affect their adoption of technology and the whole journey. Prioritizing digitalization efforts in the pre-purchase phase can thus have a significant impact on the overall customer journey, especially in digital settings where simplicity is imperative (Verhoef et al., 2021) and needs to be perceived immediately; specifically in CSS where simplicity is a differentiator. We also find that product type influences digital CX and the willingness to use digital tools from the journey's onset. In summary, using a socio-technical perspective (Morgan-Thomas et al., 2020), factors such as the digital setting, age, gender, and product type can be considered when designing digital experiences (Belanche et al., 2023). The general complexity (inherent in the service) and individual complexity (resulting from specific business decisions) are first to be addressed while digitalizing CSS.

Regarding the second research question, our findings nicely align with prior research that identified usage challenges related to uncertainty, functional challenges, and context-specific challenges related to the relationship (Claudy et al., 2015; Herzenstein et al., 2007). In addition, in line with Prahalad and Ramaswamy (2004), we recognize the role of communication, accessibility, and transparency as levers to co-create value, structure them regarding the customer journey and frame them per CSS specificities. In particular, our findings highlight the role of access to information at the purchase stage, thus a form of business transparency in improving the purchase experience phase (Liu et al., 2015). In general, transparency involves the clarity, completeness, and accessibility of information, enhancing customer trust (Dethier et al., In press; Dexe et al., 2021; Schnackenberg & Tomlinson, 2016), which is key when consumers need to decide. This creates opportunities for digital tools to support value co-creation by acting as a translation function (Tuunanen et al., 2023), making products more understandable without a human advisor and allowing leads to take action and convert them as clients. Our understanding aligns with the notion

that perceived complexity in CSS stems from challenges in comprehending services or the need for expert guidance in purchasing because information is hard to access, compare and understand. This complexity resonates with customers' perceptions, affecting their interactions with the service provider (Benedettini & Neely, 2012).

Concerning the last stage of the journey, we provided evidence that building rapport with customers is a key aspect of the post-purchase phase, especially in the insurance industry, where there may be a time lag between purchase and use (Kunreuther & Pauly, 2018). The nature and occasion of the interaction influence relational complexity. Actively managing CX through digital tools during this phase increases satisfaction, creates value, and improves the overall experience. Trust is also critical in customer service, and digital tools can foster trust by providing seamless and reliable interactions. Today's omnichannel marketing communications provide numerous touchpoints to communicate with customers (Huré et al., 2017), and CX sentiment varies across service channels (Lappeman et al., 2022). We further stress the imperative to strengthen ties with business partners in a B2B2C context (Dominique-Ferreira, 2018), as they play a key role in the customer journey. Collaborating with business partners when digitalizing services is essential, as neglecting them may hinder the adoption and implementation of digital tools.

To summarize, our study offers a more detailed and operationalizable treatment of the challenges customers face at each stage of the customer journey, when it comes to digitalization. Our focus on CSS, which presents particularly arduous conditions for the smooth implementation of technology, allows proposing insights that may apply to a wide array of service companies, in particular those utilizing B2B2C models.

Managerial recommendations

We discuss the recommendations for service providers to leverage digital solutions effectively and improve CX in CSS according to the customer journey. In the pre-purchase phase, optimizing the digital experience and increasing customer satisfaction depends on the product offering, as using digital tools in this phase strongly influences their use in subsequent stages. Complex insurance products pose a challenge in a digital setting, where simplicity and understandability are crucial (Accenture, 2022). For example, digital tools are more likely to be used when purchasing additional insurance for an airline ticket or parcel, where the coverage overview and timeframe are clear, than when purchasing home insurance.

In the purchase phase, using digital technology to provide transparent and accessible pricing and coverage information helps customers make informed choices and customize their insurance packages. For example,

offering user-friendly online comparison sites, simplifying policy terms, or engaging intermediaries with technology can improve CX. Incorporating these features into customer-centric self-service portals while maintaining transparency allows intermediaries and service providers to focus on their core business: leveraging the B2B2C relationship. Customers are more willing to accept a digitalized purchase phase compared to the pre-purchase phase, with the COVID-19 pandemic accelerating this process (Amankwah-Amoah et al., 2021).

In the post-purchase phase, using digital tools in collaboration with intermediaries is an opportunity for service providers, particularly in settings with B2B2C distribution models. Intermediaries are increasingly open to digital innovation, and involving them in testing and decision-making can foster better customer relationships (Gittell, 2002). Communicating the firm's digital strategy and involving customers in certain aspects can contribute to setting and meeting expectations. Segmenting communication strategies based on demographics further enhances the post-purchase relationship phase. For example, simplified loyalty programs and digitalization enable intermediaries and service providers to foster better relationships and improve customer satisfaction (Brophy, 2013).

Limitations and future research

In this article, we formulated a framework to improve CX in CSS rooted in existing research and examined these principles through empirical data. This study is exploratory in nature and does not aim to make statistical inferences regarding the broader state of CX. Consequently, this research has certain constraints stemming from the methodology used and the sampling strategy.

Firstly, a limitation revolves around the representativeness of our sample. We employed convenience sampling, a commonly employed technique in qualitative research, to select participants based on specific criteria and availability, rather than opting for random sampling methods. While this approach facilitated an in-depth exploration of targeted experiences, it may constrain how our findings can be generalized to a broader population. Also, our qualitative data were exclusively collected from respondents with higher education qualifications. This aspect may constrain the generalizability of our findings, as individuals with bachelor's or master's degrees often possess advanced financial literacy, analytical skills, access to resources, career needs, income levels, and cognitive biases that can influence their decision-making. Hence, it would be of interest to conduct research with respondents that have lower education qualification.

Moreover, our approach's qualitative and context-specific nature may restrict the capacity to make inferences about the entirety of the CX in the CSS research discipline. Our approach was well-suited to obtain profound insights of human behavior, motivations, and perceptions. However, future research could examine CX in CSS across various industries, either qualitatively or quantitatively. Additionally, it is crucial to acknowledge that our study focused on the Belgian insurance context, characterized by a predominantly indirect distribution model. This characteristic may confine the applicability of our findings to (insurance) settings in other countries, notably those with a predominantly direct distribution model.

Therefore, future research could extend our findings by conducting large-scale quantitative studies to validate the relevance of our framework in diverse settings, both similar and dissimilar to the Belgian insurance landscape. Additionally, complementing our findings with the input of various stakeholders, such as intermediaries, regulators, and InsurTech players (Standaert & Muylle, 2022), can enrich the study of B2B2C experiences.

Furthermore, our study was inclusive in terms of insurance products, technologies, and customer types. Hence, future research could delve deeper by concentrating on a specific insurance product (e.g., home insurance), a specific technology (e.g., chatbots), or a particular customer segment (e.g., Gen Z). This approach would allow for a more detailed application of our framework, for instance to products that differ in their inherent complexity and customer segments (Järvinen et al., 2003). Such research would offer an in-depth understanding of customer needs, risk assessment, and tailored innovative strategies, ultimately contributing to both improved business performance and satisfied customers.

Finally, future researchers could explore best practices for each phase within our framework. One area that we think is especially promising is to examine the impact of relationship quality between service providers and intermediaries on the end customer experience. Indeed, a positive relationship quality between service providers and intermediaries can streamline communication, enhance information sharing, and improve the overall efficiency of the purchasing process, thus directly impacting CX. The significance of relationship quality cannot be overstated in CSS. It offers actionable insights to strengthen relationships with intermediaries and enhance customers' understanding of service offerings (Gittell, 2002).

We hope these avenues for future research can inspire researchers to build on our findings.

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Disclosure statement

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References

Accenture. (2022, March 30). Insurance Broker Market Pulse Survey 2021 | Accenture. *WordPressBlog.* https://www.accenture.com/be-en/blogs/belux/insurance-broker-market-survey-2021

Alliedmarketresearch. (2023). *B2B2C Insurance Market Size, Share and Growth | Analysis*—2027. https://www.alliedmarketresearch.com/B2B2C-insurance-market

Amankwah-Amoah, J., Khan, Z., Wood, G., & Knight, G. (2021). COVID-19 and digitalization: The great acceleration. *Journal of Business Research*, *136*, 602–611. https://doi.org/10.1016/j.jbusres.2021.08.011

Arici, H. E., Köseoglu, M. A., & Sökmen, A. (2022). The intellectual structure of customer experience research in service scholarship: A bibliometric analysis. *The Service Industries Journal*, *42*(7–8), 514–550. https://doi.org/10.1080/02642069.2022.2043286

Becker, L., & Jaakkola, E. (2020). Customer experience: Fundamental premises and implications for research. *Journal of the Academy of Marketing Science*, *48*(4), 630–648. https://doi.org/10.1007/s11747-019-00718-x

Belanche, D., Casaló, L. V., Flavián, M., & Loureiro, S. M. C. (2023). Benefit versus risk: A behavioral model for using robo-advisors. *The Service Industries Journal*, 1–28. https://doi.org/10.1080/02642069.2023.2176485

Benedettini, O., & Neely, A. (2012). Complexity in services: An interpretative framework. In *23rd Annual Conference of the Production and Operations Management Society (POMS)*, pp. 1–11.

Bohnert, A., Fritzsche, A., & Gregor, S. (2019). Digital agendas in the insurance industry: The importance of comprehensive approaches†. *The Geneva Papers on Risk and Insurance - Issues and Practice*, *44*(1), 1–19. https://doi.org/10.1057/s41288-018-0109-0

Bolton, R. N., Gustafsson, A., Tarasi, C. O., & Witell, L. (2022). Designing satisfying service encounters: Website versus store touchpoints. *Journal of the Academy of Marketing Science*, *50*(1), 85–107. https://doi.org/10.1007/s11747-021-00808-9

Brinkmann, S., & Kvale, S. (2018). *Doing interviews* (2nd ed.). SAGE.

Briscoe, G., Keränen, K., & Parry, G. (2012). Understanding complex service systems through different lenses: An overview. *European Management Journal*, *30*(5), 418–426. https://doi.org/10.1016/j.emj.2012.06.004

Brophy, R. (2013). Adding value to insurance products: The AXA Irish experience. *Journal of Product & Brand Management*, 22(4), 293–299. https://doi.org/10.1108/JPBM-09-2012-0183

Bueno, E. V., Weber, T. B. B., Bomfim, E. L., & Kato, H. T. (2019). Measuring customer experience in service: A systematic review. *The Service Industries Journal*, 39(11–12), 779–798. https://doi.org/10.1080/02642069.2018.1561873

Claudy, M. C., Garcia, R., & O'Driscoll, A. (2015). Consumer resistance to innovation—A behavioral reasoning perspective. *Journal of the Academy of Marketing Science*, 43(4), 528–544. https://doi.org/10.1007/s11747-014-0399-0

Colgate, M., & Norris, M. (2001). Developing a comprehensive picture of service failure. *International Journal of Service Industry Management*, 12(3), 215–233. https://doi.org/10.1108/09564230110393211

Dalla Pozza, I., Heitz-Spahn, S., & Texier, L. (2017). Generation Y multichannel behaviour for complex services: The need for human contact embodied through a distance relationship. *Journal of Strategic Marketing*, 25(3), 226–239. https://doi.org/10.1080/0965254X.2017.1299785

De Keyser, A., Verleye, K., Lemon, K. N., Keiningham, T. L., & Klaus, P. (2020). Moving the customer experience field forward: Introducing the touchpoints, context, qualities (TCQ) nomenclature. *Journal of Service Research*, 23(4), 433–455. https://doi.org/10.1177/1094670520928390

Dethier, F., Delcourt, C., & Dessart, L. (In press). Donor perceptions of nonprofit organizations' transparency: Conceptualization and operationalization. *Nonprofit and Voluntary Sector Quarterly*. https://doi.org/10.1177/08997640231211212. https://hdl.handle.net/2268/309069. Peer Reviewed verified by ORBi.

Dexe, J., Franke, U., & Rad, A. (2021). Transparency and insurance professionals: A study of Swedish insurance practice attitudes and future development. *The Geneva Papers on Risk and Insurance. Issues and Practice*, 46(4), 547–572. https://doi.org/10.1057/s41288-021-00207-9

Dominique-Ferreira, S. (2018). The key role played by intermediaries in the retail insurance distribution. *International Journal of Retail & Distribution Management*, 46(11–12), 1170–1192. https://doi.org/10.1108/IJRDM-10-2017-0234

Douthwaite, B., Keatinge, J. D. H., & Park, J. R. (2001). Why promising technologies fail: The neglected role of user innovation during adoption. *Research Policy*, 30(5), 819–836. https://doi.org/10.1016/S0048-7333(00)00124-4

Eckardt, M., & Räthke-Döppner, S. (2010). The quality of insurance intermediary services—Empirical evidence for Germany. *Journal of Risk and Insurance*, 77(3), 667–701. https://doi.org/10.1111/j.1539-6975.2010.01361.x

Eling, M., & Lehmann, M. (2018). The impact of digitalization on the insurance value chain and the insurability of risks. *The Geneva Papers on Risk and Insurance - Issues and Practice*, 43(3), 359–396. https://doi.org/10.1057/s41288-017-0073-0

Epetimehin, F. M. (2011). Achieving competitive advantage in insurance industry: The impact of marketing innovation and creativity. *Journal of Emerging Trends in Economics and Management Sciences*, 2, 18–21.

Gahler, M., Klein, J. F., & Paul, M. (2023). Customer experience: Conceptualization, measurement, and application in omnichannel environments. *Journal of Service Research*, 26(2), 191–211. https://doi.org/10.1177/10946705221126590

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2012). Seeking qualitative rigor in inductive research: Notes on the gioia methodology. *Organizational Research Methods*, 16(1), 15–31. https://doi.org/10.1177/1094428112452151

Gittell, J. H. (2002). Relationships between service providers and their impact on customers. *Journal of Service Research*, 4(4), 299–311. https://doi.org/10.1177/1094670502004004007

Golf-Papez, M., Heller, J., Hilken, T., Chylinski, M., de Ruyter, K., Keeling, D. I., & Mahr, D. (2022). Embracing falsity through the metaverse: The case of synthetic customer experiences. *Business Horizons*, 65(6), 739–749. https://doi.org/10.1016/j.bushor.2022.07.007

Goplakrishnan, R., & Ajitha, A. A. (2022). Business customer experience in B2B2C service settings: A scale development. *Journal of Business & Industrial Marketing*, *38*, 886–904. https://doi.org/10.1108/JBIM-07-2021-0342

Grodal, S., Anteby, M., & Holm, A. L. (2021). Achieving rigor in qualitative analysis: The role of active categorization in theory building. *Academy of Management Review*, *46*(3), 591–612. https://doi.org/10.5465/amr.2018.0482

Gronroos, C. (2007). *Service management and marketing 3e: Customer management in service competition* (3rd ed.). John Wiley &Sons.

Grönroos, C. (2008). Service logic revisited: Who creates value? And who co-creates? *European Business Review*, *20*(4), 298–314. https://doi.org/10.1108/09555340810886585

Grundstrom, C., & Karampela, M. (2018). *A transforming insurance company and the 4 types of health data challenges that arise: A Finnish case study.* [Paper presentation].12th EAI International Conference on Pervasive Computing Technologies for Healthcare, pp. 310–317. https://doi.org/10.1145/3240925.3240950

Hamilton, R., & Price, L. L. (2019). Consumer journeys: Developing consumer-based strategy. *Journal of the Academy of Marketing Science*, *47*(2), 187–191. https://doi.org/10.1007/s11747-019-00636-y

He, J., & Zhang, S. (2022). How digitalized interactive platforms create new value for customers by integrating B2B and B2C models? An empirical study in China. *Journal of Business Research*, *142*, 694–706. https://doi.org/10.1016/j.jbusres.2022.01.004

Heidenreich, S., & Kraemer, T. (2016). Innovations-doomed to fail? Investigating strategies to overcome passive innovation resistance: innovations-doomed to fail? *Journal of Product Innovation Management*, *33*(3), 277–297. https://doi.org/10.1111/jpim.12273

Heidenreich, S., & Spieth, P. (2013). Why innovations fail—The case of passive and active innovation resistance. *International Journal of Innovation Management*, *17*(05), 1350021. https://doi.org/10.1142/S1363919613500217

Heinze, J., & Matt, C. (2018). Reducing the service deficit in M-commerce: How service-technology fit can support digital sales of complex products. *International Journal of Electronic Commerce*, *22*(3), 386–418. https://doi.org/10.1080/10864415.2018.1462940

Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. *Psychology and Marketing*, *14*(8), 737–764. https://doi.org/10.1002/(SICI)1520-6793(199712)14:8 < 737::AID-MAR2 > 3.0.CO;2-F

Herhausen, D., Kleinlercher, K., Verhoef, P. C., Emrich, O., & Rudolph, T. (2019). Loyalty formation for different customer journey segments. *Journal of Retailing*, *95*(3), 9–29. https://doi.org/10.1016/j.jretai.2019.05.001

Herzenstein, M., Posavac, S. S., & Brakus, J. J. (2007). Adoption of new and really new products: The effects of self-regulation systems and risk salience. *Journal of Marketing Research*, *44*(2), 251–260. https://doi.org/10.1509/jmkr.44.2.251

Holm, M., Kumar, V., & Rohde, C. (2012). Measuring customer profitability in complex environments: An interdisciplinary contingency framework. *Journal of the Academy of Marketing Science*, *40*(3), 387–401. https://doi.org/10.1007/s11747-011-0263-4

Huré, E., Picot-Coupey, K., & Ackermann, C.-L. (2017). Understanding omni-channel shopping value: A mixed-method study. *Journal of Retailing and Consumer Services*, *39*, 314–330. https://doi.org/10.1016/j.jretconser.2017.08.011

Iankova, S., Davies, I., Archer-Brown, C., Marder, B., & Yau, A. (2019). A comparison of social media marketing between B2B, B2C and mixed business models. *Industrial Marketing Management*, *81*, 169–179. https://doi.org/10.1016/j.indmarman.2018.01.001

Järvinen, R., Lehtinen, U., & Vuorinen, I. (2003). Options of strategic decision making in services: Tech, touch and customisation in financial services. *European Journal of Marketing*, *37*(5–6), 774–795. https://doi.org/10.1108/03090560310465143

Jo Bitner, M. (2001). Service and technology: Opportunities and paradoxes. *Managing Service Quality: An International Journal*, *11*(6), 375–379. https://doi.org/10.1108/09604520110410584

Kannampallil, T. G., Schauer, G. F., Cohen, T., & Patel, V. L. (2011). Considering complexity in healthcare systems. *Journal of Biomedical Informatics*, *44*(6), 943–947. https://doi.org/10.1016/j.jbi.2011.06.006

Kennedy, A. (2006). Electronic customer relationship management (eCRM): Opportunities and challenges in a digital world. https://doi.org/10.21427/D7WN4B

Kim, K., Baek, K. K., & W., Byon. (2020). Customer-to-customer value co-creation and co-destruction in sporting events. *The Service Industries Journal*, *40*(9–10), 633–655. https://doi.org/10.1080/02642069.2019.1586887

Kranzbühler, A.-M., Kleijnen, M. H. P., Morgan, R. E., & Teerling, M. (2018). The multilevel nature of customer experience research: An integrative review and research agenda: customer experience research. *International Journal of Management Reviews*, *20*(2), 433–456. https://doi.org/10.1111/ijmr.12140

Kuehnl, C., Jozic, D., & Homburg, C. (2019). Effective customer journey design: Consumers' conception, measurement, and consequences. *Journal of the Academy of Marketing Science*, *47*(3), 551–568. https://doi.org/10.1007/s11747-018-00625-7

Kunreuther, H., & Pauly, M. (2018). Behavioral economics of multiperiod insurance purchasing behavior: The role of emotions. *Foundations and Trends® in Microeconomics*, *12*(2), 109–199. https://doi.org/10.1561/0700000069

Lappeman, J., Meyer, S., & Miguel, D. (2022). Exploring online sentiment (OS) as a measure of customer experience (CX) for telecommunication services. *Services Marketing Quarterly*, *43*(3), 257–276. https://doi.org/10.1080/15332969.2021.1992558

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, *80*(6), 69–96. https://doi.org/10.1509/jm.15.0420

Liu, Y., Eisingerich, A. B., Auh, S., Merlo, O., & Chun, H. E. H. (2015). Service firm performance transparency: How, when, and why does it pay off? *Journal of Service Research*, *18*(4), 451–467. https://doi.org/10.1177/1094670515584331

Loshin, D., & Reifer, A. (2013). Chapter 10—Making customer centricity pervasive in the company. In D. Loshin & A. Reifer (Eds.), *Using information to develop a culture of customer centricity* (pp. 79–86). Morgan Kaufmann. https://doi.org/10.1016/B978-0-12-410543-0.00010-X

Lotz, S., Raabe, J., & Roggenhofer, S. (2018). The role of customer care in a customer experience transformation. In McKinsey and Company, Insights. https://mckinsey.com/capabilities/operations/our-insights/the-role-of-customer-care-in-a-customer-experience-transformation

Maglio, P. P., & Spohrer, J. (2008). Fundamentals of service science. *Journal of the Academy of Marketing Science*, *36*(1), 18–20. https://doi.org/10.1007/s11747-007-0058-9

Marano, P. (2016). The EU regulation on comparison websites of insurance products. In P. Marano, I. Rokas, & P. Kochenburger (Eds.), *The 'dematerialized' insurance: Distance selling and cyber risks from an international perspective* (pp. 59–84). Springer International Publishing. https://doi.org/10.1007/978-3-319-28410-1_3

Mikolon, S., Kolberg, A., Haumann, T., & Wieseke, J. (2015). The complex role of complexity: How service providers can mitigate negative effects of perceived service complexity when selling professional services. *Journal of Service Research*, *18*(4), 513–528. https://doi.org/10.1177/1094670514568778

Mingione, M., & Leoni, L. (2020). Blurring B2C and B2B boundaries: Corporate brand value co-creation in B2B2C markets. *Journal of Marketing Management*, *36*(1–2), 72–99. https://doi.org/10.1080/0267257X.2019.1694566

Morgan-Thomas, A., Dessart, L., & Veloutsou, C. (2020). Digital ecosystem and consumer engagement: A socio-technical perspective. *Journal of Business Research*, *121*, 713–723. https://doi.org/10.1016/j.jbusres.2020.03.042

Nash, W. (1994). Jargon: Its uses and abuses. *Choice Reviews Online*, *31*(10), 31–5281–31–5281. https://doi.org/10.5860/CHOICE.31-5281

Parise, S., Guinan, P. J., & Kafka, R. (2016). Solving the crisis of immediacy: How digital technology can transform the customer experience. *Business Horizons*, *59*(4), 411–420. https://doi.org/10.1016/j.bushor.2016.03.004

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, *18*(3), 5–14. https://doi.org/10.1002/dir.20015

Regan, L., & Tennyson, S. (2000). Insurance distribution systems. In G. Dionne (Ed.), *Handbook of insurance* (Vol. *22*, pp. 709–748). Springer Netherlands. https://doi.org/10.1007/978-94-010-0642-2_22

Riikkinen, M., Saarijärvi, H., Sarlin, P., & Lähteenmäki, I. (2018). Using artificial intelligence to create value in insurance. *International Journal of Bank Marketing*, *36*(6), 1145–1168. https://doi.org/10.1108/IJBM-01-2017-0015

Rubin, H. J., & Rubin, I. S. (2011). *Qualitative interviewing: The art of hearing data*. SAGE.

Rydback, M. (2022). Role of facilitators in the medical tourism industry—A study of medical tourism facilitators in an emerging market. *Services Marketing Quarterly*, *43*(2), 129–145. https://doi.org/10.1080/15332969.2022.2056288

Schenk, B., Dolata, M., Schwabe, C., & Schwabe, G. (2021). What citizens experience and how omni-channel could help–insights from a building permit case. *Information Technology & People*, https://doi.org/10.1108/ITP-06-2020-0374

Schnackenberg, A. K., & Tomlinson, E. C. (2016). Organizational transparency: A new perspective on managing trust in organization-stakeholder relationships. *Journal of Management*, *42*(7), 1784–1810. https://doi.org/10.1177/0149206314525202

Schreuer, R. (2000). To build brand equity, marketing alone is not enough. *Strategy & Leadership*, *28*(4), 16–20. https://doi.org/10.1108/10878570010378663

Shaikh, A., Banerjee, S., & Singh, B. (2023). The differential impact of e-Service quality's dimensions on trust and loyalty of retail bank customers in an emerging market. *Services Marketing Quarterly*, *44*(2-3), 121–141. https://doi.org/10.1080/15332969.2022.2161811

Smith, S., & Wheeler, J. (2002, September 14). *Managing the customer experience: Turning customers into advocates*. https://www.semanticscholar.org/paper/Managing-the-Customer-Experience%3A-Turning-customers-Smith-Wheeler/7ffd3d9754a6e5ef6e36dd32a57fbc8a029a2851

Spohrer, J., Maglio, P. P., Bailey, J., & Gruhl, D. (2007). Steps toward a science of service systems. *Computer Magazine*, *40*(1), 71–77. https://doi.org/10.1109/MC.2007.33

Standaert, W., & Muylle, S. (2022). Framework for open insurance strategy: Insights from a European study. *The Geneva Papers on Risk and Insurance. Issues and Practice*, *47*(3), 643–668. https://doi.org/10.1057/s41288-022-00264-8

Stremersch, S., Gonzalez, J., Valenti, A., & Villanueva, J. (2022). The value of context-specific studies for marketing. *Journal of the Academy of Marketing Science*, *51*(1), 50–65. https://doi.org/10.1007/s11747-022-00872-9

Tuunanen, T., Lumivalo, J., Vartiainen, T., Zhang, Y., & Myers, M. D. (2023). Micro-level mechanisms to support value co-creation for design of digital services. *Journal of Service Research*. https://doi.org/10.1177/10946705231173116

Vakulenko, Y., Shams, P., Hellström, D., & Hjort, K. (2019). Service innovation in e-commerce last mile delivery: Mapping the e-customer journey. *Journal of Business Research*, *101*, 461–468. https://doi.org/10.1016/j.jbusres.2019.01.016

Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, *122*, 889–901. https://doi.org/10.1016/j.jbusres.2019.09.022

Voorhees, C. M., Fombelle, P. W., Gregoire, Y., Bone, S., Gustafsson, A., Sousa, R., & 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*, 269–280. https://doi.org/10.1016/j.jbusres.2017.04.014

Zaki, M. (2019). Digital transformation: Harnessing digital technologies for the next generation of services. *Journal of Services Marketing*, *33*(4), 429–435. https://doi.org/10.1108/JSM-01-2019-0034

Zolkiewski, J., Story, V., Burton, J., Chan, P., Gomes, A., Hunter-Jones, P., O'Malley, L., Peters, L. D., Raddats, C., & Robinson, W. (2017). Strategic B2B customer experience management: The importance of outcomes-based measures. *Journal of Services Marketing*, *31*(2), 172–184. https://doi.org/10.1108/JSM-10-2016-0350

Appendix

Table A1. Respondents characteristics.

ID	Age	Gender	Education	Digital devices used				Number of insurance products
				Smartphone	Tablet	PC	Laptop	
1	25	M	MSc	√		√	√	2
2	30	F	MSc	√			√	2
3	30	F	MSc	√		√	√	3
4	25	F	MA	√			√	5
5	37	M	MSc	√	√	√	√	4
6	30	F	MSc	√			√	5
7	63	F	BSc	√	√	√		4
8	32	F	MSc	√	√		√	2
9	63	F	BSc	√		√	√	4
10	50	M	MSc	√	√	√	√	13
11	55	F	BSc	√	√	√	√	8
12	28	M	MSc	√	√		√	5
13	66	F	BSc		√	√	√	4
14	71	M	MSc	√	√	√	√	5
15	34	M	BSc	√		√		5
16	37	F	MSc	√			√	2
17	33	M	MSc	√			√	3
18	31	M	MSc	√			√	4
19	27	M	MSc	√			√	3
20	67	M	MSc	√	√	√	√	9
21	33	F	MSc	√			√	5
22	27	F	MSc	√			√	4

Table A2. Example quotes.

1st order concept	Example quotes
Product use uncertainty	Respondent 17: it is costly to cover a risk and if the insurance does not cover the particular issue you have… Well then you have paid conscientiously all those years and it's like throwing money down the drain, you will never see it back.
Product involvement ambivalence	Respondent 18: While I wouldn't attribute the highest focus to them I would say that they are very important a bit behind the scenes. And it is that you are not confronted with them on a daily or weekly basis, hence they are less top of mind, because you know you need them only to back you up.
Product variety	Respondent 4: So many different insurance companies, with so many different rates, trying to trigger you like 'oh yeah we do three percent on' or 'we do two point nine but you have an extra…'
Lack of product/ service customization	Respondent 3: When you go on **the insurance website** for the insurance of a car, for example. You have something that calculates, you have very general questions and that's it. And they need that of course, but I think that a person could be happier with an insurance if it could fit more to who that person is. Adapting to the personal situation.
Language specificity	Respondent 11: It is not accessible language, certainly not. Some sentences I have to read a couple of times. Even when you are used to it. Insurance is harder to compare because you need to have the terms and conditions and they don't put those **online**.

Table A2. (Continued).

1st order concept	Example quotes
Expert dependence	Respondent 6: I thought that the broker explaining all the documentation to me was really useful. Because it helps you to really understand, which you just cannot do by yourself. Just by you going on **the website** or reading the documentation by yourself […] Because you know nothing about insurance. Respondent 5: I still need to ask my question physically to someone. To get more information because I can't find everything **online**.
Pricing Inaccessibility	Respondent 18: The need of access to information in my case translates into **digital presence** and having the information quickly accessible on the **device** that I am using.
Lack of Comparability	Respondent 16: I saw that for the car insurances once, but it was mostly brokers' **websites** and I wanted to compare the insurance prime. But the tricky thing was that there was **no online estimation** that didn't ask for a sales representative to call me. And the only thing I wanted to know was the amount of insurance.
Unclear coverage overview	Respondent 5: Bringing to you the **data** in a very simple way. And always **accessible**. I mean, as a user, as a consumer, as a customer, I want to know at any moment what my insurance is, what's included, how much can I get reimbursed in case of these incidents.
Communication inefficiency	Respondent 15: I want my **online experience** to be as efficient as possible. If I have a question, that this is addressed as quickly as possible. If it is about a change in situation.. or if it is about.. well I think it's all about efficiency.
Unclear channel options	Respondent 15: If my product changes I believe I am better off by calling someone… then looking for the changes myself **online**. Efficiency and options to be able to contact the company are important to me.
Single point of contact	Respondent 5: Having it spread across different insurance companies, it is really a pain […] So let's say **one touchpoint**, one customer support, it's all there. Definitely if you have to manage, if you have to think about all the insurance. Imagine that if you have an accident, you are like okay… like you have something with your car and then you have to remember with which company you have it again. Respondent 15: If my product changes I belief I am better off by calling someone… then to look for the changes myself **online**. Efficiency and options to be able to contact the company are important to me.
Lack of conversation	Respondent 20: I think it is good to have contact and to not forget them and keep us informed and create some kind of involvement. Respondent 12: You can find reviews obviously, customer reviews. You can go to a **website** called Test-Achats, you know. There is this **website** where people write comments and recommendations. […] But also friends, family, and colleagues can play an important role in this.
Unreliability	Respondent 1: I haven't been in a situation where I really need to have insurance […] But I do hope that when the situation arises they do deliver what they promise. Respondent 17: My broker I trust completely but with the bicycle insurance and especially with the insurance of my laptop I don't. It was a smooth salesman that wanted to make an additional sale. And at that moment he succeeded, but I have no faith in that.
Inconsistency	Respondent 12: There are so many options and it also depends on whom you are speaking to because the explanation can differ from person to person, or office to office, and be inconsistent with what they communicate elsewhere.