



Article

# **Customer Experience in Retail: A Systematic Literature Review**

Camila Bascur \* and Cristian Rusu

School of Informatics Engineering, Pontificia Universidad Católica de Valparaíso, Valparaíso 2340000, Chile; cristian.rusu@pucv.cl

\* Correspondence: camila.bascur.b@mail.pucv.cl

Received: 28 September 2020; Accepted: 26 October 2020; Published: 29 October 2020



**Abstract:** The customer experience (CX) is a concept that has been closely studied by companies in recent years. This is because it is one of the most important factors in maintaining a competitive advantage. In addition, it is customers who seek to create an experience that goes beyond the acquisition of a product. In this article, we present a systematic literature review of the CX in retail. We reviewed articles published over the last ten years related to (1) the definition of the CX; (2) dimensions, attributes, and factors that influence the CX in retail; (3) methods used to evaluate the CX in retail; and (4) potential heuristics to evaluate the CX in general and, in particular, in retail. We analyzed 67 articles, and the obtained result shows that (1) multiple definitions exist in different contexts; (2) the dimensions, such as the conceptualization of the CX, vary depending on the context; (3) the evaluation methods found do not comprehensively evaluate the CX; (4) there is no evidence of heuristics used to evaluate the CX.

**Keywords:** customer experience; customer experience evaluation; retail; systematic literature review; user experience

#### 1. Introduction

Customer experience (CX) is one of the most important factors in the maintenance of a company's competitive advantage among its peers. Customers have greater power and influence with companies and have the means to validate them via websites or social networks, among others. Customers know more about companies' products, services, competitors, and prices, and are looking for unique and memorable experiences that accompany the delivery of systems, products, and services [1]. The relationship between companies and customers exists in various stages ranging from the initial awareness of a potential customer, through the shopping experience, until after the use of the product and/or service [2]. CX is a concept traditionally related to the study of marketing and services. Increasing interest in CX by the Human-Computer Interaction (HCI) community has recently arisen. CX extends the user experience (UX) concept. The ISO 9241 standard defines UX as "The perceptions and responses of people, as a result of the anticipated use, of a product, system or service" [3].

In this work, we performed a systematic literature review of research published during the past 10 years (from 2010 to 2020), to identify customer experience definitions, influencing factors, and methods used to evaluate the context as it is applied to retail. Furthermore, we aimed to determine if heuristics exist to evaluate this concept. Because our interest in CX is founded in HCI, we focused our systematic literature review on references indexed in traditional computer science databases.

The results obtained show a large number of definitions that explain the CX in different contexts with their respective dimensions. In addition, various methods are shown for the evaluation of the CX. However, many of these are not capable of comprehensively evaluating the CX.

Appl. Sci. 2020, 10, 7644 2 of 18

The article is organized as follows. Section 2 introduces the theoretical background. Section 3 presents the research questions and describes the methodology of the systematic literature review. Section 4 presents the studies selected, the results obtained, and the answers to the research questions. Finally, in Section 5, we present the conclusions and future work.

#### 2. Background

The concepts of user experience, heuristic evaluation, customer experience, and retail are briefly presented below.

## 2.1. User Experience

Standard ISO 9241-210 defines user experience (UX) as "The perceptions and responses of people, as a result of the anticipated use, of a product, system or service" [3].

UX is a subjective concept that depends on each person and their experiences. These experiences can be constructed in different periods of time and can be sporadic or they can accumulate. To explain the UX in greater depth, in 2004 Morville created a scheme that groups the main factors that must be considered to create a good user experience, called "the honeycomb model", which considers a detailed design of the aspects that comprise the UX [4]. These are:

- Useful: The site must be able to cover a need, in addition to having a real purpose for its
  construction. The content is expected to be useful and this is associated with innovative solutions.
- Usable: The site must be simple and easy to use so that its design is familiar and easy to understand; thus, a site can be used effectively and efficiently to achieve a goal established by the product and the user.
- Desirable: Image, identity, brand, and other design elements that are used to evoke emotion and gratitude.
- Valuable: The site must add value for interested users.
- Findable: The information must be easy to find and easy to navigate. If problems arise, the user should be able to find a solution quickly. The navigation structure must be configured in a way that makes sense.
- Accessible: The product must be designed so that even people with disabilities can have the same user experience as others.
- Credible: The products must be reliable so that they fulfill the function for which they
  were designed.

UX is a concept that extends the usability concept. Standard ISO 9241-11 defines usability as: "the extent to which a system, product or service can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use" [5].

## 2.2. Heuristics Evaluation

Heuristics evaluation is an inspection method that consists of a technical analysis carried out by experts and allows evaluation of the usability of interfaces through a series of criteria known as usability heuristics. These heuristics can be generic, such as those proposed by Nielsen and Molich [6], or specific, created to evaluate a specific context, such as the set of eCommerce heuristics [7]. Heuristic evaluation is commonly used to evaluate usability; however, research has also developed heuristic sets to evaluate the UX [8,9].

It has also been proposed to extend the horizon of evaluations to target specific aspects of CX [9,10].

## 2.3. Customer Experience

The customer experience (CX) is a concept that encompasses UX. Several articles exist that explain this concept from different perspectives, which shows the interest of scholars in this concept. The CX

Appl. Sci. 2020, 10, 7644 3 of 18

is a broad concept that encompasses both customers and companies and includes the physical and emotional experiences of customers when interacting with products, systems, and services. This occurs during all of the stages experienced by the customer [11]. The CX is a subjective concept because it involves the opinions of the customers until the post-consumption stage [12–15].

To better understand the role of the CX, all of the stages experienced by the customer need to be considered, in addition to the different types of experiences that accompany the interactions with a service provider at different touchpoints [16,17]. These stages and types of experiences constitute what is known as the customer's lifecycle, which is made up of four phases [18–20]:

- Acquisition phase: This begins when the customer feels the need to purchase a new product/service. The customer evaluates all of the options available and evaluates which best meets his needs.
- Loyalty phase: This is the maximum value that is reached when the product or service is used.
  The customer is fully aware of the product purchased and its brand. This awareness manifests
  itself through the continuous purchases of a brand, product, or service, thus establishing an
  emotional bond between the customer and company.
- Reactivation phase: This occurs when the customer decreases the intensity of use of the product
  or service, which leads to distancing the customer from the brand. During this phase, customers
  can be attracted to the competition.
- Winning back phase: This is the process of reconquering users who used to be customers. The main objective is to generate value for the former customer through actions that the company considers relevant.

Because CX is a broad concept, it is necessary to specify the dimensions required to delve into this topic. Various dimensions exist, each of which is designed to explain a specific context. For this article we consider the dimensions proposed by Gentile et al. [21] in the retail area:

- Sensorial component: Focused on stimulating or affecting the senses (that is, sight, hearing, touch, taste, and smell) to awaken various sensations in people. A good example of this component is the Lush store.
- Emotional component: Involves the affective system, which generates moods, feelings, and emotions in people. A good example is the Kinder Surprise.
- Cognitive component: Involves the mental processes of a person, in addition to conscious thoughts.
   A good example is the Barbie doll.
- Pragmatic component: This occurs when a person undertakes a practical act. This component includes the concept of usability, which covers all stages of the product life cycle.
- Lifestyle component: Relates to the values and beliefs of people through the adoption of lifestyles and behaviors. A good example is the consumption of products without a logo.
- Relational component: Involves a person, beyond their social context, their relationship with others, or their ideal self. A good example of this is haute couture products.

#### 2.4. Retail

The retail concept is defined as "the set of activities that markets products or services to final consumers for their own personal or household use. It does this by organizing their availability on a relatively large scale and supplying them to consumers on a relatively small scale" [22]; that is, it is a transaction of goods or services, between the seller and the end-user, that are used to satisfy the needs of individuals.

Examples of retail stores at which customers can buy products for immediate use or consumption are [23]:

 Department stores: Offers various types of products to future customers in one place. Department stores offer a wide range of options to customers, so a large number of needs can be met in one place. Appl. Sci. 2020, 10, 7644 4 of 18

 Discount stores: Offers a wide variety of products to customers, but at a reduced price. Discount stores generally offer a limited range of products and the quality may be lower than that of a department store.

- Supermarkets: Generally sell food products and household items. In a supermarket, the products are stored by departments to capture the attention of customers so that they can freely choose according to their choice and need.
- Warehouse stores: Sells a limited stock of products in bulk at a discount rate. In general, this type of store is not concerned with the store interior and the products are not displayed as neatly as in the previous store types.
- Mom and pop stores: Small shops run by their owners that are designed to meet the daily needs
  of customers living in the surrounding area. In general, they offer products that cover the basic
  needs of a family.
- Specialty stores: Stores that specialize in a particular product, that is, only selective items of a particular brand are sold. These types of stores are focused on high customer satisfaction.

#### 3. Research Method

To carry out a systematic review of the literature, it is necessary to define a research methodology. According to Kitchenham [24], this includes three main phases:

- 1. Review planning, which includes research questions and a review of protocols to follow.
- 2. Carrying out the review, which includes the selection of articles and the verification of their quality, in addition to the extraction and synthesis of data.
- 3. Inform about the review, through a report that presents the results obtained.

We defined the review protocol for this systematic literature review as follows: research questions, data source, search strategy, selection criteria, study quality, data extraction, and data synthesis.

## 3.1. Research Questions

We oriented a systematic literature review to the following topics: (1) the definition of customer experience in retail; (2) dimensions, attributes, and factors that influence the customer experience in retail; (3) methods that evaluate the customer experience in retail; and (4) whether heuristics exist to evaluate the customer experience in general and, in particular, in retail. In Table 1, we present the four research questions defined for our work.

ID	Research Questions
RQ1	What is the customer experience in retail?
RQ2	What dimensions/attributes/factors influence customer experience in retail?
RQ3	What are the methods to evaluate customer experience in retail?
RQ4	Are there heuristics to evaluate the customer experience in general/particular in retail?

**Table 1.** Research questions defined in this work.

## 3.2. Data Source

The following electronic databases were selected to search for scientific articles: ScienceDirect, Scopus, Springer Link, ACM Digital Library, and IEEE Xplore Digital Library. ScienceDirect, Scopus, and Springer Link are general databases, including references from all areas of knowledge. ACM Digital Library and IEEE Xplore Digital Library include references mainly related to Computer Science (including HCI). We aimed to provide a broader view of the CX, not limited to Service Science and HCI.

Appl. Sci. 2020, 10, 7644 5 of 18

#### 3.3. Search Strategy

The scientific articles collected have information related to the questions defined in Table 1. For this purpose, the following search string was used: ("customer experience" OR "consumer experience") AND (retail OR retailing). This covers all of the main concepts of this research.

In all databases search for occurrences was made in titles, abstracts, and keywords. This led to 898 articles. When also searching for occurrences in articles' full, the number of articles multiply approximately by 10; such amount of references is unmanageable.

#### 3.4. Selection Criteria

To address the search and selection of scientific articles, we defined inclusion and exclusion criteria. The selection of articles was made according to the following criteria:

- Articles that document and focus on CX.
- Articles that document business to consumer (B2C) experiences.
- Articles related to the retail experience.
- Articles published between 2010 and 2020.
- Articles written in English.

We excluded those articles that:

- Refer to CX in general and are not related to the retail area.
- Document experiences related to business to business (B2B), consumer to business (C2B) or consumer to consumer (C2C).

## 3.5. Data Extraction

The information extracted from all of the selected articles was as follows:

- Year of publication and authors.
- Journal and type of scientific article.

For articles related to the study of the customer experience in retail, the following information was considered:

- Studies on customer experience, both in specific and general areas.
- Definitions of customer experience given in articles (own or external).

For the articles related to dimensions/attributes/factors of the customer experience in retail, the following information was considered:

- Areas covered in the dimensions proposed in each of the articles.
- Dimension and subdimension identified in the articles.

For articles related to the methods of customer experience in retail, the following information was considered:

- Type and detail of method used to evaluate CX.
- Design and objective of the instrument used to evaluate CX.
- Detail of the data obtained in each of the methods.
- Usability, UX, or CX evaluation heuristics.

## 3.6. Data Synthesis

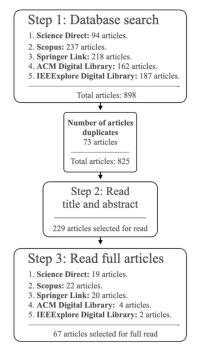
We grouped each of the articles into different appendices (Appendices A–C). The articles found were associated as follows: Appendix A—articles on the definition of CX (RQ1); Appendix B—articles on dimensions/attributes/factors influencing CX (RQ2); Appendix C—articles analyzing the involved CX evaluation methods (RQ3 and RQ4).

Appl. Sci. 2020, 10, 7644 6 of 18

#### 4. Results

#### 4.1. Study Selection

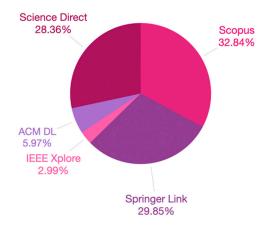
This work includes scientific articles found in ScienceDirect, Scopus, Springer Link, ACM Digital Library, and IEEE Xplore Digital Library. Figure 1 documents the results obtained in the article selection process.



**Figure 1.** Diagram with the results of the article selection process.

We carried out the article selection process and we obtained 898 articles in the first step of the research. After applying the inclusion criteria and eliminating duplicate articles, 67 articles were identified as relevant for the current review. This process was carried out using the different selection options provided by the electronic databases, or through a manual review in the case of Springer Link because no additional filters could be applied.

Figure 2 shows the percentage of articles available in each of the databases consulted. We can observe that the largest number of articles was found in the Scopus (32.84% of 67) followed by Springer Link (29.85% of 67), and Science Direct (28.36% of 67) databases. The lowest number was found in ACM DL (5.97% of 67) and IEEE Xplore (2.99% of 67) databases.



**Figure 2.** Articles contributed by the electronic databases.

Appl. Sci. 2020, 10, 7644 7 of 18

#### 4.2. Data Source

The 67 selected articles were published within a period of 10 years, between 2010 and 2020 (until April 2020). Figure 3 shows the number of articles published per year within the 10-year period considered in this review. Seventeen of these articles were published in the first 5 years, whereas 50 articles were published in the latter 5-year period, indicating the considerable increase in scientific interest in studies on CX.

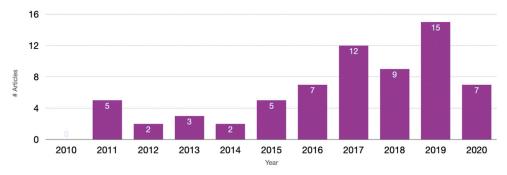
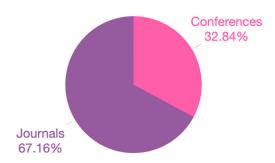


Figure 3. Number of articles per year.

Figure 4 shows a classification of the 67 selected articles. They correspond to 22 conferences (32.84%) and 45 journals (67.16%). It seems that there is a greater interest in studying the CX via journals and relatively less via conferences. The research questions posed for this systematic review are answered below.



**Figure 4.** Type of selected articles.

## 4.3. What Is the Customer Experience in Retail?

More than 50% of the selected articles seek to answer this research question. We consider that the customer experience is a broad concept that can be studied from different perspectives; thus, its conceptualization depends on the adopted approach and point of view [25].

The study of this concept can determine the success of a company [21]. This experience plays an important role in maintaining a competitive advantage among a company's peers, in addition to influencing customer preferences, which translates into generating an impact on the customer's purchase decision [26].

Due to the considerable increase in digitization and the resulting increase in internet purchases, it is expected that customers will choose to rely increasingly on external information sources [27], in addition to considering online channels to satisfy their needs.

Next, three of the definitions most cited by those seeking to define the CX are established (for details see Appendix A).

In Gentile et al. (2007) [21], it is noted that the CX is strictly personal at different levels and involves both the customer, the product, and the company that offers it [28–37].

In Meyer and Schwager (2007) [38], it is established that the CX is totally internal and subjective, and is generated through different points of contact with the company [28,29,31,32,34,35,39–44].

Appl. Sci. 2020, 10, 7644 8 of 18

Verhoef et al. (2009) [45] explains that the CX includes various responses that a customer may have when interacting with a company. The authors comment that the experience is generated by all of the elements delivered by the company (both those that it can control and those that it cannot). This experience covers all the phases that the customer can go through in the different channels offered by the company [28–30,32–37,46–49].

The previous research confirms that, conceptually, the CX is holistic and multidimensional. Customers have different experiences, ranging from the first contact to the subsequent consumption of the product or service [5,45], and these can be presented by interacting through the multiple channels offered by companies. These experiences can be good or bad, and mark the relationship generated between the customer and the company. Today, customers seek more than the mere acquisition of products and services; they also seek to have memorable experiences, for which they are willing to pay [50]. In addition, regardless of the channel chosen by the customer, the experience received by the company must be the same for all. The only concern of the customer is to satisfy their needs or desires, without worrying about the channel through which they will interact with the company [51].

From the perspective of experience, consumption is not only limited to the time of purchase, but includes all activities before, during, and after the purchase. Thus, all activities that may affect decisions and activities in the future are included [20]. This experience covers all of the stages experienced by the customer.

The CX must be continually developed. Maya Angelou said: "People will forget what you said, they will forget what you did, but people will never forget how you made them feel" [52]. This means that delivering good customer experiences is vital because it is the basis of customer loyalty with companies.

Based on the information collected and the answers to the initial question of this research, it can be said that the CX has multiple definitions and that these depend on the context in which the CX is generated. The following definition that encompasses various aspects of the customer experience can be considered:

"The customer experience construct is holistic in nature and involves the customer's cognitive, affective, emotional, social, and physical responses to the retailer (Verhoef et al. 2009). This experience is strictly individual (Gentile et al. 2007) and corresponds to an internal and subjective response that customers have of any direct or indirect contact with a company (Meyer and Schwager, 2007). This experience is created not only by those elements which the retailer can control (e.g., service interface, retail atmosphere, assortment, price) but also by elements that are outside of the retailer's control e.g., the influence of others, purpose of shopping). Additionally, the customer experience encompasses the total experience, including the search, purchase, consumption, and after-sale phases of the experience and may involve multiple retail channels (Verhoef et al. 2009)".

## 4.4. What Dimensions/Attributes/Factors Influence Customer Experience in Retail?

Given the nature of the question and the research conducted, it can be noted that multiple dimensions can influence the CX. The labels attached to these classifications depend exclusively on the author who proposes them. Thus, it is possible to find in the literature, as factors, attributes that influence the experience. In the same way that the previous question depends on the context in which the experience is studied, the dimensions that are used are important.

It is useful to conceptualize the experiences received by customers through the dimensions that they go through. These dimensions can be included in various components that can affect the CX, depending on the context of the customer.

The importance of studying the dimensions that affect the experience of the customer extends beyond an understanding of each of these separately; rather, the dimensions should be studied together, and the interrelationships between the variables that can affect the shopping experience should be examined.

Appl. Sci. 2020, 10, 7644 9 of 18

Given the large number of dimensions found, those most relevant to this research are arranged in Appendix B. Two of the most cited authors mentioned in the articles studied propose dimensions that influence the CX and are considered relevant for this research.

In Gentile et al. (2007) [21], the conceptualization of the components of the CX based on two articles is established [14,53]. The authors established six experiential components (sensory, emotional, cognitive, pragmatic, lifestyle, and relational) that explain the multidimensional structure of the CX. It is highlighted that the components are part of a whole, so when studying the CX, all possible interactions between the components must be considered to exploit the effects of their joint work [28,30,31,49,54,55].

Verhoef et al. (2009) [45] establish that the CX involves several responses (cognitive, affective, emotional, social, and physical). These responses are considered dimensions. This research establishes, unlike that of other authors, dimensions that may be beyond the control of the retailer (including the influence of others and purchase purpose), which were not previously considered. We highlight that the proposed dimensions can be present in all of the purchase phases [30,39,47,54–56].

As previously mentioned, and based on the research conducted, it can be concluded that the two authors mentioned above present a greater number of references compared to other authors who propose dimensions capable of influencing the CX.

We also highlight that the dimensions proposed by both authors can be considered in the study of the CX in retail. However, the specific context in which it will be applied must be clear to obtain the maximum benefit.

## 4.5. What Methods Are Used to Evaluate Customer Experience in Retail?

Most companies continually seek to establish a framework that allows studying and establishing methods of evaluating customer experience, particularly in retail. Thus, it is important to know the opinions of customers because they are the basis of the success of companies.

One of the oldest and most widely used evaluation methods is that of Parasuraman (1988), who created the SERVQUAL multidimensional scale (21 dimensions), which seeks to measure the quality of service delivered by a company. Due to its importance in the service sector, various adaptations have been made to assess quality in specific contexts (e.g., WEBQUAL and SITEQUAL) [56].

Another method used to date was proposed by Brooke (1996) and corresponds to the System Usability Scale (SUS) (10 items), which seeks to measure the perceived usability of products and websites [57]. This research topic continues to grow due to the number of new evaluation methods that have been created to measure the CX in the service sector.

In the reviewed research, several authors noted the EXQ method to evaluate the customer service experience. EXQ is a multiple-item scale (19 items) proposed by Klaus and Maklan (2012) [58].

The preceding paragraphs note three of the methods used to evaluate the CX (see Appendix  $\mathbb{C}$ ). As was the case for the previous questions, each of the methods corresponds to a specific connection. However, if necessary, it is possible to adapt these methods to the context of each company.

The current increase in digitization presents a challenge to establish an evaluation method that can assess the omnichannel delivery of services. A gap is evident when seeking to evaluate the CX in all its aspects and in a comprehensive manner. However, it is necessary, first, to find a means to evaluate the CX holistically, and second, that this evaluation method provides inputs that serve to improve each aspect of the experiences.

## 4.6. Do Heuristics Exist to Evaluate the CX in General and in Particular in Retail?

Based on the research carried out, none of the 67 articles reviewed mentioned heuristics to evaluate the CX. However, as a result of the investigation of additional sources of information, we detected heuristics that evaluate usability and the UX.

Although the UX and CX are related concepts, it is not possible to evaluate the CX with heuristics that were designed to evaluate usability or the UX [7,9]. However, some CX aspects could be evaluated

Appl. Sci. 2020, 10, 7644 10 of 18

based on usability/UX heuristics. Moreover, such heuristics could be used as a baseline to define CX heuristics.

#### 5. Conclusions

Today, more companies are interested in the manner in which they offer their products, systems, and/or services to their customers. Thus, companies strive to provide a better experience to understand and provide products and services designed for their customers.

Most companies are concerned with meeting new trends, that is, considering the customer as an influencing factor in their decisions. Thus, the customer is not considered to be a concern, but to provide a benefit, which allows the company to position itself and be recognized in the market.

Currently, the customer is not just a customer but also participates in the decisions made in companies. Thus, the use of the CX concept is increasing. In general terms, this concept refers to all of the interactions that the customer has with a company that occurs within the customer's life cycle, and in various phases during the customer's journey.

The article seeks to discover information about the CX in retail from an HCI perspective. This expands the scope of the previous research which was focused on the UX.

Interest in studying the CX has increased over time. However, because it is a relatively extensive concept, in the current paper, we focused on retail because this is an area in which we work and in which we seek to establish mechanisms that allow us to better understand customers.

Given these considerations, a systematic review of the literature on the CX in retail was carried out from the HCI perspective, in which definitions, dimensions, and evaluation methods were identified. Furthermore, a search for potential heuristics related to the CX was also conducted. This review focused on retail, thus helping to establish a mechanism that allows the CX to be evaluated in this specific context.

The reviewed research shows that multiple definitions exist that contextualize CX, both from a general point of view and focused directly on the services sector. Based on these definitions, various dimensions have identified that influence the CX. However, this influence depends on the context in which the most appropriate dimension is applied to study CX in retail. Currently, several methods exist that allow evaluation of a part of the CX; that is, no methods were found that evaluate the experience integrally. No evidence of heuristics to evaluate the CX was found and further exploration is required on this topic. However, heuristics were found that evaluate usability and UX. This finding represents a contribution to the evaluation of part of the CX but also does not constitute an evaluation of the concept in an integral way.

As previously mentioned, the results obtained from this review show the trends of the previous 10 years. It should be noted that although the article does not seek to establish a theoretical model, it can help establish a basis for future research, both conceptually and in the evaluation of the CX. Based on this and according to the information collected in this systematic review of the literature, in future work, it is expected that a set of heuristics will be established that is based on the CX concept, its dimensions, and the evaluation methods used in other studies.

**Author Contributions:** Conceptualization, C.B. and C.R.; methodology, C.B. and C.R.; validation, C.B. and C.R.; formal analysis, C.B. and C.R.; investigation, C.B.; data curation, C.B.; writing—original draft preparation, C.B.; writing—review and editing, C.B and C.R.; visualization, C.B.; supervision, C.R.; project administration, C.B and C.R. All authors have read and agreed to the published version of the manuscript.

Funding: Camila Bascur is supported by CONICYT-PFCHA/Doctorado Nacional/2020-21201456.

**Acknowledgments:** The authors would like to thank the School of Informatics Engineering of the Pontificia Universidad Católica de Valparaíso (PUCV), Chile, and the Agencia Nacional de Investigación y Desarrollo (ANID).

Conflicts of Interest: The authors declare no conflict of interest.

Appl. Sci. 2020, 10, 7644

## Appendix A

This appendix shows the list of articles with their authors, domain, and the important aspects of the definition of the CX related to research question 1 (RQ1), including all articles that discuss these definitions.

**Table A1.** Definition of customer experience.

Authors	Domain	Definition	References
Holbrook and Hirschman (1982) [59]	Consumption experience	"The experience is defined as complete events experienced by a person, often affecting emotions, occurs when the interaction takes place through the stimulation of consumed goods and services".	[32,34,42,48,60–63]
Carbone and Haeckel (1994) [64]	Service sector	"Experience is a 'takeaway' impression formed by people's encounters with products, services, and businesses-a perception produced when humans consolidate sensory information".	[32]
Pine and Gilmore (1998) [50]	Experiential marketing	"As the sum total of feelings, perceptions, and attitudes formed throughout the decision-making process and the consumption chain, which implies an integrated series of interactions with people, objects, processes, and environment".	[34,36,37,42,48,61,65,66]
Schmitt (1999) [14]	Experiential marketing	"Experiences involve the entire living being. They often result from direct observation and/or participating in the event whether they are real, dreamlike or virtual".	[26,34,36,48,66]
Shaw and Ivens (2002) [67]	Service sector	"The customer experience is a blend of a company's physical performance and the emotions evoked, intuitively measured against customer expectations across all moments of contact".	[36,42]
Poulsson and Kale (2004) [68]	Experiential marketing	"An engaging act of co-creation between a provider and a consumer wherein the consumer perceives value in the encounter and in the subsequent memory of that encounter".	[66]
Gentile et al. (2007) [21]	Experiential marketing	"The customer experience originates from a set of interactions between a customer and a product, a company, or part of its organization, which provoke a reaction. This experience is strictly individual and implies the customer's involvement at different levels (rational, emotional, sensorial, physical, and spiritual)".	[28–37]
Meyer and Schwager (2007) [38]	Service sector	"The internal and subjective response that customers have any direct or indirect contact with a company. Direct contact generally occurs in the course of purchase, use, and service and is usually initiated by the customer. Indirect contact most often involves unplanned encounters with representatives of a company's products, services, or brands and takes the form of word-of-mouth recommendations or criticisms, advertising, news reports, and reviews".	[28,29,31,32,34,35,39–44]
Verhoef et al. (2009) [45]	Retail environment	"The customer experience construct is holistic in nature and involves the customer's cognitive, affective, emotional, social and physical responses to the retailer. This experience is created not only by those elements which the retailer can control (e.g., service interface, retail atmosphere, assortment, price) but also by elements that are outside of the retailer's control (e.g., the influence of others, purpose of shopping). Additionally, the customer experience encompasses the total experience, including the search, purchase, consumption, and after-sale phases of the experience and may involve multiple retail channels".	[28–30,32–37,46–49]
Grewal et al. (2009) [69]	Retail environment	"Customer experience includes every point of contact at which the customer interacts with the business, product, or service".	[28,37,46]

Appl. Sci. 2020, 10, 7644

Table A1. Cont.

Authors	Domain	Definition	References
Brakus et al. (2009) [70]	Experiential marketing	"Experiences arise in a variety of settings. Most experiences occur directly when consumers shop, buy, and consume products. Experiences can also occur indirectly for example, when consumers are exposed to advertising and marketing communications, including Web sites".	[37]
Walter et al. (2010) [71]	Service sector	"Customer experience is defined as the customer's direct and indirect experience of the service process, the organization, the facilities, and how the customer interacts with the service firm's representatives and other customers".	[72]
Rose et al. (2011) [5]	Retail environment	"Online customer experience to be a psychological state, manifested as a subjective response to the e-retailers website. The customer engages in cognitive and affective processing of incoming sensory information from the website, the result of which is the formation of an impression in the memory. A number of antecedent conditions will influence the cognitive and affective state of the customer".	[40,46,73]
Lemke et.al. (2011) [28]	Service sector	"Customer experience as the customer's subjective response to the holistic direct and indirect encounter with the firm, including but not necessarily limited to the communication encounter, the service encounter, and the consumption encounter".	[31,37,46]
Klaus and Maklan (2013) [74]	Experiential marketing	"Customer experience: the customer's cognitive and affective assessment of all direct and indirect encounters with the firm relating to their purchasing behavior".	[29,36,40,73,75]
Lemon and Verhoef (2016) [27]	Experiential marketing	"Customer experience is a multidimensional construct focusing on a customer's cognitive, emotional, behavioral, sensorial, and social responses to a firm's offerings during the customer's entire purchase journey".	[32,46,76–78]
Zhao and Deng (2020) [79]	Retail environment	"Customer experience is the feeling of consumers in the shopping process affected by retailer' services, shopping environment, product price and quality".	[79]

## Appendix B

This appendix shows the list of articles with their authors, domain, and dimensions of the CX related to research question 2 (RQ2), including all articles that discuss these dimensions.

**Table A2.** Dimension of customer experience.

Authors	Domain	Dimension	References
Pine and Gilmore (1998) [50]	Experiential marketing	Entertainment experience Education experience Recluse experience Aesthetic experience	[79]
Schmitt (1999) [14]	Experiential marketing	Sensory (Sense) Affective (Feel) Cognitive (Think) Physical (Act) Social-identity (Relate)	[36,55,72]

Appl. Sci. 2020, 10, 7644

Table A2. Cont.

Authors	Domain	Dimension	References
		Personnel Service elements Selection Price Design Display	
Jones (1999) [80]	] Service sector	Layout Atmospherics Social aspects Tasks The purchase Time Mood/state of being	[60]
Fornerino et al. (2006) [53]	Service sector	Perceptual-sensorial Emotional Physical-behavior Social Cognitive	[30]
Gentile et al. (2007) [21]	Experiential marketing	Sensorial Emotional Cognitive Pragmatic Lifestyle Relational	[28,30,31,49,54,55]
Verhoef et al. (2009) [45]	Retail environment	Cognitive Affective Emotional Social Physical	[39,55,60,76,81,82]
Puccinelli et al. (2009) [83]	Retail environment	Goal schemas and information processing Memory Involvement Attitudes Affect Atmospherics Attributions and choices	[32,81]
Brakus et al. (2009) [70]	Experiential marketing	Sensory Affective Intellectual Behavioral Social	[84]
Grewal et al. (2009) [69]	Retail environment	Promotion Price Merchandise Supply chain Location	[60,79,81,82]
Schmitt (2011) [85]	Experiential marketing	Sensory-affective Cognitive intellectual Behavior Action-oriented	[35,79]
Ismail (2001) [86]	Experiential marketing	Store environment Service interfaces Store atmosphere Service quality Price	[60,82]
Lemon and Verhoef (2016) [27]	Experiential marketing	Cognitive Emotional Behavioral Sensorial Social	[66]
Zhao and Deng (2020) [79]	Retail environment	Functional experience Emotional experience Seamless experience	[79]

Appl. Sci. 2020, 10, 7644 14 of 18

## Appendix C

This appendix shows the list of articles with their authors, domain, and evaluation methods of the CX related to research question 3 (RQ3), including all articles that discuss these methods.

Authors Domain Methods References Parasuraman et al. (1988) [56] SERVQUAL Service sector Brooke (1996) [57] System Usability Scale (SUS) [87] Service sector Yoo and Donthu (2021) [88] SiteQual [39] Service sector Bagdare and Roy (2007) [89] Visualscape [89] Service sector Loiacono et al. (2007) [90] [39] Service sector WebOual Usability Metric for User Finstad (2010) [91] Service sector [87] Experience (UMUX) Kim et al. (2011) [92] Service sector Customer Experience Index (CEI) [42,75]Klaus and Maklan (2012) [58] Financial environments EXQ: a multiple-item scale [7,33,41,42,75,82] EUX-DM: Episodic UX Model on Al sokkar and Lai-Chong (2013) [93] Service sector [93] Decision-Making Nasution et al. (2014) [33] Experientialmarketing Customer Experience Framework (CEF) [33] Standardized User Experience Percentile Sauro (2015) [87] Service sector [87] Rank (SUPR-O) Vakulenko et al. (2019) [62] Service sector Questionnaire (27 items) [62] Shi et al. (2020) [94] Service sector Scale for omnichannel experience (22 items) [94]

Table A3. Evaluation methods of customer experience.

## References

- 1. Pine, J.J.; Gilmore, J. *The Experience Economy: Work Is Theatre & Every Business a Stage*, 1st ed.; Harvard Business Press: Boston, MA, USA, 1999.
- 2. Jantsch, J. *Duct Tape Marketing: The World's Most Practical Small Business Marketing Guide*, 1st ed.; Thomas Nelson Inc.: Nashville, TN, USA, 2011.
- 3. ISO Standard 9241-210:2010. *Ergonomics of Human System Interaction—Part 210: Human-Centred Design for Interactive System;* International Standardization Organization (ISO): Geneva, Switzerland, 2019.
- 4. Morville, P. User Experience Honeycomb. Available online: http://semanticstudios.com/user\_experience\_design/ (accessed on 7 July 2020).
- 5. Rose, S.; Clark, M.; Samouel, P.; Hair, N. Online Customer Experience in e- retailing: An empirical model of antecedents and outcomes. *J. Retail.* **2012**, *88*, 308–322. [CrossRef]
- 6. Nielsen, J.; Molich, R. Heuristic evaluation of user interfaces. In Proceedings of the SIGCHI Conference Human Factors Computing System, Olympia, WA, USA, 1–5 April 1990; pp. 249–256.
- 7. Díaz, J.; Rusu, C.; Collazos, C.A. Experimental validation of a set of cultural-oriented usability heuristics: E-Commerce websites evaluation. *Comput. Stand. Interfaces* **2017**, *50*, 160–178.
- 8. Hermawati, S.; Lawson, G. Establishing usability heuristics for heuristics evaluation in a specific domain: Is there a consensus? *Appl. Ergon.* **2016**, *56*, 34–51. [CrossRef] [PubMed]
- 9. Quiñones, D.; Rusu, C.; Rusu, V. A methodology to develop usability/user experience heuristics. *Comput. Stand. Interfaces* **2018**, 59, 109–129. [CrossRef]
- Quiñones, D.; Bascur, C.; Rusu, V. Customer eXperience: A Bridge Between Service Science and Human-Computer Interaction. In Proceedings of the 2nd International Conference Human System Engineering and Design (IHSED2019): Future Trends and Applications, Munich, Germany, 16–18 September 2019; pp. 385–390.
- 11. Laming, C.; Mason, K. Customer experience—An analysis of the concept and its performance in airline brands. *Res. Transp. Bus. Manag.* **2014**, *10*, 15–25. [CrossRef]
- 12. Vanharanta, H.; Kantola, J.; Seikola, S. Customers' conscious experience in a coffee shop. *Procedia Manuf.* **2015**, *3*, 618–625. [CrossRef]
- 13. LaSalle, D.; Britton, T. *Priceless: Turning Ordinary Products into Extraordinary Experiences*, 1st ed.; Harvard Business Press: Boston, MA, USA, 2003.
- 14. Schmitt, B. Experiential marketing. J. Mark. Manag. 1999, 15, 53–67. [CrossRef]
- 15. Mascarenhas, O.A.; Kesavan, R.; Bernacchi, M. Lasting customer loyalty: A total customer experience approach. *J. Consum. Mark.* **2006**, 23, 397–405. [CrossRef]

Appl. Sci. 2020, 10, 7644 15 of 18

16. Verma, R.; Teixeira, J.; Patrício, L.; Nunes, N.J.; Nóbrega, L.; Fisk, R.P.; Constantine, L. Customer experience modeling: From customer experience to service design. *J. Serv. Manag.* **2012**, *23*, 362–376.

- 17. Stein, A.; Ramaseshan, B. Towards the identification of customer experience touch point elements. *J. Retail. Consum. Serv.* **2016**, *30*, 8–19. [CrossRef]
- 18. Porta, J. El Ciclo de Vida Del Cliente. 2016. Available online: https://jaimeporta.com/2016/01/22/el-ciclo-de-vida-del-cliente/ (accessed on 30 April 2019).
- 19. Sanchez, A. La Vida Del Cliente. 2017. Available online: https://www.informabtl.com/cual-es-el-ciclo-de-vida-del-cliente/ (accessed on 30 April 2019).
- 20. Carú, A.; Cova, B. Revisiting Consumption Experience: A More Humble but Complete View of the Concept. *Mark. Theory* **2003**, *3*, 267–286. [CrossRef]
- 21. Gentile, C.; Spiller, N.; Noci, G. How to Sustain the Customer Experience: An Overview of Experience Components that Co-create Value With the Customer. *Eur. Manag. J.* **2007**, 25, 395–410. [CrossRef]
- 22. Newman, A.; Cullen, P. *Retailing: Environment & Operations*, 1st ed.; Cengage Learning EMEA: London, UK, 2001.
- 23. Farfan, B. What Is Retail—Definitions & Examples of Retail. Small Business. 2020. Available online: https://www.thebalancesmb.com/what-is-retail-2892238#citation-1 (accessed on 30 June 2020).
- 24. Kitchenham, B. *Guidelines for Performing Systematic Literature Reviews in Software Engineering*, 2nd ed.; EBSE: Goyang-si, South Korea, 2007.
- 25. Frow, P.; Payne, A. Towards the 'perfect' customer experience. J. Brand Manag. 2007, 15, 89–101. [CrossRef]
- 26. Foroudi, P.; Gupta, S.; Sivarajah, U.; Broderick, A. Investigating the effects of smart technology on customer dynamics and customer experience. *Comput. Hum. Behav.* **2018**, *80*, 271–282. [CrossRef]
- 27. Lemon, K.; Verhoef, P. Understanding customer experience throughout the customer journey. *J. Mark.* **2006**, *80*, 69–96.
- 28. Lemke, F.; Clark, M.; Wilson, H. Customer Experience Quality: An Exploration in Business and Consumer Contexts Using Repertory Grid Technique. *J. Acad. Mark. Sci.* **2011**, *39*, 846–869. [CrossRef]
- 29. Siqueira, J.; Horst, E.; Molina, G.; Losada, M.; Mateus, M. A Bayesian examination of the relationship of internal and external touchpoints in the customer experience process across various service environments. *J. Retail. Consum. Serv.* **2019**, *53*, 102009. [CrossRef]
- 30. Srivastava, M.; Kaul, D. Exploring the link between customer experience–loyalty–consumer spend. *J. Retail. Consum. Serv.* **2016**, *31*, 277–286. [CrossRef]
- 31. ISO Standar 9241-11. Ergonomic Requirements for Office Work with Visual Display Terminals (VDT's)—Part 11: Guidance on Usability; International Organization for Standardization (ISO): Geneva, Switzerland, 2018.
- 32. Mishra, A.; Vishvas, R. Retail shopper empowerment: A consumer-centric measure for store performance. *IIMB Manag. Rev.* **2019**, *31*, 20–36. [CrossRef]
- 33. Nasution, R.; Sembada, A.; Miliani, L.; Resti, N.; Prawono, D. The customer experience framework as baseline for strategy and implementation in services marketing. *Procedia Soc. Behav. Sci.* **2014**, *148*, 254–261. [CrossRef]
- 34. Lucia-Palacios, L.; Pérez-López, R.; Polo-Redondo, Y. Cognitive, affective and behavioural responses in mall experience. *Int. J. Retail Distrib. Manag.* **2016**, *44*, 4–21. [CrossRef]
- 35. Rogojanu, I.; Suciu, G.; Ditu, M.; Pasat, A. Smart shopping technologies for indoor markets. In Proceedings of the 2018 IEEE International Conference on Computational Science and Engineering (CSE), Bucharest, Romania, 29–31 October 2018; pp. 99–103.
- 36. Lee, H.; Lee, K.; Choi, J. A Structural Model for Unity of Experience: Connecting User Experience, Customer Experience, and Brand Experience. *J. Usability Stud.* **2018**, *14*, 8–34.
- 37. Homburg, C.; Jozić, D.; Kuehnl, C. Customer experience management: Toward implementing an evolving marketing concept. *J. Acad. Mark. Sci.* **2015**, *45*, 377–401. [CrossRef]
- 38. Meyer, C.; Schwager, A. Understanding customer experience. Harv. Bus. Rev. 2007, 85, 116. [PubMed]
- 39. McLean, G.; Al-Nabhani, K.; Wilson, A. Developing a mobile applications customer experience model (MACE)-implications for retailers. *J. Bus. Res.* **2018**, *85*, 325–336. [CrossRef]
- 40. Barari, M.; Ross, M.; Surachartkumtonkun, J. Negative and positive customer shopping experience in an online context. *J. Retail. Consum. Serv.* **2020**, *53*, 101985. [CrossRef]
- 41. Orel, F.; Kara, A. Supermarket self-checkout service quality, customer satisfaction, and loyalty: Empirical evidence from an emerging market. *J. Retail. Consum. Serv.* **2014**, *21*, 118–129. [CrossRef]

Appl. Sci. 2020, 10, 7644 16 of 18

42. Andajani, E. Understanding customer experience management in retailing. *Procedia Soc. Behav. Sci.* **2015**, 211, 629–633. [CrossRef]

- 43. Ceccacci, S.; Generosi, A.; Giraldi, L.; Mengoni, M. An Emotion Recognition System for monitoring Shopping Experience. In Proceedings of the 11th Pervasive Technologies Related to Assistive Environments Conference, Corfu, Greece, 26–29 June 2018; pp. 102–103.
- 44. Koetz, C. Managing the customer experience: A beauty retailer deploys all tactics. *J. Bus. Strategy* **2018**, *40*, 10–17. [CrossRef]
- 45. Verhoef, P.; Lemon, K.; Parasuraman, A.; Roggeveen, A.; Tsiros, M.; Schlesinger, L. Customer experience creation: Determinants, dynamics and management strategies. *J. Retail.* **2009**, *85*, 31–41. [CrossRef]
- 46. Hickman, E.; Kharouf, H.; Sekhon, H. An omnichannel approach to retailing: Demystifying and identifying the factors influencing an omnichannel experience. *Int. Rev. Retail Distrib. Consum. Res.* **2019**, *30*, 266–288. [CrossRef]
- 47. Obermeier, G.; Auinger, A. Human-Computer Interaction in Physical Retail Environments and the Impact on Customer Experience: Systematic Literature Review and Research Agenda. *Int. Conf. Hum. Comput. Interact.* **2019**, 11588, 51–66.
- 48. Becker, L.; Jaakkola, E. Customer experience: Fundamental premises and implications for research. *J. Acad. Mark. Sci.* **2020**, *48*, 630–648. [CrossRef]
- 49. Pansari, A.; Kumar, V. Customer engagement: The construct, antecedents, and consequences. *J. Acad. Mark. Sci.* **2017**, 45, 294–311. [CrossRef]
- 50. Pine, B.; Gilmore, J. Welcome to the experience economy. Harv. Bus. Rev. 1998, 76, 97-105. [PubMed]
- 51. Cook, G. Customer experience in the omni-channel world and the challenges and opportunities this presents. *J. Direct Data Digit. Mark. Pract.* **2014**, *15*, 262–266. [CrossRef]
- 52. Angelou, M. The Collected Autobiographies of Maya Angelou; Modern Library: New York, NY, USA, 2004.
- 53. Fornerino, M.; Helme-Guizon, A.; Gotteland, D. Mesurer L'immersion dans une experience de consommation: Premiers developpements. In Proceedings of the Actes du XXII Ème Colloque International de l'Association Française du Marketing, Waikoloa, HI, USA, 3–6 January 2006; p. 12.
- 54. Artusi, F.; Bellini, E.; Dell'Era, C.; Verganti, R. Designing an Omni-Experience to Save Retailing: Lessons from an Italian Book Retailer. *Res. Technol. Manag.* **2020**, *63*, 24–32. [CrossRef]
- 55. Izogo, E.; Jayawardhena, C. Online shopping experience in an emerging e-retailing market. *J. Res. Interact. Mark.* **2018**, 12, 193–214. [CrossRef]
- 56. Parasuraman, A.; Zeithaml, V.; Berry, L. Servqual: A multiple-item scale for measuring consumer perceptions of service quality. *J. Retail.* **1988**, *64*, 12–40.
- 57. Brooke, J. SUS: A quick and dirty" usability scale. In *Usability Evaluation in Industry*; CRC Press: Boca Raton, FL, USA, 1996; Volume 21, pp. 189–194.
- 58. Klaus, P.; Maklan, S. EXQ: A multiple-item scale for assessing service experience. *J. Serv. Manag.* **2012**, 23, 5–33. [CrossRef]
- 59. Holbrook, M.; Hirschman, E. The experiential aspects of consumption: Consumer fantasy, feelings and fun. *J. Consum. Res.* **1982**, *9*, 132–140. [CrossRef]
- 60. Mohd-Ramly, S.; Omar, N. Exploring the influence of store attributes on customer experience and customer engagement. *Int. J. Retail Distrib. Manag.* **2019**, *45*, 1138–1158. [CrossRef]
- 61. Bagdare, S.; Jain, R. Measuring retail customer experience. *Int. J. Retail Distrib. Manag.* **2013**, 41, 790–804. [CrossRef]
- 62. Vakulenko, Y.; Shams, P.; Hellström, D.; Hjort, K. Online retail experience and customer satisfaction: The mediating role of last mile delivery. *Int. Rev. Retail Distrib. Consum. Res.* **2018**, 29, 306–320. [CrossRef]
- 63. Sachdeva, I.; Goel, S. Retail store environment and customer experience: A paradigm. *J. Fash. Mark. Manag.* **2015**, *19*, 290–298. [CrossRef]
- 64. Carbone, L.; Haeckel, S. Engineering customer experiences. Mark. Manag. 1994, 3, 8–19.
- 65. Sathish, A.; Ganesan, P. Customer loyalty: A customer experience approach with special reference to organised retailing in India. *Int. J. Econ. Policy Emerg. Econ.* **2015**, *8*, 347–360. [CrossRef]
- 66. Bustamante, J.; Rubio, N. Measuring customer experience in physical retail environments. *J. Serv. Manag.* **2017**, *28*, 884–913. [CrossRef]
- 67. Shaw, C.; Ivens, J. Building Great Customer Experiences, 1st ed.; Palgrave: London, UK, 2002.

Appl. Sci. 2020, 10, 7644 17 of 18

68. Poulsson, S.; Kale, S. The experience economy and commercial experiences. *Mark. Rev.* **2004**, *4*, 267–278. [CrossRef]

- 69. Grewal, D.; Levy, M.; Kumar, V. Customer experience management in retailing: An organizing framework. *J. Retail.* **2009**, *85*, 1–14. [CrossRef]
- 70. Brakus, J.; Schmitt, B.; Zarantonello, L. Brand experience: What is it? How is it measured? Does it affect loyalty? *J. Mark.* **2009**, *73*, 52–68. [CrossRef]
- 71. Walter, U. Drivers of Customers' Service Experiences: A Customer Perspective on Co-Creation of Restaurant Services, Focusing on Interactions, Processes and Activities. Ph.D. Thesis, Örebro Universitet, Örebro, Sweden, 2011.
- 72. Porter, M.; Heyman, J. We've shopped before: Exploring instructions as an influence on mystery shopper reporting. *J. Retail. Consum. Serv.* **2018**, 45, 12–20. [CrossRef]
- 73. Martin, J.; Mortimer, G.; Andrews, L. Re-examining online customer experience to include purchase frequency and perceived risk. *J. Retail. Consum. Serv.* **2015**, 25, 81–95. [CrossRef]
- 74. Klaus, P.; Maklan, S. Towards a better measure of customer experience. *Int. J. Mark. Res.* **2013**, *55*, 227–246. [CrossRef]
- 75. Siqueira, J.; García, N.; ter Horst, E.; Molina, G. Spreading the word: How customer experience in a traditional retail setting influences consumer traditional and electronic word-of-mouth intention. *Electron. Commer. Res. Appl.* **2019**, *37*, 100870. [CrossRef]
- 76. Kaatz, C.; Brock, C.; Figura, L. Are you still online or are you already mobile?—Predicting the path to successful conversions across different devices. *J. Retail. Consum. Serv.* **2019**, *50*, 10–21. [CrossRef]
- 77. Vakulenko, Y.; Shams, P.; Hellström, D.; Hjort, K. Service innovation in e-commerce last mile delivery: Mapping the e-customer journey. *J. Bus. Res.* **2019**, *101*, 461–468. [CrossRef]
- 78. Zaharia, S.; Schmitz, M. Customer Experience in Online-Retailing–An Analysis of the Main Segments in German Online-Retailing. *Int. Conf. Appl. Hum. Factors Ergon.* **2019**, *961*, 177–188.
- 79. Zhao, W.; Deng, N. Examining the Channel Choice of Experience-Oriented Customers in Omni-Channel Retailing. *Int. J. Inf. Syst. Serv. Sect.* **2020**, *12*, 16–27. [CrossRef]
- 80. Jones, M. Entertaining shopping experiences: An exploratory investigation. *J. Retail. Consum. Serv.* **1999**, *6*, 129–139. [CrossRef]
- 81. Bäckström, K.; Johansson, U. An exploration of consumers' experiences in physical stores: Comparing consumers' and retailers' perspectives in past and present time. *Int. Rev. Retail Distrib. Consum. Res.* **2017**, 27, 241–259. [CrossRef]
- 82. Kumar, A.; Anjaly, B. How to measure post-purchase customer experience in online retailing? A scale development study. *Int. J. Retail Distrib. Manag.* **2017**, *45*, 1277–1297. [CrossRef]
- 83. Puccinelli, N.; Goodstein, R.; Grewal, D.; Price, R.; Raghubir, P.; Stewart, D. Customer experience management in retailing: Understanding the buying process. *J. Retail.* **2009**, *85*, 15–30. [CrossRef]
- 84. Anninou, I.; Foxall, G. The reinforcing and aversive consequences of customer experience. *J. Retail. Consum. Serv.* **2019**, *51*, 139–151. [CrossRef]
- 85. Schmitt, B. *Experience Marketing: Concepts, Frameworks and Consumer Insights*; Now Publishers Inc.: Delft, The Netherlands, 2011; Volume 5, pp. 55–112.
- 86. Ismail, A. Experience marketing: An empirical investigation. J. Relatsh. Mark. 2011, 10, 167–201. [CrossRef]
- 87. Sauro, J. SUPR-Q: A comprehensive measure of the quality of the website user experience. *J. Usability Stud.* **2015**, *10*, 68–86.
- 88. Yoo, B.; Donthu, N. Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL). *Q. J. Electron. Commer.* **2001**, *2*, 31–45.
- 89. Bagdare, S.; Roy, S. VISUALSCAPE: A scale to measure visual experience in retailing. *Serv. Mark. Q.* **2016**, 37, 272–287. [CrossRef]
- 90. Loiacono, E.; Watson, R.; Goodhue, D. WebQual: An instrument for consumer evaluation of web site. *Int. J. Electron. Commer.* **2007**, *11*, 51–87. [CrossRef]
- 91. Finstad, K. The usability metric for user experience. *Interact. Comput.* 2010, 22, 323–327. [CrossRef]
- 92. Kim, S.; Cha, J.; Knutson, B.; Beck, J. Development and testing of the Consumer Experience Index (CEI). *Manag. Serv. Qual.* **2011**, 21, 112–132. [CrossRef]

Appl. Sci. 2020, 10, 7644 18 of 18

93. Al Sokkar, A.; Law, E. Validating an episodic UX model on online shopping decision making: A survey study with B2C e-commerce. In Proceedings of the 5th ACM SIGCHI Symposium on Engineering Interactive Computing Systems, London, UK, 24–27 June 2013; pp. 297–306.

94. Shi, S.; Wang, Y.; Chen, X.; Zhang, Q. Conceptualization of omnichannel customer experience and its impact on shopping intention: A mixed-method approach. *Int. J. Inf. Manag.* **2019**, *50*, 325–336. [CrossRef]

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).