

Analyzing the Relationship between Trust and Purchase Intention in mCommerce

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Abstract. The use of mobile devices is widely spread. The electronic commerce through mCommerce is also increasing. However, there are still suspicions in some users when purchasing goods or services through a mobile channel. One of the main issues that influence the purchase intention in mCommerce is the customers' trust. Consumers' trust is intrinsically related to their experience, but also with the confidence in a brand. We aim to examine the relationship between customers' trust and their intention to purchase in mCommerce. For this purpose, we designed a specific scale, based on an extensive literature review. The paper presents the process of designing the scale.

Keywords: Consumer trust, Purchase intention, mCommerce, Customer experience

1 Introduction

Consumer confidence has been extensively addressed, but its correlation with purchase intention has not always been investigated. This implies the need to know behaviors, needs and apprehensions that users may suffer when facing a mobile electronic commerce platform (mCommerce).

Due to this need, this study focuses on a bibliographic review on the shopping experience in mCommerce, and more specifically on the relationship between consumers' confidence and their purchase intention. The results obtained show that the studies regarding trust and purchase intention are still incipient. Based on the bibliographic review carried out, we have designed a survey whose purpose is to evaluate consumer confidence and purchase intention. We hope that the survey will also allow us to assess the relationship between the two constructs.

The article presents a brief frame of reference in section 2. Section 3 analyzes the works related to the subject of the study. Section 4 documents the development of the survey. Finally, section 5 highlights conclusions and future work.

2 Referential Framework

The Consumer Experience (usually referred as Customer eXperience, CX) has been defined as a multidimensional construction based on cognitive, emotional, physical, sensory and social responses evoked by various market players. Lin et al [1] argued that the consumer experience developed as a result of a set of interactions between a consumer and a business, or the offers and services of a business.

This discipline was initially linked to the science of services. However, as the consumption of products and services through platforms has grown explosively, the need to approach areas such as Human-Computer Interaction (HCI) was imminent. All interactions made by the consumer with the brand are called touch points or points of contact. The design of the CX focuses on creating an optimal experience for consumers, at all touchpoints [2].

Trust is a complex human behavior, composed and influenced by multidimensional parameters [3]. As defined by Arion et al [4], trust refers to the amount of knowledge and clues on which to base belief. Therefore, trust acts as a mental mechanism, based on incomplete information, which helps reduce complexity to allow decision making under uncertainty [5,6]. Of the studies found, on the evaluation of trust in different types of platforms, most address it based on the Technology Acceptance Model (TAM), or from the preparation of questionnaires that recall this model based on constructs that determine the questions in each section of the questionnaire.

From the perspective of social interaction, trust is a problem of gradual progression, and it forms when one has confidence in a person's actions, which suggests that they are trustworthy. It is the result of voluntarily trusting an exchange partner [7].

If we take it to the online world, Hwang and Chang [8] expose 3 subjective norms that define trust online:

- Integrity: is the belief that a trusted party adheres to accepted rules of conduct, such as honesty and keeping promises.
- Capacity: is the belief in the skills and competencies of the trusted party.
- Benevolence: is the belief that the trusted party, while waiting to make a profit, wants to do good to the consumer.

In this sense, it is understood that there is an exchange of trust, based on the user's beliefs towards the object in which the trust is placed. Well, while the platform tries to be reliable, the user evaluates its reliability based on the use, and the implicit compliance with these standards. This is where the concept of consumer trust comes from.

Purchasing intention is a possibility or probability that consumers buy a product or service [9]. According to this definition, the intention to purchase a service can be defined as a series of service factors affect the consumer's psychology and will affect the probability that consumers will buy the service [10].

Along with this, the evaluation of the online shopping experience is generated by the user. Here, the qualities and perceived aesthetic quality of an online shopping website directly affect the consumer experience, including perceived trustworthiness and perceived experimental qualities [11]. In addition, real interactions with the platform allow consumers to assess their expectations and influence their intention to buy as a result of decision making influenced by the attitude of use (User Attitude,

UA). UA can be defined as the general tendency of consumers to appreciate the value of the website and to use it. UA is influenced by perceived experiential qualities. In addition, it has been found that trust is directly related to consumer use attitude.

3 Related Works

To evaluate the consumer experience, it is necessary to know exactly which processes involve them, in order to safeguard the coherence of that experience at each point. Many authors have mapped the phases involved in the purchase process, to see how trust affects them, or for other reasons.

When entering for the first time, to an unknown site, consumers will face an exploration process in which they will form knowledge and trust or initial distrust, in this first experience. After many transactions, consumers will have become familiar with the site and its transaction process. Online trust is developed here, in the phase of commitment called continuous trust or solid trust, a level of trust intention that does not change dramatically over a given period of time [12].

For the purposes of this research, the proposal by Petre et al. [13] would be the one that best adapts, since it incorporates the phases: Formation of the expectation, Approach to the site, Pre-purchase interaction, Electronic purchase, Post-purchase interaction, Product or service consumption.

In this way, the purchase intention could be mapped with all its ingredients, from the pre-purchase interaction phase, for a user who does not convert, and the post-purchase interaction in the case of doubts, or a recurring purchase. This perspective is based on the Total Client Experience (TCE). This extends beyond the user's interaction with the site or application. Including: product delivery, after-sales, customer service and support. All these points of contact affect the perception of value and quality of service that the consumer has with respect to the company. Which consequently would affect consumer loyalty [14].

According to the definitions reviewed above, it is understood that the consumer experience is a multifactorial construction, therefore, it is important to review how these factors affect trust. Escobar and Carvajal [15], based on the model The Unified Theory of Acceptance and Use of Technology (UTAUT2) or Unified Theory of Acceptance and Use of Technology. With it, he describes the extent to which some external factors shape the acceptance of technology and also interfere with trust in an online purchasing process. These and other authors develop their research based on questionnaires that map the different constructs that form trust, according to the platform or type of service to be evaluated.

4 Developing a Questionnaire to evaluate the Consumer Experience in mCommerce

To develop this research, the mobile application of a Latin American airline was taken as a case study.

For the design of the questionnaire, the constructs obtained in the bibliographic review were taken, which were attentive to the use or adoption of the purchase through a mobile application. These are listed in table 1.

Tabla 1. Constructs that were used in the questionnaire.

Constructs and reference source	Associated questions
Trust disposition McKnight et al. 2002 [16]	I usually trust people until they give me a reason not to trust them I generally give people the benefit of the doubt when I first meet them. My typical approach is to trust new acquaintances until they prove that I shouldn't trust them.
Personal innovation McKnight et al. 2002 [16]	When I hear about a new app, I often find an excuse to download it Among my colleagues, I am usually the first to try new applications
Familiarity with the application Gefen [17]	In general, I am familiar with this application I am familiar with finding items in this application I am familiar with the purchase process for this app
Honestidad Casaló et al. (2007) [18]	I think this app generally meets the commitments it makes I believe that the information offered by this application is sincere and honest. I think I can trust the promises this app makes This application does not make false statements This application is characterized by the frankness and clarity of the services it offers to the consumer.
Benevolence Casaló et al. (2007) [18]	I think this application has to do with the present and future interests of its users. I believe this application takes into account the repercussions that your actions could have on the consumer. I think this app would not do anything intentional to harm the user I believe that the design and commercial offer of this website consider the wishes and needs of its users.
Competence Casaló et al. (2007) [18]	I think this application is responsive to the needs of its users I think this app has enough experience in marketing the products and services it offers. I believe this application has the necessary resources to successfully carry out its activities. I think this app knows its users well enough to offer them products and services tailored to their needs.
Usability	
Appropriateness recognizability Davis (1989) [19]	The application is functional (useful and practical). The content of the application is useful to me
Learnability Davis (1989) [19],	The application is easy to use The in-app purchase process is easy to learn
Operability (Own elaboration)	App attributes make it easy to control and operate
User error protection (Own elaboration)	During the purchase process, the application prevented me from making errors of use

User interface aesthetics Own elaboration)	I think this application is accessible and allows any type of user to use it
Purchase intention Taylor and Todd (1995) [20], Gefen & Straub 2000 [21]	I hope to use the SKY app to buy an airline ticket online soon I am thinking of using the SKY app to purchase an airline ticket online soon I will use the SKY app to buy an airline ticket, online soon It is likely that you will repeat the purchase of the air ticket through the SKY application
Risk Van der Heijden et al. (2003) [22] Pavlou [14] Kim et al. (2009) [23]	How would you characterize the decision to buy a product through this application? What is the probability that I will make a good deal buying in this application? How would you rate your overall risk perception of this app?

For each of the indicated constructs, various questions proposed by the cited authors were established, which would make it possible to investigate the perception of each user for each of them. The questions use a Likert scale in which it is evaluated how much agree or disagree with the statement of each question.

5 Conclusions and Future Work

Consumer trust in mCommerce platforms is a very important issue. Many consumers use them only to quote, and then make their purchase through a desktop platform. But the user gets to break the barrier of uncertainty and will be given an initial trust that fosters trust. On the other hand, if the brand, and everything that it communicates through the various points of contact, transmits trust, a purchase intention could be established which may or may not be specified.

The bibliographic study carried out allowed us to define a questionnaire to evaluate the consumer experience. The questionnaire has not yet been validated. As future work, we intend to validate the questionnaire through a case study, the mCommerce platform of an airline. Through the responses obtained, we want to investigate the relationship between consumer confidence and purchase intention.

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