What drives m-shoppers to continue using mobile devices to buy?

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What drives m-shoppers to continue using mobile devices to buy?

The aim of this work is to offer a better understanding of consumer continued intentions to use mobile devices to shop. An integrated model is developed to identify the drivers that lead m-shoppers to repurchase. Specifically, navigation, safety and ubiquity are posited as stimuli guiding consumers’ affective (satisfaction) and cognitive (trust and convenience) reactions that will, in turn, increase repurchase intention. Results show the impact of ubiquity on m-convenience and safety m-experience on both affective and cognitive reactions. Finally, repurchase intention is explained directly by m-satisfaction and m-convenience and indirectly by m-trust. This paper involves to the field of mobile marketing literature and practitioner management.
Mobile commerce, or m-commerce, refers to purchasing goods and services through wireless handheld devices (Chong 2013). These devices are usually small, light and portable and may be used on the move. In line with this definition, the present research considers both smartphones and tablets as mobile devices. Figures show the number of mobile device shoppers to be growing fast. In 2016, 34% of online sales were made with mobiles or tablets, a figure that will increase to 47% by 2022 (Forrester 2017). In addition, the expenditure of mobile shoppers (m-shoppers) was $7.8 billion in 2012, $60.2 billion in 2016 and Forrester anticipates it will reach $93.5 billion in 2018 and $175.4 billion in 2022 (Forrester 2018). But this situation has been the consequence of a gradual development. In the last three decades, consumer behaviour has experienced a strong change because of technology evolution. Prior to m-commerce, the e-commerce –the computer-mediated electronic commerce– attracted the attention of academics and practitioners. Although both are considered variations of electronic transactions, literature has acknowledged m-commerce as a separate e-commerce channel (Rodríguez-Torrico, San-Jose Cabezudo and San-Martin 2017; Shin et al. 2017).

M-commerce has many distinct characteristics from existing, well-known e-commerce. The main differentiating characteristic of m-commerce is its flexibility in terms of time and location (Yun et al. 2011). The nature of mobile devices allows consumers to use them ubiquitously, that means consumers can use them anywhere and at any time. In addition, mobile devices are considered a personal tool which enables mobile vendors to contact with consumers in real-time, but also to send them personalised information (Gao, Waechter and Bai 2015). Nevertheless, these distinguishing characteristics pose new challenges for mobile vendors. As a result of the clear differences of mobile devices (screen size, capacity, portability, personal nature …), m-shoppers face restrictions and uncertainty when using their mobile device to shop (Nilashi et al. 2015). In this sense, prior m-commerce experiences (m-experiences) become critical for consumers when
deciding to continue using the mobile devices to make purchases (Gao, Waechter and Bai 2015; Okazaki and Mendez 2013; Ozok and Wei 2010). Concretely, literature has acknowledged that interface and safety issues are important indicators of firms’ efficiency used by m-shoppers in order to reduce their uncertainty (Davis, Sajtos and Chaudhri 2011; Köster, Matt and Hess 2016). In consequence, these aspects associated with the m-commerce environment, including navigation and safety, become challenges for mobile retailers’ success (Nilashi et al. 2015; Wang, Ngamsiriudom and Hsieh 2015).

Given such a context, overcoming these challenges will require m-vendors to have a complete understanding of consumers’ motivations to engage in m-commerce and their behavioural patterns. Moreover, in a crowded market, those who know how consumers use their mobile devices to shop will retain clients. In this regard, there is a consensus among the Information Systems (IS) literature concerning continuance intentions as a key to success (Jasperson, Carter and Zmud 2005), sometimes considering it central to the survival of many business-to-consumer e-commerce relationships (Bhattacherjee 2001). Many authors have expanded the importance of continuance intentions to different contexts, namely networking services (Gwebu, Wang and Guo 2014; Ku, Chen and Zhang 2013), games (Chang 2013a; Jolley, Mizerski and Olaru 2006) or other internet services (Lin et al. 2012). Nevertheless, the focus in academic mobile research has usually been on initial adoption and acceptance of mobile devices vis-à-vis making purchases (Hahn and Kim 2013). Although initial adoption is crucial for diffusion of an innovation, adoption does not guarantee its continued usage (Kim and Malhotra 2005; Ozturk et al. 2016). Therefore, the aim of this paper is to fill this gap by identifying key drivers of m-commerce and understand their relative influence on consumer continued intentions to use mobile devices for purchasing.
This work contributes to m-commerce literature in two ways. Firstly, this paper develops an integrative model which includes key drivers of m-commerce continuance. This model allows us to move forward on the m-commerce research by identifying the drivers that impact the m-consumers’ reactions and finally their intention to repurchase through mobile devices. Secondly, in contrast to previous mobile research focusing on m-commerce adoption, this work explores m-shopper repurchase intentions, furthering the study of m-commerce continuance as suggested by the latest research into m-commerce (Al-Ghazali et al. 2015; Gao, Waechter and Bai 2015; Shin et al. 2017; Susanto, Chang and Ha 2016).

In the following section, the theoretical framework and hypotheses development of the study are presented. In the third section, the methodology is explained and, in section four, data analysis and results are shown and discussed. The last section includes the research conclusions as well as limitations and future research.

**THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT**

Consumers are changing the way they purchase. In the past, they used to go to brick-and-mortar stores to shop because that was the only possibility. With the emergence of the internet, the retailing context changed dramatically, making the e-commerce and m-commerce central in the scene. The internet has not only increased the number of channels to purchase but has also transformed the way consumers shop. With the proliferation of mobile devices, consumers have incorporated them into their shopping processes. In contrast to e-shoppers, m-shoppers use these devices to shop anytime and anywhere, that is ubiquitously, but also, they are willing to receive personalized services (Ozok and Wei 2010). However, mobile environment presents more uncertainty and risk than offline and online environments (Zhou 2013). Despite ubiquity presents a big benefit for consumers, their confidence is still lower in m-commerce compared to e-
commerce, and screen size and functionalities of mobile devices constrain consumers when making transactions (Nilashi et al. 2015).

In this sense, although one of the aspects that influence this uncertainty and constriction is the website interface (Lee and Benbasat 2004), literature has acknowledged that these limitations can be addressed through offering an interface with robust navigation (Nilashi et al. 2015). Mobile website navigability was confirmed as a key aspect of mobile websites (Venkatesh and Ramesh 2006), solving the major problem for mobile users that is to navigate on a small screen. Besides navigation issues, to increase the confidence in the m-commerce context, several factors such as reputation and guarantees are considered key by m-shoppers (Köster, Matt and Hess 2016). These issues, together with security and privacy concerns, ensure a safe m-experience and can determine the future behaviour of m-shoppers (Gao, Waechter and Bai 2015). For these reasons, in order to retain m-shoppers, the mobile vendor’s actions in terms of website interface and navigation, but also security and protection are crucial (Nilashi et al. 2015).

As a result, retailers are urged to adapt their strategies to the mobile context and respond to m-shoppers’ demands (Ozok and Wei 2010). In this sense, despite the huge growth of m-commerce, marketers have yet limited understanding of consumer motivations to engage in m-commerce and of the factors that contribute to the development of m-commerce. For this reason, there are calls for more research into m-commerce, and concretely regarding m-shopper future intentions (Roy and Moorthi 2017; Shin et al. 2017). In an effort to address this issue, this paper proposes an integrated model based on the Stimulus-Organism-Response (S-O-R) model. This model improves the marketing discipline understanding of m-shopper continued intentions by identifying the key drivers and their impact on m-shoppers’ reactions and responses. Figure 1 summarizes the proposed model and, below, the theoretical foundations and the hypotheses are explained.
Stimulus-Organism-Response (S-O-R) model

In recent years, academics have used several theoretical models to explain m-shoppers’ acceptance (e.g. Theory Acceptance Model, Theory of Planed Behaviour…). However, these approaches display certain limitations when seeking to understand consumer continuance behaviours since they are based on primary adoption variables. Therefore, other approaches are required to explore the determinants of m-commerce behaviour and repurchase intention. In this point, the S-O-R model has served as a theoretical foundation for several studies aimed at gaining an insight into consumer intentions and behaviours (Hsu, Chang and Chen 2012; Kim and Lennon 2013). In this sense, S-O-R has been employed in different contexts but is generally limited to understanding how atmospheric cues impact on emotions and behaviours and has scant application in m-commerce. However, this approach can be substantially developed by considering a large number of stimuli and organisms (Mehrabian and Russell 1974) and can serve as a baseline model for the m-commerce context. Consequently, this study proposes an integrated model of m-commerce key drivers –navigation m-experience, safety m-experience and ubiquity– to predict affective and cognitive reactions, as well as m-repurchase intention, applied to the clothing sector.

The S-O-R model is grounded on environmental psychology and has been used extensively to understand consumers’ psychological and behavioural responses toward contextual stimuli. Specifically, it suggests that certain environmental cues act as stimuli that may influence an individual’s cognitive and affective reactions (organism) which, in turn, affect behavioural intentions or consumer responses (Mehrabian and Russell 1974). The SOR model was initially developed from the SR model, where the Stimuli-Response relation was studied to explain the effects of the environment on human behaviour. Furthermore, the fact that individuals’ impact on
its response was overlooked has been criticized (Lazarus 1998). Thus, a new variable -organism- was included. The SOR model was therefore established where S is related to the shopping environment, O to consumers themselves, and R is associated with the organism function as a consequence of stimuli activity.

Stimuli (S) affect the individual’s internal states and can be defined as an environmental influence that motivates the individual (Eroglu, Machleit and Davis 2001). In this specific context, the environmental influences can be determined by the nature of the device. As it has been explained, mobile devices are ubiquitous, which allows consumers to use them anywhere and at any time; but they have also restrictions because of their physical characteristics, which increase the m-shoppers’ uncertainty. In this point, literature has recognized that website navigation is vital to reduce the small screen limitations (Nelson, Todd and Wixom 2005; Siau and Shen 2003), and that when m-shoppers perceive a safe environment their level of uncertainty is minimized (Wang, Ngamsiriudom and Hsieh 2015). Therefore, in order to capture the environmental aspects that influence the m-commerce continuance, this study considers as stimuli ubiquity –which is the main characteristic that differences m-commerce from e-commerce--; visual appeal, interactivity, enjoyment and personalization –which form the navigation m-experience--; and reputation, guarantees and security and privacy –that are variables related with the safety m-experience.

Both of these and their definitions are specified in Table 1.

PLACE TABLE 1 ABOUT HERE

Organism (O) refers to two sets of internal processes and structures intervening between external stimuli on the person and the final actions or responses emitted. According to the S-O-R model, the organism comprises emotional/affective and non-emotional/cognitive reactions that are influenced by stimuli and that impact on responses (Mehrabian and Russell 1974). In this line,
the literature has focused mainly on affective reactions such as the organism and has scarcely considered cognitive states. However, both affective and cognitive internal states are essential if a full and adequate understanding of consumer behaviour is to be achieved (Eroglu, Machleit and Davis 2001). In an effort to understand consumer behaviour better, we will thus focus on the O characterised as consumers’ cognitive and affective states and processes (Chang and Chen 2008). In order to observe the O in depth and to consider a wider perspective of m-shopper reactions, we will consider m-satisfaction (as an affective O) and m-trust and m-convenience (as cognitive O) (see Table 2).

PLACE TABLE 2 ABOUT HERE

Effects of stimuli on organism

Effects of navigation m-experience on satisfaction and trust

As it has been exposed, the m-shoppers’ experiences during the navigation can be crucial to overcome the mobile devices limitations (Venkatesh and Ramesh 2006). In this sense, visual appeal, interactivity, enjoyment, and personalization have been considered aspects that can improve this shopping experience (Choi et al. 2008; Kang, Mun and Johnson 2015; Xu, Peak and Prybutok 2015). Further, in particular, these features related with the navigation experience are determining factors in consumer website use (Wang and Li 2012), being websites generally recognized in the literature as predictors of m-shopper satisfaction with and trust in the retailer (Lee et al. 2015; Xu, Peak and Prybutok 2015).

Specifically, visual design has proved to be an important determinant of m-commerce adoption (Lee and Benbasat 2004). Visual appeal affects user appraisal of mobile websites (Cyr, Head and Ivanov 2006) and sparks positive emotions that generate positive shopping attitudes (Wang, Hernandez and Minor 2010). In addition, when consumers perceive a good mobile visual appearance, their satisfaction (Xu, Peak and Prybutok 2015) and trust in the mobile website...
increase (Li and Yeh 2010). Furthermore, interactivity has also been considered a vital feature of m-commerce success and m-trust (Lee 2005). When consumers perceive greater interactivity their affective involvement with mobile sites will increase (Kang, Mun and Johnson 2015). Moreover, interactivity has also been suggested as a generator of m-satisfaction (Lee et al. 2015). Mobile devices are also frequently chosen as a way of spending time (Agrebi and Jallais 2015) and are usually associated with fun and enjoyment (Chong 2013). In this vein, having fun during the mobile purchase enhances consumers’ feeling of effectiveness and reassurance in their mobile purchases (Agrebi and Jallais 2015). In this sense, user m-satisfaction is also directly affected by mobile enjoyment (Chong 2013). Finally, due to increasing mobile user demand for personalized information, adapting the offer to each consumer is an important indicator of m-commerce vendor quality (Nilashi et al. 2015). It has been confirmed that buyers’ m-satisfaction increases when they have positive experiences that include personalization (Choi et al. 2008).

In this line, depending on the product category, the importance of navigation aspects may differ. Thus, an attractive clothing website leads consumers to spend more time on it (McCormick and Livett 2012) and be more satisfied (Bai, Cui and Ye 2014). In addition, an interactive website for clothes is perceived as having more quality than a non-interactive one and is thus more highly valued by consumers, which in turn makes them more loyal to it (Kim and Niehm 2009). In addition, clothes are considered to be a product whose purchase is fun. In a mobile clothing context, consumers who enjoy their mobile purchases may thus tend to develop more positive attitudes toward m-commerce (Kim, Shin and Lee 2009). Finally, personalization has been recommended as a feature which must be embraced in the mobile clothing retailer’s strategy (Magrath and McCormick 2013). In addition, as the firm personalizes its services and products, customers will be more profitable (Rust and Huang 2014). Therefore, hypothesis 1 is posited:
**H1.** The navigation m-experience increases clothing buyers’ m-satisfaction (**H1a**) and m-trust (**H1b**).

*Effects of safety m-experience on satisfaction and trust*

In addition to navigation, safety m-experience has been confirmed key to reduce m-commerce uncertainty (Köster, Matt and Hess 2016). In order to achieve a safe environment, mobile vendors must focus on different aspects. In this sense, reputation, guarantees and security and privacy have been widely explored by the literature related to aspects used to ensure a safe and secure experience (Chang 2013b; Kim and Lennon 2013; Li, Dong and Chen 2012). They have often been linked to trust and satisfaction by researchers in both offline (Wu et al. 2012) and online contexts (Sha 2009), as well as in m-commerce (Gao, Waechter and Bai 2015; Köster, Matt and Hess 2016). These safety features perceived from previous experiences are more important in mobile contexts than in offline and online contexts due to the open nature of wireless networks (Nilashi et al. 2015).

Specifically, reputation has been confirmed as an important factor for m-trust development (Davis, Sajtos and Chaudhri 2011). Furthermore, consumers are more willing to engage in transactions and to conduct payments with reputable mobile companies because it is a key antecedent of companies trustworthiness (Köster, Matt and Hess 2016). Moreover, guarantees related to compensation for losses and consumer information protection are the main factor in developing trust during the initial stages of m-commerce (Kim, Shin and Lee 2009) and prove decisive in generating consumer m-trust in the firm (Davis, Sajtos and Chaudhri 2011). Finally, security and privacy have been emphasized as relevant variables when adopting m-commerce (Islam et al. 2011), and are crucial concerns for mobile companies if they are to gain consumer trust (Davis, Sajtos and Chaudhri 2011; Nilashi et al. 2015) and satisfaction. In addition they can
help to determine continued purchase intention (Gao, Waechter and Bai 2015; Susanto, Chang
and Ha 2016).

In the clothing sector, the focus of the present work, reputation acts as an external source of
information and consumers perceive less risk in companies with sound reputation (Kim and
Lennon 2013). Guarantees offered by a clothing firm can improve the development of
constructive and balanced relationships with new clients (Johnsen and Ford 2008). Specifically,
when clothing shoppers perceive guarantees in their purchases, they will increase their intention
to accept other product categories, to recommend it and to pay a higher price for the product (del
Rio, Vázquez and Iglesias 2001). Finally, in this sector, security and privacy are key; consumers
perception about a secure and private purchase plays an important role in increasing satisfaction
(Ha and Stoel 2009) and also impacts on consumer behaviour (Kim and Kim 2004).

Consequently, hypothesis 2 posits that,

**H2.** Safety m-experience increases clothing buyers’ m-satisfaction (**H2a**) and m-trust (**H2b**).

**Effects of ubiquity on m-convenience**

In this work, we consider ubiquity as the unique feature of mobile devices. Ubiquity refers to
time flexibility and spatial flexibility that allows people to be connected at any time and any
place (Okazaki, Li and Hirose 2009). It represents a unique characteristic of mobile devices and
is the main aspect that differentiates between online and mobile commerce (Ko, Kim and Lee
2009; Okazaki, Li and Hirose 2009). It has been found as a determinant of attitude toward mobile
websites (Yun et al. 2011) and system use (Lee 2005). In addition, the ubiquity of mobile devices
brings high levels of convenience to consumer life, since mobile devices allow people to use m-
commerce services anywhere and at any time, which influences behavioural intention (Li, Dong
and Chen 2012). Therefore, the notion of m-convenience is closely related to the time-place
flexibility of the ubiquity concept (Okazaki and Mendez 2013). Consequently, we posit the third hypothesis:

**H3.** Ubiquity increases convenience when buying clothes through mobile devices.

**Effects of organism on response**

Finally, Response (R), the last component of the S-O-R model, refers to the result of organism internal processes, including consumers’ reaction (Li, Dong and Chen 2012). In this sense, previous research has recognized different aspects of behavioural intentions as results. Some of these are continuance intention (Kourouthanassis et al. 2015), future patronage intention (Mathwick, Malhotra and Rigdon 2001), intention to revisit the website (Demangeot and Broderick 2007), impulsive buying intention (Lee and Yi 2008) and word of mouth behavioural intention (Joseph-Mathews, Bonn and Snepenger 2009). This paper considers mobile repurchase intention as the main consumer response since, in this competitive context, it is essential to retain customers over time and to encourage them to repeat purchase through mobile devices (Lee et al. 2015).

Satisfaction, as an emotional or affective reaction, has been confirmed as a predictor of continuance intentions in the online context (Lin, Fan and Chau 2014). In the mobile context, satisfaction has been proposed to be a strong determinant of mobile purchase intention (Agrebi and Jallais 2015), continuance behaviour (Gao, Waechter and Bai 2015) and as an essential driver of repurchase intention via mobile devices (Chong 2013). In the clothing sector, research has also confirmed that a greater degree of satisfaction leads to repeat purchases (Curtis et al. 2011).

Therefore,

**H4.** M-satisfaction increases clothing buyers’ m-repurchase intention.

Trust as a cognitive reaction stems from the perspective that views the consumer as someone whose trust is driven by the advantages offered by the firm (Komiak and Benbasat 2006). In the
mobile context, trust proves more important than in online contexts because uncertainty is greater (Gao, Waechter and Bai 2015; Köster, Matt and Hess 2016) mainly due to the characteristics of mobile devices (slower speed, simpler functions, small screens, open nature of wireless networks) (Lee 2005; Nilashi et al. 2015). In mobile purchases, trust is one of the variables that most influence consumer repurchase intention (Chong 2013; Köster, Matt and Hess 2016) and continuance (Gao, Waechter and Bai 2015). For clothing, trust also influences consumer willingness to repeat purchase (Curtis et al. 2011). Thus,

**H5. M-trust increases clothing buyers’ m-repurchase intention.**

Finally, mobile convenience has been posited as one of the major advantages of m-commerce (Wang, Malthouse and Krishnamurthi 2015). It has been recognized as a determinant of m-commerce success (Kim, Mirusmonov and Lee 2010), and allows users to spend less time and effort during mobile usage (Bankole and Bankole 2017). It reflects the ease of acquiring information compared to other alternatives and is a driver of consumer loyalty (van Riel and Pura 2005). In this sense, mobile convenience highlights customers’ involvement in a relationship with the firm, which then leads to repeat purchases (Wang, Malthouse and Krishnamurthi 2015). Therefore,

**H6. Convenience increases clothing buyers’ m-repurchase intention.**

**METHOD**

**Sample and data collection**

This empirical study is based on information gathered through an online questionnaire given to a convenience sample of mobile shoppers of a Spanish corporate clothing group. These shoppers are consumers who have purchased clothes through mobile channels (smartphone or tablet). After refining the questionnaire with the members of the marketing and digital commerce department, 1,649 customers were contacted via email and provided with the link to the online questionnaire.
The corporate group selected only clients who had purchased in the online or mobile website. The email reached 1,612 customers of whom 655 (40.63%) opened it. These buyers had access to the questionnaire for 15 days, and 284 individuals answered the whole questionnaire. Due to this sample being composed of online and mobile shoppers, we only selected mobile shoppers, asking them if they had purchased using mobile devices in the past. After this question, respondents were asked about their navigation and safety experiences when using the mobile device to purchase. In addition, they responded questions about their perception of mobile devices to make purchases, namely, ubiquity and convenience. Then questions about their relationship with the firm and m-commerce repurchase intention were included.

The sample amounted to 123 individuals, all of whom are mobile clothes shoppers. Respondents were almost all women (99.2%). 33.3% of shoppers were between 19 and 35 years of age, while 64.2% were between the ages of 36 and 50, and the remaining 2.4% were over 50 years of age. In order to refine and avoid some noise in the sample, we eliminated the only man in it. Our useful sample was finally made up of 122 women who had already purchased using mobile devices. Women are assumed to be more involved in clothing consumption, purchase, advertising and wearing than males (O’Cass 2000). In addition, recent statistics show that women are more concerned about fashion information, style and trends than men (Google 2017). Therefore, considering a female sample in this work offers a more faithful image of the reality as well as more involved respondents.

To encourage them to take part in the study, respondents were informed that after completing the survey they would be given a 5€ coupon for their next purchase in the company. In order to prevent subjects completing the survey more than once, clients could only enter the coupon code from any given IP address once.
The clothing industry was selected to carry out this study for several reasons. On the one hand, bearing in mind that mobile commerce has not developed equally in all industries, clothing has been one of the fastest growing sectors (Criteo 2015). On the other hand, clothing was the leading category purchased amongst mobile device owners in Europe in 2016 (Yelken 2017). Finally, it has been one of the main topics in marketing literature in digital contexts (Kim and Kim 2004; Magrath and McCormick 2013).

**Measures**

Variables were taken from the literature and were measured using a 5-point Likert scale adapted from previous research. Visual appeal was measured using three items taken from Mathwick, Malhotra and Rigdon (2001); enjoyment was measured by three items previously used by Lu and Yu-Jen Su (2009); interactivity was measured with five items adapted from Ballantine and Fortin (2009); personalization was measured based on a study by Swaid and Wigand (2012). In order to measure guarantees as well as security and privacy policies, three and six items, respectively, were adapted from Harris and Goode (2004), Ramus and Nielsen (2005) and Ranaweera, McDougall and Bansal (2005); reputation was measured using three measurement items adapted from Kim, Shin and Lee (2009). Ubiquity was adapted from Lee (2005). Trust was measured using three items adapted from Ganesan (1994) and Doney and Cannon (1997), and satisfaction was measured using three items based on the research of Bennett, Härtle and McColl-Kennedy (2005). Convenience was measured through three items taken from Li, Dong and Chen (2012). Finally, the three items used to measure repurchase intention were obtained from Lin (2011). As control variables, we included consumer experience as a mobile shopper and client experience so as to dismiss alternative effects.

**DATA ANALYSES AND RESULTS**
Structural equation modelling (SEM) analysis was used to test the hypotheses. Specifically, we used the Partial Least Squares (PLS) approach since it is robust for small samples and allows both types of measurement scales, reflective and formative (Hair, Ringle and Sarstedt 2011) to be worked with. In our case, navigation and safety m-experiences are reflective-formative second-order constructs. The remaining variables were measured with reflective scales. Power analysis allowed us to demonstrate the adequacy of our sample size. Using G*Power software (Faul et al. 2007), to a standard level of significance $\alpha = 0.05$, an effect size ($f^2 = 0.15$) and five predictors, the power achieved for our sample size ($N = 122$) was 91.8%, exceeding the recommended 80% power level (Cohen 1988). Therefore, it can be said that our estimates by PLS prove adequate.

**Measurement model**

In order to validate the scales and rule out problems of common method bias, Harman’s one-factor test (Podsakoff et al. 2003) was conducted. All the indicators of the variables were entered into an exploratory factor analysis and all the items loaded in one factor. The analysis showed that the unique unrotated factor explains 45.1% of data variance. We then conducted exploratory factorial analysis without forcing one factor and the cumulative variance explained by all the factors in the proposed model was 87.9%, ruling out common variance problems.

Navigation and safety m-experiences are considered as formative second-order constructs created by three and four dimensions, respectively. Following Bagozzi and Yi (2012), including a higher-order construct implies that measurement assessment needs to be undertaken at two levels. The two-stage approach was thus used as it offers the advantage of estimating a more parsimonious model on the higher-level analysis (Parveen et al. 2016).

First of all, at the first-order level, the validity and reliability of the dimensions were assessed (Hair, Ringle and Sarstedt 2011) (Table 3). Cronbach $\alpha$ and composite reliability (CR)
coefficients were above .7 and .6, respectively (Bagozzi and Yi 1988), confirming the reliability and internal consistency of the scales. In addition, convergent validity is confirmed, since the average variance extracted (AVE) presented values above .5 in all cases (Bagozzi and Yi 1988). Further, the direct relations between the dimensions and their indicators were confirmed, showing in all cases significant loading values (t>1.96, at a confidence level of 95%).

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Thus, following literature recommendations (Iacobucci 2010), the previously validated first-order constructs (navigation and safety m-experiences) could then be incorporated into the second-order measurement model. The results of the second-order measurement model are presented in Table 4. As regards reflective latent variables, Cronbach α, CR, and AVE values confirmed the scales’ reliability and validity, with values above .7, .6 and .5, respectively. As can be seen, all loading coefficients show significant values at a confidence level of 95% (t>1.96). For the formative constructs (navigation and safety m-experiences), multicollinearity was ruled out, because the variance inflation factor (VIF) values were below 5 and tolerance value (IT) above .10 as recommended (Hair et al. 2017). For formative indicators, weights represent the relative contribution in the formation of the latent variable. In order to analyse construct validity, item weights were examined (Petter, Straub and Rai 2007). Although several items’ weights were not significant, following Hair et al. (2017) we checked the loadings of these items and confirmed that they had values above .5 and were significant.

PLACE TABLE 4 ABOUT HERE

Discriminant validity was confirmed by calculating whether the square root of the AVE from each reflective construct was in every case greater than the correlations (Table 5) of the other reflective constructs, using the Fornell-Larcker Criterion (Fornell and Larcker 1981).
Structural Model

After validating the measurement model, we tested the hypotheses by estimating the overall model. Before accepting the proposed hypotheses, we analysed $R^2$ in order to assess the model’s explanatory power. Results show that $R^2$ is satisfactory since it exceeded .1 for repurchase intention (.258), convenience (.563), trust (.476) and satisfaction (.494) (Falk and Miller 1992). Considering past research on consumer behaviour (Berry, Seiders and Grewal 2002; Chen and Dhillon 2003; Gupta and Kim 2007; Homburg, Koschate and Hoyer 2006; Khalifa and Liu 2007; Venkatesh, Thong and Xu 2012) and in order to ensure the validity of our results, mobile shopper experience and client experience were included in the model as control variables. Although some of these studies conjecture that habit is an important explanatory variable of consumer behaviour, it is linked to a certain amount of repetition or practice (Aarts, Verplanken and Knippenberg 1998) and requires a stable environment (Venkatesh, Thong and Xu 2012). In this sense, considering that mobile devices and mobile users are changing and growing (Forrester 2017), this variable might be considered in future, when the environment is more stable and consumers have gained some practice. Table 6 shows the results of the estimation of the structural model after controlling for these variables.

As shown, four of our six hypotheses were fully supported. Regarding the stimuli-organism relationships, results show the impact of navigation m-experience on m-satisfaction ($\beta = .264; p< .1$), confirming H1a. In contrast, the relationship between navigation m-experience and m-trust is not significant, therefore H1b cannot be confirmed. In addition, safety m-experience is confirmed as determinant of m-satisfaction ($\beta = .453; p< .001$) and m-trust ($\beta = .640; p< .001$), fully
supporting H2. H3, which posited a positive relationship between ubiquity and m-convenience, is also confirmed ($\beta = .740; p< .001$).

Finally, for the organism-response relationship, three hypotheses were suggested. First, the results show that m-satisfaction, as an affective reaction, increases m-repurchase intention ($\beta = .334; p< .05$), confirming H4. As regards cognitive reactions, the m-repurchase intention is not explained by m-trust, such that H5 is not confirmed. Finally, m-convenience is significantly related with m-repurchase intention ($\beta = .217; p< .05$), thus confirming H6.

PLACE TABLE 6 ABOUT HERE

Considering that trust has no significant effect on repurchase intention, a mediation effect was tested following previous literature findings (Lin and Wang 2006; Susanto, Chang and Ha 2016). An increasingly popular method of testing mediation and indirect effects is bootstrapping (Montoya and Hayes 2017). The macro PROCESS developed by Hayes (2013) for SPSS was employed. This program calculates 95 percent bias-corrected bootstrap confidence intervals of mediation on the basis of 5,000 bootstrap samples. The results of the mediation effect of satisfaction in the trust-repurchase intention relationship show that trust is not significantly related to repurchase intention after controlling for the mediating variable (satisfaction) ($\beta =.095; p>.05$); and the indirect conditional effect of the confidence interval (CI) bias-corrected bootstrap at 95% is above zero (CI = .081 - .717). Thus, the full mediation role of satisfaction between trust and repurchase intention is supported. The Sobel test also confirms this finding (t-test = 2.407, p< .05).

In addition, we carried out the test of mediation of organism variables between stimuli and response. Only for the ubiquity-repurchase intention relationship the indirect conditional effect of the CI bias-corrected bootstrap at 95% is above zero (CI = .099 - .455), confirming the mediation effect. Satisfaction and trust mediation effects are not found, and indirect effects are no different
from zero in any case, where bias-corrected bootstrap CI includes zero. Sobel tests also support these findings. Only convenience shows a significant mediation effect for ubiquity and the repurchase intention relationship (t-test = 3.105, p< .05).

**DISCUSSION AND IMPLICATIONS**

This study addresses the key drivers of psychological affective and cognitive consumer reactions to finally explain m-continuance intention. First, our findings demonstrate that both navigation and safety aspects can influence female consumer reactions and that these reactions impact on consumer response. Specifically, as an affective variable, satisfaction towards the m-vendor is explained by both the navigation and safety m-experiences. These results also confirm that the safety m-experience has a higher impact on trust than the navigation m-experience. These findings demonstrate that the more guarantees, reputation as well as security and privacy are perceived, the greater is the m-satisfaction developed in the case of women’s clothes, supporting the results of previous research (Gao, Waechter and Bai 2015). In addition, navigation m-experience features have also been confirmed as satisfaction predictors. Therefore, when consumers perceive the mobile shopping experience as attractive, fun, interactive and personalized, their satisfaction is improved.

Second, our results show that shopper m-trust can be increased by the safety m-experience, confirming the findings of previous m-commerce research (Davis, Sajtos and Chaudhri 2011). In contrast, our results show that the navigation m-experience, related to visual appeal, interactivity, enjoyment, and personalization, does not have any impact on trust. Therefore, if clothing m-vendors wish to enhance consumer trust, they must highlight the safety related aspects, such as reputation, guarantees and security and privacy.
Summarizing, our results confirm a higher importance of safety aspects on consumer satisfaction and trust development. This finding can be explained due to the fact that sample is composed by women. Prior literature has established that women perceive higher levels of risk in the online context than men (Garbarino and Strahilevitz 2004). In consequence, women can be more worried about safety issues than men, specially taking into account that m-commerce is in the early stage of its growth, where safety issues are crucial for consumers (Nilashi et al. 2015). The relation between ubiquity and m-convenience is also confirmed. This relation has not been tested previously, although various authors have claimed that the two variables are related (Li, Dong and Chen 2012; Okazaki and Mendez 2013). The results of the present work confirm these claims and show that the unique characteristic of m-commerce determines consumer convenience therein. In sum, consumers who see the mobile phone as an anywhere and anytime shopping device perceive greater convenience in this kind of shopping. The results also demonstrate an indirect effect of ubiquity on repurchase intention, mediated by convenience.

Finally, mobile repurchase intention is explained by m-satisfaction, as an affective reaction, and m-convenience, as a cognitive reaction. Therefore, in order to increase consumers’ m-repurchase intention it is necessary that they feel satisfied and perceive m-shopping as convenient. These results are in line with previous m-commerce research (Liu, Guo and Lee 2011; van Riel and Pura 2005) and confirm that both affective and cognitive reactions are important in consumer intentions. For its part, m-trust is not confirmed as a direct m-repurchase intention predictor. This means that even if consumers trust a firm, this will not directly affect their intention to repurchase through mobile devices, a result reported in other studies (Susanto, Chang and Ha 2016).

However, as Susanto, Chang and Ha (2016) have also revealed, trust can have an indirect effect on repurchase intentions. After detecting a mediating effect, our findings show the effect of m-trust on repurchase intentions mediated by m-satisfaction. This means consumers may feel that
trust is necessary in m-commerce, and is a basic element in mobile purchases. However, it does not seem to be enough to make consumers repeat the purchase if they are not satisfied with the mobile vendor, which is again in line with previous research findings (Lin and Wang 2006).

**Theoretical Implications**

Our research contributes to m-commerce research by providing a comprehensive understanding of m-shopper continuance intentions. Firstly, the main theoretical contribution lies in studying the key drivers of m-shoppers repurchase intention. As highlighted earlier, there is still limited knowledge about how firms must face the m-commerce scene to maintain customers. In this sense, continuance intentions are crucial to firms’ success and adoption does not guarantee this (Kim and Malhotra 2005). To date, most mobile research has emphasized technology adoption for buying (Hahn and Kim 2013) whilst research into continuance behaviours remains scarce and it has been called for research (Roy and Moorthi 2017; Shin et al. 2017). Therefore, considering the mobile devices and m-shopper differences, this research identifies the key dimensions of m-commerce success. The findings move forward on the understanding of m-shoppers’ drivers of satisfaction, trust, and convenience which are decisive to securing the success of m-commerce.

Secondly, this work is built up from S-O-R model considering its full scope. Our research is an integrative work that has included the key drivers of m-shopper continuance intentions as well as affective and cognitive consumer reactions. Thus far, m-commerce literature has lacked any studies which explore consumer reaction and response, and which focus on the identified key drivers. Therefore, this paper offers better insight into both consumers external stimuli and internal reactions that impact the intention to continue shopping through mobile devices.

Finally, this study focuses on female clothing repurchase intentions. Considering that clothing has been deemed a more feminine area and one seen to occupy a more central position in women’s lives (O’Cass 2004), our sample increases the strength of our findings and contributes to
the literature by providing a more accurate image of reality. Additionally, women have been assumed to be more involved in buying clothes than men (O'Cass 2004; O'Cass 2000) and the most attractive segment for firms due to the volume of purchases they make and their important role as opinion leaders (Google 2017). Therefore, our sample can be considered to display a high degree of involvement with the industry studied.

Managerial Implications

M-commerce is a hot topic in marketing today. Our findings offer several important contributions for mobile commerce practitioners, particularly in the female clothing sector. This work proposes in an integrative way the keys to developing an m-commerce strategy. First, safety features of the m-experience are vital to ensure satisfaction and trust. In this sense, security and privacy policies must be clear and transparent and must explain how consumers’ personal and financial information will be used. Policies must also be accessible to shoppers on the mobile website. It is important to make available to consumers the firm’s personal data protection policy such that consumers may easily access, consult, amend and even erase any personal details the firm may be privy to. Firms should also use security certification agencies and make certificates (such as SSL certificates) visible on the mobile website and the Secure M-Commerce System (SMCS) so as to avoid payment fraud. Guarantees should allow changes to be made if the product is defective or if the consumer is dissatisfied and must also be clear and transparent as well as accessible on the mobile website in order to give the consumer the opportunity to consult them easily during the shopping process. It is important that guarantees, together with security and privacy policies, be visible and understandable for the m-shopper, otherwise, consumers may abandon the purchase. Although safety m-experience features are more relevant for women when buying clothes, navigation aspects are also important for mobile satisfaction development. Therefore, a mobile website should be both suitable and pleasing to the eye and its layout and design should enhance
the shopping experience. In order to boost the visual appeal of a mobile website, it is necessary to consistently combine colours, text, images, and sound, etc. Additionally, m-shoppers demand personal attention and the mobile can enable firms to offer their customers exactly what they need, immediately. What is more, according to Google (2018), from 2015 to 2017, mobile searches within “for me” and “near me” have grown over 60% and 150%, respectively. Therefore, to satisfy m-shoppers, firms must first know and understand their personal needs. The very nature and use which users make of mobile devices, particularly smartphones, makes them a “personal object” (it should be noted that several different people may use a PC, whereas a smartphone is highly unlikely to be shared). This is why personalized services channelled through them should be “made to measure”.

Finally, and in line with the previous idea, mobile ubiquity is perceived as convenient for saving consumers time and effort, which in turn also affects repurchase intentions. It is, therefore, necessary to develop strategies that allow anywhere and anytime purchases, taking advantage of the uniqueness that mobile devices offer. The mobile website must be designed in a way that allows purchases to be made easily on the move without the need to use a larger device. Firms should also remind purchasers of the advantages of buying through this medium such that the idea of convenience remains fresh in buyers’ minds and impacts on their repurchase intention. To achieve this, firms can develop communication campaigns containing such messages as (“enjoy the advantages of buying anytime, anywhere and instantaneously”), or sales campaigns exclusive to mobiles that make the consumer aware of the benefits this new distribution channel has to offer when it comes to convenient shopping (e.g. “special offer this weekend only! Purchase through your mobile and get a .....!”).

**Research Limitations and Future Research**
This study also has limitations that can serve as guidelines for future research. Firstly, it only focuses on the clothing industry, which involves experiential products but that prove useful when considering navigation and safety dimensions. In addition, the sample only includes women. This might limit the generalizability of our results. To address this issue, the sample could be expanded in future research by including other industries or product categories or including men and children in the clothing sector. Secondly, clothing m-commerce is still in its infancy, and so there are still few mobile clothes buyers. Future findings might differ and it is worth conducting similar studies to this in the months and years ahead with larger samples so as to observe whether results are influenced by time. In this point, habit should be considered as a key moderating variable (Lin and Lekhawipat 2016; Venkatesh, Thong and Xu 2012). Future studies might include consumers' psychographic factors (e.g. consumer personality, attitudes, values…) so as to explore whether these variables influence consumer reactions and responses. Finally, another future research line might address how the nature of mobile devices can impact shoppers’ decision-making processes. Consumer behaviour is heading towards omnichannel behaviour. M-commerce literature must focus on this new context, in which mobile devices are key. In the omnichannel scenario, each channel cannot be addressed separately but must be considered in a seamless way whilst also not overlooking the specific characteristics of each (Rodríguez-Torrico, San-Jose Cabezudo and San-Martín 2017). In this line, and due to the specification of the main m-commerce determinants for consumer continuance intention, the present paper provides the basis to integrate an m-commerce strategy in the omnichannel context.

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Figure 1. Proposal mobile S-O-R model.

- **Stimuli**
  - Navigation m-experience
    - Visual Appeal
    - Interactivity
    - Enjoyment
    - Personalization
  - Safety m-experience
    - Reputation
    - Guarantees
    - Security and Privacy
  - Ubiquity

- **Organism**
  - AFFECTIVE REACTION
    - M-Satisfaction
  - COGNITIVE REACTIONS
    - M-Trust
  - M-Convenience

- **Response**
  - M-Repurchase intention

- Hypotheses:
  - H1a, H1b
  - H2a, H2b
  - H3
  - H4
  - H5
  - H6
Table 1. Definition of stimulus variables

<table>
<thead>
<tr>
<th>Stimuli</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual appeal</td>
<td>The balance, emotional appeal, or aesthetics of a mobile website which are expressed through colors, shapes, language, music or animation (Cyr, Head and Ivanov 2006).</td>
</tr>
<tr>
<td>Interactivity</td>
<td>The degree to which two or more communicating parties can synchronize and act on each other through the communicative medium with their messages (Liu and Shrum 2002).</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>The consumers’ direct experience of immediate pleasure and joy from using the mobile website (Lu and Su 2009).</td>
</tr>
<tr>
<td>Personalization</td>
<td>Producer adaptation of products and services for the consumer (Montgomery and Smith, 2009).</td>
</tr>
<tr>
<td>Reputation</td>
<td>The extent to which consumers consider vendors to be honest and concerned about their consumers (Doney and Cannon, 1977).</td>
</tr>
<tr>
<td>Guarantee</td>
<td>Service quality and the firm’s ability to live up to consumer expectations, and meet consumer requirements (Emons, 1988).</td>
</tr>
<tr>
<td>Security and privacy</td>
<td>Technical safeguards to ensure legal requirements are met and best practices adhered to when dealing with personal details (Casaló et al., 2007).</td>
</tr>
<tr>
<td>Mobile ubiquity</td>
<td>Time flexibility and spatial flexibility that allows people to be connected at any time and any place (Okazaki, Li and Hirose 2009).</td>
</tr>
</tbody>
</table>

Table 2. Definition of organism variables

<table>
<thead>
<tr>
<th>Organism</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-satisfaction</td>
<td>The affective feeling of a consumer based on his/her experience with the mobile seller (Lin and Wang 2006).</td>
</tr>
<tr>
<td>M-trust</td>
<td>Consumer confidence that a mobile vendor is honest, accurate, dependable, and keeps promises (Dabholkar, van Dolen and de Ruyter 2009).</td>
</tr>
<tr>
<td>M-convenience</td>
<td>Consumer perception of the time and effort saved in using the mobile device when purchasing (Berry Seiders and Grewal 2002).</td>
</tr>
<tr>
<td>Variable</td>
<td>Reflective items</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Visual Appeal (α = .966, CR = .978, AVE = .937)</strong></td>
<td>The way the firm displays its products is attractive.</td>
</tr>
<tr>
<td></td>
<td>The mobile website is aesthetically appealing.</td>
</tr>
<tr>
<td></td>
<td>I like the way the mobile website looks.</td>
</tr>
<tr>
<td><strong>Enjoyment (α = .941, CR = .963, AVE = .895)</strong></td>
<td>The process of surfing the mobile website is enjoyable.</td>
</tr>
<tr>
<td></td>
<td>Overall, when I have accessed the mobile website, I have felt pleased.</td>
</tr>
<tr>
<td></td>
<td>Overall, I believe that visiting the mobile website is fun.</td>
</tr>
<tr>
<td><strong>Interactivity (α = .921, CR = .941, AVE = .762)</strong></td>
<td>I thought the mobile website was able to respond to my specific requests for information.</td>
</tr>
<tr>
<td></td>
<td>The mobile website allows me to communicate easily with the company should I ever have a specific question.</td>
</tr>
<tr>
<td></td>
<td>The mobile website lets me access other consumers’ opinions easily about the products featured.</td>
</tr>
<tr>
<td></td>
<td>I think the mobile website really gave me some control over the content I wanted to see.</td>
</tr>
<tr>
<td></td>
<td>Overall, I think the mobile website was highly interactive.</td>
</tr>
<tr>
<td><strong>Personalization (α = .804, CR = .883, AVE = .716)</strong></td>
<td>The firm provides personal attention.</td>
</tr>
<tr>
<td></td>
<td>The firm enables personalized products to be ordered.</td>
</tr>
<tr>
<td></td>
<td>The firm understands consumers’ needs.</td>
</tr>
<tr>
<td>Safety experience</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Security and privacy (α = .956, CR = .965, AVE = .822)</td>
<td></td>
</tr>
<tr>
<td>The mobile website is safe and has a privacy policy regarding consumer and privacy information.</td>
<td>.855</td>
</tr>
<tr>
<td>The mobile website informs the consumer about security and privacy policies.</td>
<td>.861</td>
</tr>
<tr>
<td>I feel safe when sending personal information through the mobile website.</td>
<td>.953</td>
</tr>
<tr>
<td>I think my rights regarding my personal details are respected in the mobile website.</td>
<td>.937</td>
</tr>
<tr>
<td>I think the mobile website has mechanisms that ensure the safe transmission of its users’ information.</td>
<td>.940</td>
</tr>
<tr>
<td>Reputation (α = .778, CR = .868, AVE = .688)</td>
<td></td>
</tr>
<tr>
<td>The mobile vendor has a good reputation.</td>
<td>.892</td>
</tr>
<tr>
<td>The mobile vendor is recognized widely.</td>
<td>.741</td>
</tr>
<tr>
<td>The mobile vendor offers good services.</td>
<td>.848</td>
</tr>
<tr>
<td>Guarantees (α = .849, CR = .908, AVE = .768)</td>
<td></td>
</tr>
<tr>
<td>The mobile vendor provides a guarantee to cover possible unforeseen events or product/service faults.</td>
<td>.848</td>
</tr>
<tr>
<td>The mobile vendor offers the possibility of returning a product if the consumer is not satisfied.</td>
<td>.891</td>
</tr>
<tr>
<td>The mobile vendor is a solid and reliable company to conduct my purchases with.</td>
<td>.888</td>
</tr>
</tbody>
</table>
Table 4. Second-order measurement model.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items of the reflective dimensions</th>
<th>Loadings</th>
<th>t-value (p-value)</th>
<th>α</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ubiquity</td>
<td>The mobile enables me to access anytime. The mobile enables me to access anywhere. The mobile enables me to order/search for products anywhere at any time.</td>
<td>.906</td>
<td>24.629 (.000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.949</td>
<td>50.578 (.000)</td>
<td>.930</td>
<td>.955</td>
<td>.877</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.953</td>
<td>72.753 (.000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-trust</td>
<td>I think I can trust the firm. I think the firm keeps its promises. The firm stands out for its honesty and transparency while offering its products.</td>
<td>.960</td>
<td>60.498 (.000)</td>
<td>.941</td>
<td>.962</td>
<td>.895</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.969</td>
<td>83.765 (.000)</td>
<td>.941</td>
<td>.962</td>
<td>.895</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.909</td>
<td>28.850 (.000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-repurchase</td>
<td>I would use the mobile website again for clothes shopping. I am very likely to re-purchase clothes from the mobile website in the future. I intend to buy again through the mobile website in the future.</td>
<td>.946</td>
<td>44.559 (.000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>intention</td>
<td></td>
<td>.983</td>
<td>127.149 (.000)</td>
<td>.967</td>
<td>.978</td>
<td>.938</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.975</td>
<td>80.762 (.000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-satisfaction</td>
<td>Overall, the shopping experience with the firm has been satisfactory. I am happy with the products I have bought from the firm. I am generally happy with the service provided by the firm.</td>
<td>.915</td>
<td>32.072 (.000)</td>
<td>.893</td>
<td>.933</td>
<td>.824</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.871</td>
<td>18.096 (.000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.963</td>
<td>43.372 (.000)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
M-convenience

M-commerce is convenient because it saves me time. 0.877 32.627 (.000)
Using a mobile device makes my life easier. 0.885 21.239 (.000) 0.856 0.912 0.777
Using a mobile device makes comparing prices easy. 0.881 27.577 (.000)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items of the formative dimensions</th>
<th>Weights</th>
<th>t-value</th>
<th>VIF</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation m-experience</td>
<td>Visual Appeal</td>
<td>.450</td>
<td>1.926 (.054)</td>
<td>3.831</td>
<td>.261</td>
</tr>
<tr>
<td></td>
<td>Enjoyment</td>
<td>-.200</td>
<td>1.167 (.243)</td>
<td>2.894</td>
<td>.345</td>
</tr>
<tr>
<td></td>
<td>Interactivity</td>
<td>.366</td>
<td>1.427 (.154)</td>
<td>4.210</td>
<td>.238</td>
</tr>
<tr>
<td></td>
<td>Personalization</td>
<td>.510</td>
<td>3.321 (.001)</td>
<td>1.585</td>
<td>.631</td>
</tr>
<tr>
<td>Safety m-experience</td>
<td>Reputation</td>
<td>.373</td>
<td>2.273 (.023)</td>
<td>2.179</td>
<td>.459</td>
</tr>
<tr>
<td></td>
<td>Guarantees</td>
<td>.543</td>
<td>3.019 (.003)</td>
<td>2.335</td>
<td>.428</td>
</tr>
<tr>
<td></td>
<td>Security and privacy</td>
<td>.218</td>
<td>1.532 (.126)</td>
<td>1.584</td>
<td>.631</td>
</tr>
</tbody>
</table>

Table 5. Descriptive analysis and correlation matrix

<table>
<thead>
<tr>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repurchase intention</td>
<td>4.563</td>
<td>.700</td>
<td>.968</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Convenience</td>
<td>4.137</td>
<td>.966</td>
<td>.324</td>
<td>.881</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Navigation m-experience</td>
<td>-</td>
<td>-</td>
<td>.583</td>
<td>.158</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Trust</td>
<td>4.730</td>
<td>.543</td>
<td>.354</td>
<td>.258</td>
<td>.545</td>
<td>.809</td>
<td>.946</td>
<td></td>
</tr>
<tr>
<td>6. Ubiquity</td>
<td>4.443</td>
<td>.872</td>
<td>.192</td>
<td>.748</td>
<td>.250</td>
<td>.252</td>
<td>.206</td>
<td>.936</td>
</tr>
<tr>
<td>7. Safety m-experience</td>
<td>-</td>
<td>-</td>
<td>.565</td>
<td>.294</td>
<td>.647</td>
<td>.647</td>
<td>.682</td>
<td>.244</td>
</tr>
</tbody>
</table>

Notes: Hedonic and Utilitarian m-experiences are second-order constructs with mean = 0 and SD = 1. The mean (SD) of the first-order constructs are: Visual Appeal = 4.33 (.85), Enjoyment = 4.18 (.92), Interactivity = 4.15 (.92), Personalization = 4.05 (1.02), Reputation = 4.23 (.80), Guarantees = 4.51 (.75) and Security and privacy = 4.28 (.85). Diagonal entries are square root of AVE (in bold); others are correlation coefficients.

Table 6. Results of the SEM estimation.
<table>
<thead>
<tr>
<th>Path</th>
<th>Coefficient</th>
<th>t-test (p-value)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation m-experience → M-satisfaction</td>
<td>0.264†</td>
<td>1.882 (.060)</td>
<td>Supported</td>
</tr>
<tr>
<td>Navigation m-experience → M-trust</td>
<td>0.055 ns</td>
<td>0.529 (.597)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Safety m-experience → M-satisfaction</td>
<td>0.453***</td>
<td>3.220 (.001)</td>
<td>Supported</td>
</tr>
<tr>
<td>Safety m-experience → M-trust</td>
<td>0.640***</td>
<td>5.938 (.000)</td>
<td>Supported</td>
</tr>
<tr>
<td>Ubiquity → M-convenience</td>
<td>0.740***</td>
<td>13.513 (.000)</td>
<td>Supported</td>
</tr>
<tr>
<td>M-satisfaction → M-repurchase intention</td>
<td>0.334*</td>
<td>2.253 (.024)</td>
<td>Supported</td>
</tr>
<tr>
<td>M-trust → M-repurchase intention</td>
<td>0.015 ns</td>
<td>0.086 (.931)</td>
<td>Not supported</td>
</tr>
<tr>
<td>M-convenience → M-repurchase intention</td>
<td>0.217*</td>
<td>2.168 (.030)</td>
<td>Supported</td>
</tr>
</tbody>
</table>

**Control variables**

<table>
<thead>
<tr>
<th>Path</th>
<th>Coefficient</th>
<th>t-test (p-value)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile shopper experience → M-satisfaction</td>
<td>0.107 ns</td>
<td>1.639 (.101)</td>
<td>-</td>
</tr>
<tr>
<td>Mobile shopper experience → M-trust</td>
<td>0.074 ns</td>
<td>1.165 (.244)</td>
<td>-</td>
</tr>
<tr>
<td>Mobile shopper experience → M-convenience</td>
<td>0.058 ns</td>
<td>0.946 (.344)</td>
<td>-</td>
</tr>
<tr>
<td>Mobile shopper experience → M-repurchase intention</td>
<td>0.097 ns</td>
<td>1.141 (.254)</td>
<td>-</td>
</tr>
<tr>
<td>Client experience → M-satisfaction</td>
<td>-0.157**</td>
<td>2.661 (.008)</td>
<td>-</td>
</tr>
<tr>
<td>Client experience → M-trust</td>
<td>-0.061 ns</td>
<td>1.060 (.289)</td>
<td>-</td>
</tr>
<tr>
<td>Client experience → M-repurchase intention</td>
<td>0.176*</td>
<td>2.521 (.012)</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. Significant coefficients are in boldface. ***p<0.001; **p<0.01; *p<0.05; †p<.1; ns, not significant.