# A m-CEM framework to understand the factors that contribute to a satisfactory and lasting experience

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### **RESUMEN EJECUTIVO**

This work is one of few studies that apply the CEM framework in a digital context to analyze m-shopping consumers' behavior. This paper focuses on the dimensions of CEM that can engender m-shopper satisfaction and repurchase intention: human (vendor reputation), mechanical (site design) and technical (security) dimensions. Besides, the location of consumers near or far away from physical stores acts as a moderating variable in the proposed model. The model was tested using PLS method with information collected from 1053 m-shoppers. Our findings show that the human dimension (particularly for consumers who live near physical stores), the mechanical dimension (principally for consumers who live far away from brick and mortar stores) and the technical dimension of CEM enhance m-shoppers' satisfaction. Satisfactory experiences finally increase repurchase intention for every m-shopper.





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### 1. Introduction

The more recent and fast-growing range of digital communication technologies has radically altered the ways in which citizens interact with one another (Lavariega & Marichal, 2014). Among those technologies, the mobile commerce is booming, due to strong growth in smart mobile devices on five continents, changing consumer habits, the introduction of high-speed mobile connectivity and the digital retail adaptation to the demands of the multi-screen user (Purita, 2013). Technological enrichment of countries like Mexico, where the penetration of smartphones has increased from 13.9% in 2000 to 88.3% in 2013, demonstrates the growing importance of mobility (AMIPCI, 2014). 92% of Internet surfers use these devices to look for products or services and 62% use the mobile site to look for specific nearby stores (AMIPCI, 2014). The society is experiencing the convergence of contents to a single medium (Internet) and at the same time the divergence of contents to more than one device. However, despite the fact that in 2013 50% of Mexican shoppers have conducted some of its purchases through a mobile device [which reflects an upward trend in comparison with 2013 (38%)] (AMIPCI, 2014), Mexican consumers' preferred device to buy online remains to be the desktop computer (82%) (AMIPCI, 2014).

In this context, managing expectations is critical, because a greater understanding of customers can improve customer satisfaction and business performance (Hsieh & Yuan, 2010; Puccinelli et al., 2009). However, retailers are not managing customer experience in the most appropriate way when selling in mobile environments, so it is in this aspect where this research is focused. We follow the three dimensions of Customer Experience Management (CEM) suggested by Berry, Wall & Carbone (2006) (human, mechanical and technical dimensions) to reach the aim of understanding the generation of a satisfactory and repurchase experience in m-commerce contexts, using information collected from real m-shoppers. More concretely, the firm's reputation, m-site design and perceived security when shopping with the mobile phone are factors of different nature that can create or enhance satisfaction and repurchase with the mobile phone. In this way, this research contributes to academic literature by applying CEM to a m-shopping context with information from 1053 real m-shoppers and to managerial practice by providing firms with recommendations regarding the factors they can use to offer a complete satisfactory experience. Besides, the influence of shoppers' location near or far away from physical stores is considered in our m-CEM framework.

# 2. Customer Experience Management

Customer Experience Management (CEM) is the name given to the strategic management process of 'Total Customer Experience' with a firm, the firm's effort to improve the quality of interactions with consumers in the different encounters in a consistent and effective way (Joshi, 2014). In this way, it generates a participatory and lasting experience, which is produced by a real and distinct market offer, which requires the active interaction between consumers and suppliers (Fang et al., 2012; Martínez-Torres, Rodríguez-Piñero & Toral, 2015; Mascarenhas, Kesavan & Bernacchi, 2006; Rohrbeck, Steinhoff & Perder, 2010; Gerpott & Berg, 2011).

Berry et al. (2006) have classified CEM into three dimensions:

- Human dimension of CEM. Following Berry et al. (2006), this dimension refers to the behaviour of providers. In our research, this aspect is related to the retailer's reputation. The absence of physical and temporal barriers (an advantage in m-commerce) is sometimes a problem because consumers cannot a priori know how firms and products fit to consumers' needs. In those situations, reputation turns out to be a key experiential factor (Lescop & Lescop, 2014). Consumers are more prone to buy when mobile vendors have good reputation (Kotha, Rajgopal & Rindova, 2001; González-Hernández & Orozco-Gómez, 2012; Joshi, 2014).
- Mechanical dimension of CEM: Berry et al. (2006) state that this dimension comprises diverse
  environment clues that concern the 'sensory' presentation of the service (i.e. design, ambient





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- conditions, signs and symbols). According to Forushani, Meshkani & Monfared (2015), these factors show a greater impact on the perception of service quality than the intangible aspects of the environment. This is the dimension that is usually perceived first by customers and the one that helps to create a first positive impression (Berry et al., 2006).
- Technical dimension of CEM. This refers to the customer's perception of the technical performance of the service provided (Berry et al., 2006). It is a relevant aspect, taking into account that in 44% of the shopping encounters, a failure in this dimension is the cause of an exceptional or permanent change of provider by a customer (Keaveney, 1995).

From a phenomenological perspective, the customer experience is more than just behaviour, is a set of activities and states of human beings, called 'experiential consumption prospects' (Holbrook & Hirschman, 1982). Consumers expect an unforgettable positive and emotional experience in each contact with the organization (Barlow & Maul, 2000), thus the quality of that experience is one of the most important factors to enhance shopper's satisfaction. An adequate management of customers' experience is a differential competitive advantage to finally create loyal customers, which is one of the main goals of every firm (Forushani et al., 2015; Konrad, 2006). However, the incorporation of the CEM concept to the research on online environment and mobile commerce, is novel, as the vast majority of existing research focus its analysis on the physical retailers (see Table 1) (Choi et al., 2014; Forushani et al., 2015; Genlin & Jie, 2015; Grewal, Levy & Kumar, 2009; Joshi, 2014; Nagasawa, 2008; Mascarenhas et al., 2006; Sukwadi, 2015). To the extent of our knowledge, there are not studies that address CEM applied to a mobile context.

TABLE 1
Review of studies that analyze CEM

REFERENCE	OBJETIVE	OBJETIVE CONTEXT VARIABLES		RESULTS		
Berry, Wall and Carbone (2006)	To understand the factors that influence customer experience and its impact on repeat purchase.  Offline		Human, mechanical and technical dimensions.	CEM has a significant effect of repurchase, being the mechanical dimension the most relevant one.		
Grewal, Levy and Kumar (2009)	To offer a theoretical Framework of CEM.		Macro factors (macroeconomic, social and political environment), marketing variables (4P) and financial and marketing metrics (i.e. shopping, recommendation, average order value, satisfaction).	[Do not offer an empirical analysis.]		
Joshi (2014)	To find our which factors affect customer experience.	Offline	Brand, environment, culture of customer service, communications and service delivery.	[Do not offer an empirical analysis.]		
Klaus (2013)	To analyze the online customer experience and to develop a theoretical framework.		Functional and psychological factors (trust, value of money and familiarity of context; usability, communication, social presence, product and interactivity).	Customer experience plays an important role in shaping positive attitudes and positively influences customer loyalty.		





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Nagasawa (2008)	To explain the relationships and meaning of CEM through the revision of engineering-related products.	Offline	Sense, feel, think, act and relate.	The area of intersection between the world of the functional benefits and customer satisfaction creates added value for customers.	
Palmer (2010)	To assess the conceptual construct validity of customer experience and to propose a model that integrates interpersonal relations, quality of service and brands.  To assess the conceptual construct validity of customer experience and to propose a model that integrates interpersonal relations, quality of service and brands.		Service quality, brand personality, interpersonal relationships, emotional experiences.	[Do not offer an empirical analysis.]	
Sukwadi (2015)	To demonstrate how CEM can be used to improve service quality.		Product, service, entertainment, environment.	[Do not offer an empirical analysis.]	
Verhoef et al. (2009)	To offer a general review of existing literature about customer service.		Social, service interface, retail atmosphere, assortment, price, customer experiences in alternative channels, brand.	[Do not offer an empirical analysis.]	

Besides, the study of the customer experience in m-commerce is discussed in most cases, using already investigated theoretical perspectives, such as the main existing models of technology adoption [Expectation Confirmation Theory (ECT) (Pappas et al., 2014), Social Cognitive Theory (SCT) (Pappas et al., 2014), Technology Acceptance Model (TAM) and its extensions (TAM2 and TAM3) (Chong, 2013; Dalcher & Shine, 2003; GroB, 2015; Holmes, Byrne & Rowley, 2013; Karjaluoto et al., 2014; Peral, Arenas & Ramón-Jerónimo, 2014; Thakur & Srivastava, 2014), Unified Theory of Acceptance and Use of Technology (UTAUT) (Jaradat & Rababaa, 2013; Slade et al., 2015; Pappas et al., 2014)]; and the scales of measuring online service quality (SERVQUAL, SERVPERF, E-S-QUAL, E-RecS-QUAL, WebQUAL) (Özer, Argan & Argan, 2013; Palmer, 2010; Sukwadi, 2015).

# 3. Proposed hypotheses

One of the most important variables in CEM is satisfaction as it is the result of a good and complete experience (Hsieh & Yuan, 2010; Joshi, 2014; Mascarenhas et al., 2006). Satisfaction is a relational variable which has been studied in the context of m-commerce (Choi et al., 2008; Deng et al., 2010). It implies fulfilling expectations as well as a positive affective state based on the result of maintaining the relation in the case of m-commerce (Yeh & Li, 2009). It also impacts client loyalty as well as purchase intention in an online sales context (Kuo, Wu & Deng, 2009). In m-commerce, which is a new and still unexplored medium of buying and selling for many clients, satisfaction is a key if relations are to be maintained, bearing in mind that initial commercial experiences may set the tone for a firm's success or failure in this medium. Several studies highlight the importance of exploring m-shopper satisfaction (Choi et al., 2008; Kuo et al., 2009; Lam & Shankar, 2014; Lee et al., 2015).





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### 3.1. Dimensions of CEM in mobile shopping

We follow the three dimensions of Customer Experience Management (CEM) suggested by Berry et al. (2006) to understand the generation of a satisfactory and repurchase experience in m-commerce contexts, using information collected from real m-shoppers.

- Human dimension of m-CEM. In our research, this aspect will be related to the retailer's reputation. The absence of physical and temporal barriers (an advantage in e-commerce) is sometimes a problem and reputation turns out to be essential in these contexts. Consumers are more prone to buy when online vendors have good reputation (Kotha et al., 2001). According to GroB (2015), the perception of a good m-provider positively affects the mobile purchase intention. In this line, the better the reputation of the retailer, the greater its effect on customer behaviour, meaning it intends to repurchase by mobile (Fiore & Kim, 2007). Besides, reputation has a positive influence on customer experience (Joshi, 2014) and generates positive emotional states (Kim & Lennon, 2013). Therefore,
  - **H1**. The human part of CEM positively influences m-shopper satisfaction.
- Mechanical dimension of m-CEM. In our study this dimension will refer to the web atmosphere or design, i.e., the sum of signals that the user perceives during his shopping experience. Cyr, Head & Ivanov (2006) and Li & Yeh (2010) suggest that aesthetics might be an important part of designing an overall satisfactory user experience with mobile devices. In addition, Joshi (2014) points out that design is an essential factor for improving customers' lasting and enjoyable experiences. This relationship is proposed to check if the context of use has positive effects on customer satisfaction, as already shown by Kim & Chung (2015) in Korea.
  - **H2**. The mechanical part of CEM positive influences m-shopper satisfaction.
- Technical dimension of m-CEM. In our research, this technical dimension is going to focus on security, a significant factor when taking into account that although the mobile phone plays an important role in e-commerce transactions, they are still minimal through this device. Mobile phone use for shopping is associated with low security, which in turn involves less shopping intention, as shown by Holmes et al. (2013), Özer et al. (2013), Slade et al. (2015) and Thakur & Srivastava (2014). Choi et al. (2008) state that security is a crucial variable in m-commerce and satisfaction is essential to engender shoppers' satisfaction (Schaupp & Belanger, 2005; Szymanski & Hise, 2000; Zeithaml, Parasuraman & Malhotra, 2000).
  - **H3**. The technical part of CEM positive influences m-shopper satisfaction.

### 3.2. The relationship between satisfaction and repurchase intention

Returning to the concept of 'Total Customer Experience' in which the strategy of CEM is based, it is necessary to focus attention on the fact that this has to be positive. When researching on customer experience, it is unavoidable to talk about satisfaction since a key for a retailer to be successful is to meet the needs of customers better than its competitors and beneficially for both parties. In this context, it is essential a proper management of customers' expectations to finally achieve customers' repurchase intention (Chong, 2013; Hsieh & Yuan, 2010; Klaus, 2013). In the specific case of m-commerce, Agrebi & Jallais (2015) find that satisfaction directly influences repurchase intention.

H4. M-shopper satisfaction positively influences his/her repurchase intention.

### 3.3. The distance to physical stores as a moderating variable

A consumer's personal and situational variable that is of interest in understanding why consumers shop is their perceived geographical location (Angell et al., 2015). In the case of consumers who have to travel large distances to stores that provide them with the goods needed, m-shopping could be a sustainable



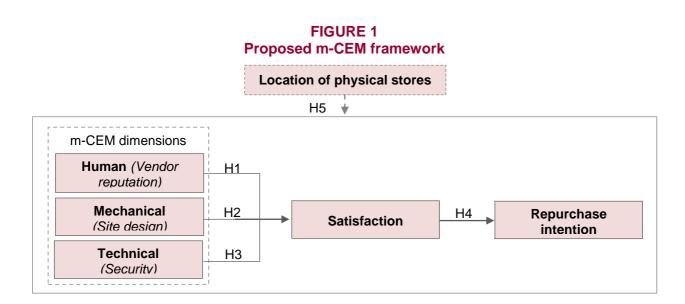


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alternative to overcome this perceived geographical distance (Perea-Monsuwé, Dellaert & De Ruyter, 2004). The higher the distance of consumer's home to physical stores, the higher the probability of m-shopping. Nevertheless, it is interesting to explore the differences that location may produce in the impact of m-CEM dimensions on satisfaction and repurchase intention as there is no study dealing with this issue, to the extent of our knowledge.

**H5**. M-shopper's distance to physical stores has a moderating effect on the relationships previously proposed.

Following the previous reasoning, the proposed model here is reflected in Figure 1.



# 4. Empirical analysis

The empirical study conducted is based on information gathered through personal interviews with Mexican mobile phone users, who have already bought at least once with the mobile phone. We selected Mexico to test the proposed model since it represents an emerging potential market for m-commerce. Attending AMIPCI (2014), the Mexican mobile market represents 27.7 million of smartphone users and 135.3 millions of euros, and this country is in the fifth position on the world ranking (after China, US, India and Brazil). The final sample included 1053 individuals of different characteristics. The sample was randomly selected from a list of mobile phone numbers and with a screening question about previous purchasing using the mobile phone. 56.7% were male; 59.2% were less than 24 years old; 52.9% were students and 61% lived near physical stores. Table 2 shows the descriptive statistics of the variables. The profile of our sample is similar to the scarce available data about mobile shoppers profile outlined by the AMIPCI (2015) (52% are male and 78% belonging to the millennial generation).





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TABLE 2
Descriptive statistics

CHARAC	CTERISTICS	MAIN DEMOGRAPHIC CHARACTERISTICS	%		
Population statistics	Mobile shoppers	Gender	Male: 56.7% Female: 43.3%		
Geographical field	Mexico	Age	Under 18: 10.5% 35-44: 6.2 18-24: 59.2% 45-54: 3.1 25-34: 20.7% 55-64: 0.3		
Sample size	1053 valid questionnaires from 1800 attempts (response rate= 58.5%)	Occupation	Students: Non-studen		
Sampling error	3.02% (confidence level of 95%).	Perception of closeness to shopping centres	Near: 61.4% Far: 38.6%		

## 5. Results

In order to validate the scales, a Harman's one-factor test was conducted to test the presence of the common method effect (Chang, Van Witteloostuijn & Eden, 2010). All variables were entered into an exploratory factor analysis, using unrotated and rotated principal components factor analysis and principal axis analysis with varimax rotation to determine the number of factors needed to account for the variance in the variables. If we forced all the indicators to load only on one factor, the percentage of explained variance is 41%. Then we conducted an exploratory factorial analysis with indicators of the variables. This analysis revealed the presence of five distinct factors with eigenvalues greater than 1.0 and corresponded to the five latent variables involved in the proposed model: human, mechanical and technical dimensions of CEM, satisfaction and repurchase intention. Total explained variance is 69.574.

The extent to which an observed variable measures the underlying construct is tested by the lambda coefficient and the t-Student statistic value. Direct relationships between each latent construct and their observed variables present factor loadings greater than 0.5 with a confidence level of 95%. Therefore, we confirmed that all the indicators are significant, thereby ensuring their convergent validity. The results of the measurement model are shown in Table 3.





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TABLE 3
Measurement items analysis

VARIABLE	ITEM	EFA WEIGHT	% EXPLAINED VARIANCE	LOADINGS	T- VALUE	AVE	CR	α- CRONBACH	
	V1	0.745		0.755***	46.61	0.636	0.897		
	V2	0.752		0.805***	52.65			0.857	
Human dimension	V3	0.717	9.920	0.788***	53.75				
difficition	V4	0.752		0.841***	72.21				
	V5	0.679		0.796***	53.70				
	V6	0.653	5.451	0.732***	32.51				
Mechanic	V7	0.719		0.796***	51.15	0.634	0.873	0.807	
dimension	V8	0.773		0.837***	64.70				
	V9	0.721		0.816***	54.81				
	V10	0.819	8.262	0.821***	50.79	0.738	0.919	0.883	
Technical	V11	0.890		0.894***	95.47				
dimension	V12	0.883		0.884***	94.03				
	V13	0.716		0.836***	69.15				
	V14	0.751	L	0.842***	79.43	0.710	0.945	0.932	
	V15	0.757		0.849***	78.72				
	V16	0.769		0.837***	69.96				
Satisfaction	V17	0.804	41.248	0.854***	82.77				
	V18	0.794		0.852***	85.68				
	V19	0.764		0.836***	66.58				
	V20	0.743		0.827***	68.68				
	V21	0.821		0.787***	53.55	0.630			
Repurchase intention	V22	0.729	4.693	0.818***	63.26		0.910	0.882	
	V23	0.706		0.842***	91.21				
***p<0.01; **p<0.05; *p<0.10									

The corresponding Cronbach alpha coefficients and composite reliability (CR) coefficients were calculated to determine the reliability of the final scales and in all cases their respective values were greater than 0.70 and 0.60, which confirms that the scales are reliable and possess internal consistency (Bagozzi & Yi, 1988). The average variance extracted (AVE), which was greater than 0.5 in each case, shows the global quantity of variance for each item that is explained by the latent constructs (Bagozzi & Yi, 1988). The discriminant validity was assessed and fulfilled by comparing the AVE associated with each construct to the correlations between the constructs. Moreover, the squared correlation between the variables in each case was below the extracted variance, thereby ensuring discriminatory validity.

After validating the measurement model (Table 3), we used the SmartPLS 3.0 (Hair, Ringle & Sarstedt, 2011) program to estimate the model. A resampling procedure helped us to calculate the statistical significance of the coefficients, and we estimated the multigroup model taking into account the moderating effect of location of physical stores (Table 4). According to the results, all dimensions of m-





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CEM have a positive effect on m-shopper satisfaction and satisfaction engenders m-shoppers repurchase intention, thus all the proposed hypotheses are supported. Following the Welch-Satterthwait MGA statistic, results show that there is a moderating effect of location in the relationships between human and mechanical dimensions of CEM and satisfaction at a 95% confidence level and between technical dimension of CEM and satisfaction at a 90% confidence level.

TABLE 4
PLS multi-group analysis and moderation results

	GROUP (1): NEAR FROM PHYSICAL STORES		GROUP <sub>(2)</sub> : FAR FROM PHYSICAL STORES		WELCH- SATTERTHWAIT MGA	R <sup>2</sup> (1)	R <sup>2</sup> (2)	
Hypothesis		b <sub>(1)</sub>	t- value	b <sub>(2)</sub>	t-value	(P-VALUE)		
Human dimension→Satisfaction		0.408***	7.07	0.314***	5.63	0.046**		
Mechanical dimension→Satisfaction		0.312***	7.31	0.428***	5.53	0.038**	0.43	0.43
Technical dimensión→ Satisfaction		0.147***	4.81	0.201***	4.41	0.068*		
Satisfaction→Repurchase intention		0.658***	23.19	0.655***	16.98	0.360	0.39	0.42
b: path coefficient; ***p<0.01; **p<0.05; *p<0.10								

Source: Own elaboration (2016).

Although it was not the main objective of this research, we also estimated the mediating effect of satisfaction between CEM dimensions and repurchase intention. According to the results, indirect effects are significant and the strength of the mediation effect is assessed by using the VAF (Variance Accounted For) (Table 5). The VAF indicates that more than 50% of the three m-CEM dimensions are explained by the satisfaction mediator (Hair et al., 2013).

TABLE 5
PLS mediation analysis results

	GROUP (1): NEAR PHYSICAL STORES		GRO FAR AWAY FR STO	VAF	VAF					
	Total Effect (1)	t-value (1)	Total Effect (2)	t-value (1)	(1)					
Human dimension→ Repurchase intention	0.253***	4.84	0.247***	4.25	65%	71%				
Mechanical dimension→ Repurchase intention	0.304***	6.65	0.206***	3.26	51%	86%				
Technical dimension→ Repurchase intention	0.174***	4.76	0.221***	4.62	41%	51%				
b: path coefficient; ***p<0.01; **p<0.05; *p<0.10										

Source: Own elaboration.





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### 6. Discussion

Despite the growing number of recent studies addressing m-commerce (Agrebi & Jallais, 2015; GroB, 2015), much research remains to be done, particularly in developing markets. Our results emphasize several implications for marketing managers with regard to the development of m-commerce in a huge and potential market (such as the Mexican market, with 27.7 million of smartphone users) (AMIPCI, 2014). CEM framework plays a significant role for explaining m-shopper's satisfaction and repurchase by mobile phone. M-shoppers continuously collect experiences when they interact with a firm, regardless the channel they interact with it. The m-shopper experience management is actually more important since, at the mobile channel, communication and exchange are virtually established. Thus, the human, mechanical and technical dimensions must be carefully and strategically managed by firms.

This study shows the significant and relevant influence of these three dimensions on m-shoppers' satisfaction and finally on repurchase intention. In the m-commerce context, our evidence supports former studies, which affirm that customer perception of employees' effort in delivering a good service has a strong impact on satisfaction (Mohr & Bitner, 1995). Particularly, when customers perceive that they live near enough physical stores, the human clues (such as m-site reputation) has a greater effect on customers' satisfaction with the m-shopping than when consumers perceive they are far from offline stores. It could be justified by the customers' feeling of having the possibility to choose between buying by mobile phone or at a store. They do not perceive that they have to buy by mobile phone because of not having another alternative to acquire the goods they want or need. Statistics data support this explanation since most of Mexican mobile shoppers (62%) use mobile devices to find nearby stores and just 23% of m-shoppers perceive that their favourite stores do not have m-site (AMIPCI, 2015).

In addition, mechanical and technical clues impact on satisfaction is more important when consumers perceive stores are far away from them than when they perceive brick and mortar stores are near them. Attending previous literature, facilitator clues triggers the perception that m-site has the technical and organizational infrastructure required to support the purchase by mobile phone (Bonera, 2011). In this sense, m-site mechanic clues are powerful sources of sensory images, sounds and messages that can help customers to visualize firms' products and service, and increase their satisfaction with the mshopping, especially when customers can not touch or prove a priori firms' products. Complementary to the previously mentioned clues, the technical aspects are also essential to get satisfied m-shoppers. According to Berry et al. (2006), technical factors are functional clues that reveal the reliability, safety and competence of the firms that want to maintain loyal customers. In m-commerce contexts, it could be assumed that technical dimension is a necessary condition to compete (Kumar & Gambhir, 2014). This argument might explain why the perceived distance to stores does not have a robust moderating effect (at a 95% confidence level) in the relationships between technical dimension and m-shoppers' satisfaction. Finally, our results support previous studies that find a positive effect of m-shopping satisfaction on repurchase intention by mobile phone (which confirms other studies such as the one by Lin & Wang, 2006), irrespectively on customers' perceived distance to physical or offline stores.

As managerial implications, we would like to emphasize that the seller should try to offer an integral experience to their m-shoppers as many different factors can contribute to form a global image of a provider. In this sense, m-vendors should consider human, mechanical and technical aspects as all of them contribute to satisfy customers and finally make them repeating their purchases. More specifically, vendors should offer at the same time products with good quality, worry about their customers, design an attractive selling platform and make the shopping secure and private. However, a situational variable such as m-shoppers' location (related to the perception of living close or far away from traditional offline stores), can produce some differences in the m-CEM process. The providers' reputation is more important for m-shoppers who live near stores and mechanical and technical dimensions are more valued by customers who live far away from offline stores. These results indicate the need for m-vendors to segment their target market taking into account consumers' location near or far away from bricks and mortar stores.





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Several limitations of this study must be acknowledged. First, the data of this study was collected from Mexican m-shoppers, and its results cannot be generalized to others countries or cultures. In addition, there are many others factors that could affect m-shoppers' satisfaction and repurchase intention, and future studies should consider. Further research must be done by extending the knowledge and application of m-CEM to other cultural or geographical contexts. Moreover, it would be interesting to get deeper into the study of other factors affecting m-shopper experience, such as demographics and moderating variables, such as location, demographics or culture (Lavariega & Marichal, 2014).

### References

Agrebi, S., & Jallais, J. (2015). Explain the intention to use smartphones for mobile shopping. Journal of Retailing and Consumer Services, 22, 16-23. doi: 10.1016/j.jretconser.2014.09.003

Angell, R., Memery, J.E., Megicks, P., & Lindgreen, A. (2015). Unpicking motives to purchase locally-produced food: analysis of direct and moderation effects. European Journal of Marketing, 49(7-8), 1207-1233. doi: 10.1108/EJM-02-2014-0075

AMIPCI, Asociación Mexicana de Internet, A.C. (2014). Mobile devices: Mexican consumer habits 2014. Retrieved from https://amipci.org.mx/images/Ecommerce\_Movil\_en\_Mexico\_AMIPCI\_EBW.pdf

AMIPCI, Asociación Mexicana de Internet, A.C. (2015). Study on electronic commerce development on mobile Retrieved from

 $https://amipci.org.mx/images/English\_Estudio\_Sobre\_El\_Desarrollo\_del\_Comercio\_Electronico\_Movil.pdf$ 

Bagozzi, R.P., & Yi, Y. (1988). On the evaluation of structural equation models. Journal of The Academy Of Marketing Science, 16(1), 74-94. doi: 10.1177/009207038801600107

Barlow, J., & Maul, D. (2000). Emotional value-creating strong bonds with your customers. San Francisco, USA: Berrett-Koehler Publishers.

Berry, L.L., Wall, A.E., & Carbone, L.P. (2006). Service clues and customer assessment of the service experience: lesson from marketing. Academy of Management Perspective, 20(2), 43-57. doi: 10.5465/AMP.2006.20591004

Bonera, M. (2011). The propensity of e-commerce usage: the influencing variables. Management Research Review, 34(7), 821-837. doi: 10.1108/014091711111146706

Chang, S.J., Van Witteloostuijn, A., & Eden, L. (2010). From the editors: common method variance in international business research. Journal of International Business Studies, 41(2), 178-184. doi: 10.1057/jibs.2009.88

Choi, S., Cheong, K., Somera, B., & Hao, Q. (2014). Determinants of utilitarian value in smartphone-based mobile commerce. Paper number 151 presented at the 18th Pacific Asia Conference on Information Systems (PACIS), Chengdu (China), June 24-28.

Choi, J., Seol, H., Lee, S., Cho, H., & Park, Y. (2008). Customer satisfaction factors of mobile commerce in Korea. Internet Research, 18(3), 313-335. doi: 10.1108/10662240810883335

Chong, A. (2013). Understanding mobile commerce continuance intentions: an empirical analysis of chinese consumers. Journal of Computer Information Systems, 53(4), 22-30. doi: 10.1080/08874417.2013.11645647

Cyr, D., Head, M., & Ivanov, A. (2006). Design aesthetics leading to m-loyalty in mobile commerce. Information Management, 43(8), 950-963. doi: 10.1016/j.im.2006.08.009

Dalcher, I., & Shine., J. (2003). Extending the new technology acceptance model to measure the end user information systems satisfaction in a mandatory environment: a bank's treasury. Technology Analysis & Strategic Management, 15(4), 441-455. doi: 10.1080/095373203000136033





A m-CEM framework to understand the factors that contribute to a satisfactory and lasting experience por Sonia San Martín Gutiérrez, Nadia Huitzilin Jiménez Torres y Nuria Puente Domínguez

- Deng, Z., Lu, Y., Wei, K.K., & Zhang, J. (2010). Understanding customer satisfaction and loyalty. An empirical study of mobile instant messages in China. Information and Management, 30(4), 289-300. doi: 10.1016/j.ijinfomgt.2009.10.001
- Fang, S., Chou, C., Yang, S., & Ou, C. (2012). Enhancing innovation through learning: the roles of market orientation and interorganisational knowledge stores. Technology Analysis & Strategic Management, 24(3), 285-298. doi: 10.1080/09537325.2012.655414
- Fiore, A.M., & Kim, J. (2007). An integrative framework capturing experiential and utilitarian shopping experience. International Journal of Retail & Distribution Management, 35(6), 421-442. doi: 10.1108/09590550710750313
- Forushani, A., Meshkani, F., & Monfared, F. (2015). Identify and rank the factors affecting customer experience management of repeat customers. Case Study: Good Father Chain Store. Journal UMP Social Sciences and Technology Management, 3(3), 593-603.
- Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. Journal of Marketing, 58(2), 1-19. doi: 10.2307/1252265
- Genlin, Z., & Jie, X. (2015). Study of customer experience under the circumstances of mobile Internet. International Journal of Multimedia and Ubiquitous Engineering, 10(2), 153-158. doi: 10.14257/ijmue.2015.10.2.14
- Gerpott, T.J., & Berg, D.K.S. (2011). Determinants of the willingness to use mobile location-based services. Business & Information Systems Engineering, 3(5), 279-287. doi: 10.1007/s11576-011-0288-9
- González-Hernández, E.M., & Orozco-Gómez, M. (2012). A segmentation study of Mexican consumers based on shopping centre attractiveness. International Journal of Retail & Distribution Management, 40(10), 759-777. doi: 10.1108/09590551211263173
- Grewal, D., Levy, M., & Kumar, V. (2009). Customer experience management in retailing: an organizing framework. Journal of Retailing, 85(1), 1-14. doi: 10.1016/j.jretai.2009.01.001
- GroB, M. (2015). Exploring the acceptance of technology for mobile shopping: an empirical investigation among smartphone users. The International Review of Retail, Distribution and Consumer Research, 25(3), 215-235. doi: 10.1080/09593969.2014.988280
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139-152. doi: 10.2753/MTP1069-6679190202
- Hair, J.F., Hult, G.T.M., Ringle, C., & Sarstedt, M. (2013). A primer on partial least squares structural equation modeling (PLS-SEM). London, UK: Sage Publications.
- Harris, L.C., & Goode, M.M.H. (2004). The four levels of loyalty the pivotal role of trust: a study of online service dynamics. Journal of Retailing, 80(2), 139-158. doi: 10.1016/j.jretai.2004.04.002
- Holbrook, M.B., & Hirschman, E.C. (1982). The experiential aspects of consumption: consumer fantasies, feelings and fun. Journal of Consumer Research, 9(2), 132-140. doi: 10.1086/208906
- Holmes, A., Byrne, A., & Rowley, J. (2013). Mobile shopping behaviour: insights into attitudes, shopping process involvement and location. International Journal of Retail & Distribution Management, 42(1), 25-39. doi: 10.1108/IJRDM-10-2012-0096
- Hsieh, Y., & Yuan, S. (2010). Modeling service experience design processes with customer expectation management. Kybernetes, 39(7), 1.128-1.144. doi: 10.1108/03684921011062746
- Jaradat, M., & Rababaa, M. (2013). Assessing key factor that influence on the acceptance of mobile commerce based on modified UTAUT. International Journal of Business and Management, 8(23), 102-112. doi: 10.5539/ijbm.v8n23p102
- Jarvenpaa, S.L., Tractinsky, N., & Vitale, M. (1999). Consumer trust in an Internet store. Information Technology Management, 1(1), 45-71. doi: 10.1023/A:1019104520776
- Joshi, S. (2014). Customer experience management: An exploratory study on the parameters affecting customer experience for cellular mobile services of a telecom company. Procedia Social and Behavioral Sciences, 133, 392-399. doi: 10.1016/j.sbspro.2014.04.206





A m-CEM framework to understand the factors that contribute to a satisfactory and lasting experience por Sonia San Martín Gutiérrez, Nadia Huitzilin Jiménez Torres y Nuria Puente Domínguez

Karjaluoto, H., Töllinen, A., Pirttiniemi, J., & Jayawardhena, C. (2014). Intention to use mobile customer relationship management systems. Industrial Management & Data Systems, 114(6), 966-978. doi: 10.1108/IMDS-11-2013-0480

Keaveney, S.M. (1995). Customer switching behavior in service industries: An exploratory study. Journal of Marketing, 59(2), 71-82. doi: 10.2307/1252074

Kim, J., & Lennon, S.J. (2013). Effects of reputation and website quality on online consumers' emotion, perceived risk and purchase intention: Based on the stimulus - organism - response model. Journal of Research in Interactive Marketing, 7(1), 33-56. doi: 10.1108/17505931311316734

Kim, M.J., & Chung, N. (2015). Motivations and use context in mobile tourism shopping: applying contingency and task-technology fit theories. International Journal of Tourism Research, 17(1), 13-24. doi: 10.1002/jtr.1957

Klaus, P. (2013). The case of Amazon.com: towards a conceptual framework of online customer service experience (OCSE) using the emerging consensus technique (ECT). Journal of Services Marketing, 27(6), 443-457. doi: 10.1108/JSM-02-2012-0030

Konrad, K. (2006). The social dynamics of expectations: The interaction of collective and actor-specific expectations on electronic commerce and interactive television. Technology Analysis & Strategic Management, 18(3-4), 429-444. doi: 10.1080/09537320600777192

Kotha, S., Rajgopal, S., & Rindova, V. (2001). Reputation building and performance: An empirical analysis of the top-50 pure internet firms. European Management Journal, 19(6), 571-586. doi: 10.1016/S0263-2373(01)00083-4

Kumar, U., & Gambhir, S. (2014). A literature review of security threats to wireless networks. International Journal of Future Generation Communication and Networking, 7(4), 25–34. doi: 10.14257/ijfgcn.2014.7.4.03

Kuo, Y.F., Wu, C.M., & Deng, W.J. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. Computers in Human Behavior, 25(4), 887-896. doi: 10.1016/j.chb.2009.03.003

Lam, S.Y., & Shankar, V. (2014). Asymmetries in the effects of drivers of brand loyalty between early and late adopters and across technology generations. Journal of Interactive Marketing, 28(1), 26-42. doi: 10.1016/j.intmar.2013.06.004

Lavariega, J., & Marichal, J. (2014). The role of digital skills in the formation of generalized trust among Latinos and African Americans in the United States, Social Science Computer Review, 32(1): 3-17. doi: 10.1177/0894439313497469

Lee, D., Moon, J., Kim, Y.J., & Mun, Y.Y. (2015). Antecedents and consequences of mobile phone usability: Linking simplicity and interactivity to satisfaction, trust, and brand loyalty. Information & Management, 52(3), 295-304. doi: 10.1016/j.im.2014.12.001

Lescop, D., & Lescop, E. (2014). The price tag of impatience, stress release: an exploration of the revenue model of mobile gaming companies. Digiworld Economic Journal, 94, 103-154. doi: 10.2139/ssrn.2404273

Li, Y-M., & Yeh, Y-S. (2010). Increasing trust in mobile commerce through design aesthetics. Computers in Human Behavior, 26(4), 673–684. doi: 10.1016/j.chb.2010.01.004

Lin, H.H., & Wang, Y.S. (2006). An examination of the determinants of customer loyalty in mobile commerce contexts. Information and Management, 43(3), 271-282. doi: 10.1016/j.im.2005.08.001

Luarn, P., & Lin, H.H. (2005). Toward an understanding of the behavioural intention to use mobile banking. Computers in Human Behavior, 21(6), 873–891. doi: 10.1016/j.chb.2004.03.003

Martínez-Torres, M., Rodríguez-Piñero, F., & Toral, S.L. (2015). Customer preferences versus managerial decision-making in open innovation communities: the case of Starbucks. Technology Analysis & Strategic Management, 27(10), 1.226-1.238. doi: 10.1080/09537325.2015.1061121

Mascarenhas, O., Kesavan, R., & Bernacchi, M. (2006). Lasting customer loyalty: a total customer experience approach. Journal of Consumer Marketing, 23(7), 397-405. doi: 10.1108/07363760610712939





A m-CEM framework to understand the factors that contribute to a satisfactory and lasting experience por Sonia San Martín Gutiérrez, Nadia Huitzilin Jiménez Torres y Nuria Puente Domínguez

Mohr, L.A., & Bitner, M.J. (1995). The role of employee effort in satisfaction with service transactions. Journal of Business Research, 32(3), 239-252. doi: 10.1016/0148-2963(94)00049-K

Montoya-Weiss, M.M., Voss, G.B., & Grewal, D. (2003). Determinants of online channel use overall satisfaction with a relational, multichannel service provider. Journal of the Academy of Marketing Science, 31(4), 448-458. doi: 10.1177/0092070303254408

Nagasawa, S. (2008). Customer experience management: Influencing on human Kansei to management of technology. The TQM Journal, 20(4), 312-323. doi: 10.1108/17542730810881302

Özer, A., Argan, M., & Argan, M. (2013). The effect of mobile service quality dimensions on customer satisfaction. Procedia - Social and Behavioral Sciences, 99(6), 428-438. doi: 10.1016/j.sbspro.2013.10.511

Palmer, A. (2010). Customer experience management: a critical review of an emerging idea. Journal of Services Marketing, 24(3), 196-208. doi: 10.1108/08876041011040604

Pappas, I., Pateli, A., Giannakos, M., & Chrissikopoulos, V. (2014). Moderating effects of online shopping experience on customer satisfaction and repurchase intentions. International Journal of Retail & Distribution Management, 42(3), 187-204. doi: 10.1108/IJRDM-03-2012-0034

Peral, B., Arenas, J., & Ramón-Jerónimo, M.A. (2014). Technology Acceptance Model and mature: are education and professional activity moderator variables?. Revista Española de Investigación en Marketing, 18(1), 43-56. doi: 10.1016/S1138-1442(14)60005-X

Perea-Monsuwé, T., Dellaert, B.G., & De Ruyter, K. (2004). What drives consumers to shop online? A literature review. International Journal of service industry management, 15(1), 102-121. doi: 10.1108/09564230410523358

Puccinelli, N., Goodstein, R., Grewal, D., Price, R., Raghubir, P., & Stewart, D. (2009). Customer experience management in retailing: understanding the buying process. Journal of Retailing, 85(1), 15–30. doi: 10.1016/j.jretai.2008.11.003

Purita, G. (Online Business School) (2013). M-commerce 2013. Estado actual del comercio móvil y principales tendencias. Retrieved from www.obs-edu.com

Rohrbeck, R., Steinhoff, F., & Perder, F. (2010). Sourcing innovation from your customer: how multinational enterprises use web platforms for virtual customer integration. Technology Analysis & Strategic Management, 22(2), 117-131. doi: 10.1080/09537320903498462

Schaupp, L.C., & Belanger, F. (2005). A conjoint analysis of online consumer satisfaction. Journal of Electronic Commerce Research, 6(2), 95-111.

Schierz, P.G., Schilke, O., & Wirtz, B.W. (2010). Understanding consumer acceptance of mobile payment services: empirical analysis. Electronic Commerce Research & Applications, 9(3), 209-16. doi: 10.1016/j.elerap.2009.07.005

Slade, E., Dwivedi, Y., Piercy, N., & Williams, M. (2015). Modeling consumers' adoption intentions of remote mobile payments in the United Kingdom: Extending UTAUT with Innovativeness, risk, and trust. Psycology & Marketing, 32(8), 860-873. doi: 10.1002/mar.20823

Sukwadi, R. (2015). Utilizing customer experience management framework to create a delightful service experience. International Journal of Industrial Engineering and Management (IJIEM), 6(1), 29-42.

Szymanski, D., & Hise, R. (2000). E-satisfaction: an initial examination. Journal of Retailing, 76(3), 309-322. doi: 10.1016/S0022-4359(00)00035-X

Thakur, R., & Srivastava, M. (2014). Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India. Internet Research, 24(3), 369-392. doi: 10.1108/IntR-12-2012-0244

Verhoef, P.C., Lemon, K.N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L.A. (2009). Customer experience creation: determinants, dynamics and management strategies. Journal of Retailing, 85(1), 31-41. doi: 10.1016/j.jretai.2008.11.001

Yeh, Y.S., & Li, Y.M. (2009). Building trust in m-commerce: contributions from quality and satisfaction. Online Information Review, 33(6), 1.066-1.086. doi: 10.1108/14684520911011016





A m-CEM framework to understand the factors that contribute to a satisfactory and lasting experience por Sonia San Martín Gutiérrez, Nadia Huitzilin Jiménez Torres y Nuria Puente Domínguez

Zeithaml, V., Berry, L., & Parasuraman, A. (1996). The behavioural consequences of service quality. Journal of Marketing, 6(2), 31-46. doi: 10.2307/1251929

Zeithaml, V., Parasuraman, A., & Malhotra, A. (2000). A conceptual framework for understanding eservice quality: implications for future research and managerial practice, Working Paper Report No. 00-115, Marketing Science Institute, Cambridge, MA.







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