MOBILE SOCIAL COMMERCE ACCEPTANCE MODEL: FACTORS AND INFLUENCES ON INTENTION TO USE S-COMMERCE

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ABSTRACT

The aim of this paper is to contribute to the research field which studies the consumer behavior model in mobile social commerce, starting from the evolution of the concepts of electronic commerce, mobile commerce and social commerce: It also identifies the main factors that influence intention to use, through the classical TAM model and subsequent extensions and the inclusion of the perceived risk. Consequence of all we proposed the Mobile Social Commerce Acceptance Model (MSCAM).

To carry out this research, we created a survey answered by 353 social network users who had previously watched a video explaining the functioning of this new online commercial format.

The results confirm the relevance of the relationships proposed, highlighting the influence of subjective norms on usefulness and attitude, except for the relationship between perceived risk and intention to use.

Key Words:

E-commerce, mobile-social-commerce, technology acceptance model (TAM), perceived risk, intention to use

1. Introduction

The emergence of mobile telephones and the rise of social networks constitute unprecedented landmarks. In the first place, the large number of features that help make daily life easier can explain the widespread, growing use of mobile phones. The increasing number of smartphones in the mobile market is also a clear example of this trend (Allen et al., 2010; Calzada and Estruch, 2011). Generator Research (2013) estimates that by 2015 there will be over 1,500 million smartphone users, representing 24.8% of active SIM cards, leaving no doubt that the smartphone market presents a strategic opportunity for many companies as they attempt to profit from the distribution of their services and multiple marketing programs (Sheehy, 2011). Secondly, ENISA (2010) computes the number of worldwide users of social networks by means of mobile devices by 2011 as 554 million, corresponding to 13.3% of mobile phone users. Actually, in Spain the penetration tax for SNS is over 79 % and the 70% of these users access by mobile phone (IAB, 2014).

Gómez and Otero (2011) argue that the future of Facebook, the most popular national and international social network, must pass through the path of social commerce (S-commerce) as a tool that complements advertising and the integration of Social Networks (SN) in the real world via other parallel technologies such as Quick Response (QR) codes or implementing RFID technology (Radio Frequency Identification). From our perspective, social commerce is at an emerging phase and will be one of the main tools for sale in the coming years.

Sun (2011) reveals that although the terms social commerce or social shopping are considered analogous by most authors, some regard them differently. In this sense, some researchers believe that social commerce refers to the perspective of the company that sells the product, while social shopping refers to the perspective of the consumer (Stephen and Toubia, 2010). Both concepts are actually similar and only differ, in the first case, from whether the perspective is that of the seller or consumer. For this reason we apply the term indiscriminately.

Social commerce is an electronic commerce that involves using social media, online media that supports social interaction, and user contributions to assist in the online buying and selling of products and services. In a more direct way this would be put into place in the same manner as the applications that combine online shopping and social networks (Tedeschi, 2006) in the line that Stephen and Toubia (2010) defined as the integration of social network characteristics in the functions of basic e-commerce web sites so as to "... allow people to participate actively in the marketing and selling of products and services in online marketplaces and communities."

Following the principles established by Shen (2008), we can define social commerce as "an extension of Business-to-Consumer E-commerce where consumers interact with each other as a main mechanism in conducting online shopping activities, such as discovering products, aggregating and sharing product information, and collaboratively making shopping decisions."

Based on this initial approach, our work presents the following objectives: 1) to analyze the theoretical evolution of the concepts of electronic commerce (e-commerce), mobile commerce (m-commerce) and social commerce (s-commerce), 2) to establish a pattern of behavior following the principals and modifications of the classic TAM model on the question of the social shopping experience, and 3) to define strategies of action for companies that choose to implement s-commerce based on the results achieved.

Our study is structured in six sections. Following this introduction, in section 2 we provide a theoretical framework aimed at examining e-commerce, m-commerce and s-commerce. In section 3, we establish the research hypotheses and the behavioral model proposed. In section 4, we describe the methodology used in our research. In section 5 we analyze and discuss the results. Finally, we draw the main conclusions and discuss some implications and limitations of the study in section 6

2. Theoretical framework: e-commerce, m-commerce and s-commerce

The evolution of our society has been marked by innovation since its very beginning. For many, the sudden rise of ICT has brought about a revolution similar to that of the emergence of electricity or the invention of printing.

Although investments in technology have been limited for some years in Spain, as shown by the innovation indicators in the European Union (EU) and the resources invested (Cotec Foundation, 2011), it appears that since 2008 there has been a change in this trend and the level of investment in Spain, compared to that of the rest of the EU countries, has reached equal proportions.

In spite of all this, the economic activity is undergoing an important transformation process, marked by a triple interaction: 1) a process of technological revolution, led by the investment in and the massive use of ICT; 2) a dynamic of temporal and spatial enlargement of the factors and products markets, also known as the globalization process; and 3) new patterns of consumer demand and of the investment of companies and households (Torrent-Sellens et al., 2010). These factors were confirmed in the last report of the Spanish Corporate Association for Electronics, Information and Communications Technologies (AMETIC, 2010), which verifies the high level of technological acceptance in the Spanish business sector.

In recent years, developments in the field of information and communications technologies (ICT) and the important business applications derived from them, have created significant economic progress in terms of profitability, productivity, competitiveness and economic growth for both companies and countries (Dehning and Strapoulos, 2003; Lafuente, 2005).

Trade on the Internet today is the most important potential tool for companies. This means a revolution in both the buying habits of consumers and consumer-business relationship formulas (Sharma and Sheth, 2004). Currently over 90% of total OECD companies have access to Internet. Though in Spain that number is only 86.6%, the evolution of recent years shows signs of it catching up with the average of OECD countries (AMETIC, 2010).

Different formulas have been identified in the scientific literature to define e-commerce (Vilaseca et al., 2007). For Treese and Stewart (1998), this represents "the use of global Internet for the purchase and sale of products and services, including post-sale service and support". Kalakota and Whinston (1996) define e-commerce as "the modern method of doing business that takes into account the needs of organizations, merchants and customers to reduce costs by improving the quality of goods, services and distribution".

E- commerce is now an essential tool for the business development of many companies and has many advantages, including (Poong et al., 2009; Armesh et al., 2010): continuous accessibility; increased quantity and quality of information; direct contact between customers and producers to facilitate interaction; multimedia access to companies' contents; the creation of new products and services; open markets; cost reductions; time savings; the immediacy of interaction; the personalization and globalization of offers of markets. These advantages will only be enhanced with the integration of web 2.0 in online marketing activities in the near future (Hannah and Lybecker, 2010).

In this context, m-commerce is an online trading model where mobile devices perform the classic functions of trade, for example, assisting in information searches, facilitating contact between the consumer and business and completing transactions. M-commerce is strategically important for companies because it promotes online sales using a support system that already takes advantage of varied marketing activities, and therefore reinforces the channel itself.

In today's society, the mobile phone has proven itself to be a vital tool in any personal or professional activity, with a very high level of acceptance by consumers (Masamila et al., 2010).

The main similarities between e-commerce and m-commerce are (Liébana-Cabanillas, 2012): 1) the maturity of the former and the growth potential of the latter, 2) the greater penetration of e-commerce,

3) the increased accessibility of m-commerce, 4) analogous users, 5) the similar levels of personalization available; and finally 6) the diversity of buying motives.

On the other hand, s-commerce is a new wave of e-commerce in which traditional e-commerce is mediated by social media and social networking services in order to promote online transactions and shopping-related information exchanges (Wang and Zhang 2012). Social commerce can be defined as word-of-mouth applied to e-commerce (Dennison et al. 2009) or as a type of trade supported by social media and social network services (SNS) (Curty and Zhang, 2013). S-commerce generates two advantages which improve any other previous form of commerce (Zhang, 2009). First of all, it facilitates interactions between network users, enabling direct interaction for sharing opinions, purchase advice and experiences (participatory environment and word of mouth, see Wallace et al., 2009). Secondly, it allows surfing and getting to know a variety of products, which in the offline context would be impossible to reach (unlimited access). Apart from these two advantages, we would like to add two more: the third one would be the technological accessibility, since this allows access to this type of commerce from different types of modern technological devices (conventional mobile phones, smartphones, tablets, etc.), and lastly, the payment facilities that some social networks are already providing or will provide in the future.

As claimed by different authors (Castelló, 2011; Huang and Benyoucef, 2013), s- commerce is going through an introductory phase. This means that it has not taken off yet in our country. However, after consulting several sources, we have detected a promising background, with many probabilities of success (Kumar and Benbasat, 2006; Hsiao et al., 2010; The Cocktail Analysis, 2013): a notable acceptance of social networks, a lower rejection of advertising on social networks, a higher level of the activity of social network users, a high access rate to social networks from mobile phones, better results of online purchases based on the opinion of other users, etc.

The emergence of s-commerce reflects the new power users have nowadays, removing sellers' bargaining power and replacing it by the consumers themselves (Wei, Straub and Poddar, 2011; Gu et al., 2012). This has reached the point that their behavior is recognized within that network and the visibility of their actions has a greater personal and social impact.

For all of the above, we consider that s- commerce will be crucial for future commercial activity. Hence, we define a behavioral model to verify the intention to use, based on Davis' (1989) classical model and subsequent adaptations, adding the risk that the user might perceive in purchase transactions on social networks.

3. Research proposal: antecedents of intention of use with mobile social commerce

The objective of this research is, from a holistic perspective, to develop a behavior model to define the intended use of a social commerce among population users. Our Mobile Social Commerce Acceptance Model (MSCAM) integrates factors from different existing models and theories (Hajli, 2012) to respond to the acceptance of this new commerce system.

In the scientific literature, numerous models have been used to measure technology acceptance. However, we will focus on the TAM, as it is the most widely used model in the scientific literature concerning commercial mobile services (Wei, Xinyan and Yue, 2011). Most models mentioned in the reviewed scientific literature are based on the TAM model for analyzing the acceptance of innovation, although with some limitations. Based on the classical TAM (Davis et al., 1989), our model is completed with the inclusion of risk as a relevant element in the adoption of social commerce.

The TAM model, as stated by Alcántara (2012), does not include subjective norms, as is the case in the TRA (Fishbein and Ajzen, 1975). Davis et al. (1989) "recognize the importance of social influence, but they exclude it from their model because of the problems it entails, for not being able to distinguish

whether the behavior of use is caused by the influence of reference groups or by attitudes, mainly due to the fact that subjective norms are significant when subjects have little experience with technology". In our research, we have taken this variable into account due to the importance of this influence for the adoption of innovations (e.g. Venkatesh and Bala, 2008; Kim, Chol and Han, 2009). Subjective norms are defined as the extent to which an individual perceives that people who are important to them think they should or should not use a certain system or perform a certain action, etc. (Hsu and Lu, 2004; Venkatesh and Bala, 2008).

Therefore, subjective norms will have an impact on the ease of use (Lu et al., 2005; Bhatti, 2007) and on usefulness (Schepers and Wetzels, 2007; Zhang et al., 2011; Chang et al., 2011; Kim, Kim and Shin, 2009; Teh and Ahmed, 2011; Yang et al., 2012; Chung et al., 2012). We therefore propose the following research hypotheses:

- H1: Subjective norms have a positive effect on the ease of use of s-commerce
- H2: Subjective norms have a positive effect on the perceived usefulness of s-commerce
- H3: Subjective norms have a positive effect on the intention to use s-commerce

On the other hand, the ease of use refers to the individual's perception that using a certain system is effortless or simply easy to do (Davis, 1989, Taylor and Todd, 1995). For this reason, it is considered to be one of the qualities of greatest impact on the acceptance of a new technology (Moore and Benbasat, 1991). Particularly in e-commerce, Vijayasarathy (2004) defines it as "the extent to which a consumer believes that online purchasing would be free of effort". Therefore, this concept is closely linked to the structure of the website, its content, its ease of use, etc.

The impact of the perceived ease of use on the perceived usefulness has been proved in numerous research studies applied to different contexts, as for example in the use of online services (Liao et al., 2007), the acceptance of e- commerce (Sánchez-Franco and Roldán, 2005), online purchase intention (Hernández-García et al., 2011), technology in teaching (Chang et al., 2011), mobile payment (Liébana-Cabanillas, 2012) and even in s- commerce (Teh and Ahmed, 2012). On the other hand, Lai and Li (2005), Sánchez-Franco et al. (2007), Fadil (2009), Qi et al. (2009) and Schierz et al. (2009) prove that the perceived ease of use has a positive impact on the user's attitude and perceived usefulness.

Considering these circumstances, we propose the following hypotheses:

- H4: Perceived ease of use positively influences the attitude towards the intention to use s-commerce
- H5: Perceived ease of use positively affects usefulness in the adoption of s-commerce

Davis et al.'s (1989) original model established an indirect relationship between the belief of usefulness and the behavioral intention, based on the idea that users will form their intentions towards certain behaviors when they believe they will improve their performance. This way, usefulness will affect behavior and therefore the use of the s-commerce analyzed below. Different research studies have proven how usefulness is directly related to attitude (Hsu et al., 2013), but also to the intention to use. In line with this idea, we would like to highlight the studies carried out in the context of tourism (Luque et al., 2007), social network games (Shin and Shin, 2011), 2.0 travel tools (Muñoz-Leiva et al., 2012; Ayeh et al., 2013), mobile commerce (Aldás-Manzano et al., 2008) and mobile payment (Liébana-Cabanillas, 2012), among others. In the context of our research, we understand that the usefulness of s-commerce will influence the intention to use through the user's attitude toward the purchase, but also directly, according to the principles of the TAM. In the light of these circumstances, we propose the following hypotheses:

- H6: Perceived usefulness has a positive effect on the intention to use s-commerce.
- H7: Perceived usefulness has a positive effect on the attitude toward the use of s-commerce.

Finally, the relationship between the attitude toward technological innovation and the intention of use has been empirically supported by research in different fields of study, such as using an information

system (Bhattacherjee and Premkumar, 2004), the intention of online auctions (Huang et al., 2011) and mobile payment systems (Schierz et al., 2009), etc. We therefore propose the following hypothesis:

H8: Attitude toward the intended use is an antecedent of intention to use s-commerce

3.1. Extensions of the TAM

Bauer (1960) starts an analysis of perceived risk through two components: uncertainty (consumers' lack of knowledge regarding what might happen when they make a purchase) and the eventual negative consequences of the purchase. Later, this same author stated that all consumer behavior entails a risk, since the consequences derived from it cannot be anticipated with certainty (Bauer, 1967). Gupta and Kim (2010) define it as "a consumer's perception about the uncertainty and the adverse consequences of a transaction performed by a seller".

Perceived risk is a multidimensional construct consisting of different factors, which together explain the global risk associated with the adoption of a given product - in the present case, s-commerce (Featherman and Pavlou, 2003; Lee et al., 2012).

Some authors suggest that the perceived risk in online exchange relationships is a factor that limits the development of e-commerce (Culnan and Armstrong, 1999; Reichheld and Schefter, 2000). From our point of view, the perceived risk associated with s-commerce is higher that the risk of any other online purchase (Gupta and Kim, 2010; San Martín and López, 2010), since the abovementioned multidimensionality increases due to the risk of being exposed to the social network on which the purchase will take place. Considering these arguments, we propose the following hypothesis:

H9: The perceived risk negatively influences the intention to use s-commerce.

The final model proposed is summarized in Figure 1.

Perceived Ease of use

Attitude

Intention to Use

Usefulness

Perceived Risk

FIGURE 1
Model proposed: Mobile Social Commerce Acceptance Model (MSCAM)

4. Research methodology and data collection

The aim of this study was to analyze the adoption of social commerce by users of social networks. The study subjects were students of the Business Management and Administration degree course at a southern university of Spain. We developed a questionnaire based on our research model to measure the variables. The questionnaire was completed in class. Following a pre-test, some questions were rewritten for clarification.

The questionnaire was made up of two sections: the first one was a group of questions which analyzed the students' socio-demographic profile, as well as their level of technological innovation and presence on social networks (see Table 1); the second one was a group of questions matching the constructs of our model. The students had access to the questionnaire after having watched a video explaining scommerce. The constructs analyzed were measured on the basis of an adaptation of the scales proposed - listed in Annex 1.

The questionnaire was completed by 378 students during May and June 2013, of which 353 completed questionnaires (93 per cent) were deemed valid.

The sample profile of participants appears in Table 1, which shows that 52.69 per cent of those surveyed were women and 47.31 per cent were men.

TABLE 1

Demographic and technological information of the participants

	Frequency	Percentage
Sex		
Male	167	47.31%
Female	186	52.69%
TOTAL	353	100%
Age		
19	45	12.75%
20	134	37.96%
21	99	28.05%
22	75	21.25%
TOTAL	353	100%
Social Network users		
Yes	353	100%
No	0	0%
TOTAL	353	100%

5. Results: reliability and validity of measurement items

First, to measure the scales' reliability, we applied the Cronbach alpha indicator (see Table 2), with 0.6 as the reference value (Malhotra, 1997), and 0.7 to be more restrictive (Nunnally, 1978). A Confirmatory Factorial Analysis was also conducted to compare the scales' convergent and divergent validity.

The convergent validity was evaluated through the indicators' factorial loads. We verified that the coefficients were significantly far from zero and that the loads between the latent and observed variables were high in all cases (α > 0.7). It could therefore be confirmed that the latent variables adequately explained the observed variables (Hair et al., 1995).

In terms of discriminative validity, we confirmed that the variations were significantly far from zero and that the correlation between each pair of scales was 0.9 (Hair et al., 1995).

The scales' reliability can be evaluated based on a series of indicators extracted from the confirmatory analysis. Specifically, the factor's compound reliability (CR) and extracted variance analysis (EVA) surpassed the reference threshold, 0.7 and 0.5, respectively, as well as other indicators of global adjustment for the corresponding models of individual measurements (Hair et al., 1995).

TABLE 2
Convergent validity and reliability of the internal consistency

Variable	Item	Stand. Coef.	Cronbach's Alpha	CR	EVA
Subjective Norms	SN1	0.891	0.93	0.9	
	SN2	0.898			0,76
	SN3	0.82			0,76
	SN4	0.78			
Ease of use	EOU1	0.63	0.88	0.86	
	EOU2	0.913			0,61
	EOU3	0.482			0,61
	EOU4	0.897			
Perceived Usefulness	US1	0.915	0.94	094	
	US2	0.892			0.8
	US3	0.916			0,8
	US4	0.854			
Attitude	AT1	0.809	0.92	0.92	
	AT2	0.89			0,76
	AT3	0.916			0,76
	AT4	0.857			
	IU1	0.907	0.96	0.96	
Intention of use	IU2	0.961			0,88
	IU3	0.944			
	PR1	0.907	0.9	0-91	
Perceived Risk	PR2	0.845			0,71
	PR3	0.697			0,/1
	PR4	0.897	7		

After analyzing the reliability and validity of the initial measurement scales, we tested the research hypotheses in the literature review using the structural equation model (SEM). Considering the absence of normality of the variables, we opted for the maximum likelihood estimation method and bootstrapping technique (or bootstrap learning samples) for 500 consecutive steps or samples, and a significance level of 95 percent. The maximum likelihood is preferable in the case of small samples, as opposed to generalized or weighted least squares (West et al., 1995). In the bootstrapping technique we used the Bollen-Stine's corrected p-value, testing the null hypothesis that the model is correct. Through re-sampling, this technique permits the standard error of the constructs to be corrected.

 $TABLE\ 3$ Statistical summary of the model's goodness-of-fit.

Goodness-of-fit index	Recommended value	Results in the study
χ2/degrees of freedom	<3	2.4
Goodness-of-fit index (GFI)	>0.90	0.88
Adjusted goodness-of-fit index (AGFI)	>0.80	0.85
Comparative fit index (CFI)	>0.90	0.96
Normed fit index (NFI)	>0.90	0.93
Root mean square error of approximation (RMSEA)	< 0.08	0.06

Adjusting the model with absolute, incremental and parsimonious measurements verified that the model's adjustment was reasonably effective. Table 3 shows that the goodness-of-fit of all the statistics is within an acceptable range (Hu and Bentler, 1995; Hu et al., 1999).

The results of the structural model are shown in Figure 2.

Behavioral model (standardized beta): MSCAM. **H5** 0,22*** Perceived Ease of use **H8** H1 0,16*** 0,44*** Attitude **H4** 0,29*** **H3** 0,46*** Intention to Subjective **H7 H9** 0,61*** H2 -0,04 **H6** 0,57*** Perceived 0,32*** **Usefulness Perceived** Risk

FIGURE 2
Behavioral model (standardized beta): MSCAM

Note: *** *p* < 0.001

The results of the SEM analysis and the results of the hypotheses are shown in Table 4. All the hypotheses were considered significant except hypothesis 9. The results for H9 reveal that the relation between perceived risk and intention to use is not significant (β = -0.04, p>0.001), although there is a negative and small value relationship between them. This situation could be explained by the profiles of the survey respondents (Akman and Mishra, 2010), that is, students with an average age of 20.5. Age is a risk inhibitor in the adoption of certain technologies (Liébana-Cabanillas, 2012). This means that younger users have minor problems in the adoption of technology (Phang et al., 2006).

On the other hand, hypotheses 1, 2 and 3 could not be rejected (p <0.001), thus proving the importance of subjective norms in s- commerce. It is precisely subjective norms which establish the most significant relationship with the intention to use ($\beta = 0.45$, p<0.001), as a consequence of the environment in which the purchase is carried out (a social network). This somehow conditions the users' potential behavior (Liébana-Cabanillas, 2012). For this reason, we have found out that through subjective norms, users will improve their perception of the ease of use ($\beta = 0.37$, p<0.001) and usefulness ($\beta = 0.54$, p<0.001).

Furthermore, our hypotheses regarding the effect of the ease of use (H4 and H5) could not be rejected either. The ease of use is directly and positively related to perceived usefulness ($\beta = 0.32$, p <0.001) and attitude ($\beta = 0.21$, p <0.001), according to the literature analyzed previously.

Additionally, the relationship between usefulness and intention and attitude in H6 and H7 cannot be rejected either. On this occasion, the usefulness the user gives to s-commerce directly affects both the intention of future use ($\beta = 0.33$, p <0.001) and the user's attitude towards it ($\beta = 0.52$, p <0.001).

Lastly, H8, which relates the users' favorable attitudes towards s- commerce and their intention, cannot be rejected either ($\beta = 0.18$, p <0.01), although it has a lower value than the other variables associated with intention of use.

In the model all the relationships turned out to be significant, except for the one between perceived risk and intention to use. The percentage corresponding to the variable 'intention to use' attained 70.7%. The intention to use is positively related to subjective norms ($\beta = 0.46$), usefulness ($\beta = 0.32$) and attitude ($\beta = 0.16$), and negatively related to perceived risk ($\beta = -0.04$).

TABLE 4
Non- standardized coefficients (β) of the model

Hypotheses	Effect	β_{SC}	S.E.	Sig.	Valuation
1	SN→ PEOU	0.373	0.05	0.000	Accepted
2	SN→ PU	0.547	0.04	0.000	Accepted
3	SN→ IU	0.459	0.05	0.000	Accepted
4	PEOU→ PU	0.324	0.05	0.000	Accepted
5	PEOU→ ATT	0.219	0.05	0.000	Accepted
6	PU→IU	0.332	0.06	0.000	Accepted
7	PU→ ATT	0.529	0.04	0.000	Accepted
8	ATT→ IU	0.188	0.06	0.000	Accepted
9	PR→ IU	-0.04	0.037	0.243	Eliminated

6. Conclusion and future research directions

The technological advances of recent years have modified the way clients carry out their purchases. From the classic concept of e-commerce, the implementation of mobile technology and the emergence of social networks, human behaviors have had to adapt to the environment. With the emergence of social commerce, the technology and socialization of purchases have come together, strengthening the user's presence on the network. This becomes even stronger with the massive penetration of mobile phones.

Social commerce is increasingly drawing the attention of the professional and academic world. As we have already mentioned in this paper, the evidence of the data analyzed and of previous studies shows that social commerce is a new phenomenon which needs deeper analysis in terms of economic and social consequences.

Given the importance of this new commercial format and the massive penetration of mobile phones in society, there has been a proposal of a review of the intention to use in the Spanish context, in which this type of activities is still at an embryonic stage. The model selected to this end was the TAM model. TAM has been widely used in our research and it is considered a highly validated model in a large number of technological innovations - hence our decision to use it, including some subsequent modifications.

The results of our research significantly confirm the classic relationships of the TAM. The variables 'subjective norms', 'usefulness' and 'attitude' establish a significant relationship with the intention to use. We highlight the case of subjective norms as the most important determining factor for the intention to use social commerce, precisely because of the environment in which the eventual purchase is carried out. This leads us to suppose that the user will be aware of the importance of his/her actions on the network, being influenced by them at the same time, and to some extent promoting the mobile social word of mouth (M-S-WOM). However, the relationship established between risk and intention does not attain the necessary significance, although this is a negative relationship, as expected. This suggests that the risk among the selected population (young users) is not as important as we theoretically expected it to be at the beginning, since younger users have fewer difficulties in the adoption of a new purchase system.

The inclusion of social networks in the business activity of companies -based on the domestic use of SNS- represents a great opportunity both for companies and consumers.

Traditional sales systems are adopting the new trends existing in the market, with a special emphasis on social commerce as a trading system which includes the use of social networks in the transactions carried out by their users. Although this activity is going through an expansion phase in some countries, in Spain it is still at an embryonic stage. This reduces the chances of success in light of the data analyzed. Therefore, it could be interesting to explore new lines of research related to the social web/network on which the purchase is carried out, as well as to the activity of purchasing.

Concerning the website on which the purchase takes place, we need to further the analysis of website functionalities, the different existing methods (Storefront, social commerce store and smart commerce store, among others), as well as the website operating level.

With regard to the activity of purchasing, we have to analyze the influence of social commerce at each stage of the purchasing process, including the review of the Elaboration Likelihood model (ELM). Taking into account the ELM, it would be interesting to analyze users' behavior in the central route, in which users asses the information provided in an active, cognitive and assiduous way, as well as in the peripheral route, in which users will have less experience and their behavior will be influenced by secondary aspects, such as the organization of the website itself, the order on the website (functional aspects or aspects that determine the perception of the ease of use) and other elements related to the format (color, images, etc.).

With regard to technology, we should conduct comparative analyses to find out if the use of mobile phones, tablets or similar devices can modify the results of our research, thus enhancing a better adoption of the mobile social commerce.

Finally, we believe it is crucial to analyze the eventual impact of virtual brand communities, as well as the impact of the existing social networks and how their users' profile and nature will affect the results of the social commerce activities (Facebook commerce, Pinterest commerce, etc.).

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