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## **ANTECEDENTS AND EFFECT OF COMMITMENT ON THE IMPULSE BUYING BY INTERNET**

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**MOEZ Ltifi, Ph.D,**

**Faculty of Economics and Management of Sfax**

**Postal Address: P.B n°59, Sidi Bouzid 9100, Tunisia**

**Author's Personal/Organizational: <http://www.fsegs.rnu.tn>**

**Email: [ltifimoez2007@yahoo.fr](mailto:ltifimoez2007@yahoo.fr)**

Moez Ltifi is Ph.D, in marketing at the Faculty of Economics and Management of Sfax, Tunisia. His research interests include consumer attitudes toward online shopping, e-loyalty, Digital marketing and e-commerce.

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### **Abstract**

The impulse buying is an important phenomenon in consumer behavior and distribution in the context classic and virtual. The growth of services based on communication and information technology (CIT), especially the Internet has changed the way businesses and consumers interact. This article aims to provide a more complete understanding of the characteristics of the commercial website and the role played in the development of the pleasure of service and commitment to impulse buying. Analyses of data from 302 consumers Tunisian revealed that the attributes of the site (visual appearance, navigation, customized preview) are three important antecedents of the pleasure of serving consumers increasingly affecting their commitment to this site and therefore their buying impulse.

**Keywords: E-service, Internet, commercial website characteristics, pleasure of service, commitment and impulse buying.**

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## **INTRODUCTION**

Impulsive acts are commonly considered as behaviors resulting from situations of loss of control especially on the internet. Consumers, under the effect of a pulse (strong emotion, desire, violence, fear ...) receive a sudden force, strong and compelling that sometimes drives him to act in response to this pulse. The action appears to result impulsive pulse instantly without verification cognitive. The individual, in consequence of a pulse is focused on the immediate emotional consequences of his act at the expense of emotional consequences in the longer term (shame, guilt, regret) or material or physical consequences (economic woes after a impulse buying).

Today, the services sector has experienced rapid growth, which has dominated economic activity (Chesbrough and Spohrer, 2006; Wu and Wu, 2010; Dai, Haried and Salam, 2011). In fact, for economies dominated, increasing innovation in communication and information technology (CIT) has significantly altered the conceptualization, development, delivery and use of e-services. Innovations related to computers and the Internet are innovative in service delivery and consumption fueling the tremendous growth in demand as well as to create new e-services (Sullivan and Walstrom, 2001) to encourage and the drive online shoppers to buy.

In short, marketers have recognized this paradigm shift, the exchange of goods to a service model based on the exchange where the consumer plays a central role (Vargo and Lusch, 2004), especially in the case of online services (Rai and Sambamurthy, 2006; Jiang and Benbasat, 2007; Kim and Son, 2009). In this context, the emphasis is on quality of service rather than manufacturing quality regardless of the sector (Vargo and Lusch, 2004). The willingness of a customer to maintain a relationship with a company depends on its perception of the benefits of high quality service that provides a continuous flow of value (Patterson, Cowley, and Prasongsukarn, 2006).

A number of empirical studies have examined the impact of service quality on several variables such as customer satisfaction, loyalty, attitudes and purchase intentions. However, these studies have varied considerably in terms of the conceptual model as well as in terms of statistical significance (Carrillat, Jaramillo, and Mulki, 2009). Ambiguity is more about the quality of service and commitment of online shoppers, which some studies have failed to find a significant relationship between these two concepts (Roberts, Varki, and Brodie, 2003) and other studies that have found that the quality of services accounted for over 60% of the variance in attitudes of commitment (Zeithaml, Berry and Parasuraman, 1996). In our study, we will focus on the buying impulse testing the effect of commitment on impulse buying.

These contradictory results and inconsistencies raise important questions about the impact of service quality on customer attitudes and commitment as an indicator of customer loyalty. Despite the importance of an economy in e-services, there is still a lack of agreement on the magnitude of the impact of service quality on key variables such as marketing and engagement impulse buying and the theoretical model of service quality and its antecedents and consequences (Carrillat, Jaramillo, and Mulki, 2009).

Several studies have evaluated some history of quality online services such as navigation, visual appeal, speed, access, content customization and reliability (Palmer, 2002; Jiang and Benbasat, 2007) and pleasure (Parboteeah, Valacich and Wells, 2009;

Turel, Serenko and Bontis, 2010; Vila, and Kuster, 2011) and loyalty (Chang and Chen, 2009; Kim and Son, 2009). These studies make a significant contribution and thus increased our knowledge related to online services. However, studies that have examined the antecedents of service quality do not develop a comprehensive model incorporating these histories with the quality of service and their impact on the dependent variables such as customer engagement (Palmer, 2002; Jiang, and Benbasat, 2007). Conversely, studies that have examined the quality of online services and pleasure (eg, (Parboteeah, Valacich and Wells, 2009; Turel, Serenko and Bontis, 2010; Chang and Chen, 2009, Kim and Son, 2009, Cyr, Head, and Ivanov, 2006) do not consider the antecedents of service quality and their impact on the dependent variables of customers.

In addition, electronic services have many characteristics of services offline, but they introduce many unique qualities not addressed by previous research of quality of service (Rai and Sambamurthy, 2006; Tan, Benbasat and Cenfetelli, 2007). As a result, traditional knowledge management services are not easily adaptable strategies needed in mediated environments (Ayanso, Lertwachara and Thongpapanl, 2010).

Parboteeah, Valacich and Wells (2009) repeated a similar sentiment that "a common denominator in many studies business-to-consumer (B2C) in the past has been the challenge of understanding how consumer behavior can be traditional offline within a mediated environment".

The commitment is a construct that has a direct impact is growing on customer loyalty (Reicheld, 2003). Therefore, there is a growing need for more conceptual development and empirical evaluation of a history of quality e-service and the impact of service quality on the results of customer relationship management (Carrillat, Jaramillo, and Mulki, 2009), such as commitment.

The study of purchasing behavior is one of the main areas of research that is behind the development of a huge amount of marketing disciplines. Indeed, the phenomenon of consumption is more complicated due to the sophistication of the behavior and the proliferation of products, increased competition, globalization of the economy and the media business environments. Consumer behavior is far from being rational and reasonable, it is complicated. Sometimes it follows endless thoughtful purchases and other times he is tempted by an offer he totally neglected before seen on the point of sale: it is impulse buying. This person can then purchase a product at a price or under conditions that would not necessarily be accepted if he had analyzed less emotional. Impulsive acts are usually considered as behaviors resulting from loss situations verification. The consumer as a result of a pulse felt a sudden force, powerful and sometimes irresistible urges him to act in response to this impulse (Rook and Fisher, 1995). There is a growing need for more conceptual development and empirical evaluation of a history of impulsive buying. A strategic issue discussed in this article is the following: how a virtual environment such as the Internet it can stimulate impulse buying?

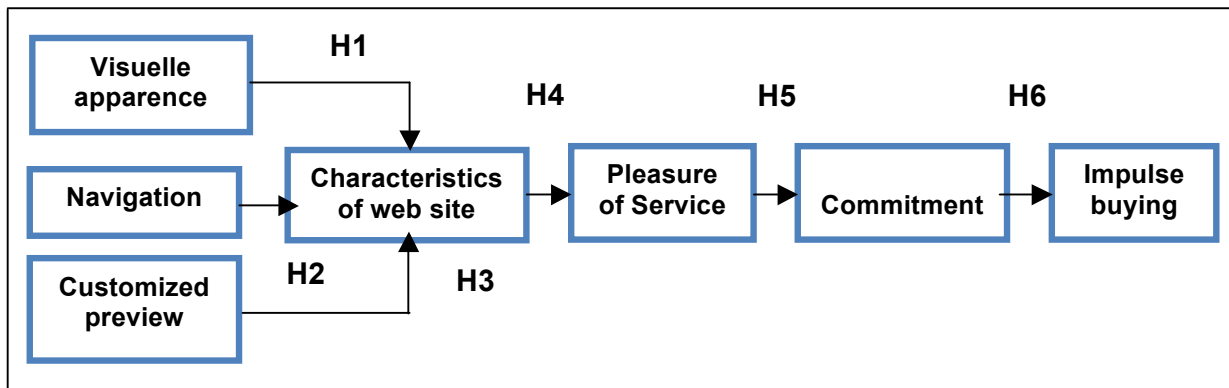
Given the gaps in the literature, it is essential that we consider as a research model that integrates the overall history of the quality of online services and their impact on impulse buying mediated by the pleasure of service and commitment.

Accordingly, this article focuses on the following research questions:

- (1) How history such as visual appeal, navigation and customized view affect the quality of online service?
- (2) How is the quality of service affects the perception of pleasure to service a consumer?
- (3) How the service affects the enjoyment of online shopper’s commitment to a commercial website?
- (4) How commitment affects the pulse of online shoppers purchase a commercial website?

The rest of this paper is organized as follows. The next section focuses on the literature review, the research model and theoretical assumptions. Methodology, evaluation research design, and discuss the results. We conclude the research implications and perspectives for future research. The diagram (1) below shows the conceptual model that we wish to test.

**Figure 1: Conceptual model of the research**



**CONCEPTUAL FRAMEWORK**

Impulse purchases expose the characteristics of an impulsive act (reaction speed and simplicity of the cognitive process), but its features are not aware of all the impulse purchases, real purchasing decisions are not entirely impulsive rather than sudden as devoid of cognitive deliberation (Giraud and Bonnefont 2000). Phase leading to the buying impulse purchase may lasts for a short time. Indeed, if the consumer provides that the purchase is irrational, it may have to stop his pulse by reasoning, and conclude the inadequacy of yielding to the impulse to buy, yet so strong emotional appeal remains, resulting in emotional conflict and purchase can still occur (Shiv and Fedorikhin 1999).

Early approaches to impulse buying, formed on the cognitive characteristics and reactive impulse purchases. Stern (1962), Shenson and Antoni (1973) and Piron (1991) were unable to differentiate properly recorded impulse purchases of unplanned purchase, nor provide appropriate tools to measure the impulse buying. They gave the place

approaches considering buying impulsive decision-making process as a result of emotional impulse. The initiator of this movement was Rook (1987). According to him, there is impulse buying "when the consumer feels an irresistible urge to buy something so immediate. This pulse is complex and hedonistic level can give rise to emotional conflicts. In addition, it often takes a look down for the consequences".

The quality of service is one of the most important and widely studied in the literature of services (Fassnacht and Koese, 2006; Parasuraman, Valarie and Malhotra, 2005 Sullivan and Walstrom, 2001; Zeithaml, Berry, and Parasuraman, 1996; Zeithaml, 2000; Dai, Haried and Salam, 2011). Consensus among researchers is that the quality of service is the result of comparing a client their expectations of a service encounter with their perceptions (Rosenfeld and Morville, 2002). In fact, we define e-services as mediated by communication and information technology (CIT) where the consumer interacts with a suitable user interface such as commercial web site, in order to gain experience and consumption continue desired benefits to another entity or the entity itself (Fassnacht and Koese, 2006).

Two approaches to customer loyalty can be found in the literature. Approach conceptualizes loyalty as intentional customer behavior while others have defined intentional loyalty as an attitude that reflects a commitment to long term. Many studies have noted the superiority of the attitudinal approach to its ability to better model the psychological processes underlying in relation to concurrent behavioral approach. Repeat purchase behavior may simply be due to customers who find it more convenient to buy from the same company rather than being evidence of long-term relationships (Webster, 1992). In this research, we adopt the concept of attitudinal loyalty intentionally similar to Chang and Chen, 2009 where customer loyalty is a favorable attitude towards customer service email that predisposes the client to a consumer repeated engagement in the context of a continuing relationship.

In addition, several researchers have suggested that intrinsic pleasure associated with the use of the site can positively influence the use of a consumer Web over time (Novak, Hoffman and Yung, 2000). The content and delivery quality can play a key role in the cognitive assessment of the consumer, including taste, joy, pride, dislike, pleasure and frustration (Ethier, Hadaya, Talbot, and Cadieux, 2006 ; Parboteeah, Valacich and Wells, 2009). Given the recognized importance of delivering high quality of service and the likelihood that perceptions of service quality affect customer relationships. Therefore, practitioners, professionals and researchers need to understand how customer perceptions occur during the consumption experience related to electronic services (Dai Haried and Salam, 2011). To meet this need, we present our research model proposed in Figure 1.

### **Quality of e-service**

Service quality has been shown to be criticized by organizations that attempt to differentiate their service offerings by improving and establishing customer value and satisfaction of customer needs (Ozment and Morash, 1994; Rai and Sambamurthy, 2006). The results suggest that the quality of service promotes customer loyalty and retention is increasingly important in today's competitive environment (Yoo and Donthu, 2001).

Several approaches have been developed (Deng, Turner, Gehling, and Prince, 2010; Zeithaml, Berry and Parasuraman, 1996) to study the impact of the confirmation of the quality of service on consumer satisfaction and intentions to use continue. Grönroos (1998) defined service quality as "the result of an evaluation process, where the consumer compares his expectations with the service, he realizes that he has received" (p. 37). The electronic service quality is defined as the extent to which the electronic device facilitates consumption activities effective and efficient in service encounters (Zeithaml, Berry and Parasuraman, 1996). Based on earlier theories of service quality and e-commerce studies, Tan, Benbasat and Cenfetelli, (2007) have argued that the conceptualization of service quality should consider the service and delivery. We examine the history of electronic service quality.

### **Features commercial website**

Quality of service is defined as the extent to which the content accurate, complete and timely information is provided to consumers online during the process of interaction with the user interface in the virtual environment (Tan, Benbasat and Cenfetelli, 2007). The user interface is an essential component of the e-service experience. In the context of the online environment, store layout and design influence in particular the consumption experience of service consumer (Seiders, Berry, and Gresham, 2000). To capture the characteristics of the commercial website, we have identified three antecedents based on the literature: the visual appearance, navigation and preview custom. These antecedents were considered important in the studies on the context of online services (Palmer, 2002).

### **Visual appearance**

The perception of a consumer visual appeal thrown by the service is driven by design, attractiveness, and beauty inherent in the service interface (Hirschman and Holbrook, 1982). The visual appearance in virtual environments can be defined as a total power of image or personality components generated from the website, such as text, style, graphics, colors, logos, themes and slogans (Srinivasan, Anderson, and Ponnaveolu, 2002). Websites with a visual interface more acceptable often result in a higher quality of service and experience can influence consumer Internet shopping and finally his long-term relationship with the service provider (Cyr, Head, and Ivanov, 2006; Dai, and Salam, 2010). Therefore, the appearance of the interface is one of the most important aspects of the experience with the environment mediated by the internet. Therefore, we can formulate the following hypothesis:

*Hypothesis 1: The visual appearance of the e-service system positively influences the perception of the characteristics of commercial website.*

### **Navigation**

Consumers want and require websites that are simply designed as easy to use (Novak, Hoffman and Yung, 2000). Ease of navigation has emerged as a key element, since the internet environment mediated by lack most vital element of human interaction in the offline services (Holloway and Beatty, 2003). Difficulties to navigate, the loss are often associated with consumer confusion, frustration and anger, and therefore negative experiences. To cancel this danger, in the context of electronic navigation functions have been developed to prevent consumers from suffering losses (Rosenfeld and Morville, 2002).

A considerable amount of information available for free, if it is well organized and easily accessible, and consumers frequently mentioned as an important reason for interacting with an environment mediated by internet (Rosenfeld and Morville, 2002; Dai, Haried and Salam, 2011). Ease of navigation in virtual environments should improve the quality of e-service. So we can announce our hypothesis as following:

*Hypothesis 2: The navigation system on the e-service positively influences the perception of the characteristics of commercial website.*

### **Customized view**

The customized view is the ability to adapt products, services and environment to individual customers in a way (Srinivasan, Anderson, and Ponnnavolu, 2002). The overview should influence the commitment to service by creating the perception of increased choice by enabling rapid development, signaling high quality and lead to a better match what the customer really wants (Ozment, and Morash, 1994). "Lands' End", for example, allow access to my virtual model is a software that allows customers to build a virtual photo and then try on clothes in a virtual dressing room to preview product before buying. On the basis of these arguments to our hypothesis looks as following:

*Hypothesis 3: An overview of personalized e-service system positively influences the perception of the characteristics of commercial website.*

### **Pleasure of Service**

Just like shopping pleasure is important in offline environments, it may be equally important in electronic environments (Jarvenpaa and Todd, 1997). Hirschman and Holbrook (1982) introduced the concept of hedonistic consumerism which means "facets of consumer behavior that relate to the multisensory, fantasy and emotional aspects of their experience with products" (p. 34) explain the role of pleasure in the consumer experience. Several studies have suggested that the intrinsic pleasure associated with the use of the site can positively influence the use of the Web by the consumer in time (Novak, Hoffman and Yung, 2000). Koufaris (2002) applied the flow model and found that the emotional reaction to a website (intrinsic enjoyment) influenced the intention to return. Thus, the pleasure of the service is proposed to influence the consumer experience in the virtual (Parboteeah, Valacich and Wells, 2009).

### **Characteristics of the commercial website and the pleasure of Service**

As previously reported, the quality of e-services is an essential element in the virtual experience. In the context of the online environment, store layout and design influence on online consumer activity and consumption of services (Seiders, Berry, and Gresham, 2000). In electronic environments, the spatial layout and functionality are particularly important since the availability of direct support staff is minimal human (Berry, Seiders and Grewal, 2002). Mathwick, Malhotra and Rigdon (2001) suggest that in online environments, the use of color, layout and graphic photographic quality combine to influence a consumer experience desirable. Ethier, Hadaya, Talbot, and Cadieux (2006) show that the quality of the website has a significant positive impact on cognitive assessment, including taste, joy, pride, hatred and frustration. Van der Heijden (2003) found that the perceived pleasure affects the intended and actual use of the site. In addition, Dabholkar (1996) showed a positive effect of the use and enjoyment of self-service technology on the quality of service.

Therefore, this study proposes the following hypothesis in relation to the quality of e-service:

*Hypothesis 4: The e-service quality is directly related to the pleasure of serving online shoppers.*

#### **Pleasure of service and commitment**

First, the literature suggests the importance of fun service and commitment to the customer experience. Regarding the pleasure of service, consumers are emotionally driven because the consumer experiences of services are directed to achieve the fantasies, feelings and fun (Schmitt, 1999). In addition, Dabholkar (1996) showed a positive effect of the use and enjoyment of self-service technology on the quality of service. For example, a consumer who buys and uses the service in the electronic environment would feel happy to consume a service and considers the experience as enjoyable and rewarding. Garbarino and Johnson (1999) suggest that the development of exchange relationships with long-term consumers provides service providers with a loyal and dedicated revenue stream generates reliable long term. In addition, since it is much easier to compare the specifications and prices of products in an electronic environment through traditional channels, quality of service becomes a key factor in retaining customers (Santos, 2003).

#### **Commitment**

The commitment is recognized as an essential element for the success of long-term relationships. Commitment has been defined as an exchange partner in an ongoing relationship and finding interesting work hard indefinitely (Morgan and Hunt, 1994). Environments mediated by the consumer internet are considered a co-producer in the process of service consumption. Interactions between consumers and providers of services are built around episodic experiences (Chesbrough and Spohrer, 2006), which ultimately affect the consumer's commitment to e-service provider (Dai and Salam, 2010). Therefore, we believe that the pleasure of service will influence the consumer's commitment to electronic service selected.

*Hypothesis 5: The joy of services is positively associated with the engagement of online shoppers to the commercial website.*

#### **Impulse buying**

Impulse buying is an important phenomenon in consumer behavior and distribution. Extensive research in the context of traditional trade was conducted to define, explain and measure impulse buying. A widely accepted definition is proposed by Rook and al (Rook and Hoch, 1985; Rook, 1987; Rook and Fisher, 1995): "impulse buying occurs when a person feels a sudden, often powerful and desire continuing to purchase an involuntary thoughtless and immediately after exposure to certain stimuli". The purchase is involuntary because it is made when the person is not actively looking for this article, did not intend to buy the product, and is not engaged in a task in a shopping store or on the internet, such as finding a gift. Buying unintentional result of a sudden urge to buy a specific item while shopping. Impulse buying is irresponsible in that the purchase is made without engaging in a large part of the evaluation. An impulse to action discourages consideration of the possible consequences of this behavior.



Impulse buying is immediate that the time interval between the view and purchase the item is short, and the decision to buy is made on the spur of the moment.

Early approaches to impulse buying, formed on the cognitive characteristics and reactive impulse purchases. Holistically, impulse purchases show impulsive characteristics of a fact (rapid response and simplicity of the cognitive process), yet its characteristics are not the result of any purchases impulsive purchase impulsive true judgments are not sudden nor entirely devoid of cognitive deliberation (Giraud and Bonnefont 2000).

Definition according to Stern (1962): "The impulse purchase is a purchase made although not foreseen nor planned in advance."

Behavioral definition as (Antoni and Shenson 1973): "The impulse purchase is a purchase for which the information obtained and the time actually used by a consumer for making a decision are significantly below the " normal " used by the individual to make such a decision".

Impulsive purchase by non experiential (Piron 1991): "unplanned purchase from exposure to a stimulus, where the decision is made on the field."

A study by Beatty and Ferrell (1998) suggests that impulse buying is closely related to the hedonistic and sensory stimulation. Rook (1987) also suggests that impulsivity is a trait consumer lifestyle that can be linked to materialism, sensation seeking, and recreational aspects of shopping either in a store or in a traditional shop. Leisure buyers as buyers motivated by hedonistic values are less likely to have an idea of what they will buy when they go shopping, suggesting that higher levels of impulse buying and they spend more time shopping (Bellenger and Korgaonkar, 1980).

Several studies have resulted that online shoppers are more impulsive than traditional buyers (Donthu and Garcia, 1999). Two reasons may justify this result. On the one hand, impulse buying is often associated with low prices, promotions, offers and more generally limited to the feeling of getting a good deal (Bonnefont and al., 2005; McGoldrick and al., 1999). This feeling is especially strong on the Internet, especially on websites. It has been shown that images, banners, advertisements, prices and special offers can generate impulse purchases on the Internet (Madharavan and Laundry, 2004). On the other hand, impulse buying is strongly linked to emotions experienced at the point of sale (Hausman, 2000, Spies and al., 1997). Many consumers who visit merchant sites animated hedonic motivations (Childer and al., 2001). Indeed, thanks to the rapid technological advances, the potential hedonic eshops grows very quickly - interactivity, presentation of products in three dimensions, using avatars ... - (Diebach and Jeandrain, 2005).

Whatever the distribution network, the attraction due to an impulse purchase can be offset by the potential risks associated with the purchase. The risk of post-purchase seems more important on the Internet than in traditional stores (problems related to payment security, delivery, return of goods, the conformity of products). One might think that such risks could limit the power of impulse buying felt on the Internet.

We can thus assume that the dimensions of quality for the visual appearance, navigation and overview personalized service as well as fun and engagement could increase the potential hedonistic sites and thus promote birth impulse buying (Childer and al., 2001). And this is increasing the potential of a site to stimulate impulse buying, either by reducing the potential risks associated with the purchase. We deduce the following hypothesis:

*Hypothesis 6: Commitment of online shoppers to the commercial website influence impulse buying on this site.*

**Table 1: Items of investigation**

<b>Construct</b>	<b>Measurement items</b>	<b>References</b>
<b>Visuelle apparence</b>	<ul style="list-style-type: none"> <li>-This website service is visually pleasing.</li> <li>- The layout of this website service is an attractive appearance.</li> <li>- The colors that are used on this web site provider are attractive.</li> <li>- Everything is clearly provided in the website of this service provider.</li> <li>- Overall, I think this site provider attractive.</li> </ul>	<p>Dai, and Salam, (2010)</p> <p>Sullivan, and Walstrom, (2001)</p>
<b>Navigation</b>	<ul style="list-style-type: none"> <li>- I feel that I had the freedom to go anywhere in the website of the supplier of e-services.</li> <li>- I feel that the interaction with the website of this service provider and navigation was easy.</li> <li>- When I use this site provider of e-services, there is very little waiting time between my actions and the response of the computer.</li> <li>- The pages of this website e-services provider that I usually visit are loaded quickly.</li> </ul>	<p>Luong, (2005)</p>
<b>Customized preview</b>	<ul style="list-style-type: none"> <li>- This service offering me a picture that I can see a product / service from several.</li> <li>- Overview personalized angles (front view, side view, rear view).</li> <li>- This service provider has enabled me to communicate with someone who has already bought / used the product / service for a testimony.</li> <li>- The service provider has a site that makes you feel like you're part of the community.</li> </ul>	<p>Szymanski, and Hise, (2000)</p>
<b>Characteristics of commercial website</b>	<ul style="list-style-type: none"> <li>- In general, the service offered on this website teleoperator to support me in fulfilling my transaction is satisfactory.</li> <li>- Overall, the service provided on the website of the teleoperator is very effective in supporting the</li> </ul>	<p>Fassnacht, and Koese, (2006) ;</p> <p>Novak,</p>

	<p>quality of performance of my transactions.</p> <ul style="list-style-type: none"> <li>- In general, I am satisfied with the service content available on the website of the teleoperator to support me in the execution of transactions.</li> </ul>	<p>Hoffman, and Yung, (2000) ; Tan, Benbasat, and Cenfetelli, (2007)</p>
<b>Plaisir of service</b>	<ul style="list-style-type: none"> <li>- Use of the service is exciting.</li> <li>- The process of using the service was nice.</li> <li>- This service makes me happy.</li> <li>- I enjoy this service.</li> <li>- I found using this service to be pleasant.</li> </ul>	<p>Cyr, Head, and Ivanov, (2006), Wulf, Schillewaert, Muylle, and Rangarajan, (2006)</p>
<b>Commitment</b>	<ul style="list-style-type: none"> <li>- My relationship with the service provider online is unique and something that I am very attached.</li> <li>- My relationship with this service provider specific line is very important to me.</li> <li>- My relationship with the service provider online is unique and something that I really care.</li> <li>- My relationship with the service provider online is unique and deserves my utmost to maintain</li> </ul>	<p>Anderson, (1998) ; Gefen, (2002)</p>
<b>Impulse buying</b>	<ul style="list-style-type: none"> <li>- You often felt the desire to buy things you do not plan to buy.</li> <li>- You wanted to "crack" for certain products.</li> <li>- You fell (e) course many products you wanted to buy.</li> </ul>	<p>Beatty and Ferrell (1998) (Giraud, 2002)</p>

## RESEARCH METHODOLOGY

Accordance with the instructions of Moore and Benbasat (1991) and Straub and Carlson (1989), we developed our survey. The construction principle of the measurement items were adapted and modified from existing measures to adapt to the context of this study (Table 1). All questions were measured using a five-point scale of Likert (1 = strongly disagree to 5 = strongly agree). A pretest was conducted with 40 students from the Faculty of Economics and Management. For validation of our measurement instruments, we applied the rules suggested in previous research (Moore and Benbasat (1991), Straub and Carlson (1989). A score of 0.70 is considered the threshold for internal consistency for all variables (Pavlou and Fygenson, 2006).

The survey was conducted by a virtual laboratory experimentation. Respondents were assured that all results will be disseminated in aggregate form to ensure anonymity and confidentiality. Each subject performs the experiment individually. He was asked to navigate in a natural way, as if he really wants to make the purchase of a "iPod" through the site "Tunisiana". The average duration of the browsing experience is 20 minutes.

Following the experiment, it responds to the questionnaire measuring the visual appearance, navigation, customized view, the characteristics of commercial website, fun service, commitment and impulse buying. The experiment was carried out in the place of study students. This data collection occurred during the month of October 2012.

### Sampling

The sampling of respondents is that of convenience. The sample was composed of students. A total of 320 responses were collected, with 18 incomplete questionnaires canceled due to insufficient information giving a total of 302 valid responses. So, the survey consists of 302 respondents of which 56.2%) were female. The average age is between 20 and 26 years, 93.8% were single, 73% had revenues of less than 200 dinars and 60.9% have a computer at home.

Site selection was made on the basis that "Tunisian" is the only teleoperator in Tunisia which has a shop selling online. Consequently, we selected the site ([www.tunisian.com](http://www.tunisian.com)) to conduct our research.

The choice of iPod, such as making product under study was based on the fact that it is a product whereby the consumer can reflect a certain self-image. Therefore, the technology relies heavily on the purchase. This applies well to our sample of students.

### Measurement model

We applied structural equation modeling with the method (PLS) to try our measurement model and structure. Procedure based on structural equation modeling provides an effective approach to treat key research questions (Chin and Todd, 1995). This study presents the validation of measurement after Straub and Carlson (1989). The convergent and discriminant validity of the scales was assessed by (Chin, Marcolin, and Newsted, 2003; Pavlou and Fygenon, 2006). Descriptive statistics are presented in the following tables.

**Table 2: Inter-construct Matrix of correlations**

	1	2	3	4	5	6	7
Visuelle apparence	1.00						
Navigation	0.56	1.00					
Customized preview	0.38	0.56	1.00				
Characteristics of commercial website	0.76	0.54	0.47	1.00			
Plaisir of service	0.54	0.49	0.87	0.61	1.00		
Commitment	0.85	0.63	0.46	0.53	0.67	1.00	
Impulse buying	0.57	0.81	0.75	0.65	0.83	0.78	1.00

After development of the instruments used in the survey, all scales reported high reliability (reliability > 0.71, AVE > 0.70). Thus, the measures meet the requirements of convergent validity. Based on the tests described above our measurement model (Table 4) is enabled (convergent and discriminant validity).

**Table 3: Reliability and average variance extracted for constructs**

	Reliability	AVE
Visuelle apparence	0.78	0.74
Navigation	0.80	0.75
Customized preview	0.76	0.71
Characteristics of commercial website	0.73	0.70
Plaisir of service	0.84	0.72
Commitment	0.74	0.71
Impulse buying	0.71	0.73

**Antecedents’ characteristics of merchant**

The use of partial least squares method (partial least squares, PLS) has a number of advantages not offered by estimating the maximum likelihood. In addition, the PLS method makes it possible to work on small sample sizes without loss of strength ... etc. (Charles Ball, 2010, p 290).

According to the test results PLS structural model reflects a significant positive association between visual appearance and characteristics of electronic services offered by the commercial website (b = 0.42, p <0.01), navigation is also positively associated with site characteristics (b = 0.67, p <0.01), so the preview site of a personalized e-services provider has had a positive impact on the characteristics of the merchant (b = 0.23, p <0.01). These results support Hypothesis 1, Hypothesis 2 and Hypothesis 3. So three antecedents that are able to explain 65.7% of the variance in site characteristics.

**Table 4: The factor loadings of the measurement model**

Items	Loading	Items	Loading
<b>Visual apparence</b>		<b>Plaisir of service</b>	
AppVis 1	0.85 (***)	Ps 1	0.93 (***)
AppVis 2	0.86 (***)	Ps 2	0.91 (***)
AppVis 3	0.84 (***)	Ps 3	0.89 (***)

AppVis 4	0.87 (***)	Ps 4	0.87 (***)
AppVis 5	0.81 (***)	Ps 5	0.83 (***)
<b>Navigation</b>		<b>Characteristics of commercial website</b>	
Nav 1	0.86 (***)	Cswc 1	0.89 (***)
Nav 2	0.87 (***)	Cswc 2	0.88 (***)
Nav 3	0.89 (***)	Cswc 3	0.85 (***)
Nav 4	0.85 (***)		
<b>Customized preview</b>		<b>Commitment</b>	
ApPer 1	0.89 (***)	Eg 1	0.87 (***)
ApPer 2	0.87 (***)	Eg 2	0.92 (***)
ApPer 3	0.85 (***)	Eg 3	0.84 (***)
ApPer 4	0.83 (***)	Eg 4	0.88 (***)
<b>Impulse buying</b>			
AchImp 1			0.84 (***)
AchImp 2			0.86 (***)
AchImp 3			0.83 (***)

## RESULTS OF THE STRUCTURAL MODEL

As shown by the results of the structural model of our research with the PLS method, the perceived characteristics of a commercial website ( $b = 0.39$ ,  $p < 0.01$ ) have a significant impact on the enjoyment of the service customers online. Its characteristics are able to explain 38.64% of the variance of the pleasure of service. Therefore, hypothesis 4 is confirmed.

As a result, the pleasure of service also affects significantly the commitment of a consumer against the supplier of e-services ( $b = 0.48$ ,  $p < 0.01$ ). The research model is able to explain 29.35% of the variance in commitment. Therefore, Hypothesis 5 is confirmed.

The above results are consistent with previous studies on the quality of e-services and its impact on the enjoyment of services (Dabholkar (1996, Hwang and Kim, 2007) and its relationship to engagement and intentional loyalty (Tan, Benbasat and Cenfetelli, 2007; Dai, Haried and Salam, 2011).

As shown by the results of the structural model of our research, the commitment to a commercial website ( $b = 0.43$ ,  $p < 0.01$ ) has a significant impact on impulse buying

customers online. Commitment is able to explain 34.43% of the variance of impulse buying. Therefore, Hypothesis 6 is confirmed. The summary of the assumptions is shown in Table 5.

**Table 5: Summary of hypothesis testing**

Hypotheses	Hypotheses path	Path Coefficients	T Statistic	Results
Hypotheses 1	Visual appearance → Characteristics of commercial website	0.42	4.34	Confirmed
Hypotheses 2	Navigation → Characteristics of commercial website	0.67	5.97	Confirmed
Hypotheses 3	Customized preview → Characteristics of commercial website	0.23	2.16	Confirmed
Hypotheses 4	Characteristics of commercial website → Plaisir of service	0.39	3.55	Confirmed
Hypotheses 5	Plaisir of service → Commitment	0.48	4.36	Confirmed
Hypotheses 6	Commitment → Impulse buying	0.43	4.15	Confirmed

**DISCUSSION**

The main objective of this research is to provide a more complete understanding of the role played by the characteristics of commercial website development for the enjoyment of the service, commitment and impulse buying in the electronic environment.

Empirical results show that six of our research hypotheses are confirmed. The analysis of data from 302 consumers shows that Tunisia is a positive and significant relationship between the characteristics of the site and the pleasure of service. Also, the pleasure of serving a positive and significant relationship with commitment to the e-service provider, as well as the commitment has a positive effect on impulse buying by the merchant site.

These results are significant in that these backgrounds are able to explain much of the variance of the features of the site service and thus give insight into the factors that influence consumer perception of this concept more important in the service economy. These results answer our first research question. We also found that the site characteristics affect the enjoyment of the electronic service. This result corresponds to our second research question. We also found that the pleasure of service has a significant effect on commitment. Thus, we have responded yet to our third research question. Finally, we explored the commitment to the website affects the impulse purchase by the latter. So we responded to our fourth research question.

Although researchers have found that the quality of service is a central concept in the research literature of e-services (Carrillat, Jaramillo, and Mulki, 2009). Several studies and methods made for the development of a mechanism to assess the characteristics of

the site. However, they have not tried or conceptualize these websites providing any type of service or their service characteristics. Although this is fairly recent studies, they do not contribute or advance our knowledge on the quality of electronic service.

In another recent study, Chen (2010) studied satisfaction with an online system for filing and income tax returns. Also, Palmer (2002) conducted a survey on the commercial website by studying the usability, design and performance parameters including delay download, navigability, site content, interactivity and responsiveness. Similarly, the study by Chang and Chen (2009), the quality of the customer interface, perceived safety, satisfaction and loyalty. However, these studies did not take into account the commitment to e-services provider and have not given details of history of service quality. Our research is to fill this gap in the literature by identifying and empirical validation of the history of the quality of services and their impact on the characteristics of the commercial site, as well as to integrate a new variable that is the pulse purchase via the internet.

The results of our study have implications essential for researchers and practitioners. For researchers, this study provided validated measures to facilitate the evaluation of several built quality and the pleasure of service, as well as the commitment and leadership of purchase in the virtual environment.

For practitioners, this study shows the crucial role played by the quality of service delivery in the pleasure of the service consumer and the overall experience. This research highlights the role of pleasure customer service to develop effective services and management practices. In the context of electronic system design with good and friendly service will reduce the costs in time and effort into the experience of a consumer purchasing whole (Berry, Seiders and Grewal, 2002). Companies that provide services in an electronic environment should aim to provide content of stable and reliable service and quality of delivery. Similarly, this research highlights the crucial role played by the commitment to foster and encourage cyberconsumer purchase through the commercial website.

Our results are consistent with previous research suggesting that pleasure plays an important role in the realization of intentional loyalty of consumers and the overall consumer experience (Parboteeah, Valacich and Wells, 2009). And also suggest that engagement plays an important role in boosting purchases (Rook and Hoch, 1985; Rook, 1987).

## **LIMITATIONS AND FUTURE RESEARCH**

Some limitations should be considered with caution when generalizing empirical results including the completion of the investigation by students only, the use of a single commercial website (Tunisiana) for experimentation, using the method convenience sampling and linear structural equations.

Subjects in the current sample can be generalized to a younger generation educated and who are very familiar with using the Internet but have not made purchases via the internet before.



In addition, this research has identified the variable "site characteristics" as significant antecedent that affects the pleasure of serving under virtual. However, there may be other factors that contribute to the enjoyment of services, such as proximity (Berry, Seiders and Grewal, 2002), the consumer experience of services (Pine and Gilmore, 1998). Also, this research has identified the variable "impulse buys" as the dependent variable, however, there may be other variables that can be explained by the commitment to the commercial website such as loyalty (Dai and Salam Haried, 2011).

Therefore, future researchers are encouraged to replicate the theoretical framework to extend our research results identified limits. Despite its limitations, we believe that the study provided useful information in the electronic environment.

We also propose to test the antecedents of impulse buying classic styles such as purchasing, sex, motivation site and the lifestyle in the virtual world.

It would be interesting to set up an online survey, saw the highest level of expertise of respondents and test the model with real users rather than quasi-experiment students to use other types of sites and incorporate other variables such as the hedonistic value / utility via internet shopping, fun shopping and ethics.

## **CONCLUSION**

We found empirical support for the antecedents of service quality and their collective impact on impulse buying by internet mediated by the pleasure of service and commitment. It is essential that future studies recognize that e-service quality perceived commercial website, fun service contribute to the creation of commitment and buying impulse.

We urge both the information technology practitioners and research communities rely on our results improve the understanding of the service experience in the electronics, given the importance of quality service and its impact on the variables that explain the attitudes and behavior of online shoppers such as commitment and impulse buying via the internet.

**REFERENCES**

- Anderson, E. (1998), "Customer satisfaction and Word-of-Mouth," *Journal of Service Research* (1:1), pp. 5-17.
- D'Antoni J.S. and Shenson H.L. (1973), Impulse buying revisited: a behavioral typology, *Journal of Retailing*, 49, 1, 62-76.
- Ayanso, A., Lertwachara, K. and Thongpapanl, N. (2010), "Technology-Enabled retail services and online sales performance," *Journal of Computer Information Systems* (50:3), pp. 102-111.
- Beatty, S., and Ferrell, E. (1998), Impulse Buying: Modelling Its Precursors, *Journal of Retailing*. 74, 2, 169-191.
- Bellenger, D. N., and Korgaonkar, P. K. (1980), Profiling the Recreational Shopper, *Journal of Retailing*, 56, 3, 77-92.
- Berry, L.L., Seiders, K. and Grewal, D. (2002), "Understanding service convenience," *Journal of Marketing* (66:3), pp. 1-17.
- Bonnefont A., Giraud M and Labbe-Pinlon B. (2005), Incidence des prix et des promotions sur le déclenchement d'impulsions d'achat et d'achats impulsifs émotionnels en GMS, *Journée de Marketing de Bourgogne*
- Carrillat, F., Jaramillo, F. and Mulki, J. (2009), "Examining the impact of service quality: a meta-analysis of empirical evidence," *Journal of Marketing Theory and Practice* (17:2), pp. 95-110
- Chang, H., and Chen, S. (2009), "Consumer perception of interface quality, security, and loyalty in electronic commerce," *Information & Management* (46), 411-417.
- Charles Bal, (2010), "Emotions and persuasions: An effective model of persuasion for sport sponsorship", Thesis undertaken under a cotutelle agreement between the university of Adelaide and the university paris-1 pantheon Sorbonne, as part of the requirement for the degree of Doctor of philosophy, p 290-305.
- Chesbrough, H. and Spohrer, J. (2006), "A research manifesto for services science," *Communications of the ACM* (49:7), pp. 35-40.
- Chen, C. (2010), "Impact of quality antecedents on taxpayer satisfaction with online tax filing systems — An empirical study," *Information & Management* (47), pp. 308-315.
- Chin, W.W. and Todd, P. A. (1995), "On the use, usefulness, and ease of use of structural equation modeling in mis research: a note of caution," *MIS Quarterly* (19:2), pp. 237-246.
- Chin, W.W., Marcolin, B. and Newsted, P. (2003), "A partial least squares latent variable modeling approach for measuring interaction effects: results from a Monte Carlo simulation study and an electronic mail adoption study," *Information Systems Research* (14:2), pp. 189-217.
- Cyr, D., Head, M. and Ivanov, A. (2006), "Design aesthetics leading to m-loyalty in mobile commerce," *Information & Management* (43:8), pp. 950-963.
- Dabholkar, P. A. (1996), "Consumer evaluations of new technology-based self-service options: an investigation of alternative models of service quality," *International Journal of Research in Marketing* (13:1), pp. 29-51.
- Dai, H. and Salam, A. (2010) "An integrative framework of service convenience, service consumption experience, and relational exchange in electronic mediated environment (EME)," *Proceedings of Thirty First International Conference on Information Systems*, St. Louis, MO: 2010.

- De Diebasch B. and Jeandrain A. (2005), How to generate affective reactions through social and spatial immersion on a merchant Website: Proposal of an integrative model, *Asia Pacific Advances in Consumer Research*, 6, 244-251.
- Deng, L., Turner, D.E., Gehling, R. and Prince, B., (2010), "User experience, satisfaction, and continual usage intention of IT," *European Journal of Information Systems* (19:1), pp. 60-75.
- Donthu, N. and Garcia, A. (1999), The Internet Shopper, *Journal of Advertising Research*, 39, 3, 52-58.
- Éthier, J., Hadaya, P., Talbot, J. and Cadieux, J. (2006), "B2C Web site quality and emotions during online shopping episodes: an empirical study," *Information & Management* (43), pp. 627-639.
- Fassnacht, M. and Koese, I. (2006), "Quality of electronic services: conceptualizing and testing hierarchical model," *Journal of Service Research* (9:1), pp. 19-37.
- Garbarino, E. and Johnson, M. S. (1999), "The different roles of satisfaction, trust, and commitment in customer relationships," *Journal of Marketing* (63), pp. 70- 87.
- Gefen, D. (2002), "Customer loyalty in e-commerce," *Journal of the Association for Information Systems* (3), pp. 27-51.
- Giraud M. and Bonnefont A. (2000), Création d'une échelle de mesure de l'impulsivité dans l'achat : impulsivité fonctionnelle et impulsivité dysfonctionnelle, XV<sup>e</sup> Journées Nationales des IAE, Bayonne-Biarritz, www.univ-iae.fr.
- Giraud, M. (2001), Les acheteurs impulsifs : proposition d'une typologie, *Décisions Marketing*, 24, 17-24.
- Giraud M. (2002), *L'expérience d'achat impulsif : un essai de modélisation. Une application aux achats impulsifs dans la grande distribution*, Thèse de Doctorat en Sciences de Gestion, Université de Toulouse I
- Grönroos, C. (1998), "Marketing services: the case of a missing product," *Journal of Business and Industrial Marketing* (13:5), pp. 322-338.
- Hausman, A. (2000), A multi-method investigation of consumer motivations in impulse buying behavior, *Journal of Consumer Marketing*, 17, 5, 403-419.
- Hirschman, E.C. and Holbrook, M.B. (1982), "Hedonic consumption: emerging concepts, methods and propositions," *Journal of Marketing* (46:3), pp. 92- 101.
- Holloway, B. and Beatty, S. (2003), "Service failure in online retailing: a recovery opportunity," *Journal of Service Research* (6:1), pp. 92-105.
- Hua Dai, Peter Haried and A. F. Salam, (2011), Antecedents of online service quality, commitment and loyalty, Winter 2011, *Journal of computer information systems*, pp 1-11.
- Hwang, Y. and Kim, D. (2007), "customer self-service systems: the effects of perceived web quality with service contents on enjoyment, anxiety, and e-trust," *Decision Support Systems* (43:3), pp. 746-760
- Jarvenpaa, S.L. and Todd, P.A. (1997), "Consumer reactions to electronic shopping on the world wide web," *International Journal of Electronic Commerce* (1:2), pp. 59-88.
- Jiang, Z. and Benbasat, I. (2007), "Investigating the influence of the functional mechanisms of online product presentations," *Information Systems Research* (18:4), pp. 454-470.
- Kim, S. and Son, J. (2009), "Out of dedication or constraint? A dual model of post-adoption phenomena and empirical test in the context of online services," *MIS Quarterly* (33:1), pp. 49-70.
- Koufaris, M. (2002), "Applying the technology acceptance model and flow theory to

- online consumer behavior," *Information Systems Research* (13:2), pp. 205-223.
- Luong, A. (2005), "Affective service display and customer mood," *Journal of Service Research* (8:2), pp. 117-30.
- Madharavan, S. R. and Laverie, D.A. (2004), Exploring Impulse Purchasing on the Internet, *Advances in Consumer Research*, 31, 59-66.
- Mathwick, C., Malhotra, N.K. and Rigdon, E. (2001), "Experiential value: conceptualization, measurement and application in the catalog and internet shopping environment," *Journal of Retailing* (77:1), pp. 39-56.
- McGoldrick, P.J., Bettles, E. and Keeling, K. (1999), Antecedents of spontaneous buying behavior during temporary markdowns, *Advances in Consumer Research*, 26, 26-33.
- Moore, G.C., and Benbasat, I. (1991), "development of an instrument to measure the perceptions of adopting an information technology innovation," *Information Systems Research* (2:3), pp. 192-222.
- Morgan, R.M. and Hunt, S.D. (1994), "The commitment-trust theory of relationship marketing," *Journal of Marketing* (58:1), pp. 20-38.
- Novak, T.P., Hoffman, D.L. and Yung, Y. (2000), "Measuring the customer experience in online environments: a structural modeling approach," *Marketing Science* (19:1), pp. 22-42.
- Ozment, J. and Morash, E.A. (1994), "The augmented service offering for perceived and actual service quality," *Journal of the Academy of Marketing Science* (4:22), pp. 352- 63.
- Palmer, J. (2002), "Web site usability, design, and performance metrics," *Information Systems Research* (1:2), pp. 151-167.
- Parasuraman, A., Valarie A.Z. and Malhotra, A., (2005), "E-SQUAL: A multiple-item scale for assessing electronic service quality," *Journal of Service Research* (7:3), pp. 213-33.
- Parboteeah, D., Valacich J. and Wells, J. (2009), "The influence of website characteristics on a consumer's urge to buy impulsively," *Information Systems Research* (20:1), pp. 60-78.
- Patterson, P., Cowley, E. and Prasongsukarn, K. (2006), "Service failure recovery: the moderating impact of individual level cultural value orientation on perceptions of justice," *International Journal of Research in Marketing* (23:3), pp. 263-277.
- Pavlou, P.A. and Fygenson, M. (2006), "Understanding and predicting electronic commerce adoption: an extension of the theory of planned behavior," *MIS Quarterly* (30:1), pp. 115-143.
- Peck Joann and Terry L. Childers (2003), "To Have and to Hold: the Influence of Haptic Information on Product Judgments", *Journal of Marketing*, Vol. 67, April, pp. 35-48.
- Pine, J. and Gilmore, J. "Welcome to the Experience Economy," *Harvard Business Review* (76:4), 1(998), pp. 97-105.
- Piron F. (1993), A comparaison of emotional reactions experienced by planned, unplanned and impulse purchasers, *Advances in Consumer Research*, 20, 341-344.
- Rai, A. and Sambamurthy, V. (2006), "The growth of interest in services management: opportunities for information systems scholars," *Information Systems Research* (17:4), pp. 327-331.
- Reicheld, F. (2003), "the one number you need to grow," *Harvard Business Review* (December), pp. 46-54.

- Roberts, K., Varki, S. and Brodie, R. (2003), "Measuring the quality of relationships in consumer services: an empirical study," *European Journal of Marketing* (37:1-2), pp. 169-196.
- Rook, D. and Hoch, S. (1985), Consuming impulse, *Advances in Consumer Research*, 12, 23-27.
- Rook, D. (1987), The Buying Impulse, *Journal of Consumer Research*, 14, 189-199.
- Rook D. and Fisher R. (1995), Normative influence on impulsive buying behavior, *Journal of Consumer Research*, 22, 305-313.
- Rosenfeld, L. and Morville, P., (2002), *Information architecture for the World Wide Web*, 2nd edition, O'Reilly & Associates Inc., Sebastopol California.
- Santos, J. (2003), "E-service quality: a model of virtual service quality dimensions," *Managing Service Quality* (13:3), pp. 233-46.
- Schmitt, B. (1999), "Experiential marketing: A framework for design and communications," *Design Management Journal* (10:2), pp.10-17.
- Seiders, K., Berry, L.L. and Gresham, L. (2000), "Attention retailers: how convenient is your convenience strategy?" *Sloan Management Review* (49:3), pp. 79-90.
- Shiv B. and Fedorikhin A. (1999), Heart and mind in conflict: the interplay of affect and cognition in consumer decision making, *Journal of Consumer Research*, 26, 277-292.
- Spies, K., Hesse, F. and Loesch, K. (1997), Store atmosphere, mood and purchasing behavior, *International Journal of Research in Marketing*, 14, 1-17.
- Srinivasan, S.S., Anderson, R. and Ponnnavolu, K. (2002), "Customer loyalty in e-commerce: an exploration of its antecedents and consequences," *Journal of Retailing* (78), pp. 41-50.
- Stern H. (1962), The significance of impulse buying today, *Journal of Marketing*, 26, 59-62.
- Straub, D.W. and Carlson, C.L. (1989), "Validating instruments in mis research," *MIS Quarterly* (13:2), pp. 147-166.
- Sullivan, J.R. and Walstrom, K. A. (2001), "Consumer perspectives on service quality of electronic commerce web sites," *Journal of Computer Information Systems* (41:3), pp. 8-14.
- Szymanski, D.M. and Hise, R.T. (2000), "E-satisfaction: An initial examination," *Journal of Retailing*, (76:3), pp. 309- 22.
- Tan, C., Benbasat, I. and Cenfetelli, R.T., (2007), "Understanding the antecedents and consequences of e-government service quality: an empirical investigation," *Proceedings of Twenty Eighth International Conference on Information Systems*, Montreal, 2007.
- Turel, O., Serenko, A. and Bontis, N. (2010), "User acceptance of hedonic digital artifacts: a theory of consumption values perspective," *Information & Management* (47), pp. 53-59.
- Van der Heijden, H. (2003), "Factors influencing usage of websites: the case of a general portal in the netherlands," *Information & Management* (40:6), pp. 541-549.
- Vargo, S. and Lusch, R. (2004), "Evolving to a new dominant logic for marketing," *Journal of Marketing* (68:1), pp. 1-17.
- Vila, N. and Kuster, I. (2011), "Customer feelings and behaviors towards well designed websites," *Information & Management* (48), pp. 166-177.
- Webster, F. (1992), "The changing role of marketing in the corporation," *Journal of Marketing* (56:10), pp. 1-17.

- Wu, L. and Wu, L. (2010), "Service engineering: an interdisciplinary framework," *Journal of Computer Information Systems* (51:2), pp. 14-23
- Wulf, K. D., Schillewaert, N., Muylle, S. and Rangarajan, D. (2006), "The role of pleasure in web site success," *Information and Management* (43:4), pp. 1-13.
- Yoo, B. and Donthu, N. (2001), "Developing a scale to measure the perceived quality of an internet shopping site (Sitequal)," *Quarterly Journal of Electronic Commerce* (2:1), pp. 31-46.
- Zeithaml, V. (2000), "Service quality, profitability, and the economic worth of customers: what we know and what we need to learn," *Journal of the Academy of Marketing Science* (28:1), pp. 67-85
- Zeithaml, V.A., Berry, L.L. et Parasuraman, A. (1996), "The behavioral consequences of service quality," *Journal of Marketing* (60), pp. 31-6.