

Research Paper

The Impact of e-Shopping Satisfaction Factors in Repeat Purchase Intention on Internet

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Structured Abstract

Purpose: This study is an empirical investigation which proposes and tests a model aiming to identify the perceptual dimensions of consumer's satisfaction with Internet shopping experience and examine its impact on global customer satisfaction (e-satisfaction) and repeated purchase intention on Internet.

Design/methodology/approach: The sample data was collected from Internet users and consumers obtained through an electronic survey.

Findings: The results of factorial analysis identify three dimensions representing satisfaction with Internet purchase experience (i.e. security, product offer and convenience). The regression models results demonstrate that "security", "product offer" and "convenience" are, in this order, the drivers of consumer's satisfaction with online purchase experience. The research findings demonstrate that "convenience" is significantly associated with both e-satisfaction and repeat purchase intention.

Originality/value: Despite the growing importance of e-commerce for business, the existence of empirical studies to investigate the influence of the factors that explain online repurchase intention is scarce. Moreover, the increasing competition on Internet, makes customer satisfaction and retention a strategic goal for business success and survival. Embracing consumer satisfaction construct from marketing and consumer research enhances the e-commerce research on repeat purchase intention. To fill this gap, this research presents a distinct contribution: to test empirically a model of e-satisfaction and repeat purchase intention, which could be used as an online diagnostic tool that allows online retailers to identify e-business areas which perform poorly and to concentrate resources on improving particular aspects of e-business, allowing for systematic benchmarking over time and across e-business. Finally, managerial recommendations and suggestions for further investigation are presented.

Keywords: e-shopping experience, e-consumer satisfaction, repeat purchase intention.

1. Introduction

Internet is an important communication technology having a great potential for commerce practice, related to a great convenience perception.

Internet shopping may gradually replace conventional retailing channels, mail-or phone-order stores, catalogs and sales forces. Consequently, competition among Internet shopping sites has been increasing, and the web store ability to satisfy and

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retain customers will be critical for the survival and success of online firms. Broadly speaking, electronic commerce (e-commerce) refers to goods and services purchased on the Internet, and includes digital goods and services delivered directly over the Internet. The importance of customer perceived value in e-commerce stems from the fact that electronic markets have more benefits to consumers than conventional markets due to the increased product offering, convenience, customization and the ability of consumers to discover and compare prices (Brynjolfsson and Smith, 2000). In coming years electronic markets may dramatically change the way products are bought and sold (Smith, 2002) and as Varian (2000) has said “E-commerce will undoubtedly change the way business is done” (p. 137).

As e-commerce becomes more commonplace, more experienced and existing customers are probably being more demanding on judging transaction and post-transaction experiences. While the number of firms selling products online is rapidly increasing, many consumers have been disappointed with their online shopping experiences. For example, the growth of consumers’ reviews on the Internet (such as Gomez.com) frequently concerns complaints about refund and billing, return and exchange policies, defective products and poor customer service.

There is evidence suggesting that many online consumers search for product information, but subsequently do not purchase online due to a number of constraints (Shim et al., 2001). Some of the reasons commonly revealed by consumers’ aborted search and purchase attempts, include a reluctance to disclose personal and credit card information, technical problems with Web sites and problems in finding products. These constraints suggest that consumer’s purchase experiences at Web sites affect the consumer’s satisfaction and consequently his intentional behavior (Szymanski and Hise, 2000; Wolfinbarger and Gilly, 2003).

However, observing and tracking individuals during web site visits (i.e. time spent online, frequency of web sites visits, favorites, aborted purchase decisions, etc.) are a limited way to measure purchase behavior, consumer satisfaction or Web sites performances (Szymanski and Hise, 2000; Kim and Lim, 2001). It is acknowledged that the issue of consumer satisfaction measure, in a classical service context, is sufficiently studied by many researchers (in Szymanski and Hise, 2000). However, studies are not adapted to the electronic services and retail context, strongly intangible, using a virtual environment which excludes any kind of human contact.

Based upon the problematic and investigation relevance of Internet shopping, this study proposes and tests an empirical model aiming to identify the perceptual dimensions of consumer’s satisfaction with Internet shopping experience and examine its impact on global customer satisfaction (e-satisfaction) and repeated purchase intention on Internet.

This research presents important theoretical and practical contributions. On the theoretical side, the study proposes and empirically tests an e-satisfaction model, to provide a multidimensional measurement scale for the online retail context, using a sample of existing and experienced online consumers. This study provides an initial set of important measures for researchers to understand and satisfy e-consumers. From a managerial standpoint, this model could serve at a dimension level as an online diagnostic tool that will allow online retailers to identify e-business areas which perform poorly and are in need of improvement.

For managers, a measurement instrument assessing systematic and over time customer reactions to online shopping experiences provides instrumental value to e-business, not only in identifying e-business areas that are weak and in need of improvement, but

also to identify and understand (dis)satisfied customers, warning of potential defection.

Furthermore, as e-commerce becomes commonplace, e-retailers face the challenge of monitoring customers' online shopping experiences, satisfying and keeping existing customers being critical for the success and survival of online retailers.

Therefore, the increasing importance of customer satisfaction and retention, especially for the e-retailers selling consumer goods, which are in the middle of intense competition and rapid customer churn, becomes an economic necessity for e-retailing site survival.

This study is organized as follows: first, based on the theoretical background, the conceptual model and the proposed research hypothesis are presented. In the methodology section, the electronic sampling and data gathering process, sample characteristics and the methods used to analyze and test the models are described. In section four, the results from the statistical and econometric analysis are presented. In section five, discussion and conclusions from the study results are provided. Finally, some strategic recommendations and suggestions for further investigation are presented.

2. The research model: Theoretical foundations

In this study the Internet (IT) literature review allowed to identify and analyze the relevant dimensions that affect the overall online purchase experience and two consequences of consumers' experience level: customer e-satisfaction and repeated purchase intention on Internet.

In previous research scholars have proposed several conceptual and empirical electronic service quality (e-SQ) models to capture the factors that affect customer perceptions of online service quality dimensions (Loiacono et al., 2007; Parasuraman et al., 2005; Zeithaml et al., 2002). A review of the extant literature suggests that prior e-SQ scales focus mainly on website-centric metrics and pure e-service settings.

However, online shopping experience differs from e-service: each online transaction involves a number of third-parties such as credit card clearance firms and reverse logistics for delivery and returns, the lack of personal contact with salespeople, constraints in physical access to product inspection, and the time lag between the purchase and delivery of products are often cited as the most critical elements of online transaction and post-transaction for customers' evaluations of their e-shopping experiences.

2.1 Convenience

Prior research on IT highlights the pivotal role of convenience on customer's attitude towards Internet shopping. Some authors found convenience as the most important factor of consumers' satisfaction with Internet use and is related to speed, easy access to information at low cost (i.e. time, effort and displacement) where everything can be found in a minute without time or geographical boundaries. In the consumers' perception, Internet shopping convenience is essentially related to an easy way of shopping and reducing total time spent on purchase (Szymanski and Hise; 2000; Kim and Lim, 2001), a pleasant way of shopping and delivery time (Jarvenpaa and Todd, 1997; Alba et al., 1997) and the perceived relation cost/delivery time (Shim et al., 2001). Taking a customer value orientation, convenience indirectly measures customers' value perceptions as they are related to convenience value of e-commerce.

Convenience factor related to “easy way of shopping” is also linked with a functional and attractive website store features, such as: ease of browsing (e.g. a standard language use, interface design, information search engine in virtual stores, pages actualization, clear information contents, the largest number of “clickable” items (Jarvenpaa and Todd, 1997), an organized presentation (Szymanski and Hise, 2000), interactivity tools available, a good reality simulation and product’s virtual experimentation possibility (Shim et al., 2001; Alba et al., 1997). Attractive web pages should contain animated gifts, sound, video and entertainment contents like advertisement (Kim and Lim, 2001). Indeed, the possibility of animation through virtual environments, minimizing the absence of human contact and amusement associated to shopping (Jarvenpaa and Todd, 1997) is paramount to increase the convenience of Internet shopping against traditional shopping. Additionally, other research found the human interaction loss in electronics services and retail has different effects on consumers’ satisfaction (Meuter et al., 2000; Forman and Sriram, 1991).

The other component of convenience related to reducing total time spent on online purchase is linked to fast delivery, as the time lag between the order and delivery time could be perceived as a constraint to customers, when compared to physical retail. Thus, online retail to be perceived as more convenient to physical stores, must offer a fast delivery, and more importantly for time sensitive customers (Szymanski and Hise, 2000; Wolfenbarger and Gilly, 2003)

Several authors found that the most critical problems of retailing websites are related to inadequate customer service: for example, customers cannot find products, are not able to complete transactions, encounter a bad link, discover no phone number is included in the website, and products are not delivered on time, or at all; e-mails were not answered, and desired information could not be found, which become critical to the viability of Web channels. If electronic channels are a more convenient way of buying, they must be perceived by consumers as effective and efficient (Szymanski and Hise, 2000; Wolfenbarger and Gilly, 2003).

The marketing perspective also discusses service attractiveness as a crucial factor in consumer purchasing, and it is of central importance for online marketplaces (Parasuraman et al., 2005; Stock and Zacharias, 2013). Service attractiveness is composed of responsiveness, flexibility, reliability, and customer service (Parasuraman et al., 2005). The concept of convenience, in this study, captures other factors commonly associated with service attractiveness, such as responsiveness and reliability (Parasuraman et al., 2005). Service attractiveness shapes customers’ perceptions of value and improves customer loyalty (Fassnacht and Koese, 2006; Parasuraman et al., 2005).

As we have seen in recent years, many online retailers use a low-price strategy and other incentives to draw in new online shoppers; however, simply attracting more online customers on the basis of price may not be sufficient as a viable and sustained competitive strategy (Collier and Bienstock, 2006; Fassnacht and Koese, 2006; Parasuraman et al., 2005). Online consumers are also concerned with the process and outcomes of services rendered, as well as post-transaction recovery and resolution (Collier and Bienstock, 2006; Fassnacht and Koese, 2006; Mellahi and Johnson, 2000). For example, the innovative “one-click” order process of Amazon.com has engendered within its consumers a psychological attachment to the website (Collier and Bienstock, 2006; Mellahi and Johnson, 2000; Santos, 2003; Zeithaml et al., 2002). Therefore, convenience may be the most important factor of online customers’ satisfaction and web vendors’ long-term success (Szymanski and Hise, 2000; Wolfenbarger and Gilly, 2003). This leads to the following hypothesis:

H1a: Convenience with online shopping experience will be positively associated with overall customers' e-satisfaction.

H1b: Convenience with online shopping experience will be positively associated with repeat purchase intention.

2.2 Security and privacy

Another issue of major importance to online transactions is the role of security and privacy related to the security of credit card payments and the privacy assurance of shared personal information to reduce the perceived risk of Internet shopping.

A pioneer study on e-satisfaction demonstrates that security had the biggest impact on e-satisfaction (Szymanski and Hise, 2000). Most researchers also agree, that the security problems (i.e. personal data transmission and payments with credit cards) are the major risks affecting online transactions, acting as the principal barriers to electronic commerce (Suh and Han, 2003). Likewise, Wolfinbarger and Gilly (2003) found that not having bad experiences, such as stolen credit card information, customer ratings of privacy/security improve significantly across interactions with a specific e-tail website.

According other authors, security refers to the confidentiality, integrity, authentication, and non-repudiation of the e-transaction and online data (Turban et al., 2006). To ensure transaction security and to combat the lack of trust in the context of e-commerce, e-retailers frequently provide stated and authenticated policies of security (e.g., encryption and the use of seals of approval), and websites offer digital certificates to prove their identity and verify consumer identities (Chen et al., 2010). Additionally, online retailers provide a variety of payment methods (for example, credit card, wire transfer, and online money transfer) to reduce customer constraints and facilitate online transactions. Schaupp and Belanger (2005) also pointed out that online shopping websites should not only minimize delivery time, but also to provide parcel tracking mechanisms of the order process to reduce consumer anxiety.

Similarly, the protection of privacy is imperative for online transactions. Researchers have regarded privacy as the ability of an individual to control, manage, and selectively reveal personal information (Eastlick et al., 2006). To eliminate consumer privacy concerns, many online shopping websites have developed privacy policies to assure confidentiality of customers information (Hsu, 2008). Likewise, other researchers suggested that a privacy statement can enhance the perceived trustworthiness of e-vendors (Belanger et al., 2002; Schaupp and Belanger, 2005) and, consequently, the protection of privacy signifies transaction integrity and thus influences transaction decisions (Chen et al., 2010).

Conversely, more recent research (King et al., 2016) find that website trustworthiness was not a significant predictor of repeat purchase intention and this result may be attributable to the strong, direct effects of product and service attractiveness on repeat purchase intention, which may overshadow the influence of the consumer's trust in the website. Another explanation provided by the authors, may lie on the emphasis on repeat purchase intention and consumers which are already familiar with the website; therefore, website trustworthiness may no longer be a crucial factor.

Thus, taking all this into consideration, it is proposed that a retail website that is easy to use, provides a pleasant way of buying, assures security of payment systems, declares privacy of consumers when they purchase and is trustworthy, will be more

likely to enhance e-customers satisfaction with online experience and ultimately lead to repeat purchases intentions. Therefore, the following hypotheses are:

H_{2a}: Security with online shopping experience will be positively associated with overall customers' e-satisfaction.

H_{2b}: Security with online shopping experience will be positively associated with repeat purchase intention.

2.3 Product offer

Another important issue of online transactions is product offer. Product offer on Internet is generally satisfactory for consumers, concerning product diversity and brands available (Jarvenpaa and Todd, 1997). The importance of customer perceived value in e-commerce stems from the fact that it is easy to compare product features and prices online (Anderson and Srinivasan, 2003). Past research has also shown that merchandising, which refers to features of product offerings per se, for the sake of online shopping convenience, is the major determinant of the customer online purchase decision (Szymanski and Hise, 2000). Schaupp and Belanger (2005) also suggested that e-commerce should provide a great breadth and depth of product offer to impress the consumer.

Other consumer's expectations related to product offer, concern lower prices or a perceptual price/convenience relation (Jarvenpaa and Todd, 1997; Bakos, 1997), transaction costs reduction and a higher delivery speed (Shim et al., 2001; Alba et al., 1997).

The marketing literature proposes that the quality, pricing, and customization of products influence the attractiveness of the product to potential consumers (Parasuraman et al., 2005; Sriram et al., 2010; Zeithaml et al., 2002). In an electronic marketplace where there are many alternatives and substitutes, product attractiveness has a tremendous influence on consumers' intention to purchase the product from a particular online retailer (Cao et al., 2005; Sriram et al., 2010). Consumers are more likely to identify with a company whose product offerings meet or exceed the consumer's perception of innovation or excellence. For example, Apple's association with innovativeness increases customer loyalty and the purchase of new, but not necessarily more useful, products by consumers who identify with the company (Stock and Zacharias, 2013).

Another important aspect related to product offer on Internet is the capacity to compare product's information that affects consumer's satisfaction (Alba et al., 1997). Product offer also denotes that a match between the requested and the delivered product is a key element in online purchase decisions, and reasonable price and high quality are equally important for product value (Chen et al., 2010; Mathwick et al., 2001). While price was initially considered to be the key driver for the success of e-businesses in attracting customers, however it is not a determinant factor of customer retention (Reibstein, 2002). Researchers found that customers are willing to pay premium prices for books from online retailers that they have dealt with previously (Brynjolfsson and Smith, 2000). One possible explanation is that satisfactory customer e-purchase experiences, other than price, influence customers' buying decisions.

Other major critical elements are related to risks inherent to online catalog purchase: product performance (i.e. guaranty, possibility of sensorial experimentation or product return) and supplier confidence (i.e. unknown supplier with no physical address, non-fulfillment of delivery promises) (Shim et al., 2001; Jarvenpaa and Todd, 1997). More

importantly, product return provides customers an option value by lowering the perceived risk of future purchases, knowing that products that do not fit can be returned without excess cost. Accordingly, Bonifield et al. (2010) point out product return policies as a major issue of online shopping, as it can reduce consumers' perceived product uncertainty, which can affect the decision to purchase now or even future repurchase behavior.

The attractiveness of products offered and the associated services provided are essential factors that enhance potential consumers' satisfaction and retain existing customers. Marketing and consumer behavior research have considered the product and its characteristics as the main factor in explaining repeat purchase intentions (Cao et al., 2005; Pingjun and Bert, 2005). Characteristics of the product offer, including brand diversity, guarantee, price, quality and the possibility to compare product information and product returns, influence the satisfaction of the product offer to potential customers (Bonifield et al., 2010; Cao et al., 2005; Pingjun and Bert, 2005). In addition, the product characteristics and the quality of service provided is integral to repeat purchase intention (Fassnacht and Koese, 2006; Santos, 2003; Zeithaml et al., 2002). This leads to hypothesize that:

H3a: Product offer with online shopping experience will be positively associated with overall customers' e-satisfaction.

H3b: Product offer with online shopping experience will be positively with repeat purchase intention.

2.4 E-satisfaction and repurchase intention

Theoretically, overall satisfaction it can be considered an affective-based construct and is generally defined as a positive affective state resulting from a global evaluation of performance based on past purchasing and consumption experience regarding a product or service (Fornell et al., 1996; Oliver, 1999; Szymanski and Henard, 2001).

Customers are willing to repurchase from e-retailers they believe to assure ongoing satisfaction levels (Anderson and Srinivasan, 2003; Srinivasan et al., 2002). This is even more important in the case of e-commerce, because customers do not deal directly with the company's staff and cannot judge whether a retailer is trustworthy (Gefen et al., 2008; Pavlou and Gefen, 2004).

While the number of firms selling products online is rapidly increasing, many consumers have been disappointed with their online shopping experiences, and researchers pointed out that poor service quality is a key area of concern, particularly with regard to post-transaction services (Otim and Grover, 2006; Parasuraman et al., 2005). More problematic is the increase of consumer complaints on the Internet (e.g. site reviews, virtual networks) potentially disseminating negative WOM from dissatisfied customers which, in turn, can affect a firm's reputation and customers' repurchase intentions (Hsu, 2008; Nitzan and Libai, 2011).

Therefore, successful online shopping experiences are believed to affect customer satisfaction and the intention to repurchase from a website.

Repeated purchase intention refers to a customer's willingness to repurchase from the site in the future. Along with customer advocacy, repurchase intention is considered one of the most important loyalty outcomes (Oliver, 1999). More important, repurchase intention as an outcome of customer loyalty is widely known as an essential component for the survival of an online firm. Consistent with this argument, Reichheld and Scheffer (2000), point out that acquiring customers on the Internet is

extremely expensive. As a result, it is crucial for online companies to create not only a satisfied but also a loyal customer base, for potential market and additional sales that it may create (Kumar et al., 2007).

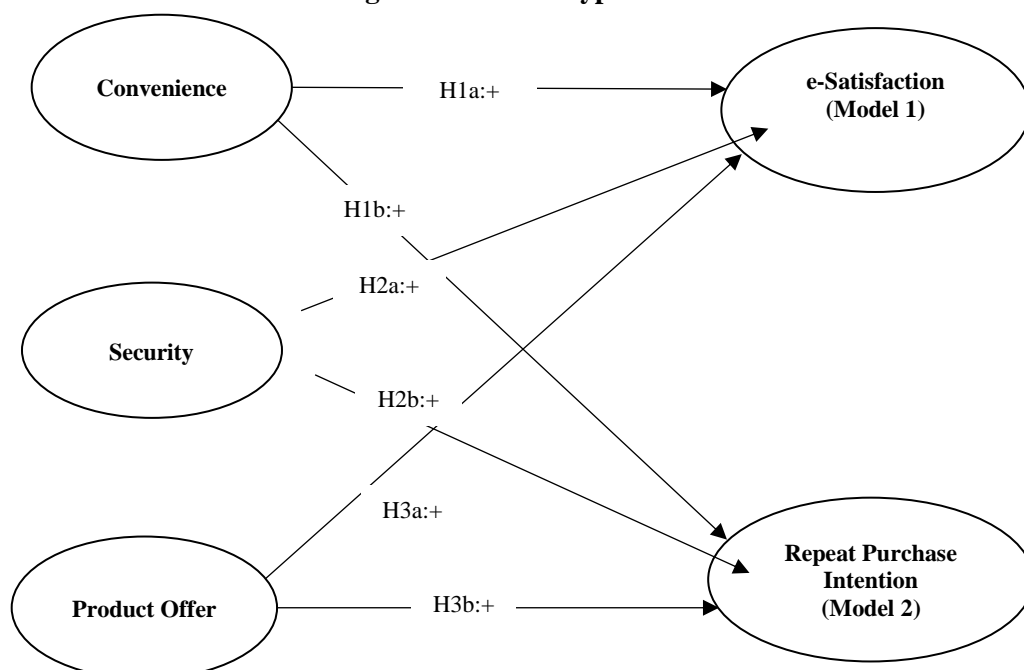
According to the discussed issues this study includes e-satisfaction and repeated purchase intentions as outcomes of consumers' evaluations of dimensions of online shopping experiences.

Finally, as it was mentioned previously customer satisfaction is widely recognized as a key influence in the formation of customers' future behavioral intentions (Fornell et al., 1996; Mithas et al., 2006; Oliver, 1999; Shankar et al., 2003). Satisfied customers are more likely to engage in repeated purchase intentions. Consistent with consumer behavior theoretic formulations, we also expect that higher levels of global customer satisfaction with online shopping experiences lead to greater repurchase intention. This path is not stated formally as hypothesis because it has been well documented in the literature.

From a managerial perspective, the justification of the explanatory power at dimension level is more relevant for e-retailers key decisions, as each of the specific dimensions is in itself a factor reflecting multiple items scales to assess consumers' e-shopping experiences. It may be difficult for the e-retailer key decisions to rely on the more abstract level of global consumer satisfaction. However, it may be indicated quite well the likelihood of satisfactory experiences or future purchase behavior, by more tangible indicators such as "security", "product offer or "convenience". More importantly, it allows e-retailer to determine the specific areas of e-business that are in need of improvement.

Based on previous discussion of antecedent researches which allowed to identify and examine the relevant elements of e-satisfaction structure to include as explanatory variables of overall customer satisfaction with online purchase experience and influence repeat purchase intention. Figure 1 depicts the conceptual model and the research hypothesis of this study. Following on, methodology and empirical analysis of regression models are presented.

Figure 1. Models Hypothesis



3. Methodology and electronic sampling process

Research method uses an online approach (i.e. via Internet) to be consistent with the research objective. Individuals are in an appropriate environment, being electronic surveys, faster, low cost, more convenient, and pleasant to respond (Sudman and Blair, 1999). The sampling method consists on a simple random sample extraction of 1318 individuals, clients from an Internet service provider. Inquiry process consisted on elaboration and application of an electronic survey, placed on Faculty web page and then tested in a small convenience sample (post-graduation students and teachers of Faculty). A few items and scale adaptations and database refinements were made. A pre-contact message was sent to the 1318 e-mails addresses, including a hyperlink, which permitted a direct and private access to the survey, and excluded any random access of non-selected individuals. Data survey was automatically entered in a database (programmed to exclude unrecognized e-mails and multiple or incomplete queries) minimizing missing data and doing a validation and deputation job. Finally, after survey application and data collection, 115 valid queries were received. The model uses 77 observations, just those individuals that experienced online purchasing, which consists the effective sample.

3.1 Sample characteristics

In its majority, the sample is composed by males, aged 30-49, married, with high level education and professional degree, residing in urban centres (see Table 1).

Table 1. Sample principal characteristics

<i>Demographic</i>	<i>Characteristics</i>	<i>%</i>	<i>Internet use</i>	<i>%</i>	
<i>Gender:</i>	Males	84.3	<i>Experience:</i>	3-4 years	33
	Females	15.7		≥ 5 years	60
<i>Age:</i>	18-29	14.8	<i>Internet access:</i>	From home	65.2
	30-39	26.1		From work	32.2
	40-49	33.9			
	≥ 50	25.2			
<i>Married:</i>		78.3	<i>Frequency: (hours/week)</i>	2-4 hours	19.1
<i>Education:</i>	A'Levels	12.2		5-15 hours	45.2
	University degree	77.4		16-30 hours	18.3
<i>Profession:</i>	Researchers (R&D)	27.8	<i>Learning:</i>	31-50 hours	11.3
	Managers and directors	24.3		Alone	78.3
	Self-employed	17.4		With friends or family	13.9
	Technicians	15.3		Classes	7.8
<i>Residence:</i>	Lisbon and Tejo Valley	47.8	<i>Internet shopping use:</i>		66.9
	North	32.2			

Most respondents have a significant experience of Internet use and about 67% of the individuals have Internet purchase experience, mainly with books, magazines, newspapers, CD's, videos, PC's software, traveling and financial products/services (see table 2). Noticeably these are the product categories frequently referenced in antecedent studies (Shim et al., 2001; Szymanski and Hise, 2000). The similarity of the sample profile descriptors with other antecedent studies about Internet shopping (Szymanski and Hise, 2000), can be considered a good indication of data sample consistency.

Table 2. e-Shopping experience for product categories

<i>Product category</i>	<i>Books Magazines Journals</i>	<i>Music/ Videos</i>	<i>Computer software</i>	<i>Travel</i>	<i>Clothes</i>	<i>Food</i>	<i>Finance</i>
<i>Frequency %</i>	62.4	40.3	46.8	35.1	2.6	19.5	79.3

3.2 Variables and measures scale

The Internet literature review allowed to identify and analyze the relevant elements of e-satisfaction structure, needed to include as explanatory variables in regression models developed in this study.

Variables included in Internet shopping experience satisfaction model (e-satisfaction) intent to reproduce the relevant dimensions (more quoted in literature reviewed) which potentially affect Internet consumer's e-satisfaction. Scale measures used in e-satisfaction model were adapted mainly from existing scales that previous research has shown to be reliable and valid (Hsu, 2008; Szymanski and Hise, 2000; Wolfinbarger and Gilly, 2003) and includes 12 items related to Internet shopping experience. The specific items included in this study are shown in the Appendix. Values on satisfaction are interpreted directly as performance measures (Cronin and Taylor, 1992, in Cronin and Taylor, 1994). Global satisfaction with Internet shopping experience was measured with a single item-item. A Likert scale of five points reversed is used and the anchors for all items were 5=High Satisfaction....1= Low Satisfaction) which is referred on marketing literature as an appropriate metric and easy to answer too (Weijters et al., 2010). Repeated purchase intention was measured with a single item-scale and the anchors for the item were 1= very unlikely to 10= very likely. Finally, a single item-scale was used to measure each of the demographic variables (e.g. age, genre, education level, occupation) and Internet shopping experience and use.

4. Statistic and econometric analysis results

Statistics and econometric analysis performed (using SPSS software, version 20) to test the models were used. Hypotheses proposed in this study uses, in first place, factorial analysis - principal components method- to reduce data and identify variables which gives a major contribute to represent each dimension (i.e. satisfaction with purchase experience on Internet). In a second stage, the selected factors are used as explicative variables in multiple linear regression analysis to estimate each partial causal model, using the 77 observations.

Results of the factorial analysis applied to the 12 initial variables on Internet purchase experience satisfaction presented in Table 3, allow to identify the following 3 significant factors, extracted by a decreasing quantity of explained variance and eigenvalues ≥ 1 : security (5 items) accounting for 42,474% of the variance explained, product offer (5 items) responsible for 12,402% of the variance and convenience (2 items) accounting for 8,457% of the variance are the ranked significant factors representing consumer's satisfaction of Internet purchase experience, explaining 63,333% of total variance. The contribution of each item for factor construction is presented in the Appendix and shown that each factor loading are in the recommended values, ranged from 0.55 to 0.82.

intention on Internet, confirming H1b. The variables security and product offer are not statistically significant (at the accepted significance level) to explain repeated purchase intention on Internet (H2b and H3b are not confirmed).

Table 5 - Regression analysis results of Internet repeat purchase intention (Model 2)

Dependent variable: Repeat purchase intention on Internet			
Factors	Standardized coefficients	t statistics (p-value)	Decision
Security	0.130 (n.s.)	1.148 (0.255)	H2b not confirmed
Product offer	0.116 (n.s.)	1.026 (0.308)	H3b not confirmed
Convenience	0.193*	1.704 (0.093)	H1b confirmed
	R ² 0.037		
	R ² adjusted 0.024		
	F statistic (p-value) 2.903 (0.093)		
n=77		Significant at the level 10%* (n.s.) not significant.	

As shown in table 5, model 2 is globally significant too and the coefficient of determination although poor, means that approximately 4% on the variation of repeated purchase intention on Internet is explained by variations of convenience variable.

Following, a discussion of these results and the conclusions of the study are presented. Finally, some managerial contribution of the study and directions for further research are provided.

5. Discussion and conclusion

This study proposes and tests empirically a model of e-satisfaction and repeated purchase intention on Internet in which security, product offer and convenience are the major contributors to the development of customer satisfaction with online purchase experience.

The dimensions, security, product offer and convenience are, in this order, the factors which represent Internet shopping experience, permitting to conclude that e-consumers tend to be more satisfied with Internet contents related to security (i.e. payment security, trust in supplier, privacy of purchase, personal sales absence and pleasant way of buying) which cause no stress or anxiety on e-consumers. Product offer, is closely related with easiness to compare products' characteristics, diversity of products' brands, product guarantee, price reduced products, and the possibility to return a product. Convenience with Internet shopping is associated with fast delivery and easy way of buying.

One major conclusion of this study is that e-satisfaction with Internet purchase experience strongly depends first, on *security* which means that it is closely related with the reduction of risk perception of online transactions, concerning security of payments, retailers' trust and purchasing privacy. These elements are the most critical of online purchase and it is crucial to prevent these undesirable problems in order to increase e-trust, and consequently online repurchase intention, especially for occasional buyers.

Secondly, a diverse and better quality of *product offer*, related to the capacity of comparing products' characteristics, reduced prices, product guaranty and return, has an important effect on e-consumers' global satisfaction. Thirdly, Internet shopping convenience (perceived on the relation between ease way of purchasing and fast

product delivery) has a lower impact on consumer' satisfaction (almost half of security). This finding suggests that online retail to be perceived as more convenient to physical stores, should be an easy way of shopping, and more importantly, must offer a fast delivery, especially for time sensitive customers.

These findings are similar to antecedent researches (Hsu, 2008; Szymanski and Hise, 2000; Wolfinbarger and Gilly, 2003), which identify important factors of Internet shopping and major determinants of e-satisfaction. However some differences on each factor contribution deriving from sample characteristics were found.

As such, previous research (Hsu, 2008; Kim and Lim, 2001; Szymanski and Hise, 2000; Wolfinbarger and Gilly, 2003) find most of the reasons commonly revealed by consumers' aborted search and purchase attempts, include a reluctance to disclose personal and credit card information, technical problems with Web sites and problems in finding products, and these constraints affect the consumer's satisfaction and consequently his intentional purchase behavior at Web sites.

Likewise, other authors found convenience as an important factor of consumers' satisfaction with Internet use and is related to speed, easy access to information at low cost (i.e. time, effort and displacement) and in the consumers' perception, Internet shopping convenience is essentially related to an easy way of shopping and reducing total time spent on purchase (Szymanski and Hise; 2000; Kim and Lim, 2001).

Another major conclusion of this study is that repeat purchase intention on Internet basically depends on convenience (i.e. easy way of buying and fast delivery) which means that a satisfactory convenient Internet shopping is perceived on several aspects of cost reduction (i.e. time, effort and economy) deriving from rapid product delivery and Internet facilities available for an easy buying (e.g .shopping cards, product information available, diversity of payment systems). This finding is in line with previous research which conclude if electronic channels are a more convenient way of buying, they must be perceived by consumers as effective and efficient (Szymanski and Hise, 2000; Wolfinbarger and Gilly, 2003). Therefore, taking a customer value orientation, this evidence permit to conclude that convenience measures online customers' value perceptions as they are related to convenience value of e-commerce.

The study results also allows to conclude that security and product offer factors doesn't explain significantly consumers' intentions to repurchase from the Internet, suggesting an improvement of those elements in order to increase consumer's repeated purchases and customer retention. Moreover, these elements are the cause of constraints in Internet shopping activities more mentioned in literature and their improvement will foster sales on Internet. Another explanation of this finding is that security and product offer are not relevant to determine repurchase intentions on Internet, especially for repeated customers.

This conclusion is also in line with recent research. Likewise, King et al. (2016) found that on the context of repeat purchase intention, consumers which are already familiar with the website therefore, website trustworthiness may no longer be a crucial factor.

Another conclusion is possibly explained by the sample characteristics of this study related to the product categories more frequently purchased on Internet - books, magazines, CD's, videos, software, traveling – currently categorized as “search products” (conversely to “experiential products”) – remove uncertainty with online purchase by lowering the perceived risk of future purchase.

This study provides several contributions for online managers and some directions for further research.

The proposed measurement model is a first step towards developing a multidimensional scale to assess customer satisfaction with online shopping experience. At dimension level the measurement instrument could serve as a diagnostic tool that will allow online retailers to determine e-business areas that are weak and in need of improvement. Analysis of data at dimension level of e-shopping experience would permit e-managers to identify problem areas within their online stores in order to concentrate resources on improving particular aspects of e-business that allows for systematic benchmarking over time and across e-business.

Based on these study conclusions, it's crucial that e-marketers and e-designers develop strategic tools, in order to overcome risks and physical limitations inherent to online purchase, developing trust, security and service in order to increase Internet shopping sales. In coming years electronic markets may dramatically change the way products are bought and sold. The shifting from traditional to electronic commerce retention practices such as cybersecurity, trust, on-time delivery, product return policies, reasonable prices, product performance, and follow-up service and support seem to remain very important to customer loyalty in e-commerce (Smith, 2002).

Besides, embracing product and service attractiveness from marketing and consumer research enhances the e-commerce research on repeat purchase intention. These two additional constructs are relevant and meaningful since the main objective of e-commerce should remain focused on the commercial exchange of goods and services albeit through a different transaction channel.

These study findings demonstrate that product offer is positively and significantly associated with customer satisfaction. Interestingly, product offer does not explain significantly repeat purchase intention. However, the overwhelming importance of product offer (i.e. diversity, attractiveness) on a global e-marketspace signals another rich frontier for e-commerce researchers to explore, particularly for design science researchers. Information technology can enhance online product presentations and virtual try, by adding new technological dimensions or features to communicate and augment product performance and sensorial experiences, develop product recommendation systems by matching customer profiles or support product customization; these issues lie at the heart of e-commerce research. Moreover, interactive technology may facilitate consumers' extra-role behaviors and the product co-creation processes that are commonly indicative of consumers' strong participation and co-value creation with companies.

Studies in similar directions should be encouraged for developing a more comprehensive knowledge on e-commerce and online consumer behavior.

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Appendix

Factor correlation with survey items

<i>Internet Purchase Experience Satisfaction</i>		
<i>Factor</i>	<i>Survey Item</i>	<i>r</i>
<i>Security</i>	1- Payment security	0.823
	2- Trust in supplier	0.720
	3- Privacy of purchase	0.688
	4- Personal-sales absence	0.680
	5- Pleasant way of buying	0.629
<i>Product Offer</i>	6- Easy to compare products' characteristics	0.815
	7- Diversity of products' brands	0.689
	8- Product guarantee	0.676
	9- Price reduced products	0.665
	10- Possibility to return	0.552
<i>Convenience</i>	11- Fast delivery	0.745
	12- Easy way of buying	0.683