

The Impact of Customer Perceptions and Satisfaction on E-Loyalty

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As Internet use continues to increase, companies have to emphasize the understanding of the implications of its use on long term purchase behavior, in terms of satisfaction and loyalty. Ultimately, companies should be interested in consumer perceptions and the factors that play a role in following a certain behavior over an extended period of time. Attaining a successful marketing program compels companies to fully connect with their targeted customers. Therefore, this paper aims to propose a new model that examines relationships between cognitive – affective – conative constructs in an e-shopping environment.

Keywords: *online consumer behavior, perceived usefulness, perceived ease of use, perceived value, customer satisfaction, customer loyalty, structural equation model, online shopping.*

JEL Classification: *M31*

1. Introduction

Consumer perception of the online environment is critically important in influencing the success of e-commerce, in terms of engaging in such activities, feeling satisfaction in a highly impersonal environment, and fostering loyalty for companies' e-customers. There has been an impressive growth in the number of Internet users and e-tailers.

Online marketing offers unique benefits. The internet has changed how consumers engage with brands. It is transforming the economics of marketing and making obsolete many of the traditional strategies and structures. For marketers, the old way of doing business is no longer sustainable (Edelman, 2010). By now, everyone acknowledges the fact that technology is shifting toward the digital world—the Internet, computers, cell phones, and social media—with a major impact on the behavior of producers and consumers.

A 2012 report from BCG assesses that more than a billion Internet users are already using mobile devices to purchase products and services, exhibiting a profound change in decision making process. As per-store decline, all retailers will need to reconsider the role of their brick-and-mortar assets, rethink their physical locations, and re-seize them to meet changing consumer needs. This reevaluation may transform how many companies operate and can lead to massive changes in market shares, the retailer landscape, and commercial real estate (BCG, 2012; Vinerean, 2013, p.10). Under these premises, the growth and transformational potential of online shopping services is undeniable.

In general, online services can be defined as services that are produced, supplied or consumed through the use of a network technology, such as Internet-based systems and mobile solutions (Vinerean, 2013, p.10). Further, due to technological advancement, studies have to examine consumer response on

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online services and how they have the potential to affect future online consumer behavior, in terms of searching, evaluating, purchasing, consuming, and re-buying or disposing of products and services. Thus, marketers have to revolutionize consider online consumer behavior, as new questions arise regarding the buying process. For example, how do customers perceive online shopping? How do perceive usefulness and perceived value influence online satisfaction of customers? How strong is the relationship between satisfaction and loyalty in an e-setting? This paper seeks to address these questions, by focusing on constructs of loyalty and satisfaction and considering the role of perceived usefulness, perceived ease of use, and perceived value in an online context.

With this research we provide insights to the online marketing and online consumer behavior literature, in general, and to promoting a new model on developing and enhancing e-loyalty, in particular. The present research is interesting for both academics and online marketing practitioners.

This paper provides a literature review of the five concepts that will be included in this new model, and continues with a primary research. The aim of this research is to empirically investigate how to create loyalty based on a cognitive-affective-conative framework for online shopping behavior. Finally, in the last section of the paper, we provide the contributions of the research, the managerial implications, and limitations of the research.

2. Literature Review and Conceptual Framework

2.1. Perceived Usefulness

In terms of studying consumer behavior in an online environment, the technology acceptance model (TAM) (Davis et al., 1989, pp.982--1002) is highly used. TAM is adapted from the theory of reasoned action (TRA) and its main objective is to provide a better understanding of the determinants of information technology acceptance in general; however it can be adjusted to explain e-commerce acceptance, in particular. The technology acceptance model (Davis et al., 1989, pp.982--1002) originally suggested that two beliefs- perceived usefulness and perceived ease of use - are instrumental in explaining the variance in users' intentions. Perceived usefulness is defined as "the prospective user's subjective probability that using a specific application system will increase job performance (Davis et al., 1989, p. 985)." Lin (2007) definition of perceived usefulness in virtual communities as users' belief in their ability to obtain information and services, share their experiences with others, and enhance their performance in information exchange.

2.2. Perceived Ease of Use

The other important variable of TAM with impact on understanding the acceptance of e-commerce is perceived ease of use. This variable refers to "the degree to which the prospective user expects the target system to be free of effort (Davis et al., 1989, p. 985)." In other words, perceived ease of use is dictated by what the system can do and what it allows its customers to do, i.e., the capabilities embedded in the e-service technology.

2.3. Perceived Value

Holbrook (1994, p.22) proclaimed that customer value represents 'the fundamental basis for all marketing activity'. Perceived value represents the difference between the benefits a customer receives from a company and the associated costs a customer encounters. Perceived costs can include the obvious monetary sacrifice, but also nonmonetary costs such as time, energy, stress. In the case of online shopping, a successful shopping experience can be determined by the value of overall e-store performance, the value of the time spent shopping, the value of the product price and the effort involved in shopping (Sirdeshmukh et al., 2002, pp. 15--37). Also, in terms of online perceived value, Chen (2012, pp.202--210) proposed that it refers to the overall evaluation of the extrinsic cues of the target e-retailer, based on customers' perceptions of what they received and what their input to the shopping experience was (Chen, 2012, pp.202--210).

2.4. Customer Satisfaction

Previous research have exhibited the existence of two different conceptualizations of customer satisfaction, namely transaction-specific and cumulative (Anderson, 1973, pp. 38--44; Anderson, Fornell, Lehmann, 1994, pp. 53--66; Fornell, 1992, pp. 6--21). The transaction-specific customer satisfaction reflects a post-choice evaluative judgment of a specific purchase occasion (Anderson, 1973, pp. 38--44). In turn, this type of satisfaction may serve as a better predictor of customer loyalty.

In comparison, cumulative customer satisfaction represents an overall evaluation based on the overall experience with the goods and services of a particular firm over time (Oliver, 1980). Some

researchers (Parasuraman, Zeithaml, and Berry, 1988, pp. 1--40) consider overall satisfaction to be primarily a function of perceived service quality. In an online commercial setting, customer satisfaction represents the contentment of customer regarding their prior purchasing experience with a given e-commerce firm (Anderson and Srinivasan, 2003, pp. 123--138).

In this paper, satisfaction represents a consumer's affective response to an online purchase, following the cumulative conceptualization. Thus, we consider satisfaction as an affective component in the conceptual framework.

2.5. Loyalty

Loyalty represents a crucial concept in marketing that has been the subject of discussion and research over the past 50 years. In terms of an overall accepted definition, loyalty represents a repeated purchase behavior exhibited over a sustained period and driven by a favorable attitude toward the subject (Dick and Basu, 1994, pp. 99--113; Oliver, 1999, pp.33--44), including both attitudinal and behavioral aspects (Casalo, Flavian, and Guinaliu, 2008, pp. 325--345; Jacoby and Chestnut, 1978). Oliver (1999, pp.33--44) expanded this widely accepted idea and defined loyalty as 'a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior.'

Due to the proliferation of Internet and its increasing impact on marketing, a new form of loyalty started to surface, namely 'e-loyalty'. Loyal customers often will, over time, bring in substantial revenues and demand less time and attention from the firms they patronize. Anderson and Srinivasan (2003, pp. 123--138) defined e-loyalty in the context of e-commerce as a customer's favorable attitude toward the e-retailer that leads to repeat buying behavior. Thus, the conceptual framework for loyalty in an online setting is similar to the traditional understanding of this variable, although certain differences arise in terms of e-consumer behavior and online marketing. Srinivasan et al (2002, pp. 41--50) identify customization, contact interactivity, cultivation, care, community, choice and character as generating e-loyalty. Chang and Chen's (2009, pp. 2927--2944) study examined e-loyalty in terms of customization, interactivity, convenience, and character.

This paper regards e-loyalty as a favorable attitude for e-commerce that instigates e-customers to repeat their online buying behavior and further recommend certain e-tailers to their peers. Therefore, e-loyalty encompasses a conative and action component, by considering the likelihood or tendency of an individual to undertake a particular course of action or behave in a particular manner (re-buying in an online setting or recommending a e-commerce site).

3. Research Hypotheses

3.1. Relationship Between Perceived Ease Of Use and Perceived Usefulness

In this model we will introduce a well-established relationship proposed by Davis in 1986 through his technology acceptance model, set in accordance with the theoretical basis. This relationship is meant to show how perceived ease of use of e-commerce can influence the usefulness consumers may perceived regarding a switch to this new shopping channel, in the context of fostering satisfaction and loyalty in an e-setting. Hence, we hypothesize:

H1: Perceived ease of use is positively associated with customers' perceived usefulness of online shopping.

3.2. Relationship Between Perceived Usefulness and Perceived Value

In an online environment, customer perceived value can be defined as the net benefits resulting from a transaction with an online vendor. Especially online, a marketer can increase customer value by offering more benefits (economic, functional or emotional), and consequently by instigating the idea of how useful Internet retailing is for them. More specifically, as a consumer acknowledges that e-shopping has the capability to be used advantageously, he will perceive more value in that specific marketing object. Therefore, this hypothesis seeks to detect a direct relationship between the two constructs:

H2: Perceived usefulness is positively associated with perceived value.

3.3. Relationships Between Perceived Usefulness and Satisfaction

Drawing from TAM, perceived usefulness captures the instrumentality of IS use, whereas perceived ease of use taps into the self-efficacy dimension. The Internet is a relatively new form of information technology. If customer perceived ease of use and perceived usefulness of shopping using the Internet does not outweigh customer losses occasioned by factors such as impersonal experiences, technical difficulties, and learning effort, then customers may simply revert their patronage back to traditional channels (Yang and Peterson, 2004, pp. 799--822). This being the case, the perceived usefulness and ease of use of Internet transactions play a pivotal role in customer satisfaction with online services.

Bhattacharjee (2001, pp. 351--370) proposed that because perceived usefulness and ease of use are the primary motivators of IS acceptance, it is plausible that they can also influence subsequent continuance decisions. Nonetheless, several studies empirically tested the relative effects of perceived usefulness and ease of use during pre-acceptance and post-acceptance stages of IS use and found that (1) usefulness has a great impact on attitude during both stages of IS use, and (2) ease of use has an inconsistent effect on attitude in the initial stages, which seems to further subside and become non-significant in later stages (Davis et al. 1989, pp.982--1002; Karahanna et al. 1999, pp. 183--213; Bhattacharjee, 2001, pp. 351--370). Therefore, we propose the following hypothesis:

H3: Perceived usefulness is positively associated with consumer satisfaction in an online shopping setting.

3.4. Relationship Between Perceived Value and Satisfaction

Woodruff (1997, pp.139--153) argues that perceived value is customer cognition of the nature of relational exchanges with suppliers, and satisfaction reflects customers' overall feeling derived from perceived value. As mentioned earlier, we view perceived value as a cognitive component a customers in an e-setting and satisfaction as an affective construct. Therefore, based on Fishbein and Ajzen's (1975) behavioral model, cognition is significantly influenced by affect. Although there are various studies that examine and empirically test this relationship in a traditional setting (Anderson and Mittal, 2000, pp. 107--120), the online environment does not overemphasize this connection only with attitude as a mediator. Thus, it is proposed that:

H4: Perceived value will have a positive influence on online customer satisfaction.

3.5. Relationship Between Satisfaction and Loyalty

Traditionally, satisfaction has been a main determinant of loyalty (Dick and Basu, 1994, pp. 99--113), and similarly online satisfaction can influence e-loyalty. Various studies (Anderson and Srinivasan, 2003, pp. 123--138; Chang and Chen, 2009, pp. 2927--2944) investigated the impact of customer satisfaction on customer loyalty in the context of e-commerce. Loyal customers are not necessarily satisfied customers, but satisfied customers tend to be loyal customers (Fornell, 1992, pp. 6--21). Therefore, e-satisfaction needs to be an important objective of online companies in order to develop e-loyalty. Thus, we hypothesize:

H5: Customer satisfaction is positively associated with e-loyalty.

The research model in Fig. 1 shows the hypotheses proposed for this new model.

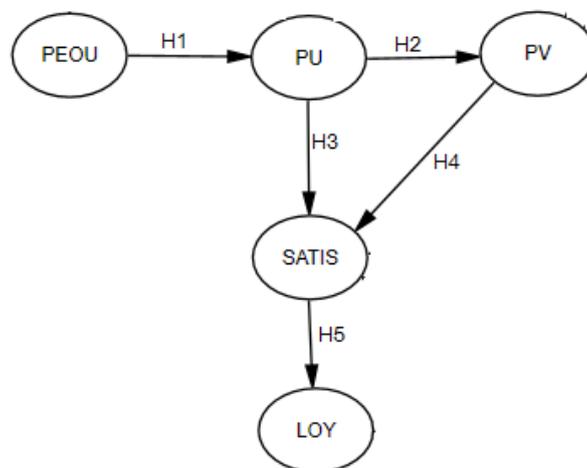


Figure 1. Research proposed model

Note: PEOU = perceived ease of use, PU = perceived usefulness, PV = perceived value, SATIS = online customer satisfaction, LOY = online customer loyalty

4. Research Methodology

4.1. Research Context

The research setting for this paper refers to e-purchasing services, due to their increasing popularity among consumers. An online shopping context was selected because shopping is an information-intensive activity that implies using e-services. Through this research we will propose a new model that will include cognitive – affective – conative constructs in an e-shopping environment.

The investigated and proposed model is based on a quantitative marketing research from primary sources. One of the most important contributions of a marketing research is to define the marketing research problem that requires the provision of marketing solutions (Malhotra and Birks, 2007, p.15). The problem definition for this conducted research is in regard to the developing and enhancing online customer loyalty in relation to online shopping services.

4.2. Measurement and Research Instrument

Five constructs were measured to form this new model. Constructs were measured using multiple-item scales, drawn from pre-validated measured in marketing research and reworded to reflect the context of online shopping. All these dimensions have been previously studied, providing a large pool of existing valid items to use. The participants indicated their agreement with a set of statements using five-point Likert scales (ranging from “strongly disagree” to “strongly agree”) drawn from previously validated instruments, as shown in Table 1.

Perceived value items were adapted from Sirdeshmukh et al. (2002) with a three-item scale. The scales for perceived usefulness and perceived ease of use were previously used in existing studies on the technology acceptance model (Venkatesh and Davis (2000, pp.186--204); Davis et al., 1989, pp.982--1002). Satisfaction was measured using scale items adapted from Bhattacharjee (2001, pp. 351--370), Zeithaml et al. (2002, pp. 362--375). This scale captured respondents’ satisfaction levels along five-point scales anchored between three semantic differential adjective pairs: dreadful / delighted, very dissatisfied / very satisfied, frustrated / contented. Loyalty was measured through five items adapted from Dick and Basu (1994, pp. 99--113), Too et al. (2001, pp. 287--319), and Shankar et al. (2002, pp. 317--330). The psychometric properties of the measures are provided in Table 1.

Table 1. Constructs used in the model

<i>Dimension</i>	<i>Dimension abbreviation</i>	<i>Measure items</i>	<i>Research</i>
Perceived value	PV	PV1: Considering the money I pay for buying products from e-stores, Internet shopping is a good deal. PV2: Considering the effort I make in shopping online, I consider buying products from e-stores to be worthwhile. PV3: For the risk involved in online shopping, I would say internet shopping is of value.	Sirdeshmukh et al. (2002)
Perceived usefulness	PU	PU1: I think that online shopping is very useful to my life in general PU2: I think that online shopping is helpful to improve my performance on the internet. PU3: I think that online shopping is helpful to enhance effectiveness of my life.	Davis et al. (1989)
Perceived ease of use	PEOU	PEOU1: I find online shopping clear and understandable PEOU2: I find that online shopping does not require a lot of mental effort PEOU3: I find online shopping easy to use	Venkatesh and Davis (2000); Davis et al. (1989);
Satisfaction	SATIS	SATIS1: My overall satisfaction (e.g. e-store environment, product, service) to online shopping is: Dreadful ----- Delighted (5points) SATIS2: When I consider my experience of online purchasing I am: Very dissatisfied -----Very satisfied (5points)	Bhattacharjee (2001); Zeithaml et al.(2002);

Loyalty	LOY	<p>LOYB1: For me, online shopping is the best alternative in my consideration.</p> <p>LOYB2: I buy online on a regular basis.</p> <p>LOYB3: The internet stimulates me to buy repeatedly.</p> <p>LOYA1: I would recommend online shopping on social media websites (blogs, Facebook, Twitter, and others)</p> <p>LOYA2: I am proud to tell my family and friends that I buy products online and from my usual e-store.</p>	Dick and Basu, (1994) ; Too et al. (2001); Shankar et al., (2002);
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4.3. Sample and Data Collection

In light of the marketing research problem, this research investigates consumers who display online satisfaction and most importantly e-loyalty in an Internet retailing setting. The primary scope of this study is to understand online shopping behavior of consumers who accept this type of e-commerce. A web-based consumer survey was used for the data collection. From January to June 2013, an online survey was posted on various forums devoted to online shopping, and members we invited to support this survey. The study used primary data, namely data originated specifically to address the research problem.

The online survey generated 107 usable questionnaires. Table 2 presents the profile of the respondents, as well as the screening questions which show high levels of experience regarding the use of internet in general, and online shopping in particular.

Table 2. Respondents' profile

		Frequency	Percentage (%)
Sex	Male	38	35.5
	Female	69	64.5
	Total	107	100.0
Country	Australia	7	6.5
	Brazil	2	1.9
	Denmark	3	2.8
	France	3	2.8
	Germany	7	6.5
	Greece	1	.9
	India	5	4.7
	Poland	1	.9
	Romania	21	19.6
	Spain	7	6.5
	UK	14	13.1
	USA	36	33.6
	Total	107	100.0
Age	18-25	74	69.2
	26-30	21	19.6
	30-40	6	5.6
	Over 40s	6	5.6
	Total	107	100.0
Experience with Internet	2 - 3 years	5	4.7
	3 - 4 years	1	.9
	4 - 5 years	4	3.7
	5 - 6 years	11	10.3
	Over 6 years	86	80.4
	Total	107	100.0
Experience with online shopping	I usually just search for information on e-commerce sites, but I never bought anything	2	1.9
	I purchased just once from an web retailer	11	10.3
	I purchased more than once from web retailers	94	87.9
	Total	107	100.0
Frequency of online	Once	16	15.0

shopping in the last year	2 or 3 times	17	15.9
	4 or 5 times	31	29.0
	6 or 7 times	16	15.0
	7 or 8 times	8	7.5
	More than 8 times	19	17.8
	Total	107	100.0

5. Empirical Analysis and Results

5.1. Exploratory Factor Analysis

The empirical analysis for this paper started with exploratory factor analysis (EFA), which was used to reduce the number of scales assigned to each elaborated online behavior dimension. EFA was conducted in SPSS, using the Principal Components method, in order to extract the factors. Varimax was used as the rotation method for the analysis; however the rotation only applies when more than one factor is extracted for each dimension and this was not the case for this paper. As a clustering criterion, the Schwartz’s Bayesian Criterion (BIC) was used.

Additionally, we used the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) in order to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate that the factor is relevant. The psychometric properties of the measures developed in the questionnaire are presented in Table 2, and the results for the exploratory factor analysis are shown in Table 3.

The scales were checked for internal consistency and reliability through Cronbach’s alpha. This step validates the scales for EFA and future analysis. Reliability is identified by Cronbach’s alpha with a minimum of 0.70 (Cronbach, 1970). As shown in Table 3 all values were above the recommended level of 0.7, with values that vary from 0.737 to 0.802.

Table 3. Descriptive Statistics and EFA Results

Dimension	Items	Average	Standard deviation	Factor loading	Eigenvalue	% of Variance	KMO	Cronbach’s alpha
Perceived value (PV)	PV1	3.91	1.051	0.881	1.970	78.666	0.660	0.737
	PV2	3.82	1.071	0.879				
	PV3	3.34	0.879	0.749				
Perceived usefulness (PU)	PU1	3,87	0,982	0,864	2,151	71,683	0,704	0,802
	PU2	3,21	1,026	0,817				
	PU3	3,50	1,004	0,858				
Perceived ease of use (PEOU)	PEOU1	3,84	0,859	0,773	1,840	71,343	0,750	0,774
	PEOU2	3,55	1,135	0,747				
	PEOU3	4,01	0,837	0,828				
Satisfaction (SATIS)	SATIS1	3.97	0.444	0.832	2.680	89.302	0.794	0.814
	SATIS2	3.98	0.713	0.910				
	SATIS3	3.97	0.806	0.887				
Loyalty – (LOY)	LOYA1	3.36	1.261	0.878	3.230	74.601	0.711	0.743
	LOY2	3.45	1.215	0.889				
	LOY3	3.71	1.037	0.763				
	LOY4	3.65	1.029	0.846				
	LOY5	3.21	1.227	0.890				

For this newly proposed model, one factor was extracted for all the dimensions studied. The criteria used to identify and interpret the factors was that each element should have a factor loading greater than 0.7 and Eigenvalues greater than 1 (Field, 2005, p.389-395). Also, the eligibility of the factors can also be observed in terms of the variance explained by each resulted factor, as the variation exceeds 70%. The validity of the factors can also be noticed in terms of the Kaiser-Meyer-Olkin test with values greater than 0.5, in a range from 0.660 to 0.794.

5.2. Confirmatory Factor Analysis

The collected data were tested for reliability and validity using confirmatory factor analysis (CFA). The model included 12 items that described five latent constructs: perceived value, customer satisfaction, perceived usefulness, perceived ease of use, and customer loyalty.

The CFA implies that all five dimensions covary with each other, as each dimension consists of its observed scale items. We used the maximum likelihood estimate and the modification indices technique in AMOS; that exhibited a small number of covariances of the residues for loyalty and perceived ease of use, which were taken into consideration in order to improve the model. The CFA model generated in order to explain loyalty, a conative construct, in terms of affective (customer satisfaction) and cognitive elements (perceived value, perceived usefulness, perceived ease of use) met Hu and Bentler’s (1999, pp.1--55) recommended values in order to demonstrate a satisfactory fit: $\chi^2 = 309.616$, $df=63$, $p=0.001$, $\chi^2 / df = 3.915$, $GFI = 0.921$, $NFI = 0.912$, $RFI = 0.909$, $CFI = 0.916$, $RMSEA = 0.081$, $AGFI = 0.843$.

In order to measure the reliability of the CFA, the constructs of the research model were evaluated in terms of convergent validity, and discriminant validity of the theoretical constructs of this research in order to rate the evaluation model (Vinerean, 2013, p.13).

Reliability was examined in terms of the composite reliability values (CR) (Vinerean, 2013, p.38). The reliability requirement is met if all values pass an acceptable level of 0.6 (Bagozzi et al., 1991, pp. 421--458) or 0.7 (Gefen et al., 2000, pp.1--77). Most of the values met both acceptable levels, however, the CR value of 0.693 for perceived ease of use met only the level proposed by Bagozzi et al. (1991, pp. 421--458), although the value was close to Gefen et al.’s level. The other values range from 0.783 to 0.865 (Table 4).

Convergent validity represents the extent to which a measure is correlated with other constructs in a single variable measurement. Convergent validity was assessed for the measuring scales by using two criteria suggested by Fornell and Larcker (1981): (1) the loading factors of the confirmatory model should be significant and greater than 0.7; (2) the average variance extracted (AVE) for each variable should exceed the variance due to the measurement error of the constructs (namely, it should surpass a minimum level of 0.5) (Vinerean, 2013, p.38). In terms of the first condition, the loadings of one component (PEOU2) did not subscribe to the 0.7 threshold and it was removed from further analysis, namely structural equation model. The second condition was achieved for all of the model’s variables observed in Table 4 with values between 0.535 and 0.694, proving the convergence validity of the CFA.

Discriminant validity assesses the extent to which a concept and its indicators differ from another concept and its related indicators (Bagozzi et al., 1991, pp. 421--458). Discriminant validity was evaluated by using the criteria recommended by Fornell and Larcker (1981, pp. 39--50), namely that the square root of the average variance extracted should exceed the correlation shared by a particular latent variable model and the other constructs of the model. In addition, in order to ensure discriminant validity, Hair et al. (1998) suggested that the correlation coefficients between the constructs should be less than 0.9 in order to display discriminant validity and be considered acceptable in a particular CFA (Vinerean, 2013, p.38). Table 4 presents the correlations between the constructs and the square root of AVE is displayed on the diagonal of the table. These research variables have discriminate validity.

Table 4. Confirmatory factor analysis results

Latent constructs	CR	AVE	Correlations between factors				
			LOY	PU	PV	SATIS	PEOU
LOY	0.865	0.562	0.750				
PU	0.783	0.564	0.610	0.751			
PV	0.819	0.694	0.132	0.512	0.833		
SATIS	0.807	0.676	0.743	0.599	0.535	0.822	
PEOU	0.693	0.535	0.505	0.729	0.629	0.718	0.731

Note: CR= Composite Reliability values, AVE = Average Variance Extracted; The diagonal values (in bold) are the square root of AVE ($AVE = \sum L_i^2 / (\sum L_i^2 + \sum Var (E_i))$)

The confirmatory factor analysis for the study of model that consists of cognitive – affective – conation constructs that explain online shopping behavior has been established as acceptable and valid; therefore, we can proceed to study and model the structural equations.

5.3. Structural Equation Model

Structural equation modeling estimates the unknown coefficients in a set of linear structural equations, as it assumes there is causal structure among a set of latent variables, and that the observed variables are indicators of the latent variables (Vinerean et al., 2013, p.84). A structural equation model represents a series of hypotheses about how variables in the analysis are generated and related (Hu and Bentler, 1999, pp.1--55).

This newly proposed model was tested for examining the hypothesized relationships regarding cognitive –affective – conative constructs in an e-shopping environment. Comparison of all fit indices, with their corresponding recommended values, indicated a good model fit as can be observed in Table 5.

Table 5. Model accuracy measurement

Measurement	Measurement model result	Recommended values
χ^2	24.954 (p=0.00, 7df)	$p \leq 0.05$
χ^2 / df	3.564	≤ 5
AGFI	0.885	≥ 0.80
GFI	0.954	≥ 0.90
NFI	0.934	≥ 0.90
RFI	0.890	≥ 0.90
CFI	0.48	≥ 0.90
RMSEA	0.096	≤ 0.10

Note: χ^2 = Chi-square, χ^2 / df = ratio of Chi-square and degrees of freedom, AGFI = Adjusted Goodness of Fit Index, GFI = Goodness of fit index, NFI = Normed fit index, RFI = Relative fit index, CFI = Comparative fit index, RMSEA = Root mean square error of approximation.

Table 6 reflects information regarding the unstandardized and standardized coefficients estimates, statistical significance, and standard error of each relationship. It also shows the paths to the proposed hypotheses. Figure 2 depicts the standardized coefficient estimates.

Table 6. Summary of the hypotheses testing

Hypotheses	Significance	Unstandardized Regression Weights	Standardized Regression Weights	Standard Error	Hypothesis Result
H1.PEOU→PU	***	0.789	0.759	0.103	Confirmed
H2.PU→PV	***	0.686	0.725	0.076	Confirmed
H3.PU→SATIS	**	0.392	0.404	0.139	Confirmed
H4.PV→SATIS	*	0.403	0.394	0.153	Confirmed
H5.SATIS→LOY	***	0.718	0.730	0.072	Confirmed

*** Significant at a 0.001 level (Two-tailed), ** Significant at a 0.005 level (Two-tailed),

* Significant at a 0.010 level (Two-tailed)

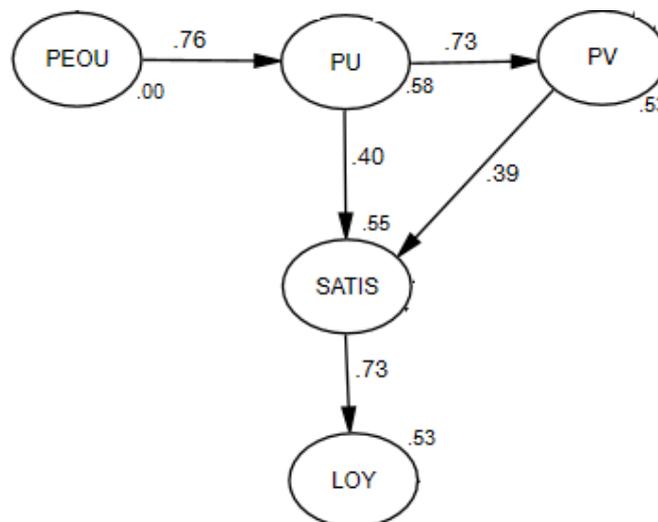


Figure 2. The standardized results of the research model

Note: PEOU = perceived ease of use, PU = perceived usefulness, PV = perceived value, SATIS = online customer satisfaction, LOY = online customer loyalty

The first relationship studied in this model refers to the well-known connection between perceived ease of use and perceived usefulness. The PU - PEOU relationship is represented by a beta coefficient with a value of 0.76, at a 0.001 significance level, denoting the importance of emphasizing in online marketing outlets the accessibility of online purchases, so that consumers can perceive these services as having a high utility for them, and then move on to the use or reuse electronic commerce and e-services constantly and long-term, with positive repercussions for web retailers (Vinerean, 2013, p.47).

Perceived usefulness is positively associated with perceived value, rendering support for H2. Therefore, this relationship has been established to be significant and with a great influence on customers' online perceived value ($\beta = 0.725$) in relation to electronic purchases. Moreover, it displays a variance of 53% in perceived value.

In this newly proposed model, online satisfaction is determined by perceived usefulness and perceived value of e-shopping. In accordance with hypothesis 3, the relationship between perceived usefulness and online satisfaction was supported and reflects a moderate score ($\beta = 0.404$). Hypothesis 4 is also significant in the model, as perceived value impacts e-satisfaction with a beta coefficient of 0.394. PU and PV jointly explain 55% of the variance in online customer satisfaction.

Lastly, in the final stages of the model, H5 examined the extent to which satisfaction represents a determinant of e-loyalty. Thus, there is a strong relationship between customer satisfaction and loyalty to buy or recommend online shopping services, and this relationship has an appointed score of 0.73 with significant statistical perspective in the proposed model, , while explaining 53% of the variance in online customer loyalty. In summary, all of the model's hypotheses are confirmed and accepted.

6. Discussion and Conclusion

6.1. Theoretical Contributions

This paper empirically tests the interrelationships among cognitive, affective and conative constructs in an Internet retailing setting. As cognitive constructs we used perceived value, perceived usefulness and perceived ease of use. We used a well-known relationship extracted from technology acceptance model in order to exhibit how consumers' perceived ease of use of Internet retailing has an impact on their perceived usefulness. More specifically, we tested how e-customers perceive that their adoption of online shopping can enhance their overall experience and activities, in relation to fostering e-satisfaction that could further lead to e-loyalty. Perceived value is another cognitive dimension that was studied in relation to its affective counterpart. In other words, in this model perceived value is customer cognition of the nature of relational exchanges with suppliers, and satisfaction reflects customers' overall feeling derived from perceived value (Woodruff, 1997, pp.139–153). Particularly online, service intangibility may take new forms and customer perception, both in terms of value, ease of use and usefulness, should be determined in an appropriate manner and with targeted online efforts as they represent direct and indirect influencers of consumer satisfaction.

The affective construct of customer satisfaction is considered an antecedent of loyalty. This relationship is supported by multiple studies, including this one, as increased satisfaction tends to lead to increased e-loyalty. Loyal customers are not necessarily satisfied customers, but satisfied customers tend to be loyal customers (Fornell, 1992, pp. 6--21). Satisfying customers should thus be of extreme importance to web retailers in their efforts to keep customers loyal. Therefore, loyalty should represent the ultimate objective of commitment to re-patronize or re-purchase a preferred product and recommend it to peers.

6.2. Managerial Implications

The research has important contributions and input for online service providers whose business models and revenue stream depend on online consumer behavior. Companies wishing to compete in an electronic marketplace need to understand what type of clients they are addressing and develop their online marketing strategy in line with their findings, to capture new electronic customers and to retain the existing ones, by emphasizing loyalty.

In an e-commerce context, building e-loyalty is a difficult challenge that may require consideration by online companies that wish to differentiate themselves from competitors. Nowadays, online companies are focusing on launching e-loyalty programs in which customers obtain substantial benefits by doing most of their online shopping through a single website. This study suggests that in order to achieve this objective of conative perspective, online companies should consider focusing on customer satisfaction first, in order to lock in the affective perspective. Cognitive constructs such as perceived value, perceived usefulness and perceived ease of use should play a major role in marketing strategies. In the beginning of the transaction

stage, customers search for information about e-service offerings, but most importantly they want to be assured about the benefits of pursuing such an e-commerce channel and how it can enhance their productivity.

These assessing activities are comparable with other online companies' websites. If a website that is logical and convenient to use facilitates fast completion of a transaction, it is likely that customers will come back, particularly for those goal-oriented shoppers who are busy and more interested in ease of access and information about products and customer service (Souitaris and Balabanis, 2007, pp. 244--261). Moreover, loyalty is extremely important because it provides information on future customer behavior, and the likelihood of future use or recommendation of the company or brand to other customers (Reichheld, 2003, pp. 46--54).

6.3. Limitations and Future Directions

The limitations of the study include the ones commonly associated with surveys. Pinsonneault and Kraemer (1993, pp.75--105) have identified several weaknesses in survey-based studies, such as: unsystematic and inadequate sampling procedures, low response rates, weak linkages between units of analysis and respondents, and over-reliance on cross-sectional surveys where longitudinal surveys are really needed. While the representativeness of the sample can always be improved, for this research special efforts were made to have high response rates and for the sample to be reflective of the target population. Further, as with other Internet-based studies, the sample was skewed toward younger, more educated demographics. Nonetheless, such consumers are the main target audience for online marketers.

Considering the fact that this analysis was conducted at an international level, the sample size was modest. Even though, the results were consistent with the proposed hypotheses, a larger sample size might have resulted in stronger results for this new model.

Another important limitation of the study was that it did not include in its analysis demographic variables, such as sex, age, social class, and ethnicity. This aspect can prove to be a further area of research by improving and extending the model and including demographic variables as mediation variables.

Moreover, in terms of limitations and future lines of research, the present study analyzes online purchasing behavior without specifying a particular type of product or service, an aspect which should be considered in new studies in order to provide a more specific framework of further validation.

7. References

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