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Online Purchase Determinants of Loyalty: The Mediating Effect of Satisfaction in Tourism

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Abstract

The purpose of this research is to investigate the impact of four online purchase determinants (website image perceptions, routine, website knowledge and innovativeness) on customer loyalty and the mediating effect of customer satisfaction within the context of e-commerce. The research model is tested using data collected from 3188 regular buyers of the national leader in the sector being studied. The statistical analyses were conducted within the Structural Equation Modelling framework. Results show that there is a complete mediating effect of e-customer satisfaction in the relationship between three online purchase determinants – website image perceptions online routine and website knowledge - and e-customer loyalty. The research results provide an important insight into how e-companies can pursue and use delight to highlight customers’ loyalty. These results allow for a better understanding of customer specificities, with practical actions aimed at their real needs and expectations.

Keywords: E-commerce, Online Loyalty, Online Customer Satisfaction, Perceived Website Image, Routine, Knowledge, Innovativeness, Structural Equation Modeling
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Online Purchase Determinants of Loyalty: The Mediating Effect of Satisfaction

HIGHLIGHTS

1) We model the influence of image, routine, knowledge and innovativeness in loyalty;

2) We discuss the mediator role of satisfaction in these relationships;

3) A questionnaire was applied to a sample of 3188 regular online buyers;

4) Results show that there is a complete mediating effect of e-customer satisfaction in the relationship between three online purchase determinants – website image perceptions, online routine and website knowledge - and e-customer loyalty;

5) The research results provide an important insight into how e-companies can pursue and use delight to highlight customers’ loyalty.
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Abstract

The purpose of this research is to investigate the impact of four online purchase determinants (website image, routine, website knowledge and innovativeness) on customer loyalty and the mediating effect of customer satisfaction within the context of e-commerce. The research model is tested using data collected from 3188 regular buyers of the national leader in the sector being studied. The statistical analyses were conducted within the Structural Equation Modelling framework. Results show that there is a complete mediating effect of e-customer satisfaction in the relationship between three online purchase determinants (website image, online routine and website knowledge) and e-customer loyalty. The research results provide an important insight into how e-companies can pursue and use delight to highlight customers’ loyalty. These results allow for a better understanding of customer specificities, with practical actions aimed at their real needs and expectations.

Keywords: E-commerce, Online Loyalty, Online Customer Satisfaction, Website Image, Online Routine, Website Knowledge, Innovativeness, Structural Equation Modeling
1. **Introduction**

In the past years, the Internet has moved from being just a new technology to a normal channel for information, communication, and shopping (Brashear *et al.*, 2009). This means that, nowadays, to use the internet as a source of information and communication is almost as usual—or even more—as using those sources that, less than two decades ago, were the only ones available: reading books or magazines or making phone calls. This new vehicle for communication and transactions has introduced significant changes in our daily lives, creating new opportunities and challenges in a world that is constantly and rapidly changing, as well as for the companies that operate in it.

The online world is full of possibilities, and from a commercial point of view both customers and companies are becoming more and more aware of this new promising and challenging world.

For customers, the Internet advantages consist mostly of a new way of searching and comparing information on products and services, as well as a new, easy and time saving way of buying them. For example, online reviews have an increasingly important role in the consumers’ path to purchase (69% of global consumer) and these consumers are influenced by online reviews when choosing which product to purchase (Deloitte, 2013). Nowadays, in a global world context, 46% of the population uses social media to help make purchase decisions (Nielsen, 2012). The exponential growth of smartphones and tablet users (46% and 98% respectively from 2011-2013), the rise in social media and the need to be connected at all times are only a few signs of the major digital revolution we are currently experiencing (Deloitte, 2013). According to Eurostat, 61% of the population read online news, 54% used online services to manage and use bank services, 52% posted messages to social media and 50% used online services to travel and choose trips (Eurostat, 2012, 2013).

The primary motivation for tourism providers to ensure customer satisfaction is the assumption that such efforts will lead to a higher level of repurchase intention, repeat attendance behaviour, and customer loyalty (Yoon and Uysal, 2005; Oliver and Burke, 1999). High customer satisfaction has been linked to customer retention, market share, loyalty, and
consequently higher company profits (Szymankski and Henard, 2001, Tarasi et al., 2013).

Customer satisfaction and loyalty have become one of the main objectives in all areas of business, especially in tourism due to the higher level of expectations regarding the experience, more than in other industries like banking or other financial sectors, where customers are looking for more functional advantages (Aminu, 2012). One of the most difficult problems is learning how to obtain either satisfaction or loyalty, which involves identifying customers' needs and desires, and transferring them to the product or service specifications offered.

Currently, tourism is one of the most important sectors in major world economies. Despite the crisis, “world tourism continued to rebound from the setbacks” of the past (UNWTO, 2012: 3). In 2012, international tourist arrivals (overnight visitors) worldwide exceed the 1 billion mark for the first time ever” (1,035 million, compared to 955 million in 2011). International tourism receipts reached US $ 1,075 worldwide (UNWTO, 2013: 3).

The importance of understanding what drives customer loyalty within the Internet ecosystem, in particular regarding the purchase of tourist products, creates the need for thorough research on this topic.

Despite previous studies, there is still a clear gap in the literature regarding the identification and assessment of antecedents influencing e-customer loyalty in tourism and, more specifically, regarding e-travel agencies, from the customer point of view and taking customer profile into consideration. There have been a few studies looking at the tourism industry but, mainly concerning traditional products like hotels, restaurants, theme parks, airline business, particular variables regarding service quality, among others. For example, Bowen and Chen (2001), developed and implemented a method to identify attributes that will increase customer loyalty, but particularly in the hotel industry. Also addressing the hospitality industry, Kandampullly and Suhartanto (2000) hypothesised how image and satisfaction can improve loyalty, which is particularly interesting in the hospitality management field, and concluded that these two constructs, supported by resource determinants as housekeeping, reception, F&B and price are positive related with loyalty in the hotel industry. In other context, Ho and Lee (2007)
developed a study in order to predict the capability to guarantee satisfaction and loyalty intention but only using an independent variable, e-travel service quality (assuming a full concept approach where information quality, security, website functionality and responsiveness are included). Huang (2008), identified determinants of e-loyalty in a different context than ours, a B2B context (the one related with wholesaler and retailer travel agencies).

Furthermore, other researchers have presented different models of customer loyalty. The review of these articles shows that diversity, if not divergence, exists regarding the measurement and conceptualization of online loyalty. Toufaily et al. (2013) developed a descriptive meta-analysis of the empirical literature among the determinants of e-loyalty. They concluded that a single study can analyse more than one relationship; however, no studies were found to simultaneously link psychological characteristics, such as inertia and/or innovativeness (Ponnavolu, 2000), with website characteristics, such as website image and familiarity (Horn, 2004). A complementary perspective is the one presented by Floh and Treiblmaier (2006), who reinforced that a model explaining antecedents of loyalty in an industry has to incorporate factors which take into account the characteristics of that specific industry (in that case, the banking industry).

Hence, typically a model trying to explain antecedents of loyalty in the online context has to incorporate factors that take into account the characteristics of the industry being studied as well as those of the medium. In this study we believed it is also important to incorporate some of the customer personal/psychological characteristics when interacting with the industry, tourism, in this medium, online. Thus, the current paper addresses for the first time the study of a set of four online determinants - website image (WI), online routine (OR), website knowledge (WK), and innovativeness (INOV) and their impact on e-loyalty – from the tourism e-customer perspective (in the case of WI, WK) and taking into consideration the personal and specific e-customer profile (concerning OR, INOV) –, mediated by satisfaction, another critical relationship marketing construct most of the times seen as an independent variable and not as a link to join specific e-relationship determinants to loyalty.
Additionally, not only does e-Commerce have its own determinants and defining elements, but also these elements change regarding the specific product category we are considering. Tourism, in this case, is directly associated with individual taste, preferences and lifestyle and, therefore, represents a bigger challenge for online vendors, when satisfying their customer needs.

To accomplish the research aims, a questionnaire was applied to regular online customers of the Portuguese national leader in the studied sector, and a sample of 3188 individuals was analysed. The research hypotheses were tested and the proposed model was validated using Structural Equation Modelling.

The research offers theoretical contributions and expands the understanding of consumer loyalty. Moreover, practical insights are given to the online tourism providers.

2. Literature review and research hypotheses

Customer expectations rapidly changed, powered by new technology and the growing availability of cutting-edge features and services (Sheth et al., 2012). This enabled companies to quickly answer to competitors’ innovations, lowering the impact that product differentiation had on markets. Given this, products became considerably homogeneous and competition increased. Only collaborative relationships with customers proved to be a wise way of distinguishing organizations from their competitors, at a superior level: the augmented product level (Taleghani et al., 2011).

The perceptions that induce consumers in this buying process aren’t linear and that is why it is so important to understand and characterize consumers’ online behavior. Hernández et al. (2010), for example, found that the perceptions that induce individuals to shop online for the first time are not the same that create repurchasing behavior. According to these authors, customer behavior doesn’t remain the same, because past experience creates an evolving perception.

The rapid growth of e-commerce reflects the compelling advantages that it offers over traditional commerce, to both retailers and customers. More specifically, and within the context
of online tourism products and online purchase experience, huge information is generated
electronically that can be stored in data-warehouses and further explored by using big data
analytics software. Nowadays Starwood and Hilton hotel chains have guests’ check in via
mobile phone (Rauch, 2014). Indeed, the tourist experience is being transformed by mobile
technology. Both smartphones and tablets have changed the way tourists process information
and conduct transactions (Diener, 2015). Furthermore, Motorola has developed a
comprehensive mobile hospitality solutions’ portfolio, with the aim of transforming the guest
experience from check-in to check-out with mobility. The range of applications includes mobile
check-in, mobile concierge, mobile restaurant and food services, mobile ticketing, as well as
mobile loyalty programs, among others (Motorola, 2011).

The above studies point critical success factors regarding an effective strategic management of
the digital approach, namely: image and direction of the company, content and design, service
quality, communication, maintenance and monitoring. Each of these categories includes a
number of relevant items that, if taken into account, ensure the company's success in this virtual
context.

Loyalty is nowadays seen as a critical determinant of long term financial performance in
competitive markets (Lai et al., 2009; Reichheld, 1996). This research examines an integrated
model of loyalty. Studies found in the literature often focus on goods producing firms and on
retail stores (e.g. Bloemer and Ruyter, 1997) and little work reports on customers’ satisfaction
and loyalty in the context of service firms (and the few ones that have done it usually study the
relationships between customers and brands in USA). Nevertheless, there is limited evidence
suggesting that consumers do not become loyal the same way in different cultures (Lai et al.,
2009). Thus, consumers’ reactions to service providers and loyalty formation may be unique
and it is important to test that in different cultures. However, the core constructs of the proposed
model are likely universal and the relationship among them can be reasonably consistent across
cultural and structural contexts.
The model proposed in this paper examines the joint impact of a set of four online determinants (website image, online routine, website knowledge, and innovativeness) on e-loyalty, mediated by e-customer satisfaction.

2.1. Website image

The website image is an important dimension of the online relationship, and presents itself as a key element with the ability to influence customer satisfaction, customer loyalty and brand image (Doyle and Fenwick, 1974; James et al., 1976; Bloomer et al., 1998; Sanchez-Franco and Rondan-Cataluña, 2010). In the context of electronic marketing, where the exchange process takes place in a virtual space characterized by greater uncertainty and risk, and where opportunistic behavior provides more room for maneuver than in a physical market environment, image becomes even more important for the success of the relationship (Mostafa et al. 2006; Oh et al., 2008).

In the online context, consumers measure their Internet shopping experiences in terms of perception of evaluation of the online service quality. According to Kim and Lennon (2006) retailers must take into consideration certain dimensions of the online service that affect customers’ perceptions of service quality, which, among other things, has to provide information. This dimension is considered critical regarding apparel retailers since customers can’t feel or examine the product, and therefore need an adequate amount of information to make a purchase decision. The graphic style, like zoom functions and video content, is also crucial (Kim et al., 2009).

Some research has also focused on hedonic elements of a website, as they contribute to the user’s experience (e.g., Cyr et al. 2006). Regardless of the focus being considered, it addresses visual design and usability as a means to drive customer engagement. Hence, it is paramount to understand the impact of the website image on customer loyalty.

A website must be usable, and at the same time engage users. Given the millions of sites available, online vendors must try to understand ways to attract users, retain them, and keep them coming back for more. Switching costs have been studied broadly in the service sectors;
however, there are some major differences in nature between online services and offline
services, such as the restrictions of operation time and its location (Yen, 2010). According to
Pandir and Knight (2006), a key way of achieving that is through the homepage design. In fact,
previous studies have suggested that visual appearance is extremely important in users’
preferences (Shenkman and Jonsson, 2000; Kim and Niehm, 2009), and that consumers prefer
beautiful websites, perceiving them even as more usable. This is critical in order to create a
global experience and an overall and complete website image.

According to Oh et al. (2008), images also contribute to create a feeling of convenience, as well
as to a perception of higher quality merchandise. Regarding online storefront designs,
designation given by Oh et al. (2008) to the Website’s page, it was found that a thematic
storefront, with a design that reflects a store’s identity and presents products in a lifestyle type
atmosphere, will be more appealing and entertaining to costumers, communicating a safer
environment.

Other elements like close-up pictures and zoom functions, 3D virtual product presentation,
and video content improve consumer’s perceptions, enjoyment and involvement (Kim et al.,
2009). According to Koo and Ju (2010), graphics, color and links also have a positive impact on
intention while menus have a negative impact on arousing and pleasure of shopping online.

Furthermore, the presentation of the products - website layout, and design - significantly
increases customer loyalty. Danaher et al. (2006) used a nice set of features (such as graphics,
text, and advertising content) included in websites to try to explain the duration of the visit to a
store. There seems to exist a strong correlation between image and environment that fuels the
customer’s willingness to repeat purchases on the Internet, contributing positively to the overall
impression and satisfaction generated by the organization (Bloomer et al., 1998; Cyr, 2008).

The website image is likely to have an impact on e-customer satisfaction and loyalty
regarding online purchases. Therefore, we propose:

**H1**: Website image positively influences e-customer satisfaction regarding the purchase of a
touristic experience.
2.2. **Online routine**

Motives underlying loyalty behavior can help distinguish between spurious loyalty, which can be described as inertia, and true loyalty, which signifies a commitment to the brand or company. Inertia may be rather durable since it is formed based on habits or routines that enable consumers to cope effectively with time pressures and search efforts (Pitta, Franzak and Fowler 2006).

Consumer loyalty and satisfaction are linked inextricably. Satisfaction is a necessary step in loyalty formation. If the transaction is routine, so that satisfaction is not processed, the depth of loyalty is no deeper than mere performance (Oliver 1999). According to an expansion of the theory of reasoned action (Ajzen 2001; Bentler and Speckart 1979; Eagly and Chaiken 1993), a person's former behavior can explain his or her current behavior. In a similar fashion, a considerable proportion of customers bookmarks their favorite electronic commerce Websites, and is more likely to visit them than other sites. These customers visit the sites out of habit rather than by conscious determination on the basis of perceived benefits and costs offered by electronic businesses.

As in the case of traditional procurement, Foster and Cadogan (2000) argue that online shopping behavior becomes routine after a certain time. These authors consider routine as the condition where a repeat purchase occurs based on situational reasons, which become comfortable and increase customer satisfaction and customer loyalty, rather than due to a high commitment between the parties. Several empirical studies (e.g., Murray and Haubl, 2005) show that retention can be achieved indirectly when a habit exists. Habit is considered as an important factor in explaining repeated purchases (Quinn and Wood 2005). Nevertheless, most previous research on habit focuses on the temporal dimension (i.e. frequency) of the construct, only with little consideration to the effort of the context in which a habit occurs. Some researchers suggest that a weak habit may lower the sensitivity of consumer retention to satisfaction (Anderson and Srinivasan 2003).

Consumers past repeated behavior (i.e. habit) may contribute to continuance behavior. When behavior is repeated and becomes a habit, it is guided by automated cognitive processes,
rather than by elaborate decision processes (Aarts, Verplanken, Knippenberg 1998). Thus, examining the effect of habit on behavioral continuance can improve our understanding of e-customer satisfaction and loyalty.

Corstjens and Lal (2000) explain that this phenomenon is due to a psychological commitment to prior choices and to a customers’ desire to minimize their cost of thinking. This so-called inertia effect is rational because it helps consumers achieve satisfactory outcomes by simplifying the decision-making process, while saving decision making costs (Vogel, Evanschitzky and Ramaseshan 2008; Wong, 2011). This takes place automatically and without a conscious thought. Many studies give empirical evidence for habitual behavior (Anderson and Srinivasan 2003; Rust, Lemon and Zeithaml 2004).

To summarize, there is large evidence suggesting that inertia plays a very important role in consumer choice and satisfaction (Polites and Karahanna, 2012). Online routine is likely to take place due to inertia, since consumers are prone to behave based on habits, convenience, and time saving. The arguments presented lead to the formulation of the second research hypothesis:

H2: Online routine has a positive effect on e-customer satisfaction regarding the purchase of a touristic experience.

2.3. Website knowledge

Bettman and Park (1980) understand product knowledge as the amount of information stored by a specific individual regarding his or her possible buying alternatives, as well as the perception the individual has about his or her own level of knowledge. Customer experiences with a particular website and the search for information, as well as brand familiarity, have been researched as antecedents of customer satisfaction and brand loyalty (Ha and Perks, 2005).

Content availability and depth are often mentioned as the most important reasons for online shopping (Hoffman and Novak, 2009), as well as the quality of information that, coupled with the ability and ease to search for products and prices, increases satisfaction, the intention to visit the web site again, and the willingness to re-purchase (Zeithaml et al., 2002).
With the purpose of contributing to the consumer’s knowledge of the site, online vendors have been concerned about developing the online shopping experience. Several studies have also been conducted in order to find how social presence can be induced on online sites (Hassanein and Head, 2007; Cyr et al., 2007). Besides sociability, other dimensions influencing website knowledge have been researched. According to Childers et al. (2005), both utilitarian benefits (efficiency, speed, lack of irritation) and hedonic benefits (fun, playfulness and entertainment) positively influence the online buying experience and website patronage. Additionally, if e-retailers maintain shopping situations where transactions are secure, private, and certain, e-shoppers are more likely to be inspired to repurchase from the same vendors (Lu et al., 2013).

The knowledge of the website must include different aspects of the physical environment. For instance, the market space will be characterized by greater frequency and regularity in interaction and communication activities, and in greater information sharing and, for that to be possible, “convenience” is critical, which can be defined as the set of customer perceptions regarding the time and effort spent in the utilization or exchange process (Berry et al., 2002).

There are several reasons to expect that knowledge of and experience with the site may contribute to customer satisfaction and loyalty (Casaló et al., 2008), specifically concerning online tourism products. On the one hand, it increases the level of familiarity and comfort of the potential buyer, which encourages positive feelings. Moreover, empirical studies have shown that consumers will more easily access a site they already know and are familiar with than undergo a new search process each time they want to make an online purchase (Smith, 2002; Urban et al., 2009), preferring the prospect of one-stop shop (Narayandas et al., 2002). Familiarity with the website increases the ability to bring forward the website behavior in the future (Casaló, Flávian and Guinaliu, 2008). Nielsen (2000) suggests that most visitors visit websites with specific goals and objectives in mind, and with repeated visits, their familiarity with the website grows. Moreover, consumers cannot be faithful to a site unless they have information about it that goes well beyond what one learns from a simple display.
Knowledge of the site contributes to customer satisfaction, especially in online tourism products, due to the increased level of familiarity and comfort of the potential buyer with the site (Smith, 2002; Urban et al., 2009). Website knowledge involves experience and consumer familiarity with the site. Therefore, the following research hypothesis is established:

**H3:** Website knowledge has a positive effect on e-customer satisfaction regarding the purchase of a touristic experience.

### 2.4. Innovativeness

Innovativeness is defined as the predisposition to buy new products and brands at an early stage, rather than to remain with previous choices and consumption patterns, across a variety of goods and services (Steenkamp et al. 1999). Due to consumers’ intrinsic need for change, the ones high on innovativeness have a decreased tendency to stick to the same purchase response over time (Baumgartner and Steenkamp, 1996). Innovativeness is the degree to which an individual is receptive to new ideas and is regarded as a personality trait.

The establishment of a long term relationship varies with the degree of appetite for innovation shown by customers (Midgley and Dowling, 1978). High long term relationships will generate an attempt to acquire something "unique" (McAlister and Pessemier, 1982). Steenkamp et al. (1999, p.56) define consumers' appetite for innovation as "a predisposition to buy new and different products/brands over previous choices and traditional standards".

Goldsmith (2001) used the Domain Specific Innovativeness Scale to measure how innovative survey participants were with regard to buying online. The author found that an innovative predisposition towards online buying is positively associated with more hours of Internet use, greater Internet purchasing, and higher likelihood of future Internet purchase, but not necessarily in the same website or concerning the same products.

Vandecasteele and Geuens (2010) incorporate different motivations into a multi-dimensional innovativeness scale to better account for the consumer–product relationship. Four types of motivation underlie consumer innovativeness: functional, hedonic, social, and cognitive.
Understanding the effect of innovativeness on adopting an online shopping behavior is important for targeting the right customers (Cowart et al., 2008, Hirunyawipad and Paswan, 2006). In this study, the appetite for innovativeness is understood as the virtual affinity customers have for new products and services (Burns and Krampf, 1992), which means that an online customer with a desire for innovative products tends to be more unsatisfied with and less loyal to one site (Lassar, Manolis and Lassar, 2005).

Other authors, such as Burns and Krampf (1992), have concluded that innovative customers are more involved and have greater knowledge about online products and services, compared with the non-innovative ones. As a result, the first evaluate more alternatives. Innovative consumers tend to get bored more easily with the new product and move forward to explore newer launches. Consequently, the effect of innovativeness will diminish over time, leading to a negative effect on the purchase trend and then, on satisfaction and loyalty.

Customer innovativeness is therefore seen as a predisposition for change. In the current research it might involve receptiveness to consider other websites within the consumer decision making process. Hence, the following research hypothesis is formulated:

H4: Consumer appetite for innovativeness has a negative effect on e-customer satisfaction regarding the purchase of a touristic experience.

2.5. E-customer satisfaction

Website satisfaction refers to a positive navigation experience and perception of a well-designed website (Balasubramanian et al., 2003). Nevertheless, several researchers have focused on the experimental aspect, along with other important elements, to better investigate customer satisfaction (Chancellor, 2009; Jin et al., 2015).

Customer satisfaction is an effective response to a certain purchase; determining its causes and consequences is an important goal in consumer marketing (Chang and Chen, 2009). Satisfaction represents an essential ingredient for a successful business relationship, not only in the context of traditional commerce, but also within business-to-consumer electronic commerce, (Kim et al., 2009). According to Anderson and Srinivasan (2003), a dissatisfied customer is more likely to
search for alternative information and change to a competitor than a satisfied customer. Also, according to these authors a dissatisfied customer is more likely to resist the efforts of the current retailer to develop a closer relationship, and is more likely to take steps to reduce dependence from that retailer.

In traditional commerce, salespeople are the ones responsible for influencing customer satisfaction, but in the context of e-commerce, it is the customer interface that provides information to potential customers and helps to overcome the disadvantages of impersonal sites. According to Chang and Chen (2009), online retailers must focus on assuring interface’s quality, since it positively affects customer satisfaction and consequently customer loyalty.

However, Jiang and Rosenbloom (2004) claim that the influence of satisfaction on customers’ retention isn’t asymmetrical, changing with the purchase stage of the consumer. According to these authors, after-delivery satisfaction has a much stronger influence on both overall customer satisfaction and intention to return than at-checkout satisfaction, and price perception has a direct and positive impact on both variables. That is why online vendors must develop measures to assure the quality of customer service and take advantage of every contact point with the client, especially regarding after-delivery service (Jiang and Rosenbloom, 2004).

To build and maintain costumer trust and loyalty, online vendors must focus on e-service quality before, during and after the transactions assuring, in that way, their satisfaction (Wang, 2003). Hence, hypothesis 5 is proposed:

**H5**: E-customer satisfaction has a positive influence on e-customer loyalty.

### 2.6. E-customer loyalty

Being the main purpose of Relationship Marketing, loyalty is a bidimensional construct that results from the assembly of all marketing efforts to retain existing customers (Trif, 2013).

With e-Commerce growing rapidly and online shopping becoming a trend, the importance of building and maintaining customer loyalty in electronic marketplaces has become an important topic for marketing researchers and practitioners (Gommans *et al.* 2001; Santouridis
and Trivellas, 2010).

As stated by Srinivasan et al. (2002), competing businesses are only a few clicks away, which result in a minimal personal effort for the consumer when comparing online competing products and services. Therefore, retaining customers is a financial imperative for e-vendors, since attracting new customers is more expensive, especially in comparison to traditional stores (Luarn and Lin, 2003). Despite that, proving to customers that the company cares about them and wants to assist them regardless of the short-run profit consequences, helps to create/strengthen the kind of relationship that gains customer loyalty (Anderson and Srinivasan, 2003).

In the current research it is assumed that e-loyalty represents online repeat purchase intention or return visits to a website (Cyr and Trevor-Smith 2004). In the end, loyalty is not won by technology but through the delivery of a consistently superior customer experience (Reichheld and Schechter, 2000). Another important consequence of e-loyalty is word-of-mouth, where the customers recommend and share experiences regarding a certain online store (Palvia, 2009; Srinivasan et al., 2002).

Figure 1 displays the path diagram of the proposed research model, with the five postulated research hypotheses concerning direct effects.

**INSERT FIGURE 1**

### 2.7. Mediating role of E-customer Satisfaction on E-customer Loyalty

Satisfaction has played a mediating role between a number of antecedents (such as website image, online routine, website knowledge, innovativeness) and customer loyalty. Satisfaction with travel experiences contributes to destination loyalty. Yoon and Uysal (2003) studied tourist motivation and extended the theoretical and empirical evidence on the causal relationships among the push and pull motivations, satisfaction and destination loyalty. Johnson and Auh (1998) extended the conceptualization of the satisfaction-loyalty relationship to encompass a trust environment.
Martenson (2007) studied the impact of the corporate store image on customer satisfaction and store loyalty in grocery retailing and found that satisfied customers are loyal to the store. In another study, Bloemer et al. (1998) investigated how image, perceived service quality and satisfaction determine loyalty in a retail bank setting. Image was indirectly related to bank loyalty via perceived quality. In turn, service quality was both directly and indirectly related to bank loyalty via satisfaction. The latter had a direct effect on bank loyalty.

Chi and Qu (2008) sought to understand destination loyalty by examining the theoretical and empirical evidence on the causal relationships among destination image, overall satisfaction, and destination loyalty. The results supported the proposed destination loyalty model: destination image was a direct antecedent of overall satisfaction, and satisfaction in turn had direct and positive impact on destination loyalty.

Lai et al. (2009) examined the relations among service quality, value, image, satisfaction and loyalty in China. Their research findings revealed that image influence satisfaction and customer satisfaction is a significant determinant of loyalty. Also, Abdullah et al. (2000) studied the role that both image of a product or service and customer satisfaction play in determining whether a customer becomes (or remains) a loyal patron.

Hernandez-Lobato et al. (2006) analyzed the causal relationships among three key variables in tourism marketing: image, satisfaction and loyalty. Their study confirmed the strong relationship among the cognitive image service quality, satisfaction and loyalty – related with website knowledge.

Flavian et al. (2006) conducted a study to determine the influence that perceived usability – perceived as website knowledge - has on the user's loyalty to the websites they visit. Greater usability was found to have a positive influence on user’s satisfaction, and this also generated greater website loyalty.

Khalifa and Liu (2007) developed the information systems continuance model in the context on online shopping, using a contingency theory that accounts for the roles of online shopping habit and online shopping experience. They formed online shopping habit as mediated through satisfaction on repurchase intention.
Hence, in the current study, we postulate that:

H6: There is a mediation effect of e-customer satisfaction in the relationship between the online purchase determinants (website image, online routine, website knowledge, and innovativeness) and e-customer loyalty.

The proposed mediation effect is tested in Section 3.4.

3. Research method

3.1. Research design and data collection

A partnership was established with the Portuguese market leader in the online tourism sector in order to use its customer database, which includes 140 000 registered clients. This is an online operator, in a very competitive market, offering several different kinds of tourism products – flights, hotels, holiday packages, experiences … all over the world, either separately or in bundling. The 40 000 clients that can be considered regular online buyers (customers that make purchases at least twice per year) composed the target population of this study. The company placed a banner with a direct link to a web-based questionnaire, both in its website home page and newsletter. Additionally, the company also sent an institutional e-mail to the 40 000 regular buyers, reinforcing the importance of the study and offering a discount voucher of 10 Euros to be used in a future purchase. A sample of 3188 voluntary respondents was obtained within the time limit of one month allowed for data collection. Westland (2010) provides formulas, as well as a history of rules of thumb that can be used for determining the appropriate sample size for structural equation models. In our case, the obtained sample size is large enough to allow using asymptotically distribution free estimation methods.

Regarding methodology, in a first stage, an exploratory study has been developed – using focus groups, with 3 discussions in three different time and space conditions - where the participants were usual customers of online tourism products. Results from the focus group helped the construction of the preliminary version of the questionnaire. Following the recommendations of Bosch and Torrente (1993), the preliminary version of the questionnaire
was than subject to a pre-test in order to identify potential gaps in the construction of the
instrument and problems in the understanding of the questions. Both focus group and the pre-
test were very important in order to gain confidence about the scales to be used and the required
adaptations that had to be made, thus trying to ensure the adequacy of the questionnaire to the
problem under research. Minor changes were then made in order to obtain the final version of
the instrument.

Besides socio-demographic information, the final version of the questionnaire asked for
information on customer satisfaction and loyalty regarding their experiences purchasing online
tourism products, as well as information on customers’ opinions concerning website image,
online routine, website knowledge and innovativeness.

3.2. Data analysis

Descriptive statistics. In terms of profile, 51.4% of the respondents are female. Concerning
age, 44.5% of the respondents are between 25 and 34 years old. Regarding academic
background and internet use, 50% of the respondents have higher education levels and live in
urban areas; 51.1% of the respondents use the Internet preferably at home and 46% do it in the
workplace. In terms of income, 38% of the respondents have a monthly family income above
2500 Euros, and only around 4% of the respondents belong to a family with an income lower
than 750 Euros.

94% of the respondents consider recreational opportunities as the main reason to visit the
company's website. However, despite making purchases on this site, 79.8% of the respondents
usually visit other sites related to tourism, national or international, which may be stated as a
kind of polygamous loyalty that can be found in other studies. Regarding the use of the internet,
99% of the respondents use the Internet for other purposes rather than just buying tourism
products: 27% see the internet only as an information search engine, while 22% use it to search
for information and to acquire services. 35% also use it to purchase products online other than
tourism ones. 30% of the respondents have been clients of the company for at least one year,
and 60% of them for more than one year but less than two.
Concerning the initiative to visit tourism websites, 64% of the respondents made a personal
decision to visit sites related to tourism, whereas 22.6% followed the recommendation of
friends, colleagues or family. Mass media has a crucial importance for 3.5% of the respondents.
There is a strong link between those who purchase airline tickets and those that use the site to
make hotel reservations, purchase holiday packages, or simply look for a "getaway."

**Measure development.** Based on the literature review conducted regarding e-customer
satisfaction, e-loyalty and their possible determinants, measurement scales were developed for
the six latent constructs in the proposed model: website image, online routine, website
knowledge, innovativeness, e-customer satisfaction and e-customer loyalty. Following the
recommendation of Churchill (1979), several items were used to measure each construct. Used
items were mostly adapted from published scientific papers. However, some minor changes had
to be made to accommodate the online context of the current research.

The construct *website image* was measured using four items adapted from Likert scales
proposed by Parasuraman, Berry and Zeithaml (1991), Dodds, Kent and Grewal (1991), Doney
and Cannon (1997) and Ribbink et al (2004). The construct *online routine* was measured using
three items, adapted from Gremler (1995). *Website knowledge* was measured using five items
adapted from Smith and Park (1992). *Innovativeness* was measured by four items adapted from
a scale by Steenkamp, Hofsted and Wedel (1999) – this one previously adapted from
customer satisfaction* was adapted from scales proposed by Bloemer and Ruyter (1998),
Garbarino and Johnson (1999), Macintosh and Lockshin (1997), Reichheld (2001), Oliver
(1981), and Caprano, Broniarczyk and Srivastava (2003), where four items were considered.
Finally, *e-loyalty* was adapted from scales proposed in several studies like Garbarino and

Table 1 displays the complete wording of each scale item present in the final model, as well
as some measurement properties of the scales used. All the items were measured against seven-
point Likert-type scales, ranging from (1) strongly disagree to (7) strongly agree. This type of
scale has been increasingly used in studies regarding relationship marketing, in particular
Morgan and Hunt (1994), Kumar et al. (1995), Siguaw et al. (1998) and Foster and Cadogan (2000). The three items measuring innovativeness were reverse scored.

**Model estimation and goodness of fit measures.** Since the aim of the paper is to simultaneously estimate a set of multiple linear regressions among variables that are latent, thus accounting for measurement error, and to validate the proposed research model, structural equation modeling (the AMOS-LISREL approach) was chosen as the statistical modeling framework.

A Confirmatory Factor Analysis (CFA) was conducted to validate the measurement model using LISREL 8.80 (Jöreskog and Sörbom, 1996). Structural Equation Modeling (SEM) was later adopted to test the research hypotheses and to validate the proposed model. Since the observed variables were measured on ordinal scales, polychoric correlations were computed, with listwise deletion of missing data. In order to minimize the assumptions concerning the joint distribution of the observed variables, the decision was made to choose an asymptotically distribution free (ADF) estimation method. Thus, the Robust Maximum Likelihood (RML) estimation procedure, proposed by Satorra and Bentler (1998) and implemented in LISREL, was used to estimate all models. This is considered in literature as a consistent estimator, asymptotically unbiased and efficient, scale invariant and scale free, i.e., not affected by changes in measurement units of the manifest variables (Hair et al., 2010). In this robust estimation procedure model estimation is performed using maximum likelihood and estimated standard errors, while the t-values and the $\chi^2$ test statistic are subsequently adjusted.

In order to assess model-data fit, the following goodness of fit measures were used: Satorra-Bentler scaled corrected chi-square ($\chi^2$) and corresponding degrees of freedom (df), Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Root-Mean-Square Error of Approximation (RMSEA) and corresponding 90% confidence interval and Standardized Root-Mean-Square Residual (SRMR). For comparing the fit of non-nested, competing models, the Akaike Information Criterion (AIC) was used.

Composite reliability was assessed following Bagozzi and Yi (1988). In line with the recommendations in Fornell and Larcker (1981), the average variance extracted (AVE) was
computed for each construct and discriminant validity was assessed by comparing AVE values with the squared correlation between each pair of constructs.

The traditional approach to test for mediation was proposed by Baron and Kenny (1986) (see also Hair et al, 2010). Since in this paper the aim is to investigate the mediating effect of e-customer satisfaction in a model that includes the relationships between four independent variables (the four online determinants of tourism purchase) and one dependent variable (e-customer loyalty), the approached followed by Chen et al (2013) was adopted. For a better understanding of the constructs and the measurement model results see table 1.

**INSERT TABLE 1**

### 3.3. Confirmatory factor analysis.

CFA was used to construct a measurement model for the six latent variables, measured by 22 indicators. Table 1 displays the complete wording of the 22 items that were used. The chosen CFA model showed an adequate model-data fit: \( \chi^2 = 709.33, \text{df} = 194, \text{CFI} = 0.99, \text{GFI} = 0.87, \text{AGFI} = 0.83, \text{RMSEA} = 0.034; 90\% \text{ CI for RMSEA} = (0.031, 0.036) \) and \( \text{SRMR} = 0.052 \). The estimated (standardized) factor loadings that were obtained are displayed in Table 1, with the corresponding t-values.

The convergent validity of the indicators is corroborated since all obtained t-values are high (the smallest t-value equals 18.7). Also, all standardized factor loadings are above 0.6 (in line with the recommended in the literature) and the \( \text{R}^2 \) values range from 0.40 to 0.83.

It is possible to conclude that the indicators measuring each construct have internal consistency, since the obtained Composite Reliability values (CR) range from 0.81 to 0.93, all above the minimum value of 0.70 recommended in the literature (Fornell and Larcker, 1981). Obtained Average Variance Extracted (AVE) values are all above the minimum recommended value of 0.5, and range from 0.58 to 0.77, implying that for each construct in the model the amount of variance captured by the construct is higher than the variability due to measurement error. In brief, there is statistical evidence that the scale items used provide a good representation of the constructs in the model.
The estimated correlations between the six latent dimensions are presented in Table 2, and range from -0.46 (between website knowledge and innovativeness) to 0.86 (between e-customer satisfaction and e-customer loyalty). The diagonal elements in table 2 are the square root AVE values for each construct.

**INSERT TABLE 2**

There is discriminant validity of the constructs since, for each of the six latent variables, the square root of AVE is larger than the estimated correlation coefficients with all other latent variables (each diagonal element in table 2 is larger than the remaining elements in the same row/column).

3.4. **Structural Equation Modeling.**

In a second stage, Structural Equation Modeling (SEM) was used to test the research hypotheses and to validate the proposed model. Recall that H1 to H4 postulate a direct relationship between each of the independent variables (website image; online routine; website knowledge and innovativeness) and the dependent variable e-customer satisfaction. H5 postulates a direct effect of e-customer satisfaction on e-customer loyalty.

The path diagram of the global SEM tested, with the estimates that were obtained in a completely standardized solution (and t-values) is displayed in Figure 2.

**INSERT FIGURE 2**

The obtained goodness of fit measures indicate that the proposed SEM has an acceptable model-data fit, since the obtained values are higher than the minimum recommended values: Satorra-Bentler scaled corrected Chi-Square=690.5; df=198; SRMR=0.053; CFI=0.99; GFI=0.87; AGFI=0.83; RMSEA=0.033 and 90% CI for RMSEA = (0.030, 0.035).

From Figure 2 it is possible to conclude that website image, online routine and website knowledge have significant impacts on e-customer satisfaction, with standardized regression
coefficients of 0.50, 0.35 and 0.12, respectively (and *t*-values of 8.68, 11.38 and 2.46, respectively). Thus, research hypotheses H1, H2 and H3 are supported and hypothesis H4 is not supported. Regarding H5, which postulates an impact of e-customer satisfaction on e-customer loyalty, there is strong evidence of a significant positive effect and, therefore, this hypothesis is also supported (standardized regression coefficient of 0.93 and a *t*-value of 15.24).

In order to further investigate the mediating effect of e-customer satisfaction and test H6, the proposed model (that assumes a complete mediation effect of e-customer satisfaction on e-customer loyalty) presented in Figure 2 was compared to two competing models. The first competing model is presented in Figure 3 and assumes a partial mediation effect of e-customer satisfaction on e-customer loyalty. The second competing model, presented in Figure 4, does not include the construct e-customer satisfaction and postulates direct effects from website image, online routine, website knowledge and innovativeness on e-customer loyalty. The path diagrams of the two competing models follow, with the obtained estimates (in a completely standardized solution) and *t*-values.

**INSERT FIGURE 3**

**INSERT FIGURE 4**

From Figure 3 it is possible to conclude that all direct effects from website image, online routine, website knowledge and innovativeness on e-customer loyalty are non-significant. The direct relationship between e-customer satisfaction and e-customer loyalty remains significant, thus favoring the model with a complete mediation effect of e-customer satisfaction on e-customer loyalty (in Figure 2) rather than the model with partial mediation (in Figure 3).

From the model with direct effects presented in Figure 4 it is possible to conclude that only website image and online routine have significant effects on e-customer loyalty. The model explains 67% of the variability of e-customer loyalty, which is lower than the value of 86% that
was obtained for the proposed model with complete mediation (in Figure 2). Table 3 displays
the values of the goodness of fit measures that were obtained for the three competing models.

**INSERT TABLE 3**

From table 3 it is possible to conclude that the model with a complete mediation effect
of e-customer satisfaction on e-customer loyalty should be chosen, since in comparison with the
other two competing models it has the best fit measures: the lowest ratio chi-square / df and the
lowest AIC value.

In brief: e-customer satisfaction exerts a complete mediation effect in the relationship
between website image (online routine and website knowledge) and e-customer loyalty. Hence,
once controlling for the impact of e-customer satisfaction on e-customer loyalty, website image,
online routine and website knowledge no longer have significant impacts on e-customer loyalty.

4. **Discussion**

The key objective of this study is to simultaneously examine the relationships among
website image, routine, website knowledge, innovativeness, customer satisfaction and customer
loyalty in an online context. In addition, the study tests the applicability of the proposed model
to Portuguese consumers and extends the proposed loyalty model to the service sector, and to
tourism in particular.

In general, results support the proposed model: e-customer satisfaction has a full
mediating effect in the relationship between three of the so-called online determinants of
tourism purchase and e-customer loyalty. In this context, e-customer satisfaction is considered
as an antecedent of loyalty, in line with studies by Kim *et al.* (2009) and Anderson and

Findings provide both theoretical and managerial insights. Indeed, this study strengthens the
idea that the relationship between companies and their customers should be treated, both by
academics and managers, as a process of mutual value development and a new strategic
marketing orientation. What is more, technology should not be seen as just another element to take into account in business development, but should increasingly be considered as a major factor in companies’ strategic orientation (Srinivasan et al, 2002), in particular towards their customers.

4.1. Theoretical Implications

The basic aim of this study is the development and validation of a model that helps increasing scientific knowledge in the marketing area, while being applicable in the world of business management. Since the study intends to contribute to the development of theoretical knowledge, an attempt was made in order to systematize relationship marketing determinants, as well as their relation with loyalty – through satisfaction - within an online context.

This study intends to explain the antecedents of e-loyalty incorporating factors that take into account tourism characteristics. The main theoretical contributions of this research is testing the role of customer personal and psychological characteristics when interacting with a travel agency in an online context, simultaneously involving website characteristics and their joint impact on e-loyalty. Authors like Toufaily et al. (2013) showed that many relationships with e-loyalty can be analysed at the same time but also showed that no studies have linked both psychological characteristics (such as inertia and innovativeness – part of the customer profile) and website characteristics (such as website image and knowledge).

In this study, website image, routine when using the website and website knowledge play a significant role in e-customer satisfaction and, indirectly, in enhancing loyalty. Indeed, the study examines the mediating effect of e-customer satisfaction in a global model where the impacts of four online purchase determinants of e-customer loyalty are investigated. Research findings suggest that the relationship between website image (and online routine and knowledge of the website) and e-customer loyalty is fully mediated by e-customer satisfaction. This conclusion is in line with studies developed by Lai et al. (2009) and Chi and Qu (2008).
Also, customer innovativeness has no significant effects on both e-customer satisfaction and e-customer loyalty. Long term relationships depend on the innovation level of each customer (Midgley and Dowling, 1978), translated by the desire to try to get something “unique” (Burns and Krampf, 1992). Steenkamp et al. (1999) argued that a customer with a desire for unique products and relationships tends to search more and be less resigned, and therefore less satisfied with a website, which was not confirmed by this study since a non-significant effect was obtained. One of the reasons for this, to be tested in future research, may be the fact that this study was applied in an offline context. Online customers are, from the beginning, more innovative persons than the ones that prefer a traditional approach, less risky and more conservative. So, they are in a more challenging environment, where the levels of engagement and satisfaction can be higher. Also, Steenkamp et al. (1999) study was done in a cross-national context, in 11 different European countries and the differences obtained taking into consideration national cultural variables were very significant.

This finding constitutes a research contribution since it offers a new perspective regarding which customer characteristics are critical in achieving loyal relationships. We should have in mind that the notion of “uniqueness” can be considered differently in an online context, namely among website image perceptions and knowledge (indeed, significant effects were obtained in H1 and H3). Koivumaki et al. (2002) stated that the online presentation of products had a high influence on customer satisfaction. Furthermore, a retailer’s website is the primary point of contact for an online transaction as it is where customers can learn about the organization’s attention to details and the importance given to customer satisfaction. Moreover, website knowledge is rooted in the concept of convenience – the perception of the time and effort it takes to buy a product or service (Berry et al., 2002) - and it reduces uncertainty. This makes it an important determinant for online customer satisfaction and loyalty, which is also reinforced in our study.

The link between customer satisfaction and company success has historically been a matter of faith, and numerous satisfaction studies have also supported the case. Customer satisfaction has always been considered an essential business goal because it was assumed that satisfied customers
would buy more. This study has an important role to better understand the role of satisfaction on different relations among the online context.

Hence, a serious contribution of this study is the development of a deeper understanding regarding online consumer behaviour and the purchase decision process in the digital context, bearing in mind the importance of e-customer satisfaction on the purchase of online tourism products and, more, on e-customer loyalty. Several previous studies found in the literature were based on empirical work conducted with students, within laboratory conditions, as is the case of Baker et al. (2002). The present study considers the views of end customers, individuals who are actual buyers of online tourism products of an online company, the country market leader in the sector. A sample of 3188 real customers of a real company provides additional knowledge about consumers (Zao et al., 2006), building a knowledge base regarding the Portuguese market is certainly a challenge for marketing academicians to which we are contributing.

These theoretical implications are relevant both for internet and tourism research and are particular important since online tourism has recently undergone major developments, both from a scientific point of view and concerning managerial implications.

4.2. Managerial Implications

This study should help marketing practitioners to better understand the inter-relationships between website image, online routine, website knowledge, customer innovativeness, e-customer satisfaction and e-customer loyalty, as well as the mechanism for enhancing loyalty. The results generally reinforce previous research involving goods and services in other industries.

A first practical contribution of this research for the online business tourism sector lies on the data pool, a large sample composed of clients of the national market leader, which can lead to a customer profile and corresponding purchasing behaviour regarding online tourism products, potentially extendable to the sector.

This research, highlighting the impact of customer relation activities, such as ensuring the quality of the website image, intended to represent a contribution to the sector, alerting
managers with the need to overcome this weakness. Also, it allows managers to better understand that developing actions to assure delighted customers is critical to ensure their loyalty and that the impact of online determinants is also significant when using satisfaction as a mediator.

This research brought important insights for a better understanding of the customer profile for online tourism products. It grouped purchase loyalty determinants in this digital context using a satisfaction construct as a mediator of these relations, in order to ensure a more precise relationship marketing approach, and the definition of specific actions based on the profile of each customer. For example, by having each customer registered in the website, the company is able to track his/her consultation (information search stage in the consumer decision making process) and buying (purchase stage) behavior and, based on this, to propose specific and unique products/services/experiences adapted to each profile. This could be extended by allowing customers to leave in the website their testimonials after experiencing the service (post-purchase stage), with the identification of the “cluster” where they belong. Hence, firms can personalize the website, as well as provide customized service recommendations to different kind of tourists.

Market research from clickstream data can also be enhanced by stimulating users to sign in using their Facebook account, since that will allow the provider to collect further information about the consumer and thus fine tuning services to be offered to the tourist. This segments’ diversity, evident in the conceptual model, allowed us to capture the behavioral complexity of the individuals, as well as the dynamics of the various influences.

Another contribution of this study is to reinforce the idea that marketers should pay more attention to website image since these influence customer satisfaction for online tourists. This is in line with Berry et al. (2002), which argues that it is important for organizations to make real efforts towards facilitating access to content and making it easily available, offering automation of payment (no need to resort to call-centers), providing variety and innovation in tourism products offered, and guaranteeing delivery on time. Also, from a technological standpoint, it is
essential to ensure easy navigation with speed and ease of use, as concluded by Turban et al. (2002).

Routine purchases increase the satisfaction of the customer (Gefen, 2003), and in the online context inexperience in the decision making process (Einwiller et al., 2003) makes navigation routine seem more comfortable. Thus, based on our study one can suggest to organizations that operate in this context to avoid taking this behavior for granted, since these individuals are at the same time curious and demanding in the relationship they have with the organization, and a quality loss may lead to abandonment by many previously satisfied customers. The organization should have these values under control in order to improve their site and offer a better personalization level for each customer as a way to guarantee satisfaction maintenance. Clearly, customers prefer to buy from the same retailer from previous purchase occasions, even though they might perceive other retailers as providing the same or better benefits (Vogel et al., 2008).

Hence, a tourism website ought to give customers a comfortable and easy experience, which is reinforced by the fact that website knowledge also plays a significant role in e-customer satisfaction and, in the end, in e-customer loyalty. Indeed, friendly interfaces are more and more important to capture clients and make them loyal.

4.3. Limitations and indications for further research

This study has some limitations that also provide important insights and opportunities for future research. A first limitation is related to the sample that is used. The sample includes volunteers, which are regular clients of just one company, which raises issues concerning the representativeness of the target population, and therefore conditions generalizing results to other sectors and even to other companies within the same sector.

Also, further exploring the proposed model in terms of multi-group comparisons (taking into account socio-demographic characteristics) could possibly provide some extra insight and is a topic for future research.
Another limitation concerning the generalization of the conclusions is related to the cultural context: this study only includes Portuguese customers, who may clearly differ from customers from other cultures. Thus, additional research should be conducted using our proposed conceptual model in other cultural contexts.

Future research should also examine the proposed conceptual model by using different data, from different sectors, to generalize the research findings. A further possibility is to conduct a longitudinal study in order to improve the current understanding of the effects of online purchase determinants on e-customers satisfaction and loyalty.
References


Goldsmith, R (2001) "Using the Domain Specific Innovativeness Scale to identify innovative Internet consumers", *Internet Research, Vol. 11 Iss: 2, pp.149 – 158


Motorola, 2011. Mobility in Hospitality: Achieving Peak Efficiency and Teamwork to Transform the Guest Experience


Online Purchase Determinants of Loyalty:

The Mediating Effect of Satisfaction in Tourism

Figure 1 – The proposed research model

Figure 2 – Model with a complete mediation effect of e-customer satisfaction on e-customer loyalty (standardized estimates and t-values)
Figure 3 – Model with a partial mediation effect of e-customer satisfaction on e-customer loyalty (standardized estimates and t-values)

Figure 4. – Model with direct effects on e-customer loyalty (standardized estimates and t-values)
<table>
<thead>
<tr>
<th>Constructs and Items</th>
<th>Standard. Factor Loading</th>
<th>t-value</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted</th>
<th>Previous Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Website Image Perceptions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The site is technologically advanced</td>
<td>0.83</td>
<td>43.4</td>
<td>0.90</td>
<td>0.70</td>
<td>Parasuraman, Berry and Zeithaml (1991), Dodds, Kent and Grewal (1991), Doney and Cannon (1997) and Ribbink et al (2004)</td>
</tr>
<tr>
<td>The site information is presented in an appealing way</td>
<td>0.83</td>
<td>32.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The site is easily accessed</td>
<td>0.85</td>
<td>66.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It’s easy to find what I’m looking for in this site</td>
<td>0.84</td>
<td>71.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Online Routine</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unless I start having reasons to be unhappy with the website I will not bother to change</td>
<td>0.85</td>
<td>78.2</td>
<td>0.84</td>
<td>0.64</td>
<td>Grenmler (1995)</td>
</tr>
<tr>
<td>I think it will be difficult to be disappointed by this website</td>
<td>0.90</td>
<td>77.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For me, the cost of time and effort to change to another website is very high</td>
<td>0.63</td>
<td>36.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Website Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel very familiar with this website’s functionalities</td>
<td>0.71</td>
<td>40.4</td>
<td>0.87</td>
<td>0.58</td>
<td>Smith and Park (1992)</td>
</tr>
<tr>
<td>If I have to make any purchase on this website I don’t have to gather much information to make the right choice</td>
<td>0.71</td>
<td>38.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel very confident about my ability to see the difference between this website and others</td>
<td>0.67</td>
<td>36.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can navigate on this website easily and find the products and services I am</td>
<td>0.86</td>
<td>31.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
looking for
I am very familiar with the design and layout of this website

| Innovativeness | | | | |
|----------------|---|---|---|
| I am very cautious regarding using new websites to make any purchase | 0.73 | 41.6 | |
| I prefer to visit a website I already know than one I have no familiarity with | 0.88 | 66.2 | |
| If I like a website I rarely leave it only to experience something different | 0.67 | 37.5 | |

<table>
<thead>
<tr>
<th>E-customer Satisfaction</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am very satisfied with this website’s services</td>
<td>0.89</td>
<td>18.7</td>
<td></td>
</tr>
<tr>
<td>My choice for this website was correct</td>
<td>0.91</td>
<td>21.3</td>
<td></td>
</tr>
<tr>
<td>Purchasing through this website exceeded my expectations</td>
<td>0.83</td>
<td>54.6</td>
<td></td>
</tr>
<tr>
<td>I believe this website has many desirable characteristics</td>
<td>0.86</td>
<td>39.7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E-customer Loyalty</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I have no doubts to recommend this website to friends and relatives</td>
<td>0.90</td>
<td>105.4</td>
<td></td>
</tr>
<tr>
<td>This website is my first choice when I intend to purchase tourism products</td>
<td>0.85</td>
<td>88.1</td>
<td></td>
</tr>
<tr>
<td>I clearly have a preference for this website over others in the same business area</td>
<td>0.85</td>
<td>90.9</td>
<td></td>
</tr>
</tbody>
</table>


Garbarino and Johnson (1999), Capraro et al. (2003) and Srinivasan et al. (2002)
Table 2 – Estimated correlations between the latent variables, as derived from the measurement model (with the square root of AVE on the diagonal)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>1)</th>
<th>2)</th>
<th>3)</th>
<th>4)</th>
<th>5)</th>
<th>6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Website image perceptions</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Online routine</td>
<td>0.63</td>
<td>0.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Website knowledge</td>
<td>0.76</td>
<td>0.59</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Innovativeness</td>
<td>-0.50</td>
<td>-0.63</td>
<td>-0.46</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) E-customer satisfaction</td>
<td>0.82</td>
<td>0.73</td>
<td>0.75</td>
<td>-0.52</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>6) E-customer loyalty</td>
<td>0.79</td>
<td>0.74</td>
<td>0.71</td>
<td>-0.54</td>
<td>0.86</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Table 3 – Goodness of fit measures for the three competing models

<table>
<thead>
<tr>
<th>Measures of fit</th>
<th>Proposed model with complete mediation of satisfaction on loyalty (in Figure 2)</th>
<th>Model with partial mediation of satisfaction on loyalty (in Figure 3)</th>
<th>Model with direct effects on e-customer loyalty (in Figure 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square / df</td>
<td>3.49</td>
<td>3.66</td>
<td>7.80</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.033 (0.030, 0.035)</td>
<td>0.034 (0.031, 0.036)</td>
<td>0.054 (0.051, 0.057)</td>
</tr>
<tr>
<td>GFI</td>
<td>0.87</td>
<td>0.87</td>
<td>0.88</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.83</td>
<td>0.83</td>
<td>0.84</td>
</tr>
<tr>
<td>CFI</td>
<td>0.99</td>
<td>0.99</td>
<td>0.98</td>
</tr>
<tr>
<td>AIC</td>
<td>800.50</td>
<td>827.33</td>
<td>1067.32</td>
</tr>
</tbody>
</table>
Reviewer #2: The authors have done substantial improvements to the paper. However there are still shortcomings that need further revision. Especially the introduction as well as discussion sections need to be significantly improved.

Major issues:

1) The most important shortcoming still is that there is not provided sufficiently strong arguments for the existence of the alleged research gap(s), which this paper strives to fulfil.

1.1. The authors state in the last part of introduction section, that "Despite previous studies, there is still a clear gap in the literature regarding the identification and assessment of antecedents influencing e-customer loyalty in tourism." However, no specific references about those previous studies are shown or clearly demonstrated how this gap is found from those studies. Please be specific in demonstrating what is known and what is not known at the moment. This is the correct way to show that a research gap(s) exists.

Answer 1.1. As suggested, we introduced specific references about previous studies and we think, now, it is clearly demonstrated what is known and what is not known in this field. So, the authors clarified what the research gap is. (see Introduction section, highlighted in yellow in the revised manuscript).

1.2. Therefore, first, briefly show the current knowledge (and the most important studies that have contributed to this knowledge) and then clearly depict on which aspects this knowledge is inadequate in order to justify the need for this present study. This thorough justification of the research need is especially important as the paper studies issues that have been covered in numerous studies during the past decade.

Answer 1.2. There have been numerous studies on loyalty and a few looking at the tourism industry (Bowen & Chen, 2001; Ho & Lee, 2007; Huang, 2008, Kandampully & Suhartanto, 2000). Furthermore, other researchers have presented different models of customer loyalty, some of which have been cited in the paper (Anderson and Srinivasan, 2003; Srinivasan, Anderson and Ponnavaol, 2002; Luarn and Lin, 2003; Floh and Treiblmaier, 2006, Toufaily et al., 2013.) The authors think they elaborated on how this paper add to the body of knowledge specifically from a theoretical perspective in this field of service marketing. We believe this strengths the originality/value of the paper. (see Introduction section, highlighted in yellow in the revised manuscript).

1.3. On page 5 is stated e.g. "There are clear gaps in the knowledge concerning the antecedents of loyalty..." and "... little work reports on customers' satisfaction and loyalty in the context of service firms...". Again, be more specific in your argumentation. What are these gaps and how these gaps are discovered? Because otherwise, I would argue that there exists a rather decent body of knowledge about the antecedents of loyalty and satisfaction also in the services context.
Answer 1.3. We think it is properly specified in the introduction section, now. So, we decided to eliminate this statement from the literature review to overcome potential duplication of the argumentation.

1.4. Although the mediating role of satisfaction seems to be key issue of the present study, there is no hypothesis concerning this mediation effect. Why haven't you constructed a hypothesis based on the discussion in section 2.7?

Answer 1.4. Authors agree the mediating role of satisfaction is a key issue for the current study. Following your suggestion, a mediation effect of e-customer satisfaction in the relationship between the online purchase determinants and e-customer loyalty is now explicitly stated as a research hypothesis (H6) in Section 2.7. Also, Section 3.4 of the revised paper was updated accordingly. (highlighted in yellow in the revised manuscript)

1.5. In table 2 there are depicted correlations. The between-factor correlations are rather high, over 0.7 in many cases. Please discuss and argue why it's not a concern for discriminant validity? On other parts, the analyses seem to be well done and well reported.

Answer 1.5. Authors are aware of the fact that in some cases correlations between factors can be considered reasonably high. However, and as stated in the last paragraph of Section 3.3, for all 6 latent variables in the model, the square root of AVE is larger than the estimated correlation coefficients, following the recommendations in Fornell and Larcker (1981) for assessing discriminant validity (as stated in Section 3.2 of the paper).

1.6. Discussion section still needs revision. The section is still rather scattered and theoretical implications are too vaguely presented. This is mainly caused by the problems in the presentation of research gaps in the beginning of the paper. Please clearly show how exactly this study contributes to the current knowledge / earlier studies.

Answer 1.6. With the improvement of the introduction section – with a better definition of the research gaps -, we think we properly revised the discussion section from a theoretical point of view (See Discussion section, highlighted in yellow in the revised manuscript).

1.7. On page 24, the authors discuss the results related to the effects of innovativeness on satisfaction. You compare the results with the results of Steekamp et al. (1999) and state for example that "Steenkamp et al. argued that an online customer with a desire for unique products...". How would you explain the differences? E.g. different scales or that the Steenkamp et al. study didn't concern online commerce might have been causes for differences?

Answer 1.7. The authors introduced several justifications for this, in the revised manuscript (see Discussion section, just below Steenkamp et al. reference, highlighted in yellow in the revised manuscript)

Minor issues:
1.8. The first paragraph of introduction could be left out and start directly discussing online context.

Answer 1.8. Done, as suggested.

1.9. First paragraph on page 10 ("Developing the online shopping has been...") seems separate from other text.

Answer 1.9. This paragraph has been rewritten so that it strengthens its connection with other text. (highlighted in yellow in the revised manuscript)

1.10. The paragraph on pages 24 and 25 (starting, "This is a contribution because...") needs to be revised as it is now rather opaque. (highlighted in yellow in the revised manuscript)

Answer 1.10. The paragraph has been revised in order to become clearer with regard to one of the research contributions of our study. (highlighted in yellow in the revised manuscript)

1.11. Page 27, sentence "Thus, another contribution of this study is the suggestion to organizations..." is also rather difficult to understand. Also, difficult see how this conclusion was drawn from the results?

Answer 1.11. The sentence has been improved with the objective of having a better fit within the managerial implications section of the paper. (highlighted in yellow in the revised manuscript)