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Antecedents of Customer e-Loyalty and Electronic Word-of-Mouth

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Campo de Conhecimento: Marketing

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ABSTRACT

The main objective of this thesis was to examine the effects between e-loyalty and eWOM. As a secondary objective, the significance of e-loyalty predictors established in prior literature was verified. The subject of research was focused on one type of product/service: online book purchase made in an internet retailer's (e-tailer's) website. Two hundred forty two online surveys were completed with respondents from the *Millennial* generation residing in different locations in Brazil and the United States. The analysis was conducted using PLS-SEM on a research model built based in prior empirical research. While the effects between e-loyalty and eWOM were found to be weak, a high quality eWOM environment was considered a significant predictor of e-loyalty. All predictor variables had significant values, with commitment generating the strongest effect on e-loyalty.

Key-words

e-Loyalty ; eWOM ; e-Commerce ; Consumer behavior ; Millennials; Partial least squares.

RESUMO

O objetivo principal da dissertação foi o de examinar a relação entre lealdade (e-loyalty) e o boca-a-boca (eWOM) no contexto do varejo eletrônico. Como objetivo secundário, foi feita uma verificação da significância das variáveis preditoras de e-loyalty. Essa pesquisa foi focada em um tipo de produto/serviço: compra de livros através da internet. Duzentos e quarenta e dois questionários online foram respondidos por um público representativo da geração Y (*millennials*), e residentes em diferentes localidades no Brasil e nos Estados Unidos. A análise de dados foi efetuada pela aplicação do método PLS-SEM sobre um modelo de pesquisa cuidadosamente formulado com base em resultados empíricos prévios. Enquanto que a relação entre e-loyalty e eWOM foi classificada como fraca, um ambiente de boca-a-boca online de alta qualidade representou uma variável preditora significativa para o sentimento de e-loyalty. Todas as variáveis preditoras foram classificadas como significativas nesse estudo, sendo que comprometimento tem o efeito mais forte sobre a variável e-loyalty.

Palavras-chave

Lealdade ; Publicidade de boca-a-boca ; Comércio eletrônico ; Comportamento do consumidor ; Geração Y ; Mínimos quadrados parciais.

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INTRODUCTION

The concept of customer loyalty is central in marketing (Toufaily, Ricard & Perrian, 2013). With the emergence of commercial exchanges through the Internet, the process of building loyalty (e-loyalty) within the electronic retailing (e-tailing) environment has become a subject of increasing interest for Marketing professionals and academic researchers (Casaló, Flavián & Guinalú, 2008; Pan, Cheng & Xie, 2012).

Nowadays, with a high number of companies serving the same purpose, increases in consumers' general awareness and in ease of access to advantageous alternatives are motivating customers to easily change service providers (Wood, 2004); the creation and maintenance of customer loyalty has become an increasingly difficult task. Taking into account the importance and complexity of the subject to retailers working in the web environment (e-tailers), corporate executives are interested on the concept of customer e-loyalty, and the driving forces behind this behavior (Pan et al., 2012).

The threat of strong competition and rapid technological developments in various sectors are motivating firms to allocate resources to protect their market shares and financial performance. One way firms achieve this is by enhancing the overall customer experience to build a loyal customer portfolio, so firms can protect their long-term performance by gaining income from these customers' repeated purchases (Ünal, Candan & Yildirim, 2012). Customer loyalty may be considered a company's most enduring asset (Pan et al., 2012).

There are a series of advantages from increases in customer loyalty, such as increases in cross-sales, customer profitability, share of wallet, number of visits to a website, willingness to pay, and willingness to purchase and repurchase on the website. In addition, customer's sensitivity to price and alternative searches will diminish (Toufaily et al., 2013). Alternatively, the advantages can be stated more objectively through four main benefits: increases in customer spending, efficiency gains with existing customers and recruitment of new ones, price premiums from value added services, and new customers acquired through referrals (positive word-of-mouth) from existing customers (Lee et al., 2006).

Competition on retailing has been constantly increasing since the advent of the Internet (Kwon & Lennon, 2009). Big national and multinational brick-and-mortar style retailers (e.g., "Walmart" in the US and "Pão de Açúcar" in Brazil) have successfully extended their channels

to the virtual environment. Multi-channel retailers, attracted by low costs and the potential to access millions of customers, consider the Internet a fundamental part of their businesses' commercial strategy (Geyskens, Gielens & Dekimpe, 2002). Investments in e-tailing have been increasing over the years, with companies devoting significant resources to improve their online presence. By 2014, the scale and scope of multinational e-tailing had become very substantial. Amazon and Alibaba, the first and second largest e-tailers in the world, had during 2014 total revenues estimated in US\$89 and US\$53 billion respectively (Yahoo Finance, 2015). Forrester Research Inc. (2014), a respected source for projections in ecommerce, has estimated that online retail in US will have an annual compound growth of 9.5% until 2018 (Internet Retailer, 2014). In BRIC countries like Brazil, the projections are also optimistic: while ecommerce in 2014 reached US\$10.9 billion, up 24% from 2013 (Profissional do Ecommerce, 2015), yStats.com projects that the market will reach US\$25.7 billion in 2018 (Ecommerce News, 2015). Therefore, the effectiveness of investments in e-tailing is key to a company's success. In addition, the extent to which loyalty feelings influence customer behavior and expectation to a company's online service is of special interest to brick-and-click multi-channel retailers (Kwon & Lennon, 2009).

Among the variety of existing generations, Millennials (or Generation Y) are found to be, by far, the most expressive user of ecommerce. Nielsen N.V. (2014), a leading global information and measurement company, has found that millennials represent over half of respondents with online purchase intentions, independent of product category. Based on the global average population, Millennials were found to make up for 49-59% of consumers' online browsing, and 52-63% of consumers' willingness to complete an online purchase. Furthermore, evidence shows that Generation Y consumers will often recur to peers for purchase related information, a behavior facilitated by the digital connectedness characteristics of online environment (Mangold and Smith, 2012). The importance of online purchases and electronic word-of-mouth drives the focus of this research to the most representative sample: Millennial consumers.

The subject relating eWOM with e-loyalty is scarce in prior research (Yoo, Sanders & Moon, 2013), and has been addressed as an important subject for investigation in future studies (Gupta & Harris, 2010). This thesis will examine the relation e-loyalty has with electronic word-of-mouth (eWOM). The main objective will be to examine the effects between e-loyalty and eWOM. As a secondary objective, this thesis will attempt to verify the significance of e-loyalty predictors established in prior literature.

The intended contribution of this thesis is to enrich the current knowledge on the subject of consumer behavior, specifically in important academic fields such as digital marketing, consumer loyalty, and online services. Results are expected to generate insights for managers to improve their marketing strategies, particularly to e-tailers that are willing to invest in customer service.

The text is organized as follows. The introduction has presented the objectives and relevance of the research. Subsequently, the theories most pertinent to the subject are explored, and a thorough analysis is provided to uncover the depth of different areas of knowledge in the field. Important themes to the thesis' purpose, in particular e-loyalty and electronic word-of-mouth, are emphasized through a review of recent and classical knowledge among empirical findings.

The third chapter presents the method of the empirical research; a causal approach involving the instrument of an online survey. In the fourth chapter, the research findings are presented and their meaning discussed within the chosen theoretical framework. Finally, the general discussion is presented with the corresponding theoretical and managerial implications, concluding with the study's limitations and recommendations for future research.

THEORY

An overview of previous studies on consumer loyalty is presented – initially with concepts – addressing its evolving characteristics throughout the last decades. In a second stage, two important articles with meta-analysis research methodologies on loyalty and e-loyalty are analyzed and compared. A careful mapping of online customer loyalty is emphasized to clearly demonstrate the richness, complexity and limitations of e-loyalty as a field of research. In a third stage, the relevance of the “word-of-mouth” process and its possible effects on e-loyalty are discussed with references to empirical studies. Finally, the research hypotheses are exposed and explained, and this study’s research model is introduced.

2.1. E-LOYALTY

Most types of loyalty that can be perceived in a daily basis are classified as “spurious”. These are actions based on lack of alternatives, “lock-in” strategies from a company (e.g., Apple Inc.’s iTunes), or even simple convenience (Jones et al, 2002). True loyalty requires attitudinal preference, which is believed to modify behavior (Bandyopadhyay & Martell, 2007). To enable an in-depth discussion, it is important to establish which are the basic concepts of loyalty and how they evolved through time, particularly during the age of retail in the web environment (or e-tailing), where loyalty is commonly described as e-loyalty.

The conceptualization of loyalty started with a behavioral approach, merely defining the degree of loyalty through the number of repeated actions. This concept evolved to a cognitive approach, in that the primary focus rested on the attitudinal dimensions of loyalty. Accepted as a third stage, it is proper to conceptualize loyalty through a composite approach, where both conditions – attitudinal preference and the action of repeated purchase – are essential (Bandyopadhyay & Martell, 2007).

Jacoby and Kyner (1973) have pointed out six necessary conditions to brand loyalty in a composite approach: there must be a biased (i.e., nonrandom) response; a behavioral response (i.e., purchase behavior); expressed over time; by one or more decision-making units; where several alternatives are possible; and should be a function of a psychological process (e.g., the decision making process occurs) (Toufaily et al, 2013).

In the past decade another approach was adopted to conceptualize loyalty: a sequential process consisting of four phases, despite external influences such as situational factors or marketing actions (McMullan & Gilmore, 2003). The four phases can be described as cognition, affection, conation, and action. Cognitive loyalty focus merely on the brand performance aspects. However, this consumer state is of shallow nature because the depth of loyalty translates to mere performance (i.e., routine transactions). Affection will involve customer's feelings, emotions that usually make the brand, product or service preferable upon others. In this stage, a liking is developed based on cumulative satisfying usage occasions. Conative loyalty is when the consumer has intent to repeat his purchase. Conation implies a brand-specific commitment to repurchase. Action is the act of loyalty, or the conversion of intention to action, with the added willingness to overcome impediments. If this type of engagement is repeated, action inertia will occur, facilitating repurchase (Oliver, 1999). Based on Oliver's loyalty model (1999), Toufaily et al. (2013) propose a new definition of customer online loyalty:

“...the customer's willingness to maintain a stable relationship in the future and to engage in a repeated behavior of visits and/or purchases of online products/service, using the company's website as the first choice among alternatives, supported by favorable beliefs and positive emotions toward online company, despite situational influences and marketing efforts that lead to transfer behavior”.

This definition is a more simplified and comprehensible version of Oliver's concept regarding customer loyalty, but can be thought of as overly detailed in its intention to explicit the complexities of the loyalty process. This can be more clearly perceived when compared to Pan et al.'s (2012) definition:

“we define loyalty as the strength of a customer's dispositional attachment to a brand (or service provider) and his/her intent to rebuy the brand (or repatronize the service provider) consistently in the future.”

Gefen's definition of online loyalty (2002) is perhaps the most abbreviated: “to convince customers to return to the website, and make further purchases on the site.”

Despite a large number of articles found on customer loyalty, there is little consensus among the authors. The variety of information is grand, but there are factors that limit comprehensive understanding and prevents generalization of findings (Pan et al, 2012). First, there is the problem of comparing “apples to oranges”: much of the inconsistency in findings is due to the fact that previous studies have been conducted in different research contexts. Second, there seems to be no agreement on conceptualizing and operationalizing the loyalty construct (Pan et

al, 2012). Third, an arbitrary choice of subject and measurement instruments casts doubt to whether current measurements are effective for an online environment (Toufaily et al, 2013).

Luarn and Lin (2003) believe that theories on loyalty are almost identical when comparing online, or brick-and-mortar business, with offline, or brick-and-click business. Given the probability that there isn't relevant difference between the main factors affecting loyalty and e-loyalty, I will describe relevant facts found in two different meta-analysis studies. One made by Pan, Sheng & Xie (2012), which includes online and offline retail data, and the other made by Toufaily, Richard and Perrien (2013), which focus exclusively in online data.

2.1.1. Antecedents of Customer e-Loyalty

Customer satisfaction has been the most frequent subject among all the different online loyalty studies analyzed by Toufaily et al (2013). Despite many references to satisfaction as a main factor to generation of loyalty, empirical evidence is somewhat mixed (Pan et al., 2012). Some studies fail to prove direct linkage between customer satisfaction and loyalty, while other indicate an indirect and complex relation. Bauer, Grether & Leach (2002) state that companies should further develop strategies to increase online customer satisfaction, because its multiple positive effects would generate improvements on trust, commitment, and loyalty. Despite its multiple positive effects, satisfaction alone should not be understood as sufficient to generate consumer loyalty (Bowen and Shoemaker, 1998, cited in Erciş et al., 2012).

Traditionally, trust has been defined by a group of beliefs held by a person derived from his perceptions about certain attributes. In marketing, these attributes include the brand, products, services, the seller and the establishment where the transaction occurs. Trust has been identified as a major driver of loyalty (Pan et al, 2012). Once a customer has trust on a product or brand, he is most likely to develop favorable attitudes toward it; pay price premiums, remain loyal to it, and spread positive word-of-mouth (Chaudhuri and Holbrook, 2001). Toufaily et al. (2013) have found trust to be the second most important determinant of online loyalty. According to Pan et al. (2012), trust has the strongest effect size in relation to other determinants of loyalty, which confirms the findings of other studies (e.g. Johnson, 1999; Ibanez et al, 2006).

Commitment can be interpreted as a symbolic attachment to the product. Sometimes found next to loyalty (e.g. Luarn & Lin, 2003), or as an important determinant of loyalty together with trust (e.g. Donio et al, 2006; Li, Browne, & Wetherbe, 2006), commitment is also considered a consequence of trust and satisfaction and a condition to loyalty (Erciş et al., 2012). A strong

brand needs to generate commitment because committed customers will invest more heavily in the relationship with the seller; they will perceive more advantage in loyalty, and greater risks in switching brands (Evanschitz et al., 2006). Erciş, Unal, Candam, & Yildirim (2012) classifies commitment in affective and continuance. According with the authors, affective commitment means strong personal identifications causing emotional connection with a brand, while continuance commitment defines the consumer weak feelings to a brand. The results indicate that the role of satisfaction and continuance commitment on loyalty are weak, while trust and affective commitment have an important effect. The model from Erciş et al. (2012) can be seen in Figure 1.

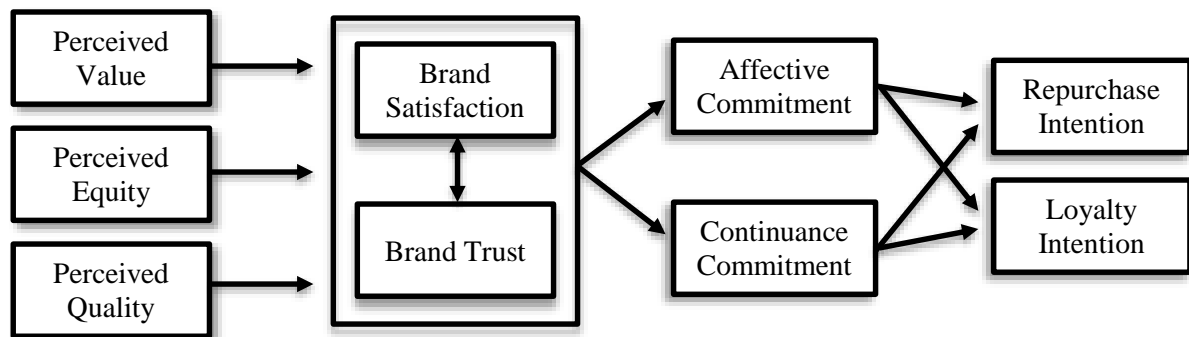


Figure 1. Research model used by Erciş et al. (2012).

Pan et al. (2012) have found the effects of certain conditions upon loyalty. For instance, the effects of customer satisfaction and trust loyalty are milder when the purchase cycle is short. This means that consumers will delegate higher importance to their satisfaction and trust toward a brand when they acknowledge beforehand that they will be “stuck” to the product for a long time. This finding could probably be extended to most customer characteristics, especially to relational (satisfaction, trust, commitment, and attachment) and perception variables (value, risk, switching costs, control behavior). Furthermore, time has proven to increase the effect of quality on loyalty, suggesting that a high-quality image is crucial to build and maintain customer loyalty (Pan et al., 2012).

Other factors directly related to customer loyalty are cited, although with a lesser degree of importance when compared to customer’s characteristics such as satisfaction, trust, and commitment. Among these other factors, attention has remained within customer characteristics: perceptions to value, switching costs to online suppliers and control behavior; psychological variables such as customer attitude, innovativity, aggressiveness and inertia (Ponnavulu, 2000); relationship with technologies, more precisely website knowledge, IT experience, and

traditional versus virtual service preference are all examples of areas that have been empirically investigated and proven to influence online loyalty (Toufaily et al, 2013). Pan et al. (2012) have also displayed considerable attention to perceived value, as low perceived value will make customers more inclined to switch to competing brands. Still in the realm of customer characteristics, Pan et al. (2012) point to the perceived fairness/justice. According to them, a firm depends on an image of fairness to develop the level of confidence required to establish loyalty.

2.1.2. *An Integrative Framework*

Toufaily et al. (2013) have classified the determinants of online loyalty in five categories: customer characteristics, product/service attributes, company/retailer characteristics, environmental characteristics, and website characteristics. Notwithstanding the higher attention of scholars on customer characteristics, elements from other categories have been demonstrated to be also important determinants. For instance, product/service attributes like quality, price, discounts and rewards, purchase volume and value for the money should all be determinants of customer e-loyalty (Wallace et al., 2004; Chen, 2003).

Characteristics of the company or retailer should also influence e-loyalty: reliability, or ability in fulfilling promises; ability in saving time and in offering high quality support services (Bergeron, 2001); and a high level of operational competence to accomplish credibility in the customer's mind (Ganesan, 1994). The timesaving factor on e-loyalty is especially important, as it is usually a major cause for choosing the online instead of offline environment, and therefore time saving should affect online loyalty (Bergeron, 2001).

Environmental characteristics are structural influences from the electronic commerce environment that result in national and international issues such as legal structure, trade restrictions and culture (Cheung et al., 2005). There are studies in the effects of culture on loyalty (Steyn et al., 2010), although the influences are in great part unknown. Areas for future research include competition, legal structure, social values and preference groups.

Relevant studies indicate that website characteristics can also affect online loyalty. These characteristics include interactivity, ease of use, content and selection of products/services, design and aesthetics, system quality, personalization, e-service quality, security, site credibility, and virtual community presence (Toufaily et al., 2013).

The consequences of loyalty found in research sums to an extensive list of advantages: increases in profitability, share of wallet, frequency of purchases, number of visits, positive word-of-mouth, cross-selling, willingness to pay and purchase from the site/website, customer retention and satisfaction; and decreases of sensitivity to price and alternative purchases.

Each empirical study adds a “piece” to the “puzzle” that is the full understanding of how loyalty is generated; Toufaily et al. (2013) has developed a framework which summarizes the extent of knowledge in the field, with significant suggestions for future research (Figure 2).

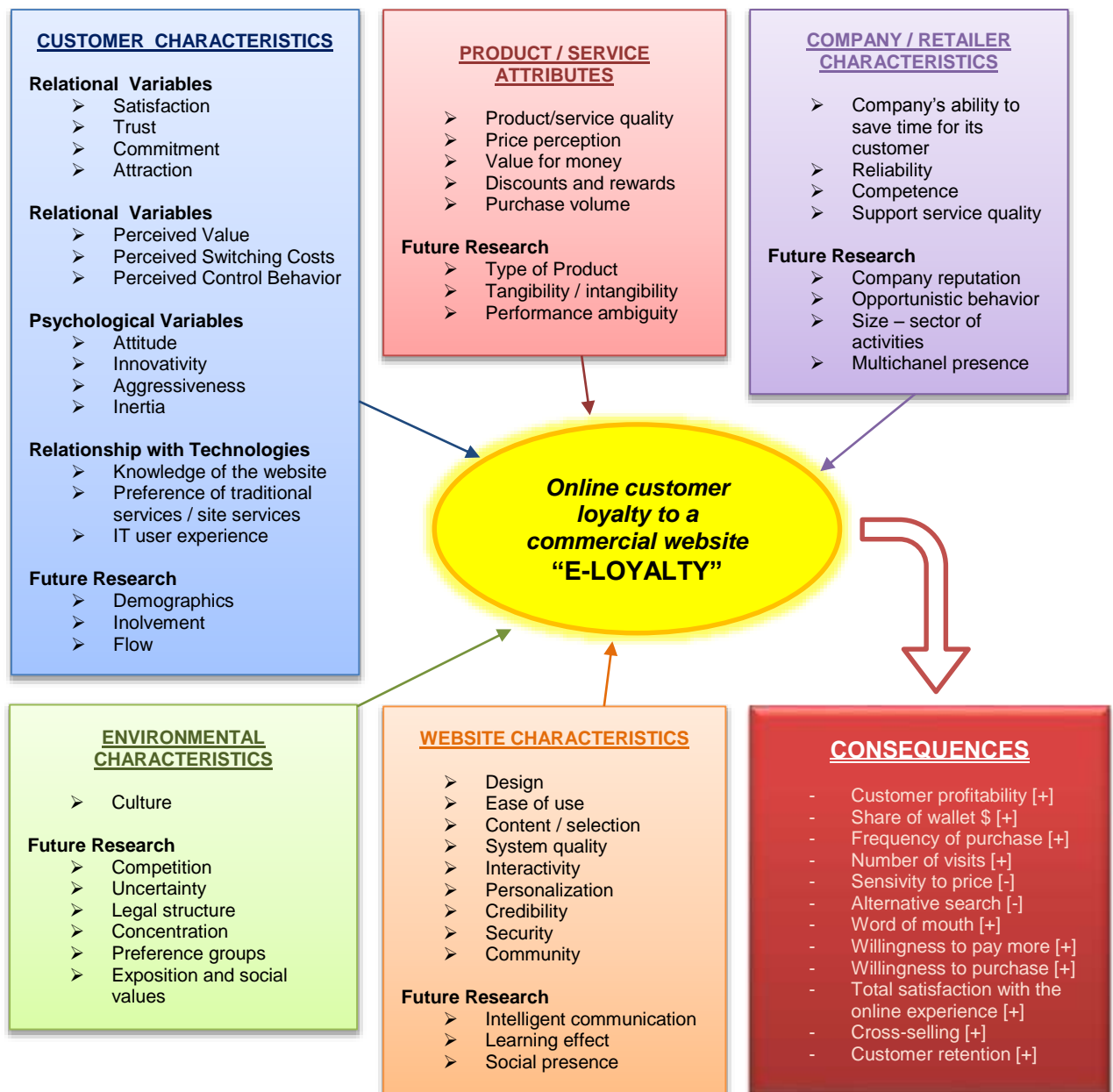


Figure 2. Integrative framework of online customer loyalty based on Toufaily et al.'s model (2013).

2.2. ELECTRONIC WORD-OF-MOUTH (eWOM)

Traditional and electronic word-of-mouth has long been considered important to marketing researchers and practitioners for a number of important reasons. Word-of-mouth (WOM) has been shown to impact consumer choice and post-product perceptions. In addition, WOM has been identified as more effective than marketing selling tools and various types of advertising (Gruen et al., 2006).

Since the mid-2000s, the rise of new media channels has offered fertile ground to the proliferation of online word-of-mouth (Cheung and Tadani, 2012). On the internet, consumers can post their opinions, comments and reviews of products/services on e-tailer websites, weblogs, discussion forums, review websites, e-bulletin board systems, newsgroups and social networking sites.

Online word-of-mouth (eWOM) is commonly interpreted as “Any positive or negative statement made by potential, actual, or former customers about the product or company which is made available to a multitude of people and institutions via the internet” (Balakrishnan, 2014). It provides consumers with the opportunity to read other people’s consumption opinions and experiences, as well as write their own contributions.

Among the factors leading to eWOM behavior, Park and Kim (2008) believe that the main ones are: desire for social interaction, economic incentives, concern for other customers, and the potential of enhancing your own self-worth. King et al. (2014) cited other antecedents to eWOM based on empirical research, such as opinion leadership, ability, and neuroticism. Although altruism and concern for others figures as a main antecedent, research has found that self-interested consumers form the largest segment of people generating eWOM (King et al., 2014). Strangely enough, self-interest was not mentioned as an antecedent. To conclude on the subject of factors leading to eWOM; product involvement, helping the company, anxiety reduction, vengeance and advice seeking have figured in research on motivation for word-of-mouth (Sundaram et al., 1998) and could also be considered as relevant antecedents of eWOM.

When comparing electronic word-of-mouth (eWOM) to traditional offline word-of-mouth, there are significant differences that must be observed. EWOM possess an incomparably higher scalability and speed of diffusion; involves multi-way exchanges in asynchronous mode; and communication information that can be archived and made available for an indefinite period of time. EWOM is also more measurable due to its characteristics of format, quantity and

persistence; and less identifiable than traditional WOM, which makes it harder to establish the communicator's credibility (Cheung and Tadani, 2012).

Floyd et al. (2014) describes the differences between WOM and eWOM from the customer's point of view: eWOM is perceived as more powerful and effective because it is accessed from anywhere (e.g.; smartphone, tablet, or laptop), given there is an internet connection; more balanced and unbiased, because it provides divergent opinions from different consumers on the same website; easier to decipher, given that WOM is found in the written form; and more controllable by retailers, because they can design information systems which mediates online feedback exchanges (e.g., regulation of who participates, what type of information is solicited, how information is aggregated, and which information is made available).

Bambauer-Sachse and Mangold (2011) have emphasized an important difference between the two types of word-of-mouth when analyzing the impact of negative reviews. According to them, consumers are unable to establish clear consensus perceptions in traditional WOM, which can be characterized as information coming from only one person or a few people. In conclusion, negative (or positive) eWOM is more effective than negative (or positive) WOM because information is transferred in a straight way, granting clearer consensus perceptions to the receiver.

Findings in regards to eWOM's valence have been ambiguous. Marketing scholars have shown through empirical research the existence of positive relations between valence and product sales; confirmatory bias, which leads consumers to look for positive reviews during the post-purchase stage; and negativity bias, which suggests negative reviews are more salient than positive reviews when customers have a neutral opinion (King et al., 2014).

There seem to be a consensus that negative eWOM is more powerful than positive WOM. Park and Nicolau (2015) found that extreme positive reviews favors people's enjoyment but have little impact on usefulness. According to them, a review with an extreme positive rating will always have less impact than any of the negative ratings. Other marketing scholars believe (Chatterjee, 2001; Bambauer-Sachse and Mangold, 2011) that consumers are more likely to face negative reviews because people are much more interested in sharing negative experiences with as many people as possible than positive experiences. In addition, they hold that negative information is considered more diagnostic and informative than positive or neutral information.

Zhang et al. (2010) believes that eWOM's valence can be mediated by the type of consumption goal. Consumers would have a positivity bias towards products with promotion consumption goals (e.g., photo editing software); which means positive reviews become more persuasive than negative ones. Accordingly, consumers would have a negativity bias for products with prevention consumption goals (e.g., anti-virus software); in this case, negative reviews become more persuasive.

WOM or eWOM is also perceived to have different degrees of influence, depending on the individual's tie strength. In weak ties, WOM is sought-after mostly for informational purposes. Individuals tend to choose weak ties when informational cues are seen as important. In stronger ties, word-of-mouth is shown to be most influential. WOM is found to influence immediate and delayed product judgments, and have strongest effects in occasions where consumers face an ambiguous experience and the source (or WOM communicator) is perceived to be from an expert (Gruen et al., 2006).

Unlike traditional WOM, where meaningful connections between the sender and receiver are pre-existent, eWOM can generate strong impact even in weak ties (King et al., 2014). Research has also found that consumers are more likely to transmit messages to stronger ties than weaker ties, and that a moderation occurs through the consumer's evaluation of the quality of information (e.g., the sender will evaluate how much value the information has to the receiver). In addition, consumers are more likely to transmit negative messages to weaker ties, whereas they share positive and negative messages with stronger ties (King et al., 2014).

Although there has been a vast amount of recent literature focusing in the effectiveness of eWOM communication, the results are fragmented, making it hard to draw significant conclusions. Furthermore, researchers have been adopting several research approaches with little effort to integrate findings from prior studies (Cheung and Tadani, 2012).

2.2.1. *EWOM's Effect on e-Loyalty*

Electronic word-of-mouth has been found to play an important role on e-loyalty. Information provided by consumers provides a sense of trust upon potential customers (Gauri & Rao, 2008). Empirical results demonstrate that customers pay more attention to information provided from other customers, than information from a salesperson or a marketer. Customers prefer to rely

on unbiased opinions based on experience (Bickart & Shindler, 2001). Furthermore, it has been found that participation by posting comments and reviews represents an extra-role behavior, which correlates with increases in satisfaction, loyalty and repurchase of the brand (Cermak & Prince, 1994; Wind & Rangaswamy, 2001).

King et al. (2014) found, based on several studies, that eWOM has been proven to impact several individual level outcomes which include factors closely related to loyalty and loyalty itself: consumer's willingness to purchase a product; consumer engagement, and levels of trust and loyalty. In addition, customer to customer interactions has been known to promote engagement and loyalty. Popular e-tailers, such as Amazon, currently explore customer to customer interaction opportunities through redirection of pre-purchase questions to customers who are already in the post-purchase phase.

C.W. Yoo et al (2013) has built a conceptual framework that builds on motivation, participation, and identification theories. Their research goal was to prove that eWOM participation behavior would improve a participant's e-loyalty feelings. In the first stage of their model (Figure 3), the individual is influenced by a series of motives classified in intrinsic (i.e., interest, enjoyment and satisfaction) and extrinsic (i.e., compensation) types. Following the idea that increased customer participation leads to increases in intrinsic motives, customer interaction during the purchase process through eWOM feedback may significantly enhance a participant's personal website identification. Finally, increases in a participant's website identification are thought to cause increases in e-loyalty feelings towards that website.



Figure 3. Conceptual framework for enhancement of e-loyalty (Yoo et al, 2013).

The motivational theory explains what are the factors that boosts eWOM participation (e.g., concern for other customers or self-esteem improvement), and it is usually broken into intrinsic and extrinsic motives. The participation segment of the framework explain whether or not the customer's eWOM behavior leads to positive or negative attitude toward the product/service. At this stage, a customer with a high degree of participation is more likely to accredit

unsatisfactory service to himself rather than to the service provider (Sedikides & Strube, 1995). The identification theory represents the bridge between participation and e-loyalty through the elucidation of psychological variables. Extra-role behavior enhances the customer's sense of connectedness and promotes social identity in the group (Dick et al, 2006). Therefore, increased levels of participation relates to higher levels of recognition (Yoo et al, 2013).

Ultimately, Yoo, Sanders and Moon (2013) found that motivation is the most important stage in promoting eWOM systems, specifically internal motivation (intrinsic motives). The results of their study also reveal that the customer's review participation has significant impact on site identification building.

The importance of further studies on eWOM in the construction of e-loyalty is highlighted here due to the fact that there are still few empirical studies on the subject. Pan, Sheng & Xie (2012) have identified close correlation with positive eWOM and trust, and the subject is indicated as relevant to future research (Yoo et al, 2013). Toufaily et al (2013) have emphasized the importance of studies in areas related to eWOM, including them on topics for future research. They were described in areas such as virtual community/forum, social presence, intelligent communication, learning effect, transactional/relational orientation, and involvement.

2.3. HYPOTHESES

The hypotheses were formulated to measure e-loyalty's main antecedents according to prior literature, and the significance of two sided effects between customer loyalty and word-of-mouth. This segment should instruct how each hypothesis was formulated based on prior empirical research and theory.

Trust is normally considered a construct of honesty and benevolence dimensions perceived in the behavior of the other party: honesty has to do with fulfilling promises and sincerity, while benevolence has to do with the interest in the wellbeing of the other, without opportunistic intentions (Flavián et al., 2006).

Researchers have found that trust leads to brand loyalty (Luarn and Lin, 2003); loyalty is directly dependent on the degree of trust (Flavián et al., 2006); and trust can be classified as a major driver to loyalty (Pan et al., 2013). In addition, trust was also found to be a critical factor stimulating purchase (Flavián et al., 2006). Trust becomes especially important factor when

there is lack of knowledge about products and service, feelings of vulnerability, perception of high risk, uncertainty, and switching decisions.

Similar to a loyal customer, a consumer who trusts a product/service is more likely to develop favorable attitudes, pay a price premium, remain loyal, and spread word of mouth (Pan et al., 2012). *Ceteris paribus*, trusted services will be purchased more often, and have a higher probability of earning loyal customers in comparison to non-trusted services. Therefore, it is reasonable to expect that such relationship happens also in websites, which conveys to the first hypothesis:

Hypothesis 1 (H1): Trust will positively affect e-loyalty

Consistent with Oliver (1999) and V. Shankar et al. (2003), satisfaction can be defined as the perception of pleasurable fulfillment of a service. Customer satisfaction has often been regarded as a major determinant of e-loyalty, although some empirical evidence has failed to provide strong linkage, whereas other has indicated a complex and complicated indirect relation (Pan et al., 2012).

Empirical research has demonstrated that overall customer satisfaction has a stronger positive effect on loyalty to an online server provider, when compared to an offline alternative. The same study has also found that satisfaction and loyalty has a reciprocal relation, positively reinforcing each other, and that it is further strengthened in an online environment (Shankar et al., 2003).

Marketing scholars have argued that satisfaction with the value of a product or service is a key determinant to customer loyalty (Picon et al., 2013), and the fulfillment of customers' expectations will lead to an increase in their future purchase intention. For example, Casalo et al. (2008) have found that greater degrees of individual loyalty have emerged from greater degrees of consumer satisfaction levels, and Lee et al. (2013) have found that customer satisfaction influences e-loyalty.

Satisfied customers, in similarity with loyal customers, are more likely to repurchase, lower their price sensitivity, and engage in positive word of mouth recommendation. It is logical to assume that customers, when constantly satisfied, are on their path to becoming loyal (Picon et al, 2013). Therefore, this study tests the subsequent hypothesis:

Hypothesis 2 (H2): Customer satisfaction will positively affect e-loyalty

The feeling of commitment towards a website reflects the intention of repeat behavior (Allegui & Temessek, 2004). Repeat purchase behavior, together with attitudinal preference, is a condition considered essential to the concept of loyalty (Toufaily et al., 2013). Loyalty has also been referred to as a commitment to repeatedly purchase a preferred product or service or to become a regular customer of a particular seller (Oliver, 1999).

Customer commitment has been defined as “a stable preference that is bound by an attitude of resistance to change”, and research has suggested that “tendency to resist changing preference” provides the main evidence for commitment (Luarn and Lin, 2003). Similar to repurchase behavior, resistance to change is a central concept to loyalty. Therefore, it is no surprise that Luarn and Lin (2003) found that commitment has a significant impact on e-loyalty. Other empirical studies have also indicated that loyalty, together with trust, are important determinants of online loyalty (Toufaily et al., 2013).

Committed customers are expected to invest more heavily in their relationship with the e-service provider. They perceive greater benefits to loyalty and greater risks to switching to other providers (Pan et al., 2012). Considering the background theory on commitment, I hypothesize that commitment is an antecedent of e-loyalty:

Hypothesis 3 (H3): Commitment will positively affect e-loyalty

Desire can be understood as both the starting point and the end point of action: the starting point is the arousal of an initial desire, and the end point is the end of the action, which is considered complete when the object of desire is achieved. Aristotle believed that the object of desire is “the starting point of practical reason, while its final stage is the beginning of action”. Therefore, desire and practical reason are not independent lines of causation, but rather a single causal path from the object of desire to practical reason/imagination to action (Mertz Hsieh, 2013).

Independent of which factors affect each individual’s information sharing desire, it is logical to infer that when a crowd has stronger desires for an outcome, the probability of that outcome happening increases in both number (quantity) and depth (quality).

The quality of eWOM environment can be defined as a sum of three factors impacting the consumer’s perception of a website’s eWOM: the argument quality, source credibility and perceived quantity of reviews. The argument’s quality is measured based on how informative and persuasive eWOM is; source credibility is measured based on the consumer’s general

perception about the credibility of users practicing eWOM on the site (i.e. how knowledgeable and sincere they are); and perceived quantity of reviews is based on consumer's perceptions regarding the volume of reviews and the popularity of corresponding products and services within a website (Zhang et al., 2014).

I assume that important e-tailers such as Amazon.com and eBay have enhanced eWOM environments in their websites because they recognize the importance of user comments and reviews to their business. These e-tailers tend to have sophisticated eWOM systems, which enable unidentified users to post reviews to a minimum effort by using a rating system instead of writing long testimonials. Such options stimulate a wider breadth and depth of users' reviews because it reduces impeditive feelings to action (e.g., loss of time and personal privacy) during the practical reasoning process. Therefore:

Hypothesis 4 (H4): information-sharing desire has a positive effect on the quality of the eWOM environment

Behavioral intention can be defined as an individual's readiness to perform a given behavior, which implies that it is an immediate antecedent of behavior (Ajzen, 2002). Zhang et al. (2014) studied the quality of eWOM on behavioral intention, which they defined as "consumer's willingness to purchase products or services after they process issue-relevant online reviews". Their findings support that argument quality, source credibility, and perceived quantity of reviews are all important determinants of behavioral intention.

Purchase intention is a kind of behavioral intention. Balakrishnan et al. (2014) investigated purchase intention and brand loyalty, and found that eWOM, a parallel factor to online communities and online advertisement, has positive effects in purchase intention and brand loyalty. According to them, there may be several meanings to the definition of purchase intention, which they state as "the subjective judgment by the consumers reflected after general evaluation of products or services". The different meanings are (1) consumer willingness to consider buying, (2) buying intention in the future, and (3) decision repurchase. Several authors (Doong, Wang, & Shih, 2008; Luarn & Lin, 2003) have defined e-loyalty in a very similar manner: an intention to maintain the behavior on the Web, such as the intention to revisit, reorder or repurchase.

There are a number of studies indicating that eWOM significantly affects loyalty. These studies have found that eWOM significantly affects several individual-level outcomes, such as trust

and loyalty (Awad and Ragowsky 2008; Gauri, Bhatnagar, and Rao 2008). As an example, consumers have been actively seeking eWOM instead of an after-sales service. The eWOM helps them understand what other consumers are experiencing, and these actions can significantly affect loyalty. A number of studies, especially those involving brand communities, have demonstrated how customer to customer interactions can heighten participants' engagement and loyalty (King, 2014). In addition, consumer engagement has been considered a key factor in gaining consumer loyalty (Blazevic et al., 2013). In accordance to this background theory, I hypothesize that:

Hypothesis 5 (H5): the quality of the eWOM environment has a positive effect on e-loyalty

2.3.1. Model Development

The literature review was used to identify which are the main antecedents of customer e-loyalty toward an online service. The selection of variables was made based on a comparison of different theoretical frameworks, in addition to the breadth (number) and depth (effectiveness) of these factors in academic research literature. Empirical findings of the antecedents and descendants of eWOM were used as building blocks to design the project's own theoretical framework. Therefore, eWOM was included in the same model as antecedents of e-loyalty such as satisfaction, trust and commitment.

The research model was inspired and adapted from the works of Zhang et al. (2014), Lee et al. (2013), Erciş et al. (2012), and Luarn and Lin (2003). Figure 4 illustrates the model with the variables and hypothesis of the study.

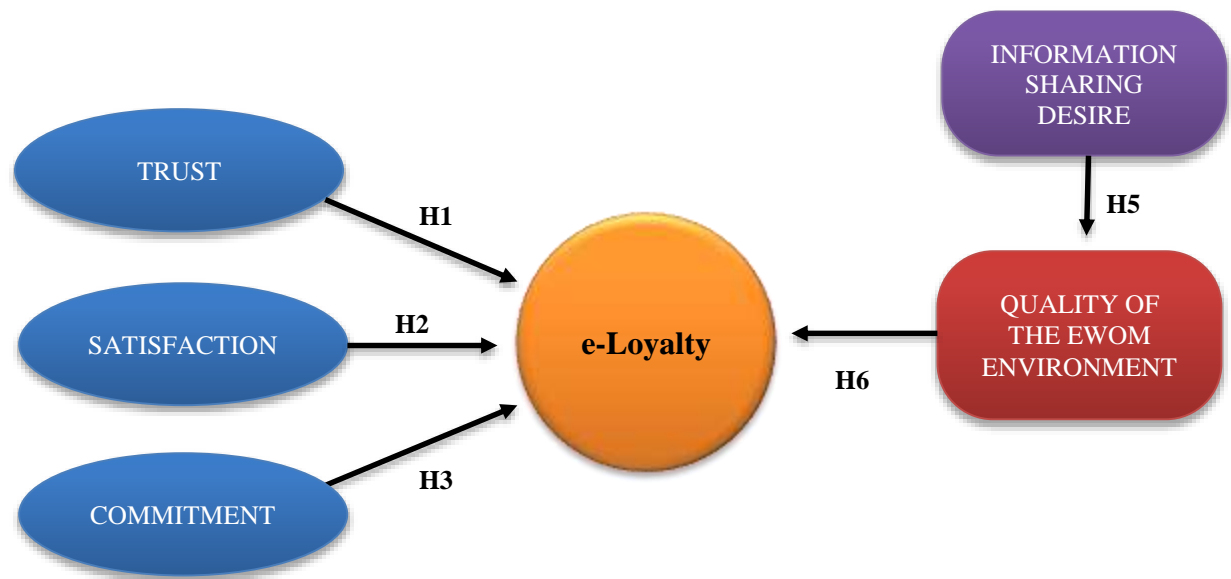


Figure 4. The theoretical model.

METHOD

This thesis uses a causal design approach through cross-sectional survey. The form of collection is through the Internet, with administration made online. The impersonality of this form of data collection is considered positive because it avoids unwanted bias risks related to face-to-face interviews. Internet survey is also proven to be a practical, fast, economical and overall convenient mode of data collection.

3.1. RESEARCH PURPOSE

When testing the hypotheses, this research should also show which variable is the most effective antecedent of e-Loyalty. Furthermore, the significance of eWOM's dual relationship (as possible antecedent and consequent) to customer e-loyalty will be analyzed. To test the hypotheses and measure the variables, the chosen method in data analysis is "Structural Equations Modeling" (SEM), which is also known as analysis of covariance structures, or causal modeling. The goal of this approach is to determine whether sample data can support a theoretical model. SEM is the appropriate choice when the purpose of research is to advance the existing knowledge on the complex relationships of constructs (Barros, 2010).

3.2. QUESTIONNAIRE DESIGN

To standardize findings to the same kind of online product and e-service, only one category was chosen: online book purchases, a common e-service choice among Millennial consumers. The major content sections created at the platform SurveyMonkey are the (1) cover letter with general profile questions (e.g., how many online purchases do you make?); (2) items in a 7-point Likert scale (strongly disagree, disagree, slightly disagree, neutral, slightly agree, agree, and strongly agree) designed to extract the subject's perception (i.e., how much do you agree?); and (3) specifics on the respondent's demographic characteristics.

3.2.1. Scales

The scales measuring the variables Trust, Satisfaction and Commitment, were based in Luarn and Lin (2003). The scales for the e-Loyalty variable are based in Luarn and Lin (2003) and

Lee et al. (2013). EWOM and the “information sharing desire” variable had scales adapted from Lee et al. (2013). “Quality of the eWOM environment” had scales adapted from Zhang et al.’s (2014). A table listing the scales and their respective authors is provided in the Appendix A.

3.2.2. *Pre-Test*

A pilot test was made in a sample of twenty subjects (ten of each country) to verify whether there are unexpected answers, or feedback questions and recommendations that will indicate improvements to the survey’s objectivity, content clarity and flow. Of these twenty subjects, five made the survey in the live presence of the author, and fifteen completed the survey by themselves, sending their feedbacks in the survey itself (i.e., a special field was created to encourage feedback).

In the pre-test phase, all aspects of the questionnaire were tested: content, wording, sequence, form and layout, question difficulty, and instructions (Malhotra and Peterson, 2006). According to the feedbacks received, there were no issues in regards to the questionnaire’s content, form and layout, and question difficulty. The issues with wording, sequence, and instructions were resolved by (1) rewriting titles and scales to improve understanding of their original meaning, (2) reevaluating logic and required questions; and (3) explaining in few words what is eWOM and whether students should include academic books in their estimates.

3.3. SAMPLE

The nonprobability sampling technique chosen for this study is classified as “convenience sampling”. In accordance to the characteristic of this technique, the selection of the sampling units was made primarily by the researcher, who was also the main responsible for delivering the survey. Convenience sampling has the advantages of being inexpensive and fast; and the serious disadvantage of suffering from selection bias (Malhotra and Peterson, 2006), which was reduced here by selecting individuals of various age ranges (within an eighteen year span), living in different geographical locations (within two or more locations in Brazil and the US), and belonging to different social classes (upper middle and lower upper classes).

The research sample consists exclusively of Millennials (generation Y), which is defined here as individuals born from 1980 to 1997, currently within 18 and 35 years of age. The choice of exclusivity upon this generation is in accordance to their expressive activity as online

consumers, which represents more than the sum of all other generations (Nielsen N.V., 2014). Approximately half of these individuals were students, and the age varied to mimic the different age groups that is a characteristic of this generation.

The total size of the sample consisted of 242 people; 123 living in the US, and 119 in Brazil. The subjects chosen for this research were drawn from a nonprobability sample, where respondents are selected through network ties, and influenced by convenience and availability.

3.4. PROCEDURE FOR DATA ANALYSIS

Data was extracted from the SurveyMonkey website service to Excel, codified (refer to Appendix D for further details), and the statistical significance of results were measured in Smart PLS, a software program. Hypothesis were tested and measured using the partial least squares structural equation modeling (PLS-SEM) method.

3.4.1. *Structural Equation Modeling (SEM)*

Structural Equation Modeling (SEM) is a second-generation multivariate data analysis method that is often used in marketing research because it can test theoretically supported linear and additive causal models. There are distinct approaches to SEM: the widely applied Covariance-based SEM (CB-SEM); the Partial Least Squares (PLS), which focuses on the analysis of variance; and the component-based SEM known as Generalized Structured Component Analysis (GSCA) (Wong, 2013).

The CB-SEM method is popularly used when the sample size is large, the data normally distributed, and the model is correctly specified. PLS is advantageous in situations where the sample size is small, predictive accuracy is paramount, and the correct model specification cannot be ensured (Wong, 2013).

SmartPLS was used to uncover the “path weighting scheme” in the model illustrated in Figure 5. The endogenous variables, which are variables with one or more paths leading outwards and none inwards, are Satisfaction, Trust, Commitment, and Info Sharing Desire. The exogenous variables, which represents the effect of other variables and have at least one path leading inward, are e-Loyalty and Quality of the eWOM Environment.

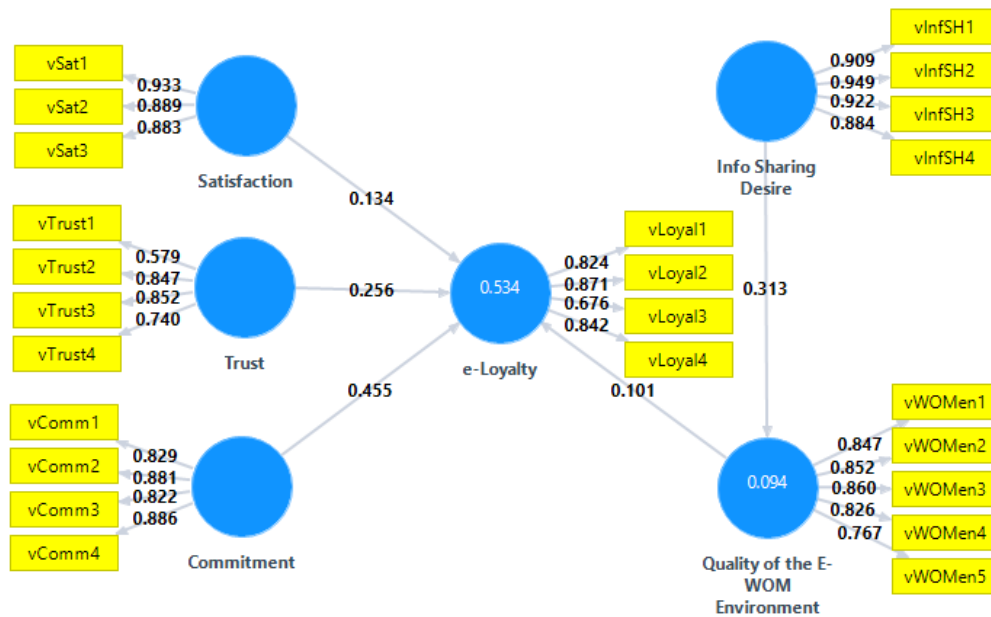


Figure 5. The research model in the PLS-SEM software

The coefficient of determination (or R^2) is used for measuring goodness of fit in linear regression models. It is the square of the multiple correlation coefficient between the study and explanatory variables based on data extracted from a sample (Cheng et al., 2014). Path coefficients, which are also known as standardized regression coefficients, indicate that each unit change in an exogenous variable results the amount of change expected in the endogenous variables (Gunuc and Kuzu, 2015). The “bootstrapping” technique is applied to confirm significance of the path coefficients in the model. This technique estimates standard errors and t-values in the basis of large subsamples of the original data with no distributional assumptions (Hair et al., 2013).

Establishing reliability and validity for all latent variables in the research is essential to complete the examination of the structural model (Wong, 2013). The following table demonstrates the procedure for verifying reliability and validity in the PLS-SEM (table 1).

<i>Technique</i>	<i>Criterion</i>
Indicator Reliability	Test the Cronbach’s alpha for all the variables in the research variables. A value equal or below 0.6 indicates unsatisfactory internal-consistency reliability (Malhotra and Peterson, 2006). Therefore, all scales should score above 6.0 .
Internal Consistency Reliability	Composite reliability should be 0.7 or higher . If it is an exploratory research, 0.6 or higher is acceptable. (Bagozzi and Yi, 1988)
Convergent validity	It should be 0.5 or higher (Bagozzi and Yi, 1988)
Discriminant validity	Fornell and Larcker (1981) suggest that the “ square root ” of AVE of each latent variable should be greater than the correlations among the latent variables

Table 1. Procedure to verify reliability and validity in a PLS-SEM analysis.

Reliability is when a measure produces consistent results even when same entities are measured in different conditions (Field, 2013). The coefficient alpha, or Cronbach's alpha, is a measure that calculates the averages of all coefficients resulting from all possible combinations of split halves. A coefficient alpha value of 0.6 or less is generally indicative of unsatisfactory internal-consistency reliability (Malhotra and Peterson, 2006).

RESULTS

4.1. DEMOGRAPHIC AND PROFILE OVERVIEW

Twenty out of 242 respondents stated either that they didn't purchase books online or didn't purchase books at all. Because the research sample involved many students (48% or 115 to be precise), the number of people that don't purchase books online is unreliable. The real percentage of people who do not purchase books online in a sample representative of the Millennial population should be at least 50% greater in the author's opinion. Table 2 illustrates the information in percentages.

<i>Condition</i>	<i>Count</i>	<i>%</i>
Never purchase books	4	2%
Don't purchase books online	16	7%
Total not purchasing online	20	8%
Projection (min. estimate)	30	12%
Number of Respondents	242	100%

Table 2. Total number of respondents who do not purchase books online

Amazon is by far the preferred online store for book purchase with 62% of the sample's preference. Brazilian bookstores with online retail operations comes in second with 17%. US bookstores with e-tailing operations and Brazilian e-tailers (sellers of books and other products and services) are both tied in 5%. Respondents that left this option in blank amount to 4%. The graphic representation in full detail can be found in Figure 6.

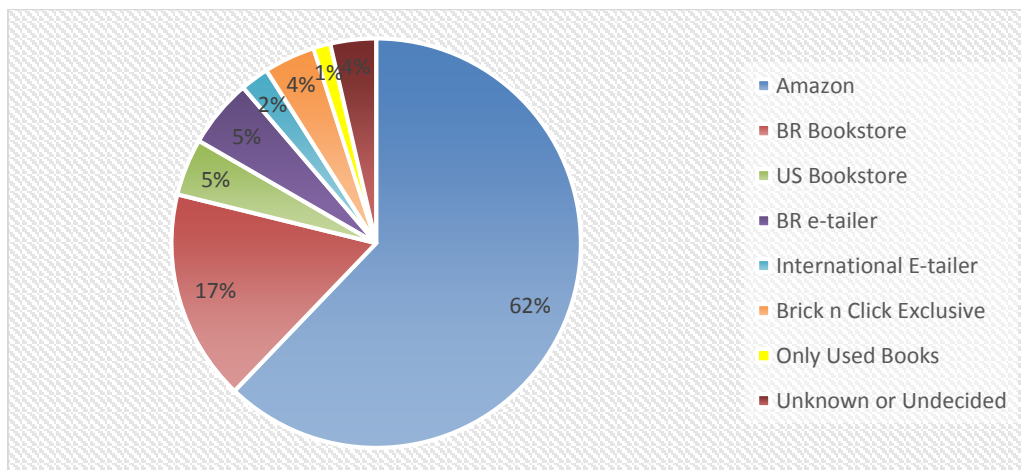


Figure 6. Preference for online book store

The sample can be characterized by preferring the online environment for book purchase: 67% uses an online e-tailer over an offline alternative. The sample's frequency of purchase is rather low, with the vast majority not exceeding 3 book purchases per semester (majority in the one to two purchases per semester). The money spent per semester is also surprisingly low, considering approximately half the sample were students. The data suggests that millennials prefer practical and cheap options for their need to acquire books, as shown in Figures 7, 8, and 9.

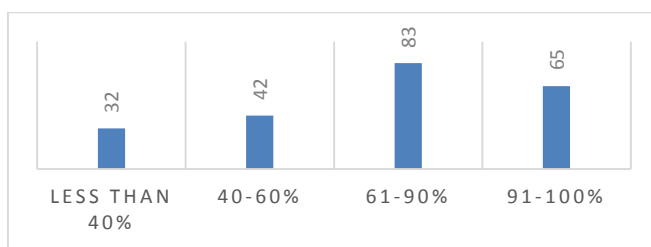


Figure 7. Online vs. offline book purchase activity

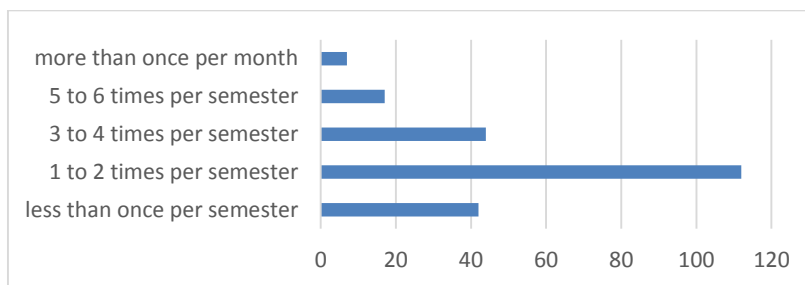


Figure 8. Online book purchase frequency



Figure 9. Semester long expense with online book purchase

The demographic characteristics of the sample were split in radically different locations: 119 respondents live in Brazil, while 123 live in the United States. The ages were distributed evenly, although all the sample below 23 years of age is living in the US. Most respondents were identified as men: 128 men and only 84 women. The majority of respondents were single

(129); only 68 were married. The majority of respondents are students (115), while 83 respondents were either working full time or part time. The amount of unemployed respondents and employed and studying at the same time were minimal (7 and 9 respectively). Almost half the sample (96) are either pursuing (or finished with) an MBA or other post-graduate degree, while 53 respondents are either pursuing or finished with their Bachelor studies. Income was mostly below 25 thousand dollars a year, with the higher ranges evenly distributed. This demographic information is the least reliable because certain respondents were confused as to whether include the income of their close relatives (i.e., parents) or not.

4.2. RESEARCH MODEL AND HYPOTHESES

The highest R^2 in the model is 0.534. This means that the three exogenous latent variables (Satisfaction, Trust, Commitment, and Quality of the eWOM Environment) explain 53.4% of the variance in the endogenous latent variable e-Loyalty. The other endogenous latent variable with a coefficient of determination is Quality of the eWOM Environment (0.094). Meaning that the exogenous latent variable of Information Sharing Desire has a small predictive value of 9.4% for the variable Quality of the eWOM Environment.

Path coefficient values in the inner model suggest that Commitment has the strongest effect on e-Loyalty (0.455), followed by Trust (0.256) and Satisfaction (0.134). The endogenous variable “the Quality of the eWOM Environment” has the least effect on e-Loyalty (0.101). Commitment was found to be the only strong predictor of e-Loyalty. Trust was found to be a moderate predictor, while Satisfaction and “Quality of the eWOM Environment” were found to be weak predictors.

The path coefficient 0.101 from the relation between variables “Quality of the eWOM Environment” and e-Loyalty is borderline acceptable. To confirm significance of this and other measures, the “bootstrap” technique is applied (Figure 10). The t-test indicates 1.92, slightly below 1.98 threshold. In addition, its p-value is slightly above 0.05, which is also considered a measure indicative of insignificance (table 3). Therefore, “Quality of eWOM Environment” can’t be classified as a reliable predictor of e-loyalty. The other variable with an insignificant t-test and p-value is Information Sharing Desire. Even though it is not a direct predictor of e-Loyalty, Information Sharing Desire has an indirect effect on e-Loyalty. This indirect effect

was considered insignificant. All other variables in the model have significant total effects on e-Loyalty.

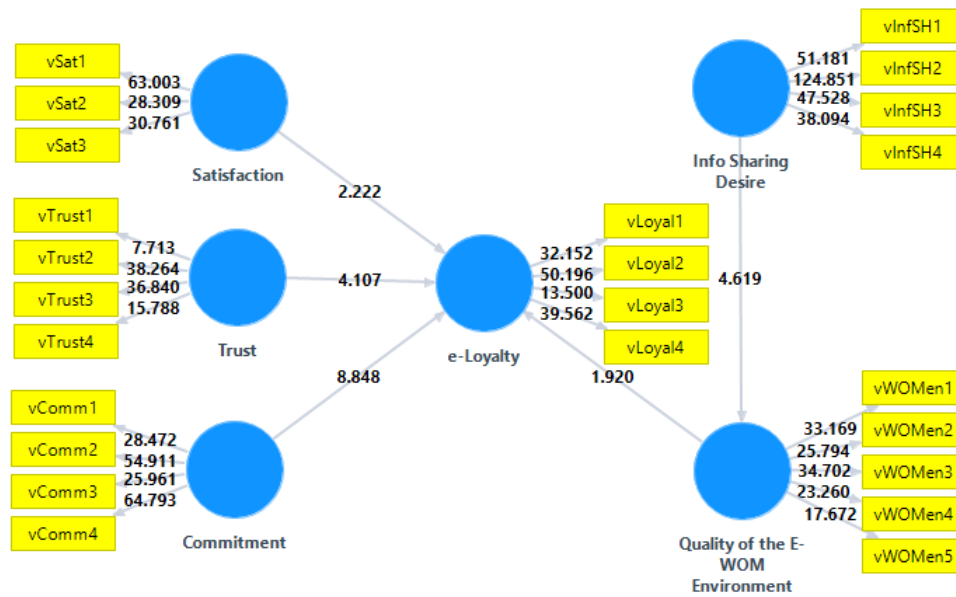


Figure 10. The “Bootstrap” technique applied to verify T-Test values.

Paths	Beta (β)	Mean (M)	Standard Error	T Statistics	P Values
Commitment → e-Loyalty	0.455	0.455	0.051	8.848	0.000
Info Sharing Desire → Quality of the eWOM Environment	0.313	0.320	0.068	4.619	0.000
Quality of the eWOM Environment → e-Loyalty	0.101	0.100	0.053	1.920	0.055
Satisfaction → e-Loyalty	0.134	0.127	0.060	2.222	0.027
Trust → e-Loyalty	0.256	0.256	0.062	4.107	0.000

Table 3. The “Bootstrap” technique is applied to verify the significance of predictor variables

An important reliability criterion for the data is the number of iterations reached in the Partial Least Square’s SEM result. When checking this number, the user must be sure that the algorithm stopped before the maximum number of iterations is reached. The PLS algorithm will only stop before the maximum number of iterations if the change in outer weights between two consecutive iterations is smaller than the stop criterion variable (Hair et al., 2013). For the model being tested, the stop criterion was set for the smallest option of 10^{-7} , and the algorithm converged after 6 iterations (of a maximum of 300). Therefore, the estimations from the model are considered good (Wong, 2013).

The Cronbach's Alpha from all scales are well above the 6.0 threshold is positive, which is indicative that the scales are reliable (see table 4).

Latent Variable	Indicators	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Commitment	vComm1	0.83	0,756	0.916	0.731
	vComm2	0.88			
	vComm3	0.82			
	vComm4	0.89			
Information Sharing Desire	vInfSH1	0.91	0,886	0.955	0.84
	vInfSH2	0.95			
	vInfSH3	0.92			
	vInfSH4	0.88			
Quality of the eWOM Environment	vWOMen1	0.85	0,877	0.918	0.691
	vWOMen2	0.85			
	vWOMen3	0.86			
	vWOMen4	0.83			
	vWOMen5	0.77			
Satisfaction	vSat1	0.93	0,817	0.929	0.814
	vSat2	0.89			
	vSat3	0.88			
Trust	vTrust1	0.58	0,937	0.845	0.582
	vTrust2	0.85			
	vTrust3	0.85			
	vTrust4	0.74			
e-Loyalty	eLoyal1	0.82	0,888	0.881	0.65
	eLoyal2	0.87			
	eLoyal3	0.68			
	eLoyal4	0.84			

Table 4. Indicator loadings, and AVE, composite reliability, and Cronbach's alpha for the Variables.

Prior literature has suggested the use of "Composite Reliability" as a replacement (Wong, 2013) to Internal Consistency Reliability. It can be observed in Table 12 that all values are much larger than 0.7. Therefore, high values of consistency reliability is demonstrated among all latent variables. Convergent validity is reached because all AVE values are above 0.5. Fornell and Larcker (1981) suggest that discriminant validity should be found by comparing the square root of AVE values with the correlation values among the latent variables. Even though the method dates back to 1981, Marketing studies in related fields (e.g., Zhang et al., 2014) are currently using the same procedure to achieve discriminant validity. The square root of each latent variable's AVE value is found to be greater than the correlation values among latent variables (Table 5). Therefore, discriminant validity is achieved.

	Commitment	Info Sharing..	Quality of the...	Satisfaction	Trust	e-Loyalty
Commitment	0.855					
Info Sharing Desire	0.174	0.917				
Quality of the eWOM ...	0.374	0.313	0.831			
Satisfaction	0.329	0.055	0.318	0.902		
Trust	0.42	0.095	0.388	0.607	0.763	
e-Loyalty	0.644	0.149	0.413	0.471	0.567	0.806

Table 5. Method to establish discriminant validity.

Now that the model has been tested for validity, reliability, and path significance, the research hypothesis may be accepted or rejected. With the exception of hypothesis 5, all hypothesis were accepted. The hypothesis “the quality of the eWOM environment has a positive effect on e-loyalty” was rejected because it is statistically insignificant. The decision was made in consequence of the low path coefficient, and the insignificance indicated in the t and p values for the path relation coefficient that simulated the statement. Table 6 clearly indicates whether the hypotheses were accepted or rejected, together with their corresponding beta, t and p values.

H#	Statement	Beta	T Value	P Value	Accepted?
H1	Trust will positively affect e-loyalty	0.256	4.107	0.000	YES
H2	Customer satisfaction will positively affect e-loyalty	0.134	2.222	0.027	YES
H3	Commitment will positively affect e-loyalty	0.455	8.848	0.000	YES
H4	information-sharing desire has a positive effect on the quality of the eWOM environment	0.313	4.619	0.000	YES
H5	the quality of the eWOM environment has a positive effect on e-loyalty	0.101	1.92	0.055	REJECTED

Table 6. Testing the research hypotheses

The model was proven valid and reliable under the quality criteria listed in the Smart PLS program. Nevertheless, there are credible researchers who consider the criteria insufficient to validate a SEM structure, namely the validation of indicators. Wong (2013) states that the square of each indicator outer loading should be checked for reliability. He continues by stating that the minimum accepted level is 0.4, while indicating that acceptable scores should be near the 0.7 range. Hulland (1999) believes that the measure 0.7 or higher should be preferred, while 0.4 or higher would be acceptable in exploratory research. In conclusion, the author decides that the analysis of the research model will only be exhausted after submitting all indicators to the aforementioned reliability test.

All linear regression coefficients (factor loadings) are submitted to a square root. Table 7 illustrates the reliability values for each indicator. While most values are near or above the 0.7 range, four indicators have values that are significantly below the preferred threshold. These indicators are “vWOMen5” (0.59), “vTrust1” (0.34), “vTrust4” (0.55), and “eLoyal3” (0.46).

Latent Variable	Indicators	Indicator Reliability (i.e., loadings ²)
Commitment	vComm1	0.69
	vComm2	0.78
	vComm3	0.68
	vComm4	0.78
Information Sharing Desire	vInfSH1	0.83
	vInfSH2	0.90
	vInfSH3	0.85
	vInfSH4	0.78
Quality of the eWOM Environment	vWOMen1	0.72
	vWOMen2	0.73
	vWOMen3	0.74
	vWOMen4	0.68
	vWOMen5	0.59
Satisfaction	vSat1	0.87
	vSat2	0.79
	vSat3	0.78
Trust	vTrust1	0.34
	vTrust2	0.72
	vTrust3	0.73
	vTrust4	0.55
e-Loyalty	eLoyal1	0.68
	eLoyal2	0.76
	eLoyal3	0.46
	eLoyal4	0.71

Table 7. Reliability values for each research indicator.

After the extraction of the four indicators, the research model is submitted to the PLS-SEM factor loadings, and quality criterion process. The first model had drastic changes in the path coefficient from the variable Trust to the variable e-Loyalty, which decreased substantially (from 0.256 to 0.142). This is understandable, since this latent variable is now dependent of only half the reflective indicators it once had. On the relation between the variables e-Loyalty and “Quality of the eWOM Environment”, a surprising change emerged after the “bootstrapping” technique was applied. Table 8 illustrates the radical change in the model.

Path	Path Coeffic.	Mean	Stand. Error	T Value	P Value
Quality of the eWOM Env. → e-Loyalty	0.118	0.119	0.055	2.158	0.031

Table 8. Main change in path relations in the model after the removal of weak indicators.

The algorithm from the model has now converged in the fifth iteration (one iteration less in relation to the first analysis). Cronbach's alpha, composite reliability, average variance extracted (AVE) values and discriminant validity had values above the threshold. Because the relation between variables e-Loyalty and "Quality of the eWOM Environment" had a path coefficient increase (from 0.101 to 0.118), t-value increase (from 1.92 to 2.158) and p value decrease (from 0.055 to 0.031), it is now considered statistically significant (Table 8). Therefore, after following a stricter method for validation of indicators, hypothesis 5 is now confirmed (Table 9).

H#	Statement	Beta	T Value	P Value	Accepted?
H1	Trust will positively affect e-loyalty	0.142	2.094	0.037	YES
H2	Customer satisfaction will positively affect e-loyalty	0.179	2.701	0.027	YES
H3	Commitment will positively affect e-loyalty	0.470	8.764	0.000	YES
H4	Information-sharing desire has a positive effect on the quality of the eWOM environment	0.305	4.656	0.000	YES
H5	The quality of the eWOM environment has a positive effect on e-loyalty	0.118	2.158	0.031	YES

Table 9. Final results from the analysis of the model after the extraction of weak indicators.

Besides this important change, there weren't other significant alterations to the model. It is important to note the slight increase in significance for Commitment and Satisfaction as predictors of e-Loyalty. These changes indicate that satisfaction and commitment suffer mediation effects with either the variables Trust and e-Loyalty, or both.

In conclusion to the data analysis procedure made using two different indicator reliability methods, the author determines that hypothesis 5 should be accepted. The rationale for this decision is straightforward: the stricter indicator reliability method should yield a more trustworthy result. The fact that the model had one less iteration (5 instead of 6) after the removal of the four indicators corroborates with this line of thought. Therefore, all hypotheses were accepted. Table 10 illustrates the final decision to the research hypotheses.

Hypothesis 1	Trust will positively affect e-loyalty	ACCEPTED
Hypothesis 2	Customer satisfaction will positively affect e-loyalty	ACCEPTED
Hypothesis 3	Commitment will positively affect e-loyalty	ACCEPTED
Hypothesis 4	Information-sharing desire has a positive effect on the quality of the eWOM environment	ACCEPTED
Hypothesis 5	The quality of the eWOM environment has a positive effect on e-loyalty	ACCEPTED

Table 10. Final judgement for the research hypotheses.

4.3. MEDIATION

Mediation in statistics means that a relationship between the predictor variable and an outcome variable can be explained by their relationship with a third variable (the mediator). Perfect mediation occurs when the relationship between the predictor and outcome variables is reduced to zero (Field, 2013). It is important to find mediation because it helps us understand which effects the research variables have among themselves. Namely, how their predictor loadings change when in linkage to other variables.

Testing for mediation involves the following procedure: (1) draw a direct path from a dependent variable to an independent variable and check for the loading number; (3) insert the variable to test for mediation and draw an inward path from the dependent variable and an outward line to the independent variable; (4) the initial loading number from the direct path changes once the mediator variable is introduced; (5) check for t-tests and p-values for the path coefficients. The t-test number should be above 1.96 for significance, and the p-value below 0.5 for adequate probability.

Smart PLS software unfortunately does not offer the user a clear testing of the mediation's significance. To achieve such a clarity in testing, one should complement the mediation analysis by using the test statistics formula illustrated in Figure 11. The formula requires the use of path coefficient and the standard error estimated in the paths between dependent variable and mediator, and between mediator and independent variable (Figure 12). If the test statistic yields a number above 1.96, and the two-tailed probability yields a value below 0.05, then the mediation may be considered significant.

$$z = \frac{ab}{\sqrt{(b^2SE_a^2) + (a^2SE_b^2)}}$$

Figure 11. Sobel test statistic (Sobel, 1982)

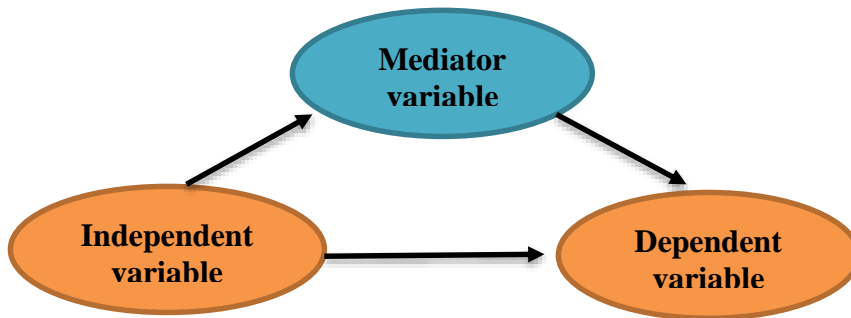


Figure 12. The mediator variable path construct (Sobel, 1982)

E-loyalty was tested for mediation between Trust and the Quality of the eWOM Environment. First, the direct path is measured with and without the mediators (Figures 13 and 14). Then, the “Bootstrap” procedure is performed. This action will enable a table with all the information needed (table 11): the path coefficients and standard errors from the paths with the mediator variable, and the t-tests and p-values.



Figure 13. Example of a direct relation (no mediator).

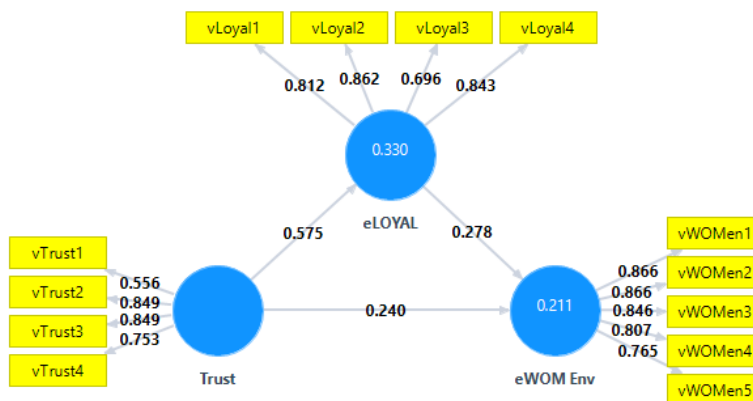


Figure 14. Example of a mediated relation (e-Loyalty is the mediator).

Paths	Path Coefficient (α)	T Statistics	P Values
Trust → e-Loyalty	0.575	11.054	0.000
Trust → Quality of the eWOM Environment	0.240	3.237	0.001
e-Loyalty → Quality of the eWOM Environment	0.278	3.791	0.000

Table 11. Verifying significance of a mediation effect among variables.

Because the t-statistic is well above 1.96 (3.237) and the p-value under 0.05 (0.001), e-loyalty is considered a significant mediator for trust and the Quality of the eWOM Environment. This means that the variable Trust will have very different direct path coefficients with the Quality of eWOM Environment variable if e-Loyalty is used as mediator in the process.

A: 0.575
 B: 0.278
 SE_A: 0.052
 SE_B: 0.073
 Calculate!

Sobel test statistic: 3.60066675
 One-tailed probability: 0.00015870
 Two-tailed probability: 0.00031740

Figure 15. Image from Sobel's Test Calculator for the Significance of Mediation (software).

A series of tests for mediation and significance were made among the variables of research. The concluding information for the mediation process is illustrated in table 12.

Mediator	Structure	STT*	2TP**	Significant?
e-Loyalty	Trust → e-Loyalty → eWOM	1.390	0.164	No
e-Loyalty	Trust → e-Loyalty → Quality of the eWOM Environment	3.601	0.000	Yes
e-Loyalty	Trust → e-Loyalty → Information Sharing Desire	1.529	0.126	No
eWOM	Info Sharing Desire → eWOM → Quality of the eWOM...	1.851	0.064	No
Info Sharing Desire	e-Loyalty → Info Sharing Desire → Quality of the eWOM...	1.791	0.073	No
Commitment	Satisfaction → Commitment → e-Loyalty	5.343	0.000	Yes
Commitment	Trust → Commitment → e-Loyalty	6.005	0.000	Yes
Satisfaction	Trust → Satisfaction → e-Loyalty	2.447	0.000	Yes
Trust	Satisfaction → Trust → e-Loyalty	5.307	0.000	Yes

* The Sobel Test Statistic should indicate a value over 1.96

** The Two-tailed Probability Test should indicate a value below 0.05

Table 12. Final results for mediation significance among variables.

As can be seen in Table 12, the latent variables Commitment, Satisfaction, Trust and Loyalty, have considerable mediation effects among themselves. Little to no mediation is found in the side of the structural model with the variables "Information Sharing Desire", eWOM and "Quality of the eWOM Environment". Therefore, the path relation among the variables with mediation effects will be further investigated (Figure 16). The path relations are an adaptation of Luarn and Lin's research model. Almost all paths are found to be significant and valid: the path relation from satisfaction to commitment had a p-value above 0.05 (table 13).

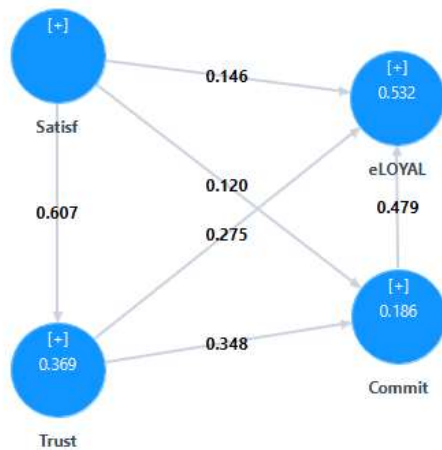


Figure 16. Path relations based on Luarn and Lin's research model (2003).

	β	t-value	p
Commitment \rightarrow e-Loyalty	0.479	9.797	0.000
Satisfaction \rightarrow Commitment	0.120	1.481	0.139
Satisfaction \rightarrow Trust	0.607	9.495	0.000
Satisfaction \rightarrow e-Loyalty	0.146	2.329	0.020
Trust \rightarrow Commitment	0.348	4.345	0.000
Trust \rightarrow e-Loyalty	0.275	4.473	0.000

Table 13. Testing significance for the path relations under analysis.

Similar to Luarn and Lin's findings, this model indicates that commitment has the strongest direct effect on e-Loyalty. The main difference is accounted by the strong paths Trust has with Loyalty and Commitment. While Luarn and Lin (2003) found weak values of Trust as a predictor of Loyalty ($\beta=0.163$, $t\text{-value}=2.707$, $p<0.01$), table 13 shows a moderate significance. Furthermore, Trust also had a moderate significance as a predictor of e-Loyalty, while in Luarn and Lin's model Trust was found to be an insignificant predictor of commitment ($\beta=0.142$, $t\text{-value}=1.836$, $p=0.068$). Satisfaction, on the other hand, was found to hold insignificant effects on Commitment. In Luarn and Lin's construct, the latent variable satisfaction had meaningful effects on commitment ($\beta=0.343$, $t\text{-value}=4.580$, $p<0.001$) and loyalty ($\beta=0.219$, $t\text{-value}=3.588$, $p<0.001$).

By reversing the path and maintaining only the significant relations (paths with $\beta>0.1$, $t\text{-value}>1.96$ and $p<0.05$), it becomes clear that Satisfaction and Trust are variables correlated with each other: in the same way that Satisfaction is a good predictor for Trust (0.607), Trust is also a good predictor for Satisfaction (0.502). The information is in agreement with of Flavián et al.'s (2006) findings: greater website user satisfaction has a direct and positive influence in

the degree of trust shown in the same website. In addition, it corroborates with Erciş et al.'s (2012) accepted research hypothesis: there is a positive relationship between satisfaction and trust.

4.4 ALTERNATIVE RESEARCH MODELS

These mediation exercises and series of investigations with the data leads to two alternative models (Figures 17 and 18). All paths were significant with beta values over 0.1, and respective t and p values over 1.96 and under 0.05.

In the first model (Figure 17), variable Trust plays an important role, uniting variables Commitment (0.492), e-Loyalty (0.36) and "Quality of eWOM Environment"(0.241), while mediating the effect of Satisfaction (0.608). Commitment continues to be the variable with the strongest direct effect on e-Loyalty (0.492), which is equal to the variable Trust's total effect. Both Trust and Commitment path values are tied as holding the highest total effect in e-Loyalty. The variable "Information Sharing Desire" appears to be a strong predictor of eWOM (0.593), confirming that the obvious correlations of these latent variables are present in the model.

In the second model, only the most significant paths (highest path coefficients) are selected after reversing the relation among variables. Even though some of these path relations are significantly different from this thesis' proposed research model, they can be supported by prior research. See-To and Ho (2014) found that prior studies in Marketing have shown eWOM's significant impact on consumer's trust on a firm and its products. The significance of the path from "Quality of the eWOM Environment" to Trust (Figure 18) suggest that this impact extends to consumers' trust in e-services. The high coefficient value (0.414) suggest that "quality of the eWOM Environment" can be a predictor of e-Loyalty (Figure 18). This data supports one of Yoo et al.'s (2013) main takeaways: when customers identify themselves by continuing to participate in electronic word-of-mouth, then e-loyalty emerges.

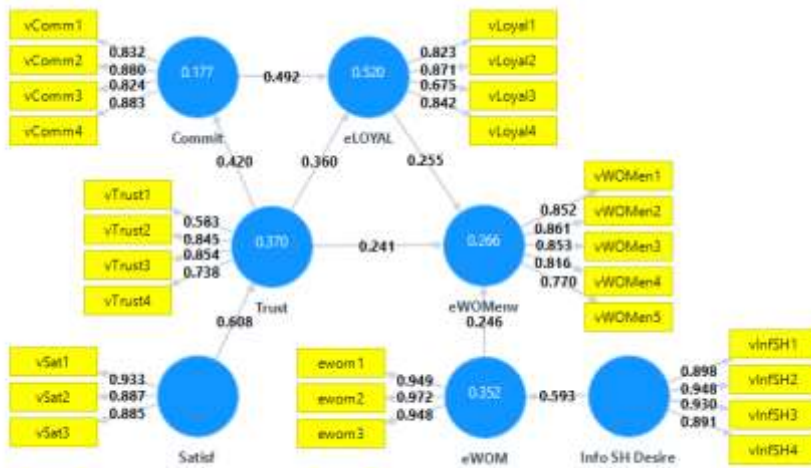


Figure 17. Alternative research model 1

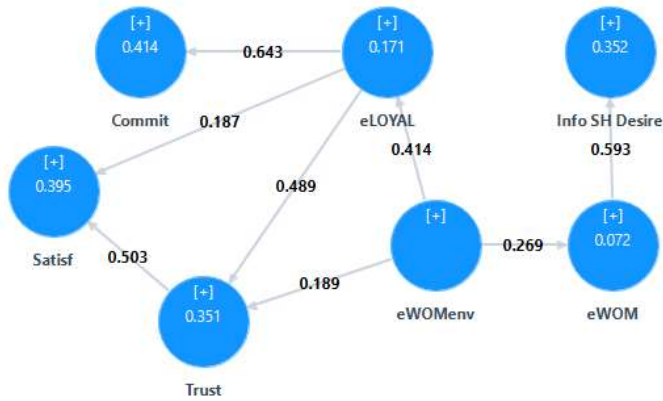


Figure 18. Alternative research model 2

FINAL REMARKS

5.1 DISCUSSION

The relation between e-loyalty, information sharing desire, and the quality of the eWOM environment is central to this study's main objective. Research from Lee et al. (2013) and King et al. (2014) suggest that the effects of these variables may result in a retro-feeding cycle. Somewhat unexpectedly, relations between e-loyalty and the quality of the eWOM environment were found to be weak. Nevertheless, the quality of the eWOM environment was considered a statistically significant predictor of e-loyalty. Therefore, it was found that the quality of a website's eWOM environment has positive effects on e-loyalty. This fact is supported by research in similar topics: source credibility, argument quality and perceived quantity of reviews have positive effects on repurchase intention (Zhang et al., 2014). More significant, research findings indicate that an eWOM environment of good quality stimulate trust and loyalty feelings throughout the customer base. This statement is grounded on previous research (Awad and Ragowsky 2008; Gauri et al., 2008) that concludes eWOM significantly affects levels of trust and loyalty.

This research confirmed a main finding from prior research (Luarn and Lin, 2003; Pan et al., 2012; Toufaily, 2013; Erciş et al., 2012): commitment, trust and satisfaction play an important role in the formation of e-loyalty. The results of this research showed that commitment is by far the greatest predictor of online loyalty, which is also a confirmation to Luarn and Lin's (2003) finding. Commitment was also found to be a strong mediator of e-loyalty and trust, and of e-loyalty and satisfaction. The fact is in accordance with past research models: Luarn and Lin (2003) found that commitment is an important predictor of loyalty, and a mediator between e-loyalty and satisfaction, and e-loyalty and trust; Erciş et al. (2012) analyzed two types of commitment (affective and continuance) as mediators of loyalty and trust sentiments.

Contrary to one of Luarn and Lin's (2003) main findings, satisfaction wasn't seen as a significant predictor of commitment, while trust was. In accordance with Erciş et al. (2012), trust had a much stronger effect on overall commitment. In their research, trust was found effective in affective and continuance commitment, while satisfaction was only effective in affective commitment. Therefore, this author agrees that "satisfaction alone is not a sufficient

factor for commitment and a satisfied customer does not always mean a loyal customer (Erciş et al, 2012)”.

Based on the data found during the PLS-SEM research process, this author thinks satisfaction is a very weak direct predictor of e-loyalty, and should be used as a starting point to trust. Trust was found to be a weak to moderate direct predictor to the variables e-loyalty, commitment and “the quality of a website’s eWOM environment”. Trust can also be predicted by the quality of a website’s eWOM environment. This can be explained by the fact that consumer produced information provides potential customers with a sense of trust (Yoo et al., 2013).

5.2. MANAGERIAL IMPLICATIONS

In consideration to the low scores from the customer’s desire to share information, e-services should diminish the customer’s cost to express themselves in the website. Currently, the customer can only share information in the website if he is (1) registered and logged in, (2) at the right website page, and (3) obeys content and format requirements. The loosening of these three “barriers” should diminish the customer’s cost of sharing information. A website which succeeds in increasing its customer word-of-mouth should benefit from increased product ROI, willingness to pay, and trust and loyalty feelings from its customer base (King et al., 2014).

The fact that customers seem to be easily satisfied in the online purchase of low search cost products such as books suggests there is an opportunity for websites to capitalize on the building of customer trust and commitment, both important mediators of customer satisfaction and loyalty. Ruitter et al. (2001) suggests that customer loyalty and commitment should be harnessed by emphasizing activities and initiatives that promote feelings of affiliation. In addition, other actions are important stimulants of these feelings such as new and innovative products and services, flexible customer contracts, and a proactive information system granting free customer advice.

Actions stimulating increased customer interactivity are found to be an important stimulant for growth of customer trust and loyalty (Cyr et al., 2009). Increases in the connection between information from a preferred website and a preferred social media platform is one effective alternative to accomplish this goal. TripAdvisor, for instance, has been obtaining important information from the visitor’s Facebook profile by enabling a personalized integration with

Facebook, and by sharing travel history among users, which influences eWOM activities (Lee et al., 2013). Therefore, finding ways to increase customer use and practice of eWOM also means working on increased levels of interactivity, which stimulate growths in customer trust and loyalty.

In agreement with Zhang et al. (2014), eWOM is now widely adopted to assist consumers in making an informed decision. It has become critical for marketers to understand the importance of these reviews as powerful stimulants (or deterrents) to customer purchase decisions. A sophisticated understanding should enable greater effectiveness to influence customer behavior.

5.3. THEORETICAL IMPLICATIONS

Commitment was found to be the variable with the highest direct effect and total effects in e-Loyalty (0.47). In prior studies, commitment was found to yield similar results (Luarn and Lin, 2003; Erciş et al., 2012). The importance of commitment in the research of e-loyalty suggest that most related studies should consider this variable in their model. Nevertheless, Toufaily et al. (2013) found that the majority of studies analyze the role of satisfaction (first) and trust (second) as determinants of e-loyalty.

This study has confirmed several findings in the study of e-Loyalty's main antecedents. Unfortunately, the effects between e-Loyalty and eWOM were found to be partially weak. Nevertheless, this research should be an important source to the topic of loyalty and word-of-mouth on the online environment.

5.4. LIMITATIONS AND FUTURE RESEARCH

A series of limitations have molded and characterized this study. As in all works of literature, the content is not only characterized by what the author chooses to include but also by what he chooses to leave out. In consideration to the research limitations, I have tried to be selective of issues that have (in my judgement) the greatest potential for improvements upon this study.

The research did not include perceived value as one of the research variables, a factor which is of confirmed importance in the formation of customer e-loyalty (Luarn and Lin, 2003; Erciş et al, 2012), and has been significantly related to e-loyalty and eWOM at the same time by Gruen et al. (2006).

Because commitment has an important role in the formation of e-loyalty, the research might have benefited from a division of the variable by type. Authors have divided commitment in prior research as affective and continuance (Erciş et al., 2012), and as affective and calculative (Ruyter et al., 2001). This division enabled them to find differences in the relation with other variables such as satisfaction, trust and loyalty.

A sample made by convenience limited the generalization of research findings. The probability of bias caused by the existence of unique characteristics within the research sample is considerable. This bias risk was partially mitigated through the extraction of respondents from at least four different social networks located in different geographic regions (minimum of two in each country).

Finally, the identification and explanation of differences among respondent groups selected by culture and demographic data, an interesting research goal for future studies, was not included in this research due to two main issues. First, a greater sample size in each of the countries would have been ideal to increase reliability to an ideal level. Second, the sparse existence of articles addressing both issues (culture and loyalty) and the absence of theory on cultural differences bring great difficulties to the reliability and validity of results.

Future studies should investigate which the main factors are leading to strong predictors of e-Loyalty, namely commitment. A strong antecedent may be found and coincided with other predictors (e.g. satisfaction, trust or value perception); a scenario which would yield a more accurate understanding of the customer loyalty building process in an online environment.

This study attempted to investigate the relations between e-Loyalty and eWOM. Although it has not found strong effects, future studies should further investigate this relation, with the intent to validate and explore differences in results through the use of different scales, and a product/service that is free from third party influences. This research involved a sample consisting of 48% students, most of which purchase books online as an obligation to their schools' academic requirements. Therefore, the mentioned bias is in reference to consumers

that may be less willing to share online information and less open to loyalty feelings when their primary motivation is to purchase in a required time frame and at the best perceived cost-benefit.

To advance in the topic of business strategies that might boost a website's eWOM structure and also the loyalty feelings throughout the user base, a case study might be of benefit in future studies. As an example, a high search product/service company (e.g., Apple Inc.) might be investigated under the scope of how customer word-of-mouth positively influence sales, and its effects in customer loyalty. In parallel, different variables such as value perception, identification perception (i.e., how much the company's image translate to the customer's own image), and idealization perception (i.e., how much the company's image translate to the customer's idealization of his own image) could be tested as predictors of loyalty in relation to satisfaction, trust and commitment.

In addition to changes in product type (from low search cost products to high search cost products) and research method (from a causal method to a mixed method using one specific company), further studies would benefit by making research of similar topics in a B2B (business to business) scenario. The effects of loyalty antecedents have been found to display different patterns in B2B and B2C (business to consumer) settings. Results have indicated that factors related to product performance (e.g., have a weaker impact on loyalty in business than in consumer markets. The reason for this might be partially explained by the fact that B2B transactions typically involve higher switching costs than B2C transactions (Pan et al., 2012).

Future studies should also analyze the difference in effects of positive and negative reviews (eWOM valence) under the context of e-Loyalty. Prior research has found that negative reviews has stronger effects in relation to positive reviews (Zhang et al., 2014), but the degree this type of eWOM affects e-Loyalty is in great part uncertain. Still in relation to eWOM, prior research hasn't agreed in findings to explain which factors most motivate consumers to practice eWOM; therefore, this poses as a subject that deserves special attention.

Further investigation is necessary to identify different attitudes among consumer groups and how these might be affecting customer loyalty (Erciş et al., 2012). Future studies should concentrate efforts to investigate why differences exist in different groups and how they might affect e-Loyalty and eWOM. This line of investigation might yield invaluable findings for business ventures seeking a group of customers (i.e., target audience) that can be easily identified by a specific set of characteristics.

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APPENDIX A

List of Scales and Respective Authors

VARIABLE	SCALE	AUTHOR
Trust	I know the website's service is NOT opportunistic.	Luarn and Lin (2003)
Trust	I know the website's service cares about customers.	Luarn and Lin (2003)
Trust	I know the website's service is honest.	Luarn and Lin (2003)
Trust	I know the website's service is predictable.	Luarn and Lin (2003)
Satisfaction	I am satisfied with this website's service.	Luarn and Lin (2003)
Satisfaction	The website's service is successful.	Luarn and Lin (2003)
Satisfaction	The website's service has met my expectations.	Luarn and Lin (2003)
Commitment	My preference for this website's service would not willingly change.	Luarn and Lin (2003)
Commitment	It would be difficult to change my beliefs about this website's service.	Luarn and Lin (2003)
Commitment	Even if close friends recommended another website's service, I would not change my preference.	Luarn and Lin (2003)
Commitment	To change my preference from this website's service would require major rethinking.	Luarn and Lin (2003)
e-Loyalty	I am a regular customer in this website.	Luarn and Lin (2003)
e-Loyalty	I have a strong attachment to this website.	Luarn and Lin (2003)
e-Loyalty	I hope that this website will succeed in the future.	Luarn and Lin (2003)
e-Loyalty	I will choose this website the next time I buy books.	Lee et al. (2013)
Quality of WOM Environ.	The e-WOM provided relevant information about the website's books.	Zhang et al. (2014)
Quality of WOM Environ.	The arguments in the eWOM were strong.	Zhang et al. (2014)
Quality of WOM Environ.	Users who posted eWOM were knowledgeable.	Zhang et al. (2014)
Quality of WOM Environ.	Users who posted eWOM were reliable.	Zhang et al. (2014)
Quality of WOM Environ.	Many users posted eWOM about the website's books.	Zhang et al. (2014)
Sharing Desire	I want to share information because it will benefit users in future transactions.	Lee et al. (2013)
Sharing Desire	I hope to share product information about a book bought in the website.	Lee et al. (2013)
Sharing Desire	I wish to share service information (related to book purchases) that I obtained in the website.	Lee et al. (2013)
Sharing Desire	I want to share information about a book seller from the website.	Lee et al. (2013)
eWOM	I often share opinions about the book seller's service in the website.	Lee et al. (2013)
eWOM	I often introduce experience of previous book transactions in the website.	Lee et al. (2013)
eWOM	I often post information on features of books or related services in the website.	Lee et al. (2013)


APPENDIX B

Survey as it appeared in the Survey Monkey web service (1st page)

Online Book Purchase - Master's Thesis Survey

Welcome to My Survey

Welcome to my survey! This research is about online consumer behavior when purchasing books using your preferred website. It is essential to my Master's thesis in Marketing. Please answer the questions to the best of your knowledge. Thank you very much for your time, and willingness to help. The forecasted duration for filling this questionnaire is approximately 6-8 minutes.



Message to students: all questions from this questionnaire should be answered by taking into consideration the books required by your school.

1. Please write down the name of your preferred online store for purchasing books:

* 2. Which percentage of your book purchases are made online?

91-100%

61-90%

40-60%

less than 40%

I never purchase books online

I don't purchase books

3. With which frequency do you shop for books online?

4. What is your approximate expense with online book purchases during a semester?
Think of an estimate and pick a price range.

29%

Next

APPENDIX B

Survey as it appeared in the Survey Monkey web service (2nd page)

Online Book Purchase - Master's Thesis Survey							
Rating the Statements - Part 1 (1 of 2)							
Please rate ALL statements below based on your experience with your preferred website for online book purchases. If you are unsure whether you agree or not, please mark the "neutral" option.							
* 5. Trusting your Preferred Website for Online Book Purchases							
	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
B) I know the website's service cares about customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) I know the website's service is honest.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) I know the website's service is predictable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A) I know the website's service is NOT opportunistic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* 6. Satisfaction with your Preferred Website							
	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
A) I am satisfied with this website's service.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) The website's service is successful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) The website's service has met my expectations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* 7. Commitment to your Preferred Website							
	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
A) My preference for this website's service would not willingly change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) It would be difficult to change my beliefs about this website's service.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) Even if close friends recommended another website's service, I would not change my preference.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) To change my preference from this website's service would require major rethinking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* 8. Loyalty to your Preferred Website							
	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
A) I am a regular customer in this website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) I have a strong attachment to this website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) I hope that this website will succeed in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) I will choose this website the next time I buy books.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
							8%
				Prev	Next		

APPENDIX B

Survey as it appeared in the Survey Monkey web service (3rd page)

Online Book Purchase - Master's Thesis Survey

Rating the Statements - Part 2 (2 of 2)

The statements below are also about your preferred website for books purchased online, although they are oriented to word of mouth in the website, which is also known as e-WOM.

E-WOM means electronic word of mouth, which can be understood as all online written communication made by the website's users (example: users' online reviews).

* 9. The e-WOM Environment in your Preferred Website for Book Purchases

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
A) The e-WOM provided relevant information about the website's books.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) The arguments in the e-WOM were strong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) Users who posted e-WOM were knowledgeable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) Users who posted e-WOM were reliable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E) Many users posted e-WOM about the website's books.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 10. Willingness to Share Information in your Preferred Website

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
A) I want to share information because it will benefit users in future transactions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) I hope to share product information about a book bought in the website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) I wish to share service information (related to book purchases) that I obtained in the website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) I want to share information about a book seller from the website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 11. The Practice of e-WOM in your Preferred Website

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
A) I often share opinions about the book seller's service in the website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) I often introduce experience of previous book transactions in the website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) I often post information on features of books or related services in the website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

 70%

Prev Next

APPENDIX B

Survey as it appeared in the Survey Monkey web service (4th page)

Online Book Purchase - Master's Thesis Survey

About You

I greatly appreciate the time you spent with the statements. You are now nearly done with this questionnaire! Would you be kind enough to finish by filling the demographic information? Thank you.

12. What is your name?

* 13. What is your age?

* 14. Where do you live? (e.g., Austin, TX)

15. Gender

Female

Male

16. Family income (year)

17. Employment

unemployed

employed part time

employed full time

student

18. Education

What was the area of study?

19. Marital status

20. Please enter your email (optional). You will not be contacted for anything other than a doubt I might have about the answers given in this questionnaire.

I am very appreciative of your time. Your answers are invaluable for the outcome of this research.
Have an awesome day!

100%

Prev Done


APPENDIX C

Portuguese version of the Survey (1st page)

Compra de Livros Online - Pesquisa para Dissertação de Mestrado

Seja bem vindo à minha pesquisa

Bem vindo(a) ao meu questionário! Essa pesquisa é sobre o comportamento do consumidor durante a compra de livros online usando o seu website de preferência. Ela é essencial para a conclusão da minha dissertação na área de marketing. Por favor se esforce para responder todas as questões com base na sua experiência de vida. Muito obrigado por seu tempo e disposição em ajudar!
O preenchimento dessa pesquisa tem duração estimada entre 6-8 minutos.



Recado para os estudantes: as questões devem ser respondidas levando em consideração os livros requisitados pela sua escola.

1. Por favor escreva o nome da sua loja virtual preferida para compra de livros:

* 2. Qual percentagem das suas compras de livros são feitas online?

91-100%

61-80%

40-60%

menos de 40%

Eu nunca compro livros online.

Eu não compro livros.

3. Com qual frequência você compra livros online?

4. Qual é a sua despesa aproximada com livros por compra online no decorrer de um semestre?
Pense num valor estimado e seleccione uma faixa de valores.

25%

Next

APPENDIX C

Portuguese version of the Survey (2nd page)

Compra de Livros Online - Pesquisa para Dissertação de Mestrado

Avaliação de frases - Parte 1 (1 de 2)

Por favor avalie as frases abaixo com base na sua experiência com seu website preferido para compra de livros online. Se você estiver incerto(a) de concordar ou discordar com a afirmação, por favor marque a opção "neutro".

* 5. Confiando no seu Website Preferido para Compra de Livros

	Discordo fortemente	Discordo	Discordo um pouco	Neutro	Concordo um pouco	Concordo	Concordo fortemente
A) Eu sei que o serviço do website NÃO é oportunista.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) Eu sei que o serviço do website se importa com os clientes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) Eu sei que o serviço do website é honesto.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) Eu sei que o serviço do website é previsível.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 6. Satisfação com o seu Website de Preferência

	Discordo fortemente	Discordo	Discordo um pouco	Neutro	Concordo um pouco	Concordo	Concordo fortemente
A) Eu estou satisfeito com o serviço do website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) O serviço do website é bem sucedido.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) O serviço do website tem atingido minhas expectativas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 7. Comprometimento com seu Website de Preferência

	Discordo fortemente	Discordo	Discordo um pouco	Neutro	Concordo um pouco	Concordo	Concordo fortemente
A) Minha preferência pelo serviço do website não irá mudar voluntariamente.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) Vai ser difícil mudar minha crença sobre o serviço ofertado pelo website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) Mesmo que amigos próximos recomendassem um serviço de um outro website, eu não mudaria minha preferência.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) Para mudar minha preferência por esse website seria necessário repensar muito.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 8. Lealdade ao seu Website de Preferência

	Discordo fortemente	Discordo	Discordo um pouco	Neutro	Concordo um pouco	Concordo	Concordo fortemente
A) Eu sou um cliente frequente nesse website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) Eu tenho um vínculo forte a esse website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) Eu espero que esse website seja bem sucedido no futuro.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) Eu vou escolher esse website na próxima vez que comprar livros.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Progress bar showing 50% completion.

Prev. Next

APPENDIX C

Portuguese version of the Survey (3rd page)

Compra de Livros Online - Pesquisa para Dissertação de Mestrado

Avaliação de Frases - Parte 2 (2 de 2)

Essas frases também são sobre seu website preferido para compra de livros online, porém elas são orientadas para o boca-a-boca online, também conhecido como e-WOM (electronic word-of-mouth).

E-WOM significa boca-a-boca eletrônico, compreendido como qualquer comunicação online criada por usuários de um site (e.g., avaliações de um livro feita por usuários).

* 9. O Ambiente do Boca-a-Boca Eletrônico (e-WOM) no seu Website Preferido para Compra de Livros

	Discordo fortemente	Discordo	Discordo um pouco	Neutro	Concordo um pouco	Concordo	Concordo fortemente
A) O e-WOM proveu informação relevante sobre os livros no website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) Os argumentos no e-WOM eram fortes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) Os usuários que postaram e-WOM eram conhecedores do assunto.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) Os usuários que postaram e-WOM eram confiáveis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E) Muitos usuários postaram e-WOM sobre os livros no website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 10. Desejo de Compartilhar Informações no seu Website de Preferência

	Discordo fortemente	Discordo	Discordo um pouco	Neutro	Concordo um pouco	Concordo	Concordo fortemente
A) Eu quero compartilhar informações porque irá beneficiar usuários em transações futuras.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) Eu espero poder compartilhar informações sobre um produto (livro) comprado no website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) Eu desejo compartilhar informações a respeito do serviço (relacionado a compra de livros) obtido no website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D) Eu quero compartilhar informações sobre um vendedor de livros do website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 11. A prática de e-WOM no seu Website de Preferência

	Discordo fortemente	Discordo	Discordo um pouco	Neutro	Concordo um pouco	Concordo	Concordo fortemente
A) Eu frequentemente compartilho opiniões sobre o serviço do vendedor de livro no website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B) Eu frequentemente introduzo minha experiência com transações de livros prévias no website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C) Eu frequentemente posto informações sobre atributos do livro ou de serviços relacionados no website.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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APPENDIX C

Portuguese version of the Survey (4th page)

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Sobre Você

Aprecio bastante pelo tempo gasto avaliando as frases. Você está muito próximo do término do questionário! Poderia fazer a gentileza de preencher alguns dados pessoais básicos? Muito obrigado,

12. Qual é o seu nome?

* 13. Qual é a sua idade?

* 14. Onde você mora? (e.g., Porto Alegre, RS)

15. Sexo

Feminino

Masculino

16. Renda da família (anual)

17. Emprego

desempregado

empregado período integral

empregado meio período

estudante

18. Educação

Qual a área de estudo?

19. Estado civil

20. E-mail para contato futuro (opcional). Você não será contatado por nenhum motivo que não seja uma dúvida que eu possa vir a ter em relação ao preenchimento desse questionário.

Aprecio bastante o tempo gasto nesse questionário.

Suas avaliações/opiniões/respostas são de suma importância para conclusão da minha pesquisa.

Tenho um ótimo dia!



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Done

APPENDIX D

Coding procedure: profile and demographic characteristics

ResNUM	Respondent's ID Number		
Store	Preferred Online Store (for book purchases)	dem_Sex	Sex
1	Amazon	1	Female
2	BR bookstore	2	Male
3	US bookstore	0	No Information
4	BR e-tailer		
5	International E-tailer (Ebay)	dem_Inc	Family Income
6	Brick & Click Book Exclusive	1	under 25k
7	Used Books	2	25k to 74.9k
11	Amazon's Kindle	3	75k to 150k
55	Ebay's Half.com	4	over 150k
		0	No Information
Pc_OBP	Percentage of Books Purchased Online	dem_Ocu	Occupation
0	I never purchase books online	1	Student
9	I don't purchase books	2	Employed
1	less than 40%	3	Student and Employed
2	40-60%	4	Unemployed (and not a student)
3	61-90%	5	Work Part Time
4	91-100%	0	No Information
Fq_OBP	Frequency of Online Book Purchases	dem_Edu	Education
0	never	1	High School
1	less than once per semester	2	Technical school
2	1 to 2 times per semester	3	Bachelor Degree
3	3 to 4 times per semester	4	Post Graduate Degree
4	5 to 6 times per semester	0	No Information
5	more than once per month		
Sem_Exp	Semester Expense with OBP	dem_Sub	Type of Skill
0	nothing	1	Hard
1	less than \$50	2	Soft
2	from \$50 to \$99	0	No Information
3	from \$100 to \$199		
4	from \$200 to \$299	dem_Mar	Marital Status
5	\$300 or more	1	Single
		2	Married (or domestic partnership)
dem_Age	Respondent's Age	3	Divorced (or widowed)
1	18-23	0	No Information
2	24-29		
3	30-35		
dem_Loc	Location of Residency		
1	South of Brazil (mostly RS)		
2	Southeast of Brazil (mostly SP)		
3	South of US (mostly TX)		
4	Northeast of US (New England region)		

APPENDIX D

Coding procedure: research indicators and scales

7-Point Likert Scale

	English	Portuguese
1	Strongly Disagree	Discordo fortemente
2	Disagree	Discordo
3	Slightly Disagree	Discordo um pouco
4	Neutral	Neutro
5	Slightly Agree	Concordo um pouco
6	Agree	Concordo
7	Strongly Agree	Concordo fortemente
0	NA (Not Applicable)	NA (Não Aplicável)

Variables

Code	Construct	Wording
vTrust1	Trust	A) I know the website's service is NOT opportunistic.
vTrust2	Trust	B) I know the website's service cares about customers.
vTrust3	Trust	C) I know the website's service is honest.
vTrust4	Trust	D) I know the website's service is predictable.
vSat1	Satisfaction	A) I am satisfied with this website's service.
vSat2	Satisfaction	B) The website's service is successful.
vSat3	Satisfaction	C) The website's service has met my expectations.
vComm1	Commitment	A) My preference for this website's service would not willingly change.
vComm2	Commitment	B) It would be difficult to change my beliefs about this website's service.
vComm3	Commitment	C) Even if close friends recommended another website's service, I would not change my preference.
vComm4	Commitment	D) To change my preference from this website's service would require major rethinking.
vLoyal1	e-Loyalty	A) I am a regular customer in this website.
vLoyal2	e-Loyalty	B) I have a strong attachment to this website.
vLoyal3	e-Loyalty	C) I hope that this website will succeed in the future.
vLoyal4	e-Loyalty	D) I will choose this website the next time I buy books.
vWOMen1	Quality of the e-WOM Environment	A) The e-WOM provided relevant information about the website's books.
vWOMen2	Quality of the e-WOM Environment	B) The arguments in the e-WOM were strong.
vWOMen3	Quality of the e-WOM Environment	C) Users who posted e-WOM were knowledgeable.
vWOMen4	Quality of the e-WOM Environment	D) Users who posted e-WOM were reliable.
vWOMen5	Quality of the e-WOM Environment	E) Many users posted e-WOM about the website's books.
vInfSH1	Information Sharing Desire	A) I want to share information because it will benefit users in future transactions.
vInfSH2	Information Sharing Desire	B) I hope to share product information about a book bought in the website.
vInfSH3	Information Sharing Desire	C) I wish to share service information (related to book purchases) that I obtained in the website.
vInfSH4	Information Sharing Desire	D) I want to share information about a book seller from the website.
ewom1	e-WOM	A) I often share opinions about the book seller's service in the website.
ewom2	e-WOM	B) I often introduce experience of previous book transactions in the website.
ewom3	e-WOM	C) I often post information on features of books or related services in the website.