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# WE KNOW AND [WHEN CONVENIENT] SHARE IT ALL.

THE ROLE OF INFORMATIONAL SOCIAL SUPPORT IN ONLINE SHOPPING EXPERIENCES.

MASTER THESIS COMMUNICATION STUDIES – MARKETING COMMUNICATION

DIEGO PEREIRA DA SILVA S1700677 D.PEREIRADASILVA@STUDENT.UTWENTE.NL / SPD.DIEGO@GMAIL.COM COMMUNICATION STUDIES – MARKETING COMMUNICATION FIRST SUPERVISOR: DR. ANNA FENKO SECOND SUPERVISOR: DR. MIRJAM GALETZKA

E.	10 hrs
Hi,	
Can	someone please give me a review/opinion about vidaXL.nl webshop?
The	prices are really cheap but I'm skeptical about their product.
revie poor	d reviews at trustpilot and thuisvergelijken; both of them give mixed ws mostly bad reviews about quality of the product, delivery time, /unfriendly customer care, damaged product at delivery and even ing delivery.
Plea	se advice Many thanks!
de Li	ike Comment
1	Sandra That site gave my whole computer a bunch of viruses Like · Reply · 🖒 1 · 10 hrs
<b>(</b> ) 杰	
<b>梁</b> 杰	Like · Reply · 1 · 10 hrs Jeroen Jeroen I ordered a strobe light (used for adjusting ignition timing on motorcycles) and I thought the site seemed a bit dodgy too, but they delivered the stroboscope and the thing seems to be working alright.
(3) ·未 (3) (5)	Like · Reply · ▲ 1 · 10 hrs         Jeroen         ignition timing on motorcycles) and I thought the site seemed a bit dodgy too, but they delivered the stroboscope and the thing seems to be working alright.         Like · Reply · ▲ 1 · 7 hrs         Shaheen       I bought bar chairs. came on time good quality. and also bought a lamp same story. but the service is not really accurate

Figure 1. Example of informational social support in social media (Facebook, 2016).

#### ABSTRACT

This study explores the role of informational social support in online shopping experiences. In fact, it is an attempt to investigate the relative importance of informational social support to consumers in e-commerce sites. For such, two different product categories were tested in a 2 (presence of informational social support vs. absence of informational social support) X 2 (consumer electronics vs. small appliances) factorial design. In contrast to many earlier studies in this area that have taken trust as the most critical factor for online shopping, we adopt the informational social support perspective as the key variable capable of influencing consumer expectations, perceived satisfaction, purchase intention and post-purchase information sharing. To address this challenge, we draw upon a multi-theory approach consisting of several underlying concepts such as social commerce, informational social support, information quality, expectations, satisfaction, purchase intention, and engagement in information sharing to investigate the effects of informational social support. An empirical survey on social media platforms with 357 participants was conducted and the results indicate that social support is indeed responsible for strengthening levels of expectation, perceived satisfaction and purchase intention; however, interestingly enough, it does not influence the willingness to share postpurchase information. No relevant interaction effects were found. Hence, the findings of this study are of importance for both the theoretical plane by cause of the new context used to test preexisting theories as well as to the practical plane, because on the grounds of the findings, improvements in terms of how to best design consumercentered strategies for online shopping is now possible.

**Keywords:** Informational social support, social commerce, user-generated content, online shopping, cultural values.

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#### **1. INTRODUCTION**

Recent years have witnessed the rapid growth and development of social media platforms, perhaps becoming a fundamental and omnipresent element in everyone's life. As a consequence of this new phenomenon, tweeting, blogging, commenting, and posting opinions on all matters is now considered a daily basis behavior of most social media users (Gass & Seiter, 2013; Kim & Park, 2012). Not only this impressive growth of popularity of social media substantially changed how people deal with social interactions, information seeking, knowledge, relaxation, and entertainment, but also and most importantly to the sense of this study, it has affected the way electronic commerce is demanded, thought, and undertaken (Chen & Shen, 2015; Whiting & Williams, 2013). On the basis of this new context of growing online interactions emerged a new stream of e-commerce, known and defined by scholars and practitioners as social commerce (Bai, Yao & Dou, 2015; Chen & Shen, 2015; Kim & Park, 2012; Zhang, Benyoucef & Zhao, 2015). As such, social commerce derives from traditional e-commerce but, by contrast, adopts social interactions as a unique and relevant premise to guide purchase experiences.

In social commerce, consumers enrich their shopping experiences by taking advantage of the collaborative tools first presented in social media platforms - now also available in many e-commerce sites - to learn about products, clarify doubts, and make decisions, mostly based on social exchange. This is possible due to the fact that consumers are voluntarily creating and sharing product information with others on the internet (Kim & Park, 2012; Tong, Wang, Tan & Teo, 2013). In fact, this unparalleled characteristic of social commerce gives rise to the scope of this study: The role of informational social support in online shopping experiences.

Turning to facts, according to a report by Business Insider, the top 500 retailers profited \$ 3.3 billion from social shopping in 2014, an increase of 26% over 2013, while the market growth of overall e-commerce was 16% (Business Insider, 2015).

As consumers are increasingly getting informed, discussing and shaping opinions online (Zollo et al., 2015), it becomes of fundamental pertinence to dedicate a research to understanding how informational social support impacts online purchases. The informational perspective adopted in this study contrasts with the main stream of research in the field of social commerce. The literature is vast in terms of works related to online shopping, however, previous studies have prioritized the effects of trust on online shopping experiences and little attention has been paid to the importance of social support (Chen & Shen, 2015; Jin & Park, 2006; Kim & Park, 2012). Thus, we believe informational social support is not well researched and more works should be committed to this endeavor. These circumstances lighted up a gap and, at the same time, an opportunity.

Therefore, given the increasing relevance of social commerce to companies -\$\$ - and the aforementioned gap in literature, it becomes clear the need to devote more attention to investigate the role and the extent of influence of informational social support in online shopping. Thus, the main concerns of the purposed study are: (1) Evaluate the merit of informational social support for consumers in e-commerce settings, testing two different product categories; and (2) with the outcomes of the research, give insights to practitioners based on our observation of reality.

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The context just mentioned and the exploratory characteristics of this study lead us to the following research question:

RQ. To what extent expectations, perceived satisfaction, purchase intention, and post-purchase information sharing are affected by the presence of informational social support elements (comments, reviews, suggestions, customer ratings, and product-related social media content) when it comes to purchasing products from different product categories in e-commerce sites?

#### 2. THEORETICAL BACKGROUND

Prior literature provides a rich theoretical foundation on which to build an experimental design capable of assessing the role of informational social support in online shopping experiences. In this section we define and go deep into the theories underpinning social commerce, informational social support, information quality, consumer decisions, purchase intention, expectations, and post-purchase information sharing.

#### 2.1. SOCIAL COMMERCE

The subject of social commerce has been investigated by multiple disciplines such as marketing, sociology, computer science, psychology and communication (Huang & Benyoucef, 2013). Under marketing perspective, practitioners and scholars tend to agree and conceptualize social commerce as a new and refined model of the traditional e-commerce that aims at facilitating and intensifying social interactions to assist consumers during the purchase process. Among the main characteristics of social commerce, it is noteworthy to mention: User-generated content, information sharing, interconnectivity, collective intelligence, and active user participation in ecommerce sites, social media platforms, communities, forums, blogs, and wikis (Hajli, 2013; Huang & Benyoucef, 2013; Kim & Park, 2013). In a practical manner, in social commerce contexts, consumers shift from the limited and outdated one-toone communication (e.g., buyer and vendor exchange of information only) usually found in former e-commerce sites (Haji, 2013), to a many-to-many communication approach, where consumers enjoy the interactive tools provided by different social media platforms such as Facebook, Twitter, WhatsApp, LinkedIn, Snapchat, and also e-commerce sites to support and be supported by other consumers during the purchase process. Thus, whereas traditional e-commerce is focused on facilitating consumer shopping experiences through product search mechanisms and sorting (Kim & Srivastava, 2007), social commerce goes beyond and adds the social component as a major premise as well (Huang & Benyoucef, 2013). These characteristics highlight two critical pillars of social commerce: (1) User-generated content; and (2) social interaction (Hajli, 2013; Huang & Benyoucef, 2013; Kim & Park, 2013).

Hajli (2013) and Kim and Park (2013) address the matter of both constructs by stating the frequent behavior consumers have of sharing shopping-related experiences, knowledge as well as product information online. It usually takes form through ratings, reviews, recommendations, referrals, posts, WOM, debates, unboxing videos, and complaints made freely in forums, communities, blogs, websites, ecommerce sites, and social media platforms. The joint of user-generated content and social interactions gives rise to the construct of informational social support, a new communicational element that has been integrated to online shopping since the advent of Web 2.0.

#### 2.2. INFORMATIONAL SOCIAL SUPPORT

The ongoing fierce competition among companies has been responsible for a significant change in the marketplace in terms of product and service differentiation. In fact, many products and services seem to lack relevant singularities or clear benefits, which are certainly an important basis for explaining why consumers often feel confused when choosing a product or brand and are overloaded with respective information (Kardes, Cronley & Cline, 2011). This study adopts the premise that, to reduce this apparent discomfort in choosing a product or service, consumers engaged in online purchases are willing to strongly rely on informational social support from other individuals to clarify their decisions. In Duan, Gu and Whinston (2008) words, such informational support may have a positive impact in the decision-making process, as there are clear evidences that people put a significant weight on third-party opinions.

Essentially, Chen and Shen (2015), Bai et al. (2015) and Gottlieb and Bergen (2010) posit informational social support as a type of resource - knowledge - available and provided from one person to another in the context of both formal and informal groups that may enhance relationships and help the involved subjects. Broadening the concept, online informational social support can be stated as any kind of user-generated content exchanged in online social interactions by one-to-one, oneto-many or many-to-many users, with the clear goal of sharing experiences and opinions, advising a person with regard to an issue, supporting a decision, promoting self-education, influencing awareness, expectations, perceptions, attitudes, intentions, beliefs, and behaviors towards a situation, object, person, product or brand (Bai et al., 2015; Chen & Shen, 2015; Hajli, 2013; Hajli, 2014; Kim & Park, 2012; Kim & Srivastava, 2007; Lee, Cheung, Sia, & Lim, 2006; Whiting & Williams, 2013).

Nowadays, with the impressive growth, reach and relevance of social media in everyone's life, online informational social support has gained status of a determinant factor in many different contexts. For example, Hajli (2013) affirms that informational social support found in product ratings, reviews, recommendations, referrals, posts, WOM, and debates has become a valuable asset for potential consumers, as it definitely helps them during the purchase process. Moreover, social support is believed to predict another similar construct: Informational social influence, which is defined by literature as one's behavior of observing the experience of a third-party in his/her social network before deciding to perform an intention such as buying a product (Kim & Srivastava, 2007; Lee et al., 2006). Hence, through informational social support, consumers become more knowledgeable and confident to actually behave purchase intentions.

Thus, based on these previously discussed studies, we may conclude that informational social support has a great potential to drive consumers to better product and brand evaluations, reduce consumer perceived-risk, enrich the decision-making process, facilitate information searching and processing as well as setting expectations.

#### 2.3. INFORMATION QUALITY & NEED FOR INFORMATION

In the context of e-commerce, information quality has been identified as of fundamental relevance. Not surprisingly, the theme is presented in several studies. It refers to the latest, timely, accurate, relevant, useful, complete and affluent pieces of information related to products or services provided by an e-commerce firm to its potential consumers (Huang & Benyoucef, 2012; Kim & Park, 2012; Zhang et al., 2015). Such importance is further extended by Huang and Benyoucef (2012), who claim that information quality can influence and enhance attitudes, satisfaction, loyalty, decision quality and perceived benefits. Moreover, Zhang et al. (2015) and Kim and Park (2012) contented that information quality can strengthen the consumere-commerce relationship, which in turn may positively affect purchase intentions.

Nevertheless, besides the consistence of the presented studies, there is still room for some controversy. Kim and Park (2012) state that online consumers have a high need for information and are totally dependent on information provided by ecommerce sites due to limited sources of information on products or services. However, we do not agree with this statement. Nowadays, it is not reasonable to say and hard to prove that, besides the rapid development, reach, and penetration of internet, consumers still have limited sources of information. In recent years internet has given room to several social media platforms, sites, blogs, wikis, communities, and forums. As a consequence, not only a new environment of free content and interactivity has emerged but also it has given consumers the opportunity to access and take advantage of "virtually" a limitless quantity of sources. Therefore, instead of affirming the existence of constraints related to sources, what we truly believe to be a real issue is the lack of understanding consumers have regarding specific types of products or services, which is totally normal depending on the product category or the personal involvement with the product.

Thus, based on the references presented, it becomes crystal clear that information quality in e-commerce settings plays a critical role and should be given high priority, regardless if the focus of the company is to implement a user-centered strategy or business profitability only.

#### 2.4. CONSUMER DECISIONS - EXTENSIVE PROBLEM SOLVING

Consumers perform product-related decision-making in a daily basis, all the time, varying from ordinary (e.g., which new potato chips to try) to complex and high risk decisions (e.g., which new car to purchase). Prior research has effectively demonstrated three different types of consumer decisions - each one with its own singularities - in which consumers engage in. They are defined by literature as: Routine choice, intermediate problem solving and extensive problem solving.

The latter, extensive problem solving, requires consumers to commit to systematic reasoning (e.g., strong cognitive elaboration) and deliberation prior to the decision, contrasting to the other 2 types of consumer decisions. Within extensive problem solving, consumers are essentially facing unique situations involving unfamiliar, expensive, technical and/or risky products that may cause substantial adverse consequences in case of a low quality decision. Due to this high level of risk, consumers usually are highly emotionally involved and thus devote a great amount of time and interest in obtaining information and reasoning about the alternatives prior to the purchase (Kardes et al., 2011; Lurie & Wen, 2014). Good examples of products that fall into this category of decision-making are cars, personal devices, electronics, and long-lasting products.

# 2.5. PRODUCT CATEGORIES - CONSUMER ELECTRONICS & SMALL APPLIANCES

Extensive problem solving decisions encompass a vast range of different product categories such as consumer electronics, jewelry, computer hardware and household furnishing, just to mention a few. In order to determine which product categories and products to include in the experimental research, we took into account both the theoretical and practical planes. Thus, the product categories and products chosen were *consumer electronics - digital camera -* and *small appliances - coffeemaker -*.

On the theoretical plane, these product categories and products are relatively expensive - high risk -, have mid to high technical complexity - unfamiliarity -, and are marketed with many competitors or similar options. That is, both products possess attributes that may trigger consumers in extensive problem solving decisions (e.g., high efforts and involvement in information seeking, processing and elaboration).

Turning to practical matters, the chosen categories are ranked in the top 20 rank of best-selling internet products, according to a report from NRF Index, Forrester Research and Statistic Brain Research Institute (2016), which highlights their importance to the market.

Nevertheless, even though both products belong to the extensive problem solving decision dimension, each product has its own idiosyncrasies and are expected

to induce different responses from participants. Digital camera and coffeemaker may trigger different levels of personal involvement and thus need for information. They also differ in price range (e.g., digital camera is threefold more expensive than the coffeemaker), complexity (e.g., for an ordinary consumer, a digital camera is highly more complex than a coffeemaker) and usage (e.g., coffeemakers are believed be used in a daily basis while digital cameras are not).

Wherefore, with these choices we will be qualified to evaluate if, after all, informational social support is relevant - or not - when it comes to purchasing products from distinct product categories that mainly differ in terms of complexity, price, and most importantly, elicit different *levels of involvement* and, consequently, *need for information*.

#### 2.6. EXPECTATIONS

Consumers are continuously processing and comparing information related to products. By reasoning about available information, perceptions, and choices, consumers set expectations. That is, an attitude towards the product or service is formed and will become thereafter the baseline to evaluate the purchase in the future (expectation vs. product experience). In this sense, informational social support becomes of fundamental relevance to expectations from the perspective that consumers may also consider social support to set their prior beliefs about a product. Moreover, according to Duan et al. (2008), online user reviews can elicit persuasive effects thus shaping consumer attitudes and evaluations towards a product. Three possible outcomes can be expected from this process. Either the product: (1) Exceeds, (2) meets or (3) lies below the expectation set settled during the purchase experience, resulting in innumerous implications to consumers themselves and to the market (Cheung & Lee, 2012; Duan et al., 2008). Among the main implications, expectations may drive consumers to a sense of satisfaction or dissatisfaction. Beyond that, by comparing expectation vs. reality, consumers can update their perception about products and brands and use the outcomes of such comparison as aids for future purchases (Duan et al., 2008). Thereafter, if expectations are satisfactorily fulfilled by product experience, then positive implications are more likely to happen. On the other hand, if there is any misalignment between expectations and product experience, it is likely that negative implications such as dissatisfaction will take place (Cho, Hiltz & Fjermestad, 2001).

#### 2.7. PERCEIVED SATISFACTION

Several scholars have put their efforts, attention, and interests in uncovering the meanings of satisfaction in B2C marketing settings. Traditional marketing literature simply defines satisfaction as a positive - or negative - psychological attitude determined by consumers' post-purchase evaluation of a product or service. However, when evaluating customer satisfaction in online shopping experiences, it becomes superficial to rely exclusively on the traditional explanation. Social shopping has brought complexity to the theme, as more elements were incorporated and now must be considered when theorizing satisfaction.

This complexity is propounded by Kim (2005) that theorizes online customer satisfaction as a psychological attitude - evaluation - built upon 2 core pillars: (1) The accumulated purchase process experience; and (2) product usage experience; also by Jin and Park (2006), when citing the ideas of Abbott et al. (2000), who sees satisfaction as a longitudinal concept compared over time - satisfaction anchored in 2 different stages in time -. That is, the first called latent satisfaction (i.e., based upon an initial evaluation before purchase) and the latter manifest satisfaction (i.e., postpurchase evaluation after reasoning and comparing expectations and product performance). In other words, consumers assess the extent to which the actual product or service performance met with what was expected from it; and by Lin, Wu and Chang (2010) research, that empirically identified information quality, system quality, service quality, product quality, delivery quality, and perceived price as factors impacting online customer satisfaction.

Hence, (dis)satisfaction would be determined not only by the balance resultant from expectations and product experience itself, but also by the whole purchase experience, including information quality. Wherefore, from this perspective, there are at least two factors strongly affected by informational social support - *expectation and information quality* - that in turn underpin perceived satisfaction.

#### 2.8. PURCHASE INTENTION

Lee et al. (2006) and Kim and Park (2012) have generically defined purchase intention as a mental position - attitude or evaluative judgment - with respect to performing the future behavior of purchasing a product or service. In the context of ecommerce, purchase intention becomes the likelihood of buying a prospective product or service via online. Moreover, purchase intention in online settings is acknowledged by scholars as a subjective construct affected by a variety of factors such as trust, price, environmental cues, perceived risk, and most importantly for the scope of this research, *information* (Bai et al., 2015; Lee et al., 2006).

With regard to information, Bai et al. (2015) believe that "in the process of collecting internal and external information on social media platforms [and e-commerce sites], consumers understand their own consumption motivation and propensities" (p.540), which may be responsible for building purchase intentions.

Putting the theme forward, Bai et al. (2015) state that the completeness of information provided by sellers has a direct impact on the formation of consumers purchase intention, mainly because of 2 phenomena: (1) Generally, consumers have poor understanding and knowledge of product quality and/or after-sales service; and (2) in social commerce, sellers may not provide sufficient product information.

Therefore, one rational assumption that can be raised based on the discussed research is that informational social support may fulfill this gap of understanding thus potentially predicting higher purchase intentions.

#### 2.9. POST-PURCHASE INFORMATION SHARING

Several are the motives triggering consumers to share post-purchase information (e.g., posting opinions, reviewing products, commenting, and rating). Among them, two perspectives seem to be prominent in social commerce literature: (1) Social exchange; and (2) motivating factors. According to the social exchange theory, individuals tend to be reciprocal with others when benefits are obtained from interactions. Broadening the concept, consumers that enjoy or benefit from social interactions are believed to experience a sense of reciprocity or obligation to support others with valuable information in the future (Zhang, Lu, Gupta, & Zhao, 2014). Moreover, Zhang et al. (2014) state social support as a predictor of reciprocity. In their words, in a strong socially supportive environment, where it is natural to share shopping information, product knowledge, and purchase experiences, consumers fulfill social needs and are encouraged to interact with one another, behaving their senses of reciprocity. Therefore, consumers who had the opportunity to engage in social exchange prior to purchases supposedly tend to share their own shopping information with others.

Turning to motivating factors, Tong et al. (2013) and Cheung and Lee (2012) state and empirically proved the existence of at least three factors that impact consumers intention to share purchase experiences: (1) Reputation - the egoistic act of sharing information with the goal of increasing the one's own welfare (e.g., seek for peer recognition); (2) sense of belonging - emotional involvement with a community that leads individuals to share information for the benefit of a group or collective; and (3) enjoyment of helping - this altruistic factor is related to satisfaction in helping others for the sake of helping (e.g., purchases experiences are shared just because another person may benefit from it).

Thus, on the basis of the previously discussed concepts of social exchange and motivating factors, it is legitimate to infer that informational social support may strengthen consumers intention to share post-purchase information (e.g., ratings, reviews, recommendations, referrals, and posts).

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#### 3. RESEARCH BOUNDARIES AND ASSUMPTIONS

Some decisions and assumptions have been made to guide this study. The most significant ones are presented in more details next.

#### 3.1. TRUST AND RELATIONSHIP

This study neither contemplates trust and its correlated constructs (e.g., reputation, security, and privacy) nor quality of relationship. Two reasons motivated this decision: (1) Trust in the context of online shopping has been the target of many previous research thus becoming a very commonplace in the field of online shopping (Chen & Shen, 2015; Jin & Park, 2006; Kim & Park, 2012); and (2) according to Cialdini and Goldstein (2004), heuristics seem to lead individuals to respond to strangers similarly as they would respond to a known individual. In other words, a meaningful relationship between individuals may not play a relevant role in online shopping.

#### 3.2. INFORMATIONAL SOCIAL SUPPORT

Although informational social support has innumerous sub-elements, this research takes into account only the different types and sources of informational social support presented in Figure 2. An empirical observation of popular e-commerce sites grounded this decision.

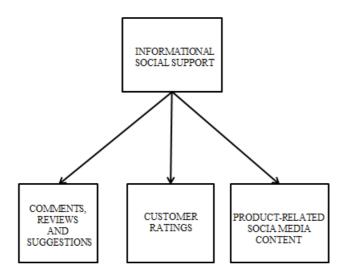


Figure 2. Informational social support elements considered in this research.

#### 4. RESEARCH QUESTION AND HYPOTHESES

After presenting the independent and dependent variables, all the relevant theoretical concepts related to them as well as the parameters of the research, we then progress restating the research question and formulating the two hypothesis of the current research.

**RQ.** To what extent expectations, perceived satisfaction, purchase intention, and post-purchase information sharing are affected by the presence of informational social support elements (comments, reviews, suggestions, customer ratings, and product-related social media content) when it comes to purchasing products from different product categories in e-commerce sites?

**H1.** Consumer expectations, perceived satisfaction, purchase intention, and postpurchase information sharing will be more positively affected when informational social support is provided, compared to the situation where NO informational social support is available.

**H2.** Consumer expectations, purchase intention, perceived satisfaction, and postpurchase information sharing will be more positively affected by informational social support when the product being purchased is consumer electronics - digital camera rather than small appliances - coffeemaker -.

#### 5. RESEARCH DESIGN AND METHODS

In this initial attempt to investigate the impact of informational social support in online shopping experiences, a 2 (presence of informational social support vs. absence of informational social support) X 2 (consumer electronics - digital camera vs. small appliances - coffeemaker) factorial design experiment was conducted. The two independent variables of this study are: (1) The presence or absence of informational social support; and (2) product category - consumer electronics or small appliances. The dependent variables consist of: (1) Expectations, (2) perceived satisfaction, (3) purchase intention, and (4) post-purchase information sharing. Thus, on the basis of the theoretical framework and in order to represent the research question and test the hypotheses, the following research model and conditions were developed:

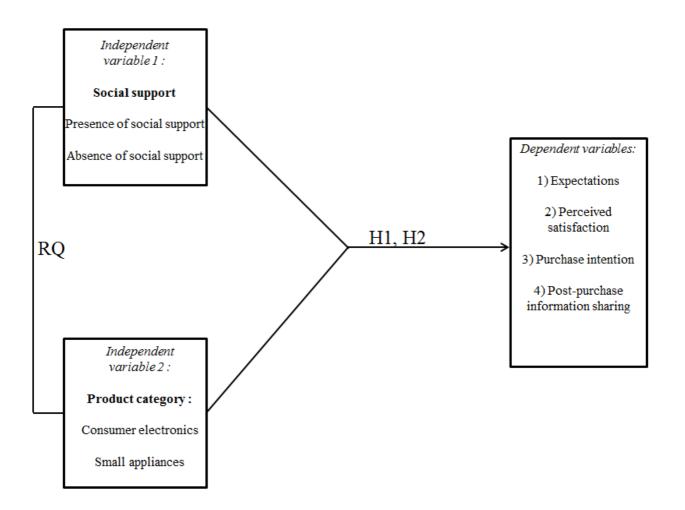


Figure 3. Research model.

#### 5.1. CONDITIONS AND FREQUENCY

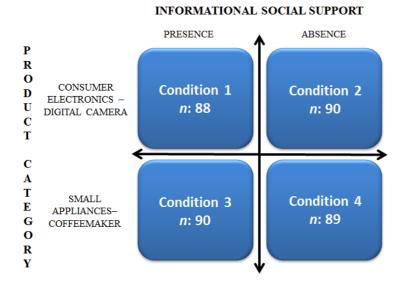


Figure 4. Research conditions.

#### 5.2. SAMPLING

The sampling technique chosen for this study was convenience sampling. The sample was drawn from direct friends and friends of friends with accounts on social media (Facebook and LinkedIn) or e-mails. Time constraints lead us to adopt the convenient sampling procedure. This limitation is better discussed and improvements are suggested on the limitation and future research section.

Although convenience sampling predicts limited scientific generalizability of the observations and thus may not be representative of the opinions of online shopper population at large (Bhattacherjee, 2012), this technique proved to be extremely effective when it comes to obtain a significant sample. To reach an even greater sample than the minimum required for a 2 x 2 factorial design, the author of this study sent private massage to nearly 700 of his friends on Facebook. Moreover, the author's closest friends with active participation in social media (e.g., daily posts) were asked to post the survey in their timelines. A total of 17 friends were asked to spread the word over their networks. As a result, in May,  $16^{th}$  2016, 585 respondents had started the survey and 357 were able to finish the questionnaire and had their responses recorded for analysis.

#### 5.3. ONLINE SURVEY TOOL

The responses were collected within a one week period through the online survey tool Qualtrics.

#### 5.4. **PROCEDURE**

Participants were approached via social media (Facebook and LinkedIn) and e-mail and asked to participate in an online experiment. As this study intends to better understand the role of informational social support in online shopping, an online experiment was considered by far the most appropriate and realistic type of experiment to be adopted.

Once participants started the survey, they were presented to an introduction text explaining the purpose of their participation. Following this very first step, instructions of how to proceed from that moment on were subsequently presented (e.g., choose the appropriate language: English or Portuguese). Then, participants were randomly assigned to one of the four conditions. After seeing the assigned manipulation, respondents were requested to answer questions regarding expectations, satisfaction, purchase intention, and post-purchase information sharing.

To conclude, demographic questions were asked. Lastly, participants were thanked for their time and participation. All conditions (manipulations) and questions were presented in English and Portuguese.

#### 5.5. TRANSLATION PROCESS

Due to the fact that Brazil is ranked 41° in the English proficiency index (EF, 2015) with low knowledge of the English language, it was decided that all manipulations and the questionnaire had to be presented also in Portuguese.

Therefore, the entire survey went through a translation and back translation process with the help of one graduate student of the Universidade Federal do ABC, in Brazil. That is, the author of the study and the graduate student translated the instruments and manipulations from English to Portuguese. Then, the versions were switched and translated back to English. The four versions were compared (2 English and 2 Portuguese) and all inconsistencies were discussed and aligned to improve the quality of the survey. As a last step, a master student of the University of Twente with working experience in market research was consulted to review the questionnaire. She is familiar with survey methods and gave us precious feedback to improve some of the wording, sequences and statements. Only after this process the survey was made available to participants.

#### 5.6. STIMULUS MATERIALS

The independent variables were manipulated in scenarios. To avoid bias among participants (e.g., most of them may know Amazon or E-bay, for instance), the manipulations were embedded within a fictional e-commerce site named *retailer.com*. There were four different scenarios: (1) Digital camera with no informational social support; (2) digital camera with informational social support; (3) coffeemaker with informational social support; and lastly, (4) coffeemaker with no informational social support. The four scenarios can be found in appendix A.

For the first scenario (digital camera x no social support), the website was totally dedicated to exhibit product pictures, product description, main features, related products, promotions, and deals. However, for the second scenario (digital camera x informational social support), besides exhibiting product pictures, product description and main features, there was also room for informational social support by means of customer reviews, customer ratings, product-related social media content as well as hints for other social sources (e.g., social media buttons: Facebook, Twitter, Google +, and tabs relating to forums and blogs). These elements replaced the commercial information found in the first scenario. The same logic is employed for the third scenario (coffeemaker x informational social support) and fourth scenario (coffeemaker x no social support).

The layout of the fictional e-commerce website took into account the main design principles, features, and interface characteristics found in real e-commerce sites. A preliminary study of interfaces and e-commerce design features can be found in appendix B.

#### 5.7. INSTRUMENT

For this study, a questionnaire consisting of 39 questions (psychometrics and demographics) was developed. To measure participant attitudes, a five-point Likerttype scale ranging from (1) "strongly disagree" to (5) "strongly agree" with 19 statements was employed. All measurement items were collected from previous research and slightly modified to ensure that they would adequately represent the underlying constructs of this study. In addition, all statements composing each of the dependent measure scales were examined for reliability by computing Cronbach's alpha coefficient. The final measurement items can be found in appendix C and the final questionnaire in appendix D.

#### 5.7.1. EXPECTATIONS ( $\alpha = .83$ )

The first dependent variable of this study - expectation - was measured by five items adapted from Kim (2010). The items (1) "The information available on retailer.com makes me confident that this product is the right choice for me", (2) "The information available on retailer.com allows me to expect that my choice will not be regretted afterwards", (3) "The information available on retailer.com enhances my expectations about the product", (4) "I would say the product will fit my personal requirement needs", and (5) "I would say I have overall high expectation regarding the product" proved to be high in reliability by a Cronbach's alpha coefficient of  $\alpha = .83$ .

#### **5.7.2. PERCEIVED SATISFACTION** ( $\alpha = .88$ )

A total of six questions adapted from Zhang et al. (2015) and Tong et al. (2013) were used to measure perceived satisfaction. The items (1) "I feel good about the information provided by retailer.com", (2) "Given the information available to me, I might be satisfied with the product", (3) "I enjoyed the amount of information available to support my purchase decision", (4) "Given the information available to me, I might be happy with the product", (5) "I feel pleased that I had the opportunity to read relevant information before purchasing the product", and (6) "Given the information available to me, I might be negative to me, I might be pleased with the product" and (6) "Given the information available to me, I might be pleased with the product" presented a Cronbach's alpha coefficient of  $\alpha = .88$ .

#### 5.7.3. PURCHASE INTENTION ( $\alpha = .84$ )

The questions for purchase intention were adjusted from the scale of Lee et al. (2006), consisting of four items. The items (1) "I am willing to purchase the product", (2) "Given the information available to me, I intend to use retailers.com frequently to buy products I need", (3) "It is likely that I will actually purchase the product on retailer.com", and (4) "The information available on retailer.com enhances my willingness to buy the product" proved to be reliable in this study by a Cronbach's alpha coefficient of  $\alpha = .84$ .

#### 5.7.4. POST-PURCHASE INFORMATION SHARING ( $\alpha = .87$ )

Intention to contribute with post-purchase information sharing was measured with the help of scales developed by Kim and Park (2012) and Zhang et al. (2014). A total of five items were used. The items (1) "I am willing to share my shopping experiences with other consumers on retailer.com", (2) "I am willing to recommend a product that is worth buying to other consumers and friends", (3) "I intend to share my shopping experiences with others more frequently in the future", (4) "I am likely to encourage others to share their shopping experiences with friends and acquaintances", and (5) "It is likely for me to provide a review, comment or rating of the product on retailer.com" yielded a Cronbach's alpha coefficient of  $\alpha = .87$  thus representing the reliability of this scale for the current research.

Results demonstrate that all measurement items chosen and adapted to this study had an excellent individual performance for reliability ( $\alpha$ ), resulting in no exclusions for the final analyses. The reliability of the dependent measures is presented in more details in Table 1.

#### Table 1

	α	М	SD	Ν
Expectation	.83	3.58	.70	5
Perceived Satisfaction	.88	3.67	.73	6
Purchase Intention	.84	3.22	.83	4
Post-purchase information sharing	.87	3.46	.88	5

General descriptive statistics of measure constructs.

#### 5.8. SAMPLE PROFILE

In total, 357 participants completed the survey. Brazilians made up the majority of the sample (n = 234, 65.5%). However, besides Brazil, participants from 36 different countries also took part in the study. Of the total of participants, 127 were male (35.6%) and 230 were female (64.4%). The age of the respondents varied from 18 to 67, with (M = 29.80, SD = 8.34) years old. The high standard deviation was caused by a variety of age groups who participated in the study. Most participants were highly educated, possessing bachelor (n = 175, 49%) or postgraduate degrees (n = 143, 40.1%). The distribution of gender, nationality, and age among the four experimental conditions is demonstrated in Table 2.

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### Table 2

Direct comparison of nationality, age, and gender among the four experimental conditions.

Characteristics		Camera vs. S. Support $(n = 88, 24.6\%)$		Camera vs. No S. Support $(n = 90, 25.2\%)$		Coffeemaker vs. S. Support $(n = 90, 25.2\%)$		Coffeemaker vs. No. Social Support $(n = 89, 24.9\%)$		Total ( <i>n</i> = 357, 100%)	
Gender	Male	32	36.4	32	35.6	31	34.4	32	36	127	35.6
	Female	56	63.6	58	64.4	59	65.6	57	64	230	64.4
Nationality	Brazilian	57	64.8	59	65.6	60	66.7	58	65.2	234	65.5
	International	31	35.2	31	34.4	30	33.3	31	34.8	123	34.5
Age	-	(M = 29.81)	, SD = 8.45)	(M = 30.86)	5, SD = 8.92	(M = 29.76)	5, SD = 7.93	(M = 28.75)	5, SD = 8.02)	(M = 29.8,	SD = 8.34)

Results indicate that in all four conditions the distribution of gender and nationality are nearly the same. Similarly, only slight variations were observed towards age. Complementarily to these outcomes, tests of homogeneity were conducted and the main findings are presented next.

#### 5.8.1. TEST OF HOMOGENEITY

To evaluate whether gender, age, and nationality were statistically different among the four groups, tests of homogeneity using chi-square and one-way ANOVA were conducted.

A chi-square test was performed for gender and no significant difference between males and females amid the four samples was found,  $X^2$  (3, N = 357) = .08, p = .99.

Similarly, the chi-square test for nationality demonstrated no significant difference between Brazilians and non-Brazilians among the four samples,  $X^2$  (3, N = 357) = .08, p = .99.

Turning to age, the same trend was observed and the one-way ANOVA test revealed no significant difference between the four sample groups, F(3, 353) = .95, p = .42.

Therefore, based on the previously presented results, we may conclude that the four sample groups are homogeneous in terms of gender, nationality, and age, indicating that there is no need to perform any statistical control for such variables.

Next, we bring forward a holistic overview of the demographic characteristics of the respondents.

# Table 3

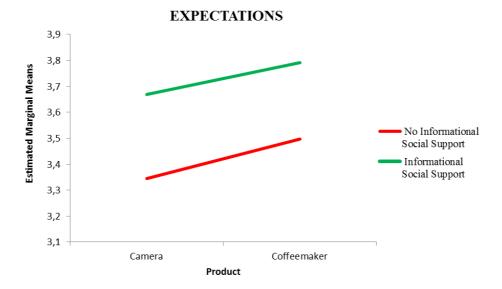
# Demographics of the survey respondents (n = 357).

		n	%
Gender	Male	127	35.6
	Female	230	64.4
Education	Did not finish High School	3	0.8
	High School	30	8.4
	Technical	6	1.7
	Bachelor	175	49
	Postgraduate or above	143	40.1
Nationality	Brazilian	234	65.5
	International	123	34.5
Produc involvement Camera	High	88	24.6
	Low	90	25.2
Coffeemaker	High	84	23.5
	Low	95	26.6
Computer expertise	Novice	0	0
	Intermediate	105	29.4
	Advanced	252	70.6
Internet expertise	Novice	0	0
	Intermediate	81	22.7
	Advanced	276	77.3
Internet usage	Rarely	0	0
	Several times a month	2	0.6
	Several times a week	14	3.9
	Several times a day	341	95.5
Use internet as a source for product information	Yes	350	98
	No	7	2
Online purchases over the last year	Yes	341	95.5
	No	16	4.5
Online purchase of small appliances or consumer	Yes	292	81.8
electronics	No	65	18.2
Frequency of online purchases of small applicances	Not Once	65	18.2
and/or consumer electronics over the last year	Once	82	23.0
	2-3 times	147	41.2
	4-6 times	37	10.4
	More than 6 times	26	7.3

#### 6. RESULTS

#### 6.1. EXPECTATIONS

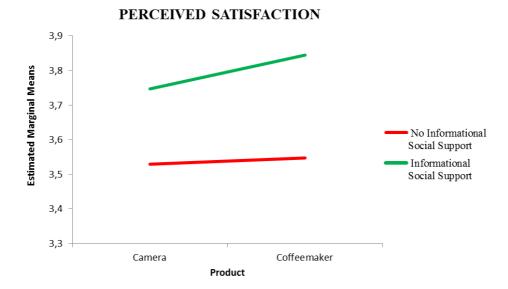
A two-way analysis of variance (ANOVA) was conducted to investigate the effects of informational social support and product category on expectations. The main effect of product category on expectations was not significant, F(1, 353) = 3.66, p = .06. However, the main effect of information social support was significant, F(1, 353) = 18.50, p = .00, indicating that the mean expectation was higher for participants with informational social support available (M = 3.73, SD = .67) than for the no informational social support group (M = 3.42, SD = .69). Both treatment groups, that is, the ones having access to informational social support during the simulated purchase experience revealed higher levels of expectation when compared to the control groups, thus supporting hypothesis 1. The interaction effect was not significant, F(1, 353) = .04, p = .84, rejecting hypothesis 2.



*Figure 4*. Main effect of informational social support and product category on expectations.

#### 6.2. PERCEIVED SATISFACTION

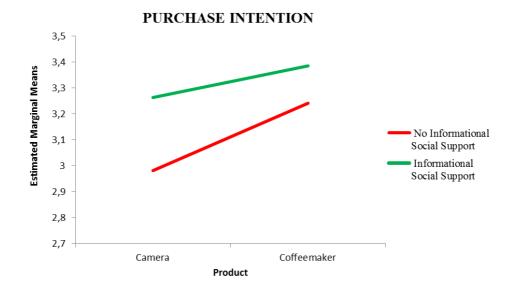
Perceived satisfaction was subjected to a two-way analysis of variance (ANOVA) having two levels of information (social support, no social support) and two levels of product category (consumer electronics, small appliances). At the .05 significance level, only the informational factor proved to be significant. The main effect of product category on perceived satisfaction was not significant, F(1, 353) = .57, p = .45, contrasting to the main effect of informational social support, that was significant, F(1, 353) = 11.28, p = .00, indicating that participants with access to informational social support during the survey unveiled higher levels of perceived satisfaction (M = 3.79, SD = .69) when compared to participants who only had product information at hand (M = 3.53, SD = .75). This outcome lends support for hypothesis 1. No relevant interaction effect was found, F(1, 353) = .28, p = .60, disproving prior assumption (hypothesis 2).



*Figure 5*. Main effect of informational social support and product category on perceived satisfaction.

#### 6.3. PURCHASE INTENTION

A 2x2 analysis of variance (ANOVA) was conducted to investigate the effects of informational social support and product category on purchase intention. Both factors were statistically significant at the .05 significance level. The main effect of product category yielded an *F* ratio of F(1, 353) = 4.82, p = .03, indicating that the mean purchase intention was significantly higher for coffeemaker (M = 3.31, SD =.80) than for camera (M = 3.12, SD = .86). The main effect of the informational factor yielded an *F* ratio of F(1, 353) = 6.03, p = .02, such that participants with informational social support at hand during the experiment revealed higher levels of purchase intention (M = 3.33, SD = .85) when compared to participants who were deprived of such information (M = 3.11, SD = .80). This outcome supports hypothesis 1. No interaction effect was found, F(1, 353) = .64, p = .43, declining hypothesis 2.

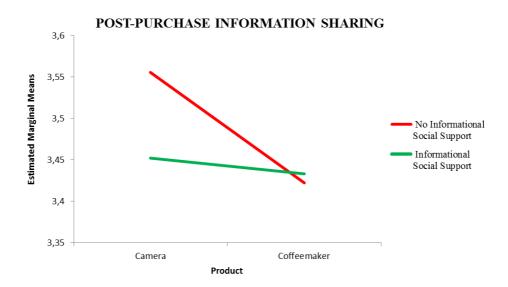


*Figure 6*. Main effect of informational social support and product category on purchase intention.

#### 6.4. POST-PURCHASE INFORMATION SHARING

Post-purchase information sharing was subjected to a two-way analysis of variance (ANOVA). Two levels of information (social support, no social support) and two product categories (small appliances, consumer electronics) were also evaluated.

The main effect of product category yielded an nonsignificant *F* ratio of F(1, 353) = .67, p = .42. Following the same trend, the informational factor was likewise not significant with an *F* ratio of F(1, 353) = .25, p = .62. All in all, it indicates that neither product category, camera (M = 3.50, SD = .84) and coffeemaker (M = 3.43, SD = .91), nor type of information provided to participants, informational social support (M = 3.44, SD = .90) and no informational social support (M = 3.49, SD = .86), resulted in higher intentions to share post-purchase information, disproving both hypotheses. Although the graph seems to indicate an interaction, the interaction effect was not significant, F(1, 353) = .38, p = .54.



*Figure 7*. Main effect of informational social support and product category on postpurchase information sharing.

#### 6.5. STATISTICAL SUMMARY - DEPENDENT VARIABLES

### Table 4

Results of the two-way ANOVA for the dependent variables

Dependent variables		F	df	Sig.
Expectations	Social support	18.50	1, 353	.00
	Product category	3.66	1, 353	.06
	Interaction	.04	1, 353	.84
Perceived satisfaction	Social support	11.28	1, 353	.00
	Product category	.57	1, 353	.45
	Interaction	.28	1, 353	.60
Purchase intention	Social support	6.03	1, 353	.02
	Product category	4.82	1, 353	.03
	Interaction	.64	1, 353	.43
Post-purchase	Social support	.25	1, 353	.62
information sharing	Product category	.67	1, 353	.42
	Interaction	.38	1, 353	.54

## 7. GENERAL DISCUSSION OF RESULTS

The aim of this research was to identify the relative influence of informational social support on consumer expectations, perceived satisfaction, purchase intention and post-purchase information sharing. The results demonstrate that informational social support has a positive influence on most of the dependent variables of this research, underling previous studies of Hajli (2013) and Hajli (2014), who found that informational social support is relevant for consumers in several ways. However,

when it comes to post-purchase information sharing, this study did not succeed in validating the findings of Cheung and Lee (2012), Tong et al. (2013) and Zhang et al. (2014). Therefore, no evidences of reciprocity, intention to actively engage in social exchange, perceived satisfaction in helping other consumers, sense of belonging or perceived probability of enhancing self-image - reputation - were found. There are two plausible explanations for this result: (1) Cultural value of participants; and (2) the perceived cognitive and executional cost. All studies, Cheung and Lee (2012), Tong et al. (2013), and Zhang et al. (2014), were conducted in Eastern countries - Hong Kong and China - with stronger collective cultural values compared to Western Europe and Brazil [the majority of the sample of this study]. Prior research state that members of collectivistic cultures such as China, Japan, and Hong Kong value more group goals and have a more interdependent self-view whereas the opposite is true for Western cultures. Here, individuals are driven by egoistic factors and are primarily concern about maximizing their own outcomes (Kardes et al., 2011).

Thus, on the basis of cultural values, it can be stated that Hong Konger and Chinese citizens are altruistic by force of culture and therefore tend to be more inclined to contribute with post-purchase information sharing due to a higher sense of belonging and enjoyment of helping. Wherefore, this difference in cultural values between the sample drawn in this study and samples of other studies may account for the results obtained.

Nonetheless, other inhibiting factors for post-purchase information sharing are the perceived cognitive and executional cost. Participants of this research may have had the feeling that information sharing are cognitively costly and annoying, as the mental effort to reasoning about a review or comment and the time spent to codify it into an e-commerce site does not worth such effort (Tong et al., 2013). These two possible explanations shed light on an important contradiction: Individuals value information from other consumers, but at the same time it does not necessarily mean that they will provide information to help others, indicating a very low sense of reciprocity, inherent of individualistic cultures.

### 7.1. THEORETICAL IMPLICATIONS

The present study revealed interesting insights regarding the importance of informational social support for online purchase experiences. It was found that in fact informational social support has a great influence on consumer expectations, perceived satisfaction and purchase intention, but not on the intention to share post-purchase information. Thus, the theories that state social support as valuable for consumers were tested and can be once more underlined. Furthermore, the idea that informational social support potentially drives consumers to better product and brand evaluations; enriches the decision-making process; allows a more complete product perception; and sets expectations; can be confirmed and emphasized with the results of this study. Also, the unexpected outcome that does not relate informational social support to investigate research affirming the opposite. It seems that such studies claiming a positive relationship between social support and information sharing are only functional under specific circumstances and it should be clarified. Thus, the deductive

approach of this study fulfills its purpose of contributing to the body of science in online shopping through the presented results.

#### 7.2. PRACTICAL IMPLICATIONS

This study highlights the uniqueness of informational social support on purchase experiences and therefore the findings also have important practical implications. First, our results suggest that e-commerce sites should always promote consumers participation. However, practitioners may need to develop reward mechanisms to encourage consumers to share their shopping experiences. Social support proved to be a valuable asset for potential consumers but not a consequent behavior of those who had a purchase experience. Moreover, to diminish perceptions that post-purchase information sharing is cognitively costly and time consuming, ecommerce companies ought to implement intuitive, ease of use and friendly information sharing interfaces.

Secondly, customer reviews and product ratings are not the only informational social elements that should be made available to consumers. Ecommerce providers are advised to develop new features that can integrate in their sites also product-related information shared on social media, forums, blogs and thirdparty sites. More than just help consumers to find relevant product information, it demonstrates transparency from e-commerce companies. As a first step to reach this optimum position, firms can start by facilitating the search for such information. Search mechanisms and hints focused on social sources may be implemented. The more firms can smooth consumers search for information, the better are the results. By doing this, e-commerce sites can maximize consumer decisions quality while minimizing efforts. From this action both sides benefit: Consumers are able to build correct perceptions about products thus setting expectation accordingly and, as a direct consequence, sellers may diminish their dissatisfaction and return rates, which may lead firms to a more profitable business.

Third, our study also cautions practitioners to be careful when presenting products in the same way. Products and consumers have their own singularities and differ in terms of characteristics, complexity, product involvement, knowledge and need for information. Therefore, to reach higher levels of expectation, perceived satisfaction and purchase intention, e-commerce firms should devote much attention to personalization features. Thus, e-commerce companies are advised to take into account consumer preferences and the product itself. In other words, a dynamic, personalized and comprehensive site is more likely to be successful. It can be done by means of big data analysis such as consumers searching historical - previous behavior -, click stream information, demographic characteristics, ratings of purchased products, and social media profiles.

Lastly, global firms such as Amazon, Fnac, and E-bay should also account for cultural differences and adapt their websites and commercial and marketing strategies in accordance to local markets and cultural values. The results of post-purchase information sharing obtained in this study, which had basically Western individuals in the sample, contrasted with prior research investigating the same theme but with Eastern subjects. This difference indicates that a one-fits-all strategy or website may not be the best option to maximizing local revenues. For example, offering economic rewards for consumers to engage in information sharing may make a lot of sense for countries with strong individualistic values such as the USA. However, it would become an unnecessary strategy to be implemented in Eastern countries like Japan or Hong Kong, as they have a cultural propensity to think more collectively thus sharing more post-purchase information.

#### 8. LIMITATIONS AND FUTURE RESEARCH

As in the case of many empirical studies, this research has some limitations. First, our review of prior literature indicates that studies acknowledging informational social support as the key factor for decision-making and purchase experiences remain relatively new and have only received limited attention in the scholarly literature. To broaden the scientific knowledge in the field, we proposed a theoretical model with paramount constructs only, which may have resulted in an excessively focused model. Thus, we believe that future research should take into account other constructs that seem to be as important as the ones presented in this research. For instance, understanding the role of information processing (the heuristic-systematic model) when it comes to processing informational social support may yield interesting outcomes.

Also, research how social support impacts other types of consumer decisions such as routine choice and intermediate problem solving or how social support permeates the stages of the traditional model of consumer decision-making (e.g., problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase evaluation) may lead to intriguing findings. Together with secondary decision elements (e.g., decision rules, choice strategies and evaluation aids), these constructs seem to be the most interesting ones to be investigated under the social support perspective.

Secondly, although the sample size is reasonably big, it lacks generalizability due to the fact that convenience sampling was used to collect data. However, even with this constraint of a non-probabilistic sampling, the current study attempted to diminish the effects of selection bias by collecting data from diverse countries. In this regard, future research should consider other sampling techniques like probability sampling or simple random sampling.

Third, given the scope of the study, there are other variables that were not included in the model. Future studies could explore social support from different perspectives. Emotional social support and tangible support are other possible streams for research. Furthermore, upcoming studies can also account for moderators. Make sense of how gender, educational level or product involvement can strengthen or weaken the relationship between the variables of this research is promising.

Another important limitation is the manipulated stimulus. Restrictions with the survey tool prevented us from designing a dynamic manipulation. This resulted in two major problems: (1) It was not possible to add all relevant information found in reallife situations; and (2) participants were presented to a static website. Hence, no interactions with the webpage (e.g., zoom in images, click on different tabs or scroll up and down) were possible. Therefore, new studies are advised to code a proper website in order to be as realistic as possible.

#### 9. CONCLUSION

In e-commerce settings, informational social support is of fundamental relevance and must not be absent. In fact, this study demonstrates that informational social support positively affects consumer expectations, perceived satisfaction and purchase intention, besides being regarded as an important source of product information used by consumers prior to purchases. However, it failed to confirm studies that correlate social support with higher intentions to share post-purchase information.

In addition, the current research supports the notion that trust and relationship between individuals are not necessarily prerequisites for social shopping. In this sense, information provided by unknown consumers may be trusted and have an impact on online shopping experiences even though no meaningful relationship or feelings of trust between individuals are present.

Additionally, as no significant interaction effects were found, we may conclude that informational social support is critical to purchase experiences involving consumer electronics - digital camera - and small appliances - coffeemaker at large.

Lastly, after reasoning about the literature in e-commerce, the results of prior studies, and the outcomes of our 2 x 2 factorial design, we reach the final conclusion that e-commerce firms should designate special attention, embrace, facilitate, and emphasize the exchange of informational social support in their websites in order to have both an effective user-centered strategy and increase profitability. However,

expect consumers to engage in post-purchase information sharing just for the sake of helping other consumers is not realistic, at least for Western consumers, and actions such as the ones suggested in the practical implication section should be implemented to increase participation rates.

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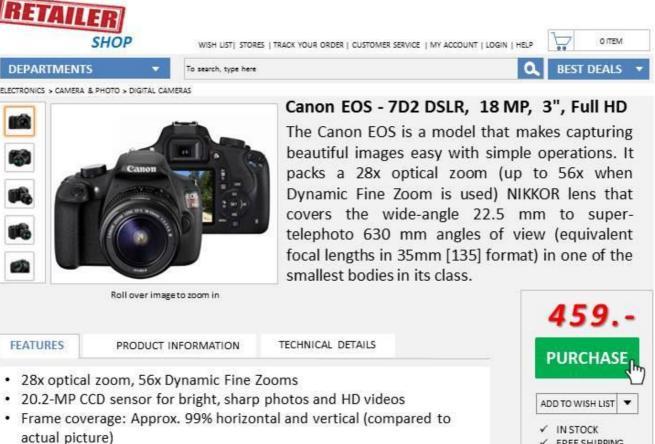
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# **APPENDIX A: STIMULUS MATERIAL SCENARIO 1**



- HD 720p videos with sound bring your memories to life
- Includes: LR6/L40 (AA-size) alkaline batteries (x4), Lens Cap LC-CP25 (with cord), USB Cable UC-E16, Camera Strap

## CUSTOMER WHO BOUGHT THIS ITEM ALSO BOUGHT

SPECIAL OFFER - MOTHER'S DAY

# EMAIL DELIVERY

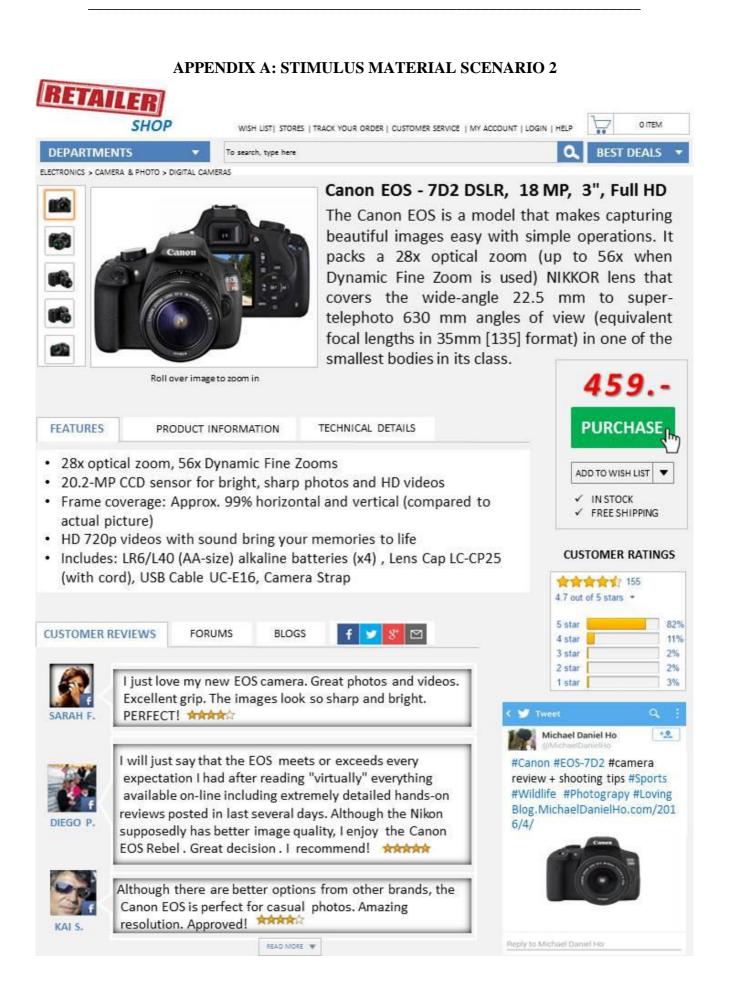


Receive a \$20 credit for any purchase of \$100 or more on Gifts.com with qualifying digital camera purchased from Retailer.com. Here's how (restrictions apply)



MOTHER'S DAY GIFT

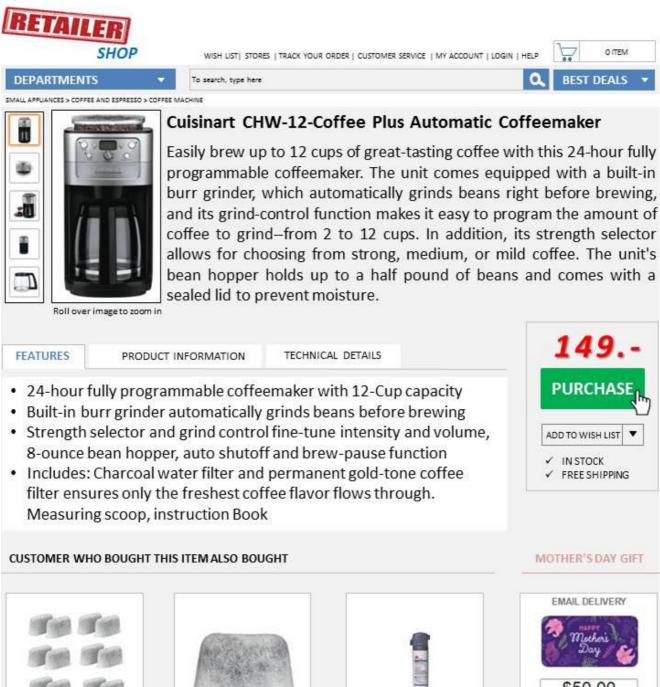




# **APPENDIX A: STIMULUS MATERIAL SCENARIO 3**



# **APPENDIX A: STIMULUS MATERIAL SCENARIO 4**



\$50.00 Continue 12-pack Replacement Water Filtration Charcoal Water Charcoal Water Filters Send a Gift Card to BREW Filters your Mom

#### **SPECIAL OFFER - MOTHER'S DAY**

Receive a \$20 credit for any purchase of \$70 or more on Gifts.com with qualifying Coffeemakers purchased from Retailer.com. Here's how (restrictions apply)



| 57

## APPENDIX B: E-COMMERCE DESIGN FEATURES – PRELIMINARY STUDY OF INTERFACES

In order to design realistic scenarios for the manipulations, we have made empirical observations of a few popular e-commerce sites together with analysis of articles that discuss e-commerce design features. In this section we present the theoretical foundations and main findings of our observations.

Huang & Benyoucef (2012) and Lurie & Wen (2014) list a series of design features commonly found in e-commerce sites. Among them, there are sorting tools, product content, technical information, business functions (e.g., payment, ordering and tracking mechanisms), product pictures, customer assistance or help functions, navigation buttons, and social content (e.g., comments, recommendations, reviews, ratings). Besides the aforementioned features, the empirical observations carried out allow us to affirm that, apparently, there is a standard layout used by most of ecommerce sites. This default look becomes even more prevalent when we shed light on interfaces, colors and information disposition found in different website layouts. In conclusion, most of the e-commerce sites resemble one another with no major differentiation.

The four manipulations used in the experimental design were created to accurately simulate a real e-commerce site thus containing most of the items, information disposition, colors and the so called default look observed in real sites.

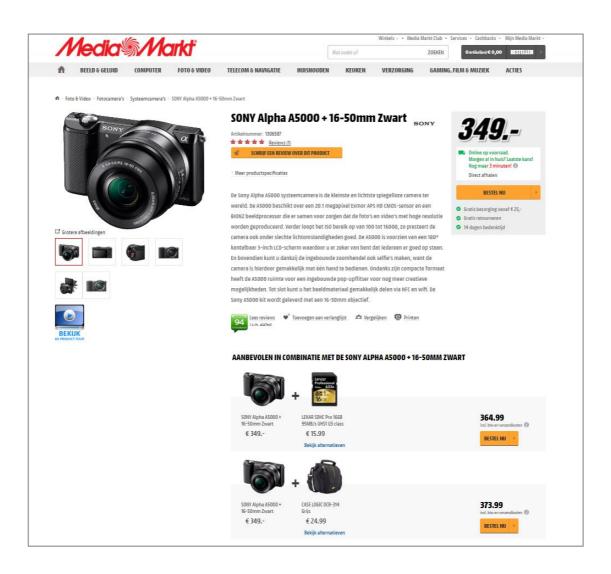


Figure 8. Example one of interface similarities in e-commerce sites (Media markt,

2016).

amazon Irakime Camera & Photo -			Q	🔌 spring event 👌
Departments - Your Amazon.com Today's Deals Gift Cards Sell Help			Hello. Sign in Your Account	nt - Try Prime - Lists - 🖓 Cart
Camera & Photo Deals - Best Selers - Interchangeable-Lens Cameras - Lenses - Point-and-Shoots - Sports & A Bectronics - Camera & Photo	ction Cameras - Camcorders - Photography Drones - 5	Security Cameras - Accessories -		
	Sony Alpha a6300 Mirrorless Digita	l Camera (Body Only)		Share 🖂 🖪 🔰 🔞
	by Sony ****** 38 customer reviews   3 answered	questions		Qty: 1 •
	Price: \$998.00 & FREE Shipping. Details			Yes, I want FREE Two-Day Shipping with Amazon Prime
	In Stock. Ships from and sold by Amazon.com. Giff-wrap availab Color: Black Style: Base		<ul> <li>Include 4-Year Drops &amp; Spills Protection for \$89.99</li> <li>Include 3-Year Drops &amp; Spills Protection for \$85.99</li> </ul>	
α sony α	Base w/16-50mm \$998.00 \$1,148.00		Add to Cart	
	From the experts at DPReview Overall score: 85% See review summary and sample in What is DPReview and its awards?		Tum on 1-Click ordering for this browser Ship to: Select a shipping address: *	
	<ul> <li>World's fastest Auto Focus speed (0.05 sec.)</li> <li>24.2 MP APS-C Exmor CMOS sensor will accelerated</li> <li>Up to 11(bs continuous shooting wilkuto Focus and 8</li> <li>Internal UHD 4K30 &amp; 1080p120 Recording</li> <li>Weather-Sealed Magnetium Allov Body</li> </ul>		Add to List Other Sellers on Amazon	
	4 new from \$998.00 4 used from \$1,120.29 1 reft	urbished from \$1,145.00 national regulations, this product can only be shipped within the continu	ental United States.	\$998.00 Add to Cart + Free Shipping Sold by: CameraSpot
		More in Camera, Photo & Video		9 used & new from \$998.00
				Have one to sell? Sell on Amazon
Roll over image to zoom in		448)	a ala	Sponsored by MegaGear
	Mirrorless Cameras Under \$500	Mirrorless Camera Bundles	Deals in Camera	MegaGear "Ultra Light" Neoprene Camera Case ★★★★☆ 219 \$19.99 √Pviewe

Figure 9. Example two of interface similarities in e-commerce sites (Amazon, 2016).

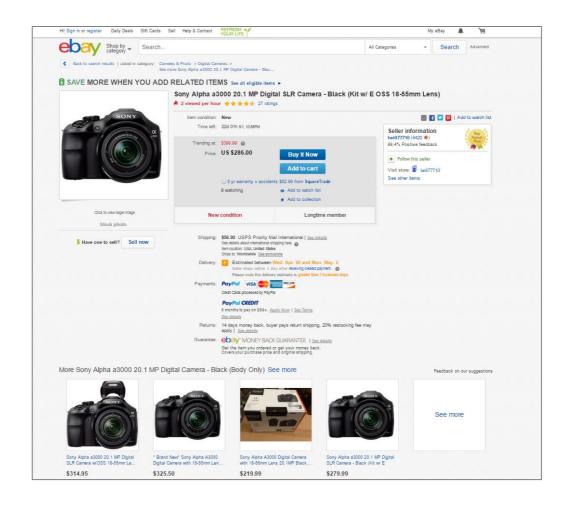


Figure 10. Example three of interface similarities in e-commerce sites (Ebay, 2016).

To conclude, the main similarities are exposed next:

(a) Colors – It prevails shades of white and grey, possibly because these colors are attractive, impactful and pleasurable for our visual perception in advertisings (Lecture material, Sartori, 2008);

(b) Product picture – Always presented on the left-upper part of the layout;

(c) Main commercial conditions – Always on the center or right part of the layout;

(d) Business functions (e.g., payment, ordering and tracking mechanisms) – Always on the upper part;

(e) Social content – Always on the bottom part;

(f) Detailed product description and technical information – Usually after "bought together" and other commercial information and deals. Consumers need to scroll the page down to reach this important part.

# References **Expectations** EXP1 - The information available on retailer.com makes me Lee et al. confident that this product is the right choice for me. (2006)EXP2 - The information available on retailer.com allows me to expect that my choice will not be regretted afterwards. EXP3 - The information available on retailer.com enhances my expectations about the product. EXP4 - I would say the product will fit my personal requirement needs. EXP5 - I would say I have overall high expectation regarding the product. **Perceived Satisfaction** PS1 - I feel good about the information provided by retailer.com. Zhang et al. (2014)PS2 - Given the information available to me, I might be satisfied with the product. Kim and Park (2012)PS3 - I enjoyed the amount of information available to support my purchase decision. PS4 - Given the information available to me, I might be happy with the product. PS5 - I feel pleased that I had the opportunity to read relevant information before purchasing the product. PS6 - Given the information available to me, I might be pleased with the product.

# **APPENDIX C: MEASUREMENT ITEMS**

Purchase intention	References
PI1 - I am willing to purchase the product.	Lee et al. (2006)
PI2 - Given the information available to me, I intend to use retailers.com frequently to buy the products I need.	
PI3 - It is likely that I will actually purchase the product on retailer.com.	
PI4 - The information available on retailer.com enhances my willingness to buy the product.	
Post-purchase information sharing	
IPPE1 - I am willing to share my shopping experiences with other consumers on retailer.com.	Zhang et al. (2014) and Kim and Park (2012)
IPPE2 - I am willing to recommend a product that is worth buying to other consumers and friends.	
IPPE3 - I intend to share my shopping experiences with others more frequently in the future.	
IPPE4 - I am likely to encourage others to share their shopping experiences with friends and acquaintances.	
IPPE5 - It is likely for me to provide a review, comment or rating of the product on retailer.com.	

## **APPENDIX D: QUESTIONNAIRE**

Dear participant,

Thanks for your engagement in this study. This survey is part of my master thesis, a requirement to conclude the master course of Marketing Communication at the University of Twente. In this survey, an e-commerce page is presented, followed by a few questions related to the site. There are no right or wrong answers. We are only interested in your sincere opinion. The names used in this survey are fictitious and are not based on a real company. The results will be kept anonymous and used for academic purposes only.

For question or comments, you can send an email to:

d.pereiradas ilva @ student.utwente.nl

I thank you in advance for your time and participation.

Kind regards,

Diego Silva Master Student of the University of Twente On the following page you are going to choose which language is most appropriate for you and then a product page of the e-commerce site Retailer.com will be displayed. Imagine that you are interested in purchasing the presented product and answer the questions that follow.

About the company:

Retailer.com is an e-commerce company that sells a variety of products online. In its portfolio it is possible to find women's apparel, books, computer hardware, toys, jewelry, office supplies, appliances and electronics. Among its main competitor are Amazon.com, Ebay.com and Mediamarkt.nl.

Q.1. Which Language is most appropriate for you?

- o Portuguese
- o English

Random manipulation was assigned. Together with the manipulation, the following text is presented: Imagine that you would like to buy a coffeemaker/digital camera via internet. Please, read the site carefully because it will not be possible to access it again.

Q.2. to Q.21. Based on the site you have just seen, please indicate to what extent you agree or disagree with the following statements:

	~ 1		Neither		
	Strongly disagree		agree nor disagree	Agree	Strongly agree
The information available on retailer.com makes me confident that this product is the right choice for me.	1	2	3	4	5
The information available on retailer.com allows me to expect that my choice will not be regretted afterwards.	1	2	3	4	5
The information available on retailer.com enhances my expectations about the product.	1	2	3	4	5
I would say the product will fit my personal requirement needs.	1	2	3	4	5
I would say I have overall high expectation regarding the product.	1	2	3	4	5

	Strongly disagree	Disaglee	Neither agree nor disagree	Agree	Strongly agree
I feel good about the information provided by retailer.com.	1	2	3	4	5
Given the information available to me, I might be satisfied with the product.	1	2	3	4	5
I enjoyed the amount of information available to support my purchase decision.	1	2	3	4	5
Given the information available to me, I might be happy with the product.	1	2	3	4	5
I feel pleased that I had the opportunity to read relevant information before purchasing the product.	1	2	3	4	5
Given the information available to me, I might be pleased with the product.	1	2	3	4	5

		Neither			
	Strongly disagree	Disagree	agree nor disagree	Agree	Strongly agree
I am willing to purchase the product.	1	2	3	4	5
Given the information available to me, I intend to use retailers.com frequently to buy the products I need.	1	2	3	4	5
It is likely that I will actually purchase the product on retailer.com.	1	2	3	4	5
The information available on retailer.com enhances my willingness to buy the product.	1	2	3	4	5

	Strongly disagree	Disaglee	Neither agree nor disagree	Agree	Strongly agree
I am willing to share my shopping experiences with other consumers on retailer.com.	1	2	3	4	5
I am willing to recommend a product that is worth buying to other consumers and friends.	1	2	3	4	5
I intend to share my shopping experiences with others more frequently in the future.	1	2	3	4	5
I am likely to encourage others to share their shopping experiences with friends and acquaintances.	1	2	3	4	5
It is likely for me to provide a review, comment or rating of the product on retailer.com.	1	2	3	4	5

Q.22. to Q25.Based on the product you saw on retailer.com, please indicate to what extent you agree or disagree with the following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
This product is important to me.	1	2	3	4	5
This product means a lot to me.	1	2	3	4	5
This product is interesting.	1	2	3	4	5
This product is needed.	1	2	3	4	5

Q.26.Please, specify from the range below which elements you noticed on

retailer.com? You can choose more than one option.

- Product picture
- Product description
- o Features
- o Price
- Suggestion of other products
- o Special offers
- Customer reviews
- Customer ratings
- o Social media content
- Social media buttons

Note. To avoid bias, the options for question Q.26. were randomized.

Q.27. Below are the elements you have noticed on the site. Please tell us how would you rate each one of the items in terms of importance for your purchase experience?

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Product picture	1	2	3	4	5
Product description	1	2	3	4	5
Features	1	2	3	4	5
Price	1	2	3	4	5
Suggestion of other products	1	2	3	4	5
Special offers	1	2	3	4	5
Customer reviews	1	2	3	4	5
Customer ratings	1	2	3	4	5
Social media content	1	2	3	4	5
Social media buttons	1	2	3	4	5

*Note.* Carry forward feature brought to the Q.27. only the options chosen in Q.26.

Q.28. What is your gender?

o Male

o Female

Q.29. How old are you?

18 🔹

Q.30. In which country were you born?

Q.31. What is your highest level of education?

- o Attended High School but did not finish
- o High School
- o Technical degree
- o Bachelor's degree
- Graduate or Postgraduate degrees (e.g., master, doctoral or specialization)

Q.32. How would you describe your expertise using computers?

- Novice. I am just learning
- o Intermediate. I feel comfortable using computers
- o Advanced. I feel extremely comfortable using computers

Q.33. How would you describe your expertise using internet?

- Novice. I am just learning
- o Intermediate. I feel comfortable using internet
- o Advanced. I am able to use most internet tools and sites

Q.34. How often do you use internet?

- o Rarely
- Several times a month
- Several times a week
- Several times a day

#### Q.35. Do you often search for product information on the internet

- o Yes
- o No

Q.36. What are the main sources of information you consult before purchasing a product via internet? You can choose more than one option.

- o E-commerce sites
- $\circ$  Social media
- o Specialized communities and forums
- o Blogs

- Official brand or product site
- o Unboxing videos
- $\circ$  In-store
- Others

Note. To avoid bias, the options for question Q.36. were randomized.

Q.37. Have you purchased anything from internet over the last year?

- o Yes
- o No

Q.38. Have you ever purchased small appliances or electronics from internet? (e.g., stand mixers, rice cookers, coffeemakers, digital cameras, GPS, cell phones, among others)

- o Yes
- o No

Q.39. How often have you purchased small appliances and/or electronics on the internet over the last year?

- o Not once
- $\circ$  2 3 times
- $\circ$  4 6 times
- $\circ$  More than 6 times

Thanks for your participation!