CATÓLICA LISBON
BUSINESS & ECONOMICS

The impact of eWOM on consumers' purchase intention

- the moderation role of products' category

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Dissertation submitted in partial fulfilment of requirements for the MSc in Management with Specialization in Strategy and Entrepreneurship, at the Universidade Católica Portuguesa, August 2017.

ABSTRACT

Title: The impact of eWOM on consumers' purchase intention - the moderation role of products' category

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Online content is becoming an increasingly important tool for consumers and marketeers relationship to grow closer and last-longing. Namely, eWOM, which derived from the need of sharing knowledge and information among consumers, allowed them to reach information perceived as more trustful and real.

Nowadays, this type of communication is part of the purchasing process and has been proved to influence consumers' buying decisions. Besides being perceived as consumer generated information, eWOM can also be managed by marketeers, aiming at influencing individuals to provide useful information, which ideally would be positive but can also be negative, and managing potential future customers' expectations and needs.

In addition, this research quantifies the purchase intention among different types of eWOM, namely by exposing different sources, valences and structures and evaluating the impact on consumers' buying decisions within different products' categories.

Therefore, quantitative data was generated by an online questionnaire which presented the different illustrative scenarios for each of the four categories of products being tested: pricey tech electronics, high touch retail, household staples and no touch services.

The conclusions obtained were mostly opposing to literature, which may be explained by the various range of eWOM limitations and characteristics, as lack of physical contact, but also, were helpful to perceive that its influence is not linear and that it could depend on the scenario and the circumstances in which the information was developed and shared.

Keywords*: eWOM, purchase intention, consumer generated information, expert generated information, need of eWOM, pricey-tech electronics, high touch retail products, household staples, no touch services, online information, written reviews, numerical ratings*

SUMÁRIO

Título: O Impacto da eWOM na Intenção de Compra dos Consumidores – o papel moderador da Categoria de Produto

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O conteúdo online é uma ferramenta cada vez mais importante para tornar a ligação entre consumidores e *marketeers* mais próxima e duradora.

Atualmente, este tipo de comunicação é parte integrante do processo de compra e, apresenta um efeito influenciador na decisão dos consumidores. Apesar disso, esta informação é vista como sendo originária de comuns consumidores, mas, esta também pode ser gerida por *marketeers* com o objetivo de influenciar indivíduos a providenciar informação útil, - que idealmente seria positiva, mas que acontece por vezes ser negativa também-, e, assim, gerir as expectativas e as necessidades de potenciais e atuais clientes.

Adicionalmente, este estudo quantifica a diferença na intenção de compra consumidores entre diferentes tipos de eWOM, através da exposição de diferentes tipos de fontes, valências e estruturas, de modo a avaliar o impacto na decisão de compra dos consumidores, no seio de diferentes categorias de produto.

Consequentemente, foi gerada data quantitativa através de um questionário online que apresentava diferentes cenários ilustrativos em relação aos tipos de eWOM que estavam a ser testados no âmbito das categorias de produto escolhidas.

Na verdade, as conclusões obtidas nesta dissertação foram, maioritariamente, contra os factos revelados na literatura considerada, o que, pode ser explicado pela variedade de limitações e características peculiares da eWOM, mas, estas conclusões podem também ser úteis para perceber que a sua influência não é linear e pode depender dos cenários e circunstâncias em que a eWOM foi criada e desenvolvida.

Palavras-chave: *eWOM, WOM, intenção de compra, informação gerada por consumidores, informação gerada por experts, necessidade de recorrer a eWOM, produtos pricey-tech electronics, produtos high touch retail, produtos household staples, serviços no touch, informação online, reviews escritos, ratings numéricos*

ACKNOWLEDGEMENTS

First I would like to thank my Mother Catarina and my Father Henrique not only for the amazing opportunity to study in of the finest and most prestigious universities of Europe but also for the constant and extraordinary support throughout these last months.

Additionally, I would like to show my gratitude to my supervisor, Professor Paulo Romeiro, for his advice and help during this entire process. Thank you for your constant availability and help.

To all my family but, specially, to my mother, father, grandmother and aunt, who always encouraged me to continue and to do my best, even in the most stressful moments.

To all my friends, thank you for being there through these months, for all the encouragement and patience to deal with all the stressful moments I went through. Specially, to Sara Pinheiro, who helped me during the most difficult stage of my thesis and to Inês Flora Ribeiro, who was the best thesis partner I could asked for.

To Inês' parents, Aníbal and Flora Ribeiro, for the support during the last effort of these months.

Lastly, I would like to show my appreciation to all the participants of my survey, who took some of their personal time to help me. Thank you for making this research possible.

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GLOSSARY

WOM - Word-of-mouth

eWOM- Electronic word-of-mouth

CGI – Consumer generated information

EGI – Expert generated information

MGI – Market generated information

PI – Purchase Intention

CHAPTER 1: INTRODUCTION

1.1 Background and problem statement

Internet development has brought to our society a whole new range of opportunities which have been changing consumers' behaviours and consequently, companies marketing strategies.
Word-of-Mouth (WOM), which is the process of sharing information and opinions regarding a specific product or service between customers (Jalilvand 2012), has been proved that influences both pre-purchase decisions as well as post-purchase decisions (de Matos and Rossi 2008). Therefore, consumers started increasingly to use web 2.0 tools, such as customer review sites, and social network sites, to communicate and exchange product information (Lee, Park, and Han 2008), resulting in a new meaning to the WOM concept, the eWOM.

Presented as a less personal form of communication, eWOM describes any positive or negative statement made by current or prospect consumers about organizations or its products and services, which is made available to a wide range of people through the Internet (Hennig-Thurau et al. 2004), concretely it consists on the sharing of products' evaluations of a wide range of products by customers through review websites, discussion forums, blogs and virtual communities (Xinxin LiHitt 2010).
Despite the fact that is equally important to identify and reach influencers with persuasive brand communications online and offline (Fulgoni and Lipsman 2015), research has proven that eWOM may have higher credibility, empathy and relevance to customers than marketeer-created sources of information on the web (Gruen, Osmonbekov, and Czaplewski 2006) and, thus, marketeers might focus on this type of communications in order to develop proper marketing strategies.

It is known that eWOM highly impacts consumers' purchase decisions, - being already proved that the rating of products affects the likelihood that an item will be bought (Leskovec, Adamic, and Huberman 2007)-, but, there is still an existing gap related to the different effects that this type of communication has within different product categories, which is one of the main reasons for choosing this topic.
Therefore, the focus of this dissertation is to study the impact that eWOM might have on consumers' purchase intent by focusing on the direct impact of reviews and ratings, and its valence and different sources. Moreover, it also considers the potential influence of two moderators, price and product category, and the relationship between both.

1.2 Aim and Scope

As mentioned, this research might be useful for future marketeers properly adapt their marketing strategies to new media standards and characteristics.

eWOM is presented free of any standard format, which means that consumers can freely write, or even evaluate numerically, their experience with the product or the service they are testing. In this sense, one of the main characteristics of eWOM is informality and, thus, format-free (Park and Kim 2008). Therefore, in order to narrow the scope of this dissertation, the main focus was on reviews and ratings, - respectively written and numerical types of eWOM. Thus, the following research questions were addressed.

Due to time constraints, and given the complexity of eWOM concept, I chose to focus the analysis on the potential impact that the valence, type and sources of ratings and reviews might have on consumers' PI.

RQ1 – How does eWOM impacts consumers' PI?

a. How does the type of ratings' and reviews' sources impacts consumers' PI?
b. How does the valence of reviews impacts consumers' PI?
c. How does the type of eWOM influences consumers' PI?

RQ2 – Does the category of the product influences the impact that eWOM will have on consumers' PI?

RQ3 – Does the variable *price* impacts the need to resort to eWOM?

Therefore, these research questions lead to the next hypotheses.

H1: The valence of the reviews will impact the consumers' PI

H1. a. A set of positive and negative reviews will have a higher impact on consumers' PI than a neutral set of reviews.

H2: The type of eWOM will impact consumers' PI

H2. a. A numerical rating has higher impact on PI comparing to written reviews.

H3: The source of a rating and a review will impact the consumers' PI

H3. a. One single expert generated rating has higher impact on consumers' PI than one generated by a common consumer.

H3. b. A review posted online with a *known* source has higher impact on consumers' PI that one signed with *unknown.*

H4: The higher the price of the product/service, the higher the need to resort to eWOM

H5: The impact that eWOM has on consumers' PI differs amongst different categories of products.

Therefore, as independent variable we have PI and, thus, the study will focus on the impact that different characteristics of eWOM, as type, valence and source, would impact consumers' PI. Thus, the effect of the variable price on the need to resort to eWOM (in order to evaluate a product or a service), will be tested as an addition to the model.

1.3 Research Methods

In order to address the presented research questions, primary and secondary data, including journal articles, academic papers and data, generated by an online survey, were collected.

Secondary data will be used mostly within the Literature Review chapter and slightly within the conclusion of the results obtained in the end of the research. Regarding to primary data, the research will be supported by quantitative data, with the development of an online survey, which will be applied to a random sample.

Furthermore, the sampling technique applicable to this research is representative sampling. With this technique, the probability of each case being selected from the total of the population is usually equal for all the cases. Hence, this technique is used to obtain inferences from the total sample regarding a population to answer research questions (Saunders, Lewis, and Thornhill 2009). Therefore, the survey was randomly distributed amongst different channels, including the social network Facebook, and personal and organizational e-mails, which allowed an extended reach.

Afterwards, in order to analyse the results from the survey (primary data), first, in order to estimate and test the hypothesis about the population itself, namely its characteristics, statistics were applied through a process denominated as statistical inference (David R. Anderson, Dennis J. Sweeney, and Thomas A. Williams 1989). Within this process, the first step was composed by a normality test, followed by t-tests which allowed to compare means among different groups of analyses. The final stage of statistical analysis consisted on a set of regression tests in order to study the potential existing relationship within the variables of the conceptual model.

Additionally, this dissertation addresses some topics outside the pre-defined model that would be relevant for the overall study, namely regarding the impact that a lower and a higher price might have on the consumers' willingness to look for eWOM before making a purchase decision.

1.4 Relevance

Giving the growing importance of Internet and its usages, it is getting increasingly important to study all of the opportunities that are arising. Therefore, brands need to be aware of technology

fast development and its impact on consumers' behaviours and decisions. Being eWOM communications one of the most used tool to evaluate the potential of a product and/or a service, online feedback mechanisms have appeared as a viable tool for fostering cooperation among strangers in such settings by ensuring that the behaviour of a trader toward any other trader becomes publicly known and probably will affect the behaviour of the entire community toward that trader in the future (Dellarocas 2003). In this sense, it is increasingly important to study the influence that different types of online information, may display on consumers' purchase intent in order to properly adapt each brand's marketing strategy to the new trends of the market.

1.5 Dissertation Outline

This dissertation presents a total of five chapters. Being this introduction the first chapter, chapter 2 presents a literature review on eWOM, PI, online search for information and different product categories.

Following to that, this dissertation presents the third chapter with the methodology used within this research. Afterwards, the collection and consequent analysis of the data collected are presented within chapter 4, being the results obtained presented and discussed in line with the proposed research questions and hypotheses.

To conclude, chapter 5 provides the main conclusions and limitations of this dissertation as well as some limitations and topics for future research.

CHAPTER 2: LITERATURE REVIEW

The intent of this chapter is to present a theoretical framework, based on previous studies and empirical evidences provided on some journals, on the concepts presented on the conceptual model of this research. Therefore, it starts with a brief reference to the evolution of WOM, to eWOM and also, includes an introduction to MGI, CGI and EGI, as well as PI and price. These subjects are followed by a detailed approach to written reviews and numerical ratings namely to its valence and source. Additionally, it presents a framework of four possible categories of products, to which the analysis will be extended.

2.1 Traditional Word-of-mouth (WOM)

Currently, internet as an increasing clutter, with high selectivity, interactive possibilities and relatively low cost (Kotler and Keller 2009), facilitates continuous technological innovations and fosters new business practices as well as alters the competitive landscape of may industry sectors (Xiang, Magnini, and Fesenmaier 2015). In this sense, in order to feed their long-term

strategic objectives, brands need to identify the most suitable technology that will allow them to identify and develop effective and sustainable marketing communication strategies.

One of the most significant development regarding to marketing over the past decade has been an increasing focus on understanding the antecedents and consequences of customer-to-customer (C2C) interactions (Libai et al. 2010), - or as denominated within this dissertation, WOM. WOM can be described as a process of sharing opinions and information about specific products between customers (Jalilvand 2012).

2.2 From WOM to eWOM

For many years, WOM, has been acknowledge as a major influence on what people know, feel and do, namely it is more influential on behaviour than other marketeer-controlled sources, like advertising. The spectrum of WOM influence regards consumers' awareness, attitudes, expectations, perceptions, intentions and behaviours (Buttle 1998) and, according to Sheth (1967), WOM has also more importance than advertising in which regards to raising awareness of an innovation and in ensuring the decision to try a certain product.

During the last decade, we witness the fast development of the social media which had a direct and significant impact to our society and daily lives. This rapid development brought the need to further research the impacts of social media to different facets in the society through the theoretical lens of information systems (IS) (See-To and Ho 2014). That said, the need to identify and reach influencers with persuasive brand communications is equally important online as it is offline (Fulgoni and Lipsman 2015) and, hence, this sharp growth of internet, among side with its improved communication skills, led to an amplification of the scope of WOM communications, which presented a "fertile base" to eWOM communications (Bataineh 2015).

WOM and eWOM present, thus, significant differences. Most notably, WOM is commonly shared face-to-face between people who know each other, whereas eWOM not only can occur between people who are personally familiar with each other, but also, there are a subset of electronic channels developed so users can share information with people they do not know. In this sense, eWOM builds a communication flow with different levels of influence (Meuter, McCabe, and Curran 2013) but, on the other hand, there is also a lack of strong ties between the individuals, making more difficult to use the similarity between sources to determine the credibility of the information (Park and Lee 2009). Despite of that, due to its speed, convenience and absence of face-to-face pressure, eWOM is proved to be more influential than WOM (Sun et al. 2006), but consumers are more likely to choose a service with positive interpersonal WOM than when they receive diverse forms of positive eWOM (Meuter et al. 2013).

2.3 eWOM

eWOM is then described as any positive or negative statement made by current or prospects customers about the organization or its products, which is made available to a multitude of people and institutions via the internet (Hennig-Thurau et al. 2004). In this sense, we have been now facing a clear change from opinion leaders to e-fluentials - opinion leaders who spread information via internet - (Bronner and ; De Hoog 2010). Moreover, eWOM turns out to be a key tool in which concerns to consumers' knowledge because with the introduction of automated feedback mediators - which enables a precise control and monitor of the operations-, that allows a better understanding of their behaviours, expectations and needs (Dellarocas 2003).

As Hovland (1948) once defined, communication is the process in which the communicator transmits stimuli to influence others behaviour. Thus, also the process of WOM communication can be defined by four main factors: the communicator, the message, the receivers and the final reaction. eWOM is then characterized as a process defined by a source (communicator), a message (stimulus), a belief (receiver perception) and a response (main effect). Representing thus an innovative type of social communication (message) that involves both information seekers and information sharing customers (receivers - response and communicators – source) (Cheung and Thadani 2012) (Wathen and Burkell 2002).

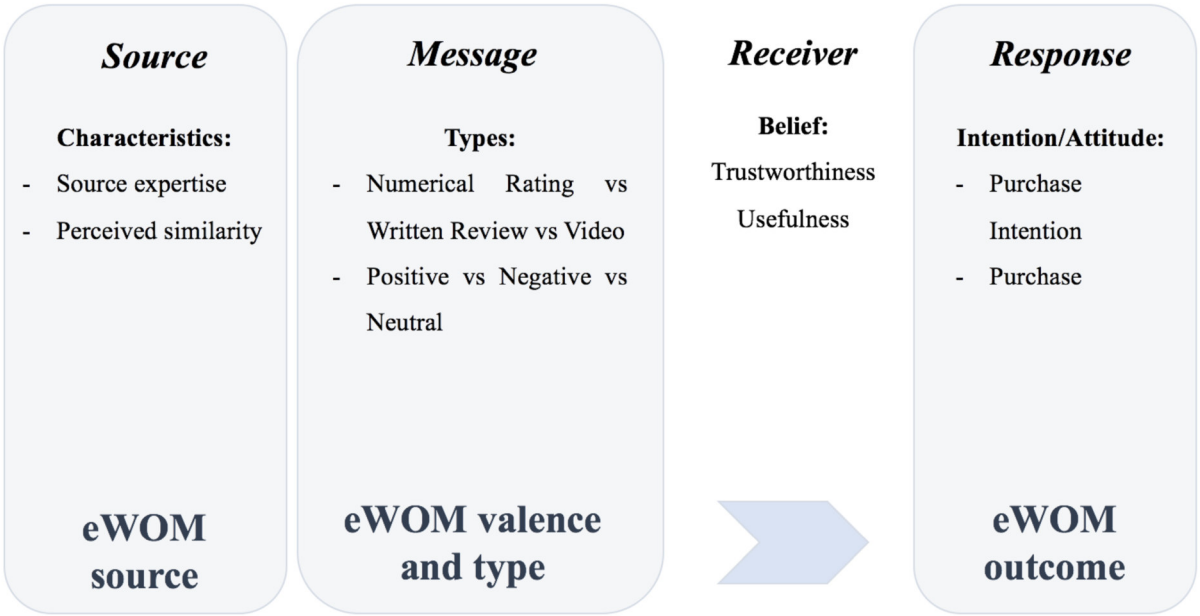


Figure 1: eWOM Communication Process

Therefore, considering the scope of this dissertation, the research will be restricted to the source of eWOM, eWOM message and consequent customer's response – in terms of PI. According

to Mcknight, Choudhury, and Kacmar (2002), a belief on the trustworthiness of a source leads to a positive attitude towards the information provided, which, in turn, have a significant impact on the consumer's intention to purchase that item. Thus, this presupposes that consumers' beliefs are implicit in their intention to buy a certain product or service which allows to obtain results regarding the entire flow of communication.

2.3.1 Valence: Positive, Neutral and Negative Information

The valence of a review regards to the direction of the evaluation that is being made on the review, being, hence, positive, neutral or negative. In a neutrally valenced review it is possible to find descriptive information about the product, or service, without any evaluative direction. On the other hand, positive reviews provide information that evaluates the object positively and, contrarily, negatively valenced reviews evaluate in a negative way (Purnawirawan, De Pelsmacker, and Dens 2012).

Readers are motivated to find trusted people opinions and to reduce perceived risk. In addition to that, the time constraints when searching for products, as well as the need to know more about new products in the marketplace, in a trustful way, are motives linked to a high predisposition to read negative reviews (Khammash and Griffiths 2011). Previous studies showed a predisposition to consumers to pay more attention to negative information rather than positive (Cheung and Thadani 2012) (Pan and Zhang 2011), as well as has been found to be more important for consumers' evaluation of a product or a service, showing thus a higher impact on their purchase decisions. Even previous studies presented an asymmetrical influence of word-of-mouth, which means that negative reviews have a stronger effect on consumers' brand evaluations and their PIs (Park and Lee 2009) (Brown and Reingen 1987).

Nevertheless, although previous studies stated that an excess of positive information may break consumers' trust due to questions regarding the source's motives and its potential lack of authenticity (Schindler and Bickart 2012), East and Lomax (2008), stated that positive WOM has higher impact on consumers' purchase probability than negative information.

Moreover, it is proved that the exposition to negative information allow customers to categorize the product, or service, as low in quality – known as negativity bias-, however, positive and neutral reviews can be found in many high-, average- and low-quality products. Explicit positive reviews help readers make a purchase they will value, contrarily, clearly negative information led consumers to avoid a purchase they may otherwise regret (Forman, Ghose, and Wiesenfeld 2008). The negativity bias is then explained by the tendency that consumers have to consider that any product or service must have, at least, one positive or neutral attribute but

never one negative, given, thus, higher weight to the most distinctive ones (Folkes and Patrick 2003).

In this sense, the following hypothesis resulted considering the controversial range of results obtained and added a new scenario, a set of neutral reviews. Namely, to study the impact that a set of mix valence reviews (negative and positive reviews) might have on consumers' PI, comparing to a neutral set of reviews.

H1. a. A set of positive and negative reviews will have a higher impact on consumers' PI than a neutral set of reviews.

2.3.2 Type: Reviews and Ratings

eWOM is a type of communication which can take the form of reviews – user comments, ratings – numerical scale evaluations, or videos (Chatterjee, 2001).

Focusing this research on the reader's perspective, potential consumers' attributions about the motivations that led a reviewer to post a certain review will include whether the opinions expressed are based on external (product) reasons or internal (reviewer) reasons. If a reader make the attribution that the review he is reading is based on external motives, he will perceive it as legitimate, believable, actionable and useful information. On the other hand, if the review is based on internal reasons, consumers that will read it, will then discount it (Sen and Lerman 2007).

eWOM is presented on the internet without any standard format, meaning that consumers can freely write, or evaluate in value, their experience with the product or the service they are testing. Nevertheless, online sellers tend to present the information about a product, or service, framed in a cognitively fitted way but, in which regards to consumers' reviews, it is unnatural for them to provide a standard review format for the buyers once the main characteristics of word-of-mouth are informality and, in this way, format-free (Park and Kim 2008).

Therefore, due to the higher complexity of visual perceptions, - in which regards to video evaluations-, the scope of this dissertation includes only the written comments, usually denominated as reviews, and the ratings, which concerns to numerical evaluations.

That said, the following hypothesis was formulated to test whether these two types of eWOM can present different impact on consumers' purchase intent.

H2. a. A numerical rating has higher impact on PI comparing to a written review.

2.3.2 Source

Reducing risk in a purchase, and the pursuit of unique experiences are both motives strongly linked to the impact of reading reviews on purchase behaviours (Khammash and Griffiths 2011). Online feedback platforms arose as a trustful mechanism for cherish cooperation among random people in such "settings by ensuring that the behaviour of a trader toward any other trader become publicly known and may, therefore, affect the behaviour of the entire community toward that trader in the future" (Dellarocas 2003).

According to previous studies, there are two types sources: personal and non-personal. Personal sources are, persons who belong to the close circle of friends or are family members or colleagues, meaning that they know the receiver and consequently are familiar with their expectations and requirements. This type of source might also include experts that are in direct contact with the receiver in situations like medical services and academic environment, for instance. On the other hand, non-personal sources are unknown people that may provide personalised or non-personalised information, which can result from previous purchases or consumer reports received from anonymous people, correspondingly (Senecal and Nantel 2004).

As an information source, and compared to other communication channels, WOM's influence presents credibility as the unique and its most salient characteristic (O'Reilly and Marx 2011) (Cheung et al. 2009), which characterises a trustworthy and expert information (Wathen and Burkell 2002).

Due to the anonymity of eWOM, its credibility is hence explained only by the linguistic quality of the information and technical aspects, like (1) the polarity and the quantity of reviews and ratings, (2) the logic and articulation of the ratings and reviews, (3) their ability to find corroborating sources and, also, (4) their previous experiences with those sellers (O'Reilly and Marx 2011). Although when comparing to WOM, eWOM seems to be less credible in which regards to unknown sources and the lack of physical contact, the level of credibility associated to it will also depend on the type of the source. In this sense, the expected value of the information presented will depend on the credibility of a source (Cheung, Lee, and Rabjohn 2008).

Consumers' intention to trust will hence be explained by the willingness to rely on others' behaviour (Buttner and Goritz 2007) and so, the higher the source's level of trust, the higher its influence on the receiver (Lis 2013). Consequently, the higher this influence, the higher the probability of influence consumers' PI.

2.3.2.1 Known source vs unknown source

This type of communication can be easily understandable by exploring the opinion leadership process. This process evolves opinion leaders, who influence the behaviours/attitudes of others, the opinion seekers. Internet as, hence, improved this process by not only providing new ways to opinion leaders to share their information, but also facilitated the search for information by opinion seekers (Sun et al. 2006).

According to the paradigm of attribution theory, consumers who are deciding whether to use, or not, eWOM as a reference, will base their decision on the causal inferences they make regarding the reviewer's motivation on posting that review (Sen and Lerman 2007). In this sense, the development of digital media, raised the complexity of evaluating the credibility of a source as well as the determination of the accuracy of the information. Therefore, considering the format-free of eWOM and also the inexistence of universal standards for posting online and the consequent huge spreading of the information, consumers nowadays need to be more willing to evaluate if they can rely, or not, on the data that it is being presented.

In order to do so, consumers usually base their judgement on personal knowledge or on common information like reputation, as well as they rely on traditional information intermediaries, like experts and opinion leaders (Metzger and Flanagin 2013).

Due to this, people are more likely to rely on sources that are either recommended by known users, or that are in the form of aggregated testimonials, reviews or ratings and are suggested by unknown others (Metzger, Flanagin, and Medders 2010). For the purpose of this dissertation, I assumed that reviews with known sources are the ones signed with the name of a common user, whereas, unknown sources regard to the anonymous signatures, ignoring hence, the fact that the reader might know, or not, that user personally.

Therefore, the authors were studying the impact of having a known and an unknown source, being, hence, expected that a review with an unknown source does not influence consumers' PI in the same extension as reviews signed by other users, which has enabled the formulation of the following hypothesis:

H3. a. A review posted online with a "known" source has higher impact on consumers' purchase intent that one signed with "unknown"

2.3.2.2 Consumer generated information (CGI)

Consumer generated websites are mainly product review sites where internet users are rating and reviewing all kinds of service and products (Bronner and ; De Hoog 2010). Additionally, consumer to consumer communication can occur through electronic channels like recommendation websites, social networking sites, blogs, online communities and chat rooms (Meuter et al. 2013). and have been in use for many years (Riegner 2007).

The influence of CGI varies among different types of products and its variety of characteristics. Namely, CGI has a higher impact on purchase intent of products that present a high level of complexity, a high price and a high level of desire – like technology and consumer electronics. On the other hand, if we consider products that have a low level of involvement, products that are commonly purchased in stores - like consumer packaged goods-, and also products that consumers need to feel, see and try-on, as well as products with privacy issues – such as travel and financial services-, CGI does not have a big influence within consumer's intent or decision (Riegner 2007).

Due to the level of technology adoption amongst different generations, it is common to verify that younger buyers are the ones that are subject to a higher impact of CGI, due to their everyday and sometimes, hourly, use of social media and dependency of society approval. Nevertheless, the extent in which CGI influences consumers' purchase intent is likely to grow with the increasingly tendency to go online within all types of generations. In addition, although it is verified a trend that shows a clear higher impact of CGI on technological and consumer electronic product, it is expected to observe an expansion, at a slower pace, of its influence to other type of product – less tech-oriented-, with the identification of lovers of this type of product that would be more willing to spread the word among online communities (Riegner 2007).

2.3.2.3 Expert generated information

EWOM is composed not only for information generated by common users/consumers but also by people usually recognized as experts. Consumers with product expertise are then considered experts and, consequently, their reviews and ratings present a high level of credibility (Smith, Menon, and Sivakumar 2005). Subsequently, EGI appears when a consumer or user, of certain product or service, due to his experience or specific knowledge about a topic or a situation, presents a significant expertise and, consequently, is perceived by others as having a great deal of experiential credibility. (Flanagin and Metzger 2013).

According to Alba, Hutchinson, and Hutchinson (1987), consumer knowledge is divided into two dimensions: expertise and familiarity. Whereas expertise refers to the *ability to perform product-related tasks successfully*, such as advertising exposures, information search, interactions with salespersons, choice and decision-making, purchasing and product usage in different situations, familiarity is measured by the quantity of product-related experiences that a consumer have been accumulating. Therefore, considering the same research, an increased product familiarity leads to an increased consumer expertise.

Volume is the variable that may impact the effect that EGI has on consumers' perception of review credibility, meaning that, experts are seen as more reliable than common users at a low volume of ratings. In a situation where the volume of ratings and reviews is low, consumers are more willing to rely on EGI rather than on CGI, otherwise, the congruence between consumers' own and others' ratings and reviews is greater when the source is common consumers rather than experts (Utz, Kerkhof, and Van Den Bos 2012). On the other hand, people who were faced with a high number of ratings from common users demonstrated greater congruence than others who saw a high number of ratings made by experts. These facts confirm the idea that values like credibility, accuracy and reliance, are significantly higher in EGI rather than on CGI (Flanagin and Metzger 2013). As a result, the different impact that a single expert source of eWOM might have on consumers' purchase intent should be different than a single consumer rating, which resulted on the following hypothesis to test:

H3. b. One single expert generated rating has higher impact on consumers' PI than one generated by a common consumer.

2.4 Purchase intention

With the main goal of reducing perceived risk, consumers usually resort to available information, either offline and online, concerning the product or the service they want to purchase (Khammash and Griffiths 2011).

When evaluating a product, consumers carefully examine the importance of specific attributes in order to estimate its value, and then, decide whether they want to buy it or not. This shows that a consumers' PI derives from their perception of product value, and, although some consumers have general standards for their evaluations, others do not.

Furthermore, we can distinguish two different types of product evaluation criteria: quality and preference, which derive from the objective domain and the subjective domain,

correspondingly. Thus, these criteria must be considered as major antecedents to the PI, therefore, reunited as the consumer's perceived value, an estimation of the value of a product made by a customer (Lee and Lee 2009).

2.5 Price

Being a primary mean with which retailers often communicate with consumers, the way price is presented its proven to be a major influence on consumers' PI (Levy, Grewal, and Levy 2007) (Harlam, Bari; Krishna, Aradhna; Lehmann, Donald; Mela 1995) (Lichtenstein et al. 2017). Moreover, price can be perceived either as an indicator of a product/service's quality or also as an indicator of the amount of sacrifice needed to buy that product or service. Therefore, in situations of high prices, there is not only, a higher willingness to purchase that product or service due to a higher perceived quality but also, simultaneously, a decrease of that willingness to buy attached to the high level of monetary sacrifice needed to the purchase (Monroe, Kent; Grewal 1991).

Furthermore, price is a major influence on customers' satisfaction and hence, it is expected that it has significant impact in the way that people evaluate a certain product, namely, regarding products' perceived value. The perceived value of a product encompasses the difference of its perceived quality and price – concretely measured by the perceived sacrifice needed to the purchase (Monroe, Kent; Grewal 1991), which is usually taken into account on consumer's reviews, namely, in situations with uncertainty regarding quality, where price is used as a measure of it (Xinxin LiHitt 2010). Subsequently, if a price is considered as unacceptable to be paid, the consumer's perception will have little or even no net perceived value (Monroe, Kent; Grewal 1991).That said, the perception of value will directly impact the willingness to buy – PI. Considering the conceptual relationship of price effect developed by Szybillo and Jacoby in 1994, the value of the money presents a more significant influence on the likelihood of buying, than would perceived quality.

Consumers may have a number of price-based cognitions for a certain product, in which he/she considers the lowest price for which the product can be bought, the fair price for the product, the price that is actually being used for selling it and, also, the highest price the consumer is willing to pay for it. Therefore, consumers may use these cognitions as references to compare to the offering price which will influence their purchases evaluations (Lichtenstein et al. 2017). Moreover, it has been proved that CGI, - or as we can denominate, WOM/eWOM-, has a higher impact on purchase intent of products that present a high level of complexity, a high price and a high level of desire – like technology and consumer electronics (Riegner 2007). In this sense,

the need to resort to eWOM during these evaluations might depend on the price of the product/service which, subsequently, might mediate the influence that eWOM has on PI.

H4: The higher the price of the product/service, the higher the need to resort to eWOM.

Just as a reminder, within the scope of my dissertation, this effect of the variable price will be tested as an addition to the model.

2.6 Product Categories

2.6.1 Pricey Tech-Electronics

Pricey Tech-Electronics product category include all the technology and electronics items, which in turn tend to be more expensive, more complex and highly desired by their buyers. Therefore, these characteristics led to a high amount of time spent by consumers to research and consider the views of other buyers prior to purchase. Although retail stores continue to be a huge influence in purchase decision of this type of products, consumer generated content sites are still the second most influential source to decisions (Riegner 2007).

2.6.2 High Touch Retail

Products such as clothing, appliances and furniture are included within the category of High Touch Retail. This type of product requires a higher need to see and touch physically rather than an intellectual evaluation, therefore, offline sources are the major source of information for potential buyers, which can affect the potential influential power of eWOM in consumers' purchase intent. Nevertheless, online sources also play a significant role in this purchase decision and would probably increase its weight in this process as retail sites offer more participatory features and youngest generations gain sufficient income that will allow them to invest and settle into new houses (Riegner 2007).

2.6.3 Household Staples

The range of products, within this category, vary from beverages to pet supplies and, hence, include all the products needed to supply a house. Therefore, Household Staples products have a high emotional level attached and thus, eWOM impact can be limited. Despite of that, the PI is slightly influenced by online sources and it is likely to increase its impact as retail sites offer more participatory features, and retailers starting to "learn how to successfully combine bricks-and-clicks" take grocery orders online through existing supermarkets" (Riegner 2007).

2.6.4 No Touch Services

Services like travel and finances, due to its high level of immateriality are the ones that, since the beginning, most stimulate the growth of e-commerce, being hence, the most purchased product category online. In which regards to purchase intent, buyers heavily rely on search engines and peer recommendations, demonstrating a need to balance the ability to pick and choose a product with trusted advices. Nevertheless, the impact that user generate content has on this type of decision is still low, sometimes due to the age of the buyer – when we are facing older generations where the adoption of online reviews is still a tiny amount-, and also due to privacy issues related to the nature of many financial and travel decisions (Riegner 2007). But the future prospection is of growth, namely, in which concerns to travel, where "virtual communities are gradually becoming more influential as consumers increasingly trust their peers, rather than marketing messages" (Buhalis and Law 2008).

Price and product features are used by marketeers to influence potential consumers' product evaluations and purchase behaviours due to its key role as decision variables. In this sense, marketeers pursuit knowledge regarding the methods used by consumers to consider the variables of price and product features to evaluate a product (Chang and Wildt 1994).

Therefore, according to these types of products and the characteristics of each consumer, it is easy to understand how their purchase behaviours would probably change amongst different services and products they plan to acquire. Moreover, as mentioned, eWOM effect is proven to be higher for negative eWOM than for positive and, also, is has been proved that this effect is mediated by the category of the product (Park and Lee 2009) so, in this sense, it is relevant to test if this moderation is replicable to all of the characteristics of eWOM being tested:

H5: The impact that eWOM has on consumers' PI differs amongst different categories of products.

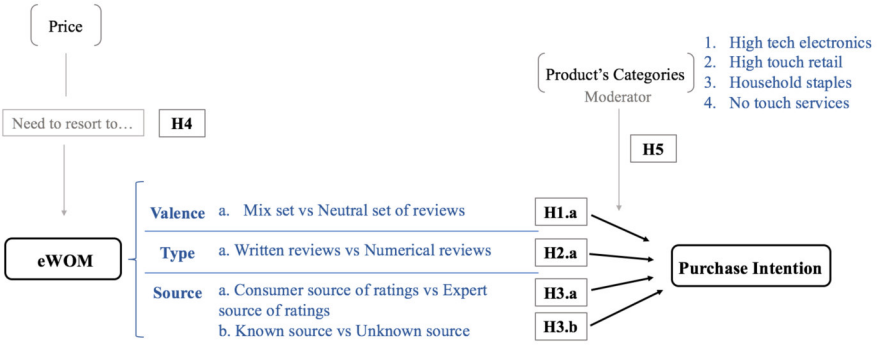


Figure 2: Conceptual Model

CHAPTER 3: METHODOLOGY

The purpose of this chapter is to present the methodology adopted in this study, namely, by describing how data was collected, measured and analysed.

3.1 Research Approach

Marketing research is defined by Malhotra (2010) as a procedure that, objectively, through the use of scientific methods, leads to accurate and supported results. This procedure is, thus, part of this dissertation's methodology and it consists in two steps, problem-identification research and problem-solving research.

First of all, we need to consider that there are three different types of research methods, the exploratory, the descriptive and the confirmatory (Saunders et al. 2009). For the purpose of this dissertation, the three types of research were applied. In an initial phase, an exploratory research was conducted to obtain new insights and gain familiarity, namely to understand the current state of research regarding this subject. It consisted on a deep literature search, in order to analyse potential existing theories about the purpose being studied. Afterwards, the main goal consisted in working on a clear picture of the topic under investigation and, for that, a descriptive research was applied. With this method was possible to describe and explain factually what is happening regarding the subject, and to fill missing parts and expanding the knowledge about it. Lastly, a confirmatory research was conducted to connect both exploratory and descriptive researches, that consisted in testing the primary data by launching an online survey designed to test the research hypothesis, which in turn, through statistical analysis, exposed the quantitative secondary data.

According to Creswell (2007), by analysing the relationship between the variables, quantitative approach seeks to test objective hypothesis, which allowed me to draw conclusions and explain the main findings regarding the conceptual model of my thesis.

3.2 Secondary Data

Secondary data is obtained through the collection of data from the literature, in order to build support, namely evidences, to the conclusions of our own research. This data was gathered on the previous chapter, the literature review, and consisted in information collected from top journals and recognized books.

This selection of information was a key step to obtain the necessary insights about this subject being study and, also, to be able to choose the most suitable methodology to apply. Namely, it was essential to develop the survey that later provided the primary data of the research.

3.3 Primary Data

Being the primary data, - which can be qualitative or quantitative -, obtained in a primary research made in the first person, it consists in information derived from the online survey developed and consequent results.

3.3.1 Data Collection

That said, an online survey, on the online platform Qualtrics, was developed, that would allow me to reach customers directly in order to test the hypotheses already presented before. This survey was distributed among social networks, such as Facebook, corporate, and personal, email addresses, and a Portuguese university internal e-mail system. In this way, the sample is totally random and includes all types of individuals from different generations.

The survey was divided into the four categories of product being studied. Therefore, in order to make it easy to answer, each person only answered to a set of questions regarding one category of product. This means that, at the beginning of the survey, the respondent selected which type (or types) of product(s)/service(s) that once, or usually, led him to resort to eWOM before the purchase and, then, randomly, the software selected one of those categories selected and presented the questions regarding it.

Hence, for each of these categories, all of the hypotheses presented were tested and, for that, were used one exemplary product of each category. Moreover, for the tech electronics products, an electric toothbrush was used, for the high touch retail product category the product selected was a sofa, on the other hand, for the category of household staples, it was used a bottle of wine and, finally, for the no touch services category, the exemplary was an hotel.

This product attribution derives from the need to choose four products which would represent the category and also, would reach the maximum number or respondents, by being, hence, a well-known product on the market.

In which regards to the sample size, according to the INE – Instituto Nacional de Estatística, in 2016, the population of Portugal was of 10 309 573 persons. Moreover, in order to obtain a representative sample of this population, the online survey should gather 384 answers, considering a confidence level of 95% and a margin of error of 5% (Saunders et al. 2009).

In this sense, considering the fact that each respondent only answered to one of the four categories of products, the sample' size, in order to be representative of the Portuguese population must be of 1.536 individuals (4x384=1.536).

3.3.2 Measurements

In order to specify the measurement items regarding this dissertation, it is important to clarify the conceptual model of this research.

The main goal of this research is to study the impact that eWOM might have on consumers' PI and so, in this sense, eWOM was expressed in its three main characteristics: valence, type and source.

As already mentioned in this dissertation, eWOM is characterized as a process defined by a source (communicator), a message (stimulus), a belief (receiver perception) and a response (main effect). Namely, eWOM represents an innovative type of social communication (message) that involves both information seekers and information sharing customers (receivers - response and communicators – source) (Cheung and Thadani 2012) (Wathen and Burkell 2002). Therefore, within the scope of this research, the effect will be restricted to the source of eWOM, eWOM message type, and consequent customer's response – in terms of PI. According to Mcknight, Choudhury, and Kacmar (2002), a belief on the trustworthiness of a source leads to a positive attitude towards the information provided, which, in turn, have a significant impact on the consumer's intention to purchase that item. Thus, this presupposes that consumers' beliefs are implicit in their intention to buy a certain product or service which allows to obtain results regarding the entire flow of communication.

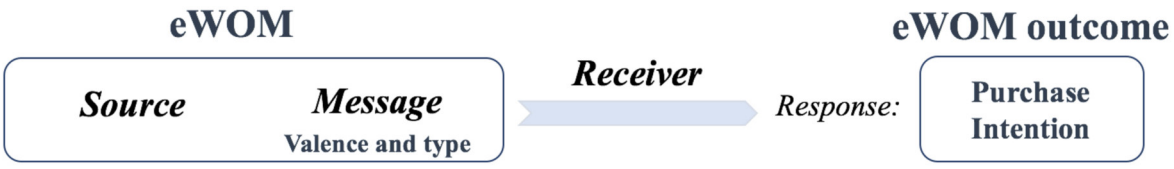


Figure 3: Communication Flow

This type of online communication is presented free of any standard format, which means that consumers can freely write, or even evaluate numerically, their experience with the product or the service they are testing. In this sense, one of the main characteristics of eWOM is informality and, thus, format-free (Park and Kim 2008). Therefore, in order to narrow the scope of this dissertation, the main focus was on reviews and ratings, - respectively written and numerical types of eWOM.

Therefore, to study the impact of eWOM valence in consumers' PI, a set of positive and negative reviews and a set of neutral reviews were used. Within these sets, respondents were asked to evaluate their intention to purchase a certain product/service, after considering those reviews, in a scale from 0 to 5 (where 0 meant no intention to purchase and 5 represented the maximum PI).

This method was, also, applied to measure both eWOM characteristics *type* and s*ource*'s influence on consumers' PI. Considering that, for *type* it was used a written review and a numerical rating and that, for *source*, the test consisted on the evaluation of the impact of consumer and expert generated reviews, as well as ratings provided by known and unknown users, in consumers' PI.

Moreover, the design of the questions consisted in showing pictures of the products with one of the situations illustrated on the hypotheses to be tested, where the respondent was asked to explicit their PI after considering that review/rating.

Below there are some examples of the stimulus used to illustrate the situations to test. Note that each of these scenarios were applied to each category of product, therefore, for further detailed information on it, and/or on the complete survey, please consult the Appendix 1,2 and 3.

Figure 4:Mix valence set of reviews-Pricey Tech Electronics–H1a.

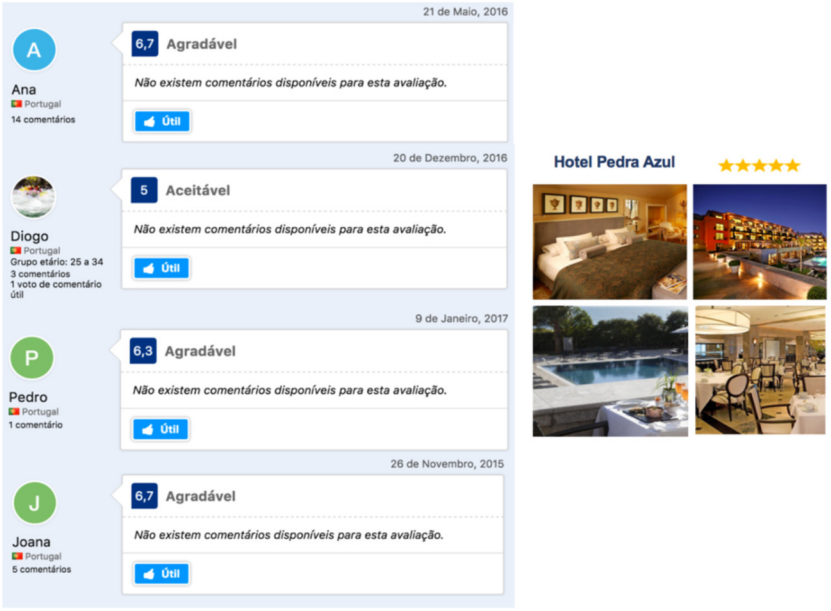


Figure 5:Neutral valence set of reviews–No Touch Services- H1a.

Figure 6:Numerical rating and a written review- Household Staples-H2a.

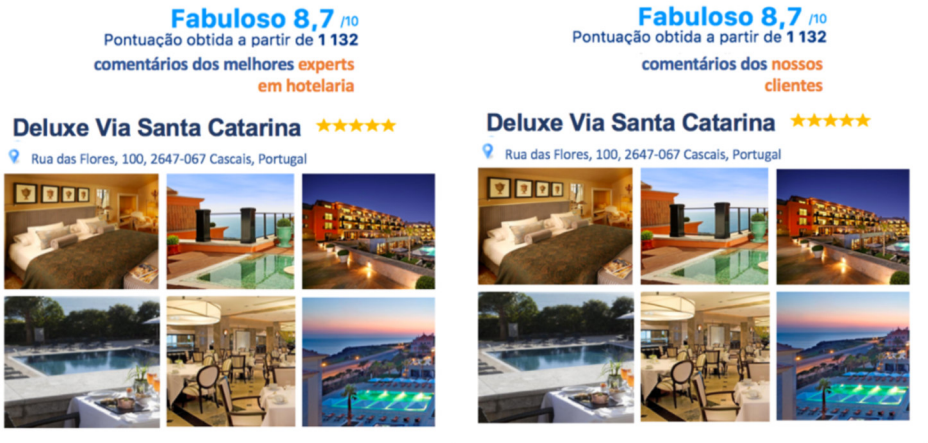


Figure 7:Expert and a consumer generated rating-No Touch Services-H3a.

Figure 8:Review with an unknown source and a review with a known source-High Touch Retail –H3b.

Figure 9:Same product with a higher and a lower price to test the need to resort to eWOM in both situations-H4

On the other hand, PI is measured through the consumers' perceived value regarding a certain product or service, which includes the mediation of the relationship among its perceived price and quality, however, this variables have lower impact on it. (Chang and Wildt 1994). When evaluating a product, consumers carefully examine the specific attributes of importance in order to estimate its value and then decide whether they want to buy it or not. In this sense, a consumers' PI derives from their perception of product value, despite of that, some consumers have general standards for their evaluations while others do not have. Moreover, we can distinguish two different types of product evaluation criteria: quality and preference, which derive from the objective domain and the subjective domain, correspondingly. Thus, these criteria must be considered as major antecedents to the PI, thus reunited as the consumer's perceived value, an estimation of the value of a product made by a customer (Lee and Lee 2009).

Therefore, the perceived value a consumer may attribute to a product or service depends on each individual's perception regarding quality, price, and even personal taste.
Thus, the evaluation of each consumer's PI was translated on a single direct question: "What is your intention to purchase this product after considering this review/rating?".

3.3.3 Data Analysis

The data collection was followed for its consequent data analysis and, for that step, the program *IBM® Statistics SPSS® version 23* was used. This tool allowed to accurately quantify the consumers' PI within the situations presented on each hypothesis and also, to evaluate the moderation effect of product's category on the relationship between eWOM and PI.

Starting by defining the sample of the research, descriptive statistics analysis concerning demographics and the overall PI means of each category of product was performed. In addition, in order to validate the reliability of the constructs used, the Cronbach's Alpha, which consists on an internal consistency reliability test (Malhotra 2010), was analysed.

For the analysis regarding the veracity of the hypothesis 1, 2, 3 and 5, parametric tests were used. This type of tests is applicable when variables are measured in a scale interval, namely *t* tests. According to Malhotra (2010), a *t* test's main goal is to compare means of two samples, paired or independent. The scope of this dissertation includes two independent samples, once each respondent of the survey only answered to one of the two questions which were testing one hypothesis. A *t* test requires a metric dependent variable, - in this research *purchase intention*-, and a categorical independent variable, (Malhotra 2010) - represented in this dissertation by *eWOM*. This test was applicable for each hypothesis within each of the four categories of product being considered, as well as an on overall overview with all the categories considered as one sample.
Moreover, for these tests, was used a confidence level of 95%, which means that the hypotheses were then rejected with a p-value inferior to 0.05 and, accepted for a p-value equal or superior to 0.05.

Regarding the fifth hypothesis, which consists in evaluating the impact of the moderating role of *products' categories* on the relationship between eWOM and PI, a regression analysis was conducted through the use of the add-on *Process*.

CHAPTER 4: RESULTS AND DISCUSSION

The main goal of this chapter is to present the data collected, and respectively analysis, on the online survey. The analysis was performed under the methodology presented on the previous chapter and aimed to reach conclusions regarding the research questions proposed on the introduction.

4.1 Results

4.1.1 Sample Characterization

Despite the fact that a total of 781 respondents finished the survey, 178 of them stated that are not users of eWOM. Therefore, the valid survey answers for this research were 603. Moreover, 175 respondents, of the total valid sample, answered the questionnaire regarding the *pricey tech electronics* product category, 111 answered to *high touch retail* products, 76 to *household staples* category of products and, finally, the majority answered to the survey related to *no touch services* (241 respondents).

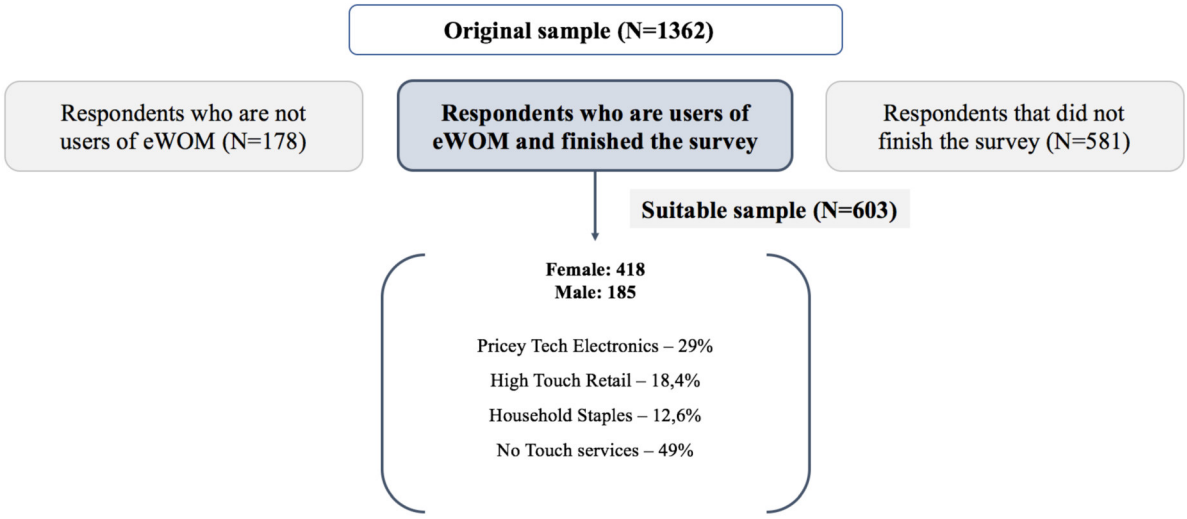


Figure 10:Sample Filtering and Characterization

By conducting descriptive analysis on SPSS, it is possible to verify that 69,3% of the respondents were women within the age range of 18 to 37 (76%).

Furthermore, this survey reached 418 female respondents and 185 male respondents with the majority of its respondents as being students or employed, namely with an academic background of high school, bachelor and master degree.

Despite the large number of respondents, this size cannot be considerate representative of the Portuguese population as quotas for gender and age ranges are not balanced and also because it is not sufficiency. (as already mentioned on the previous chapter, the methodology, in order to be representative of the Portuguese population, the sample should have a total of 1.536 respondents).
Further information on demographics can be found in the Appendix 4.

4.1.2 Results from the Hypothesis Test

The main goal of this research is the measurement of PI in each scenario of eWOM being tested. Therefore, by simulating different scenarios among the four categories of product, it is possible to compare the means in each situation and take conclusions regarding the impact of that eWOM on consumers' PI.

Furthermore, PI is being measured on a Likert scale, from 1 to 5, and, to summarize the information obtained, we conducted a descriptive analysis which resulted in the following table.

Product Category	**eWOM**		**N**	**Mean (PI)**	**Std.Deviation**
Pricey Tech Electronics	Valence	Mixed set	79	3.16	0.940
		Neutral set	96	3.56	0.805
	Type	Rating	90	1.88	0.977
		Review	85	2.34	0.670
	Source	Consumer	98	2.70	0.789
		Expert	77	2.52	0.788
		Known	92	2.35	0.844
		Unknown	83	2.54	0.915
High Touch Retail	Valence	Mixed set	59	3.61	0.851
		Neutral set	52	3.38	1.012
	Type	Rating	58	2.12	0.993
		Review	53	2.51	0.933
	Source	Consumer	61	2.67	0.700
		Expert	50	2.66	0.717
		Known	55	2.35	0.844

		Unknown	56	2.63	0.926
Household Staples	Valence	Mixed set	35	3.11	0.963
		Neutral set	41	3.20	0.749
	Type	Rating	36	2.06	0.860
		Review	40	2.50	0.961
	Source	Consumer	34	2.56	0.746
		Expert	42	2.60	0.735
		Known	33	2.45	0.794
		Unknown	43	2.56	0.796
No Touch Services	Valence	Mixed set	116	3.448	0.926
		Neutral set	125	3.136	0.874
	Type	Rating	119	1.597	0.705
		Review	40	2.500	0.961
	Source	Consumer	131	1.985	0.668
		Expert	110	2.018	0.717
		Known	122	2.131	0.802
		Unknown	119	2.193	0.716

Table 1:Descriptive Statistics by Product Category and eWOM characteristics

As it is possible to notice, the differences between means of different product categories are not too significant. Moreover, to proceed to the parametric tests and, hence, reach conclusions regarding both groups, it was necessary to merge the means of the values attributed to PI of all the categories of product, by computing new variables. Thus, we obtained an overall PI regardless the product type.

eWOM	**N**	**Mean (PI)**	**Std. Deviation**
Known Source	302	2.27	0.82674
Unknown Source	301	2.42	0.84344
Expert Source	279	2.36	0.78694
Consumer Source	324	2.39	0.79320
Mixed set	289	3.36	0.93328

Neutral set	314	3.32	0.87891
Review Type	300	2.15	0.89020
Rating Type	303	1.84	0.88974

Table 2:Descriptive Statistics by eWOM characteristics

Given the values presented on the previous table, it is easy to verify that consumers' PI, within this research, does not vary significantly when faced with different eWOM types, valences and sources. Although, in order to correctly test the veracity of the hypotheses regarding this impact it is necessary to conduct independent-samples *t*-tests.

An independent-samples *t*-test is used to compare the means of the two groups using a measure of the spread of the scores, when a numerical variable can be split in two different groups using a descriptive variable (Saunders et al. 2009). This means that this is the most applicable test to this research once each respondent only answered to one question of each group, turned the samples independent within each other.

In addition, *t*-test, as a parametric test assumes that the population follows a particular distribution, either Normal, Poisson or Binomial. Therefore, only an interval or ratio data can be used (White and Ryner 2014). Thus, it is of our best interest to confirm that the population of this research follows, or approximately follows, a normal distribution and, in order to do so, a **Shapiro-Wilk test** was conducted, before the *t*-tests were performed.
Moreover, this test also assumes that the variances are equal across samples and thus, it is also need to compare the variances with a **Levene's test.** This test assumes equal variances when sig. ≤ 0.05, which means that the variability in the two scenarios is similar, and, on the other hand, when sig. > 0.05, the equality of the variances are not assumed and the values of the two situations are significantly different (Saunders et al. 2009).

Finally, in order to study the impact that the moderator variable *Product's category* might have on the effect of eWOM on consumers' PI, a regression analysis was conducted.

4.1.2.1 Hypotheses 1, 2 and 3

- H1: The valence of a set of reviews will have impact on consumers' purchase intention

H1a. A set of positive and negative reviews will have a higher impact on consumers' PI than a neutral set of reviews.

(H1. a.: $\mu_{mixed\_set} > \mu_{neutral\_set}$) => H0: $\mu_{mixed\_set} = \mu_{neutral\_set}$ (null hypothesis)

H1: $\mu_{mixed\_set} \neq \mu_{neutral\_set}$ (alternative hypothesis)

- H2: The type of eWOM will impact consumers' PI

H2. a. A numerical rating has higher impact on PI comparing to a written review.

(H2. a.: $\mu_{rating} > \mu_{review}$) => H0: $\mu_{rating} = \mu_{review}$ (null hypothesis)

H1: $\mu_{rating} \neq \mu_{review}$ (alternative hypothesis)

- H3: The source of a rating and a review will impact the consumers' PI

H3. a. One single expert generated rating has higher impact on consumers' PI than one generated by a common consumer.

(H3. a.: $\mu_{expert} > \mu_{consumer}$*)* =>H0: $\mu_{expert} = \mu_{consumer}$ (null hypothesis)

H1: $\mu_{expert} \neq \mu_{consumer}$ (alternative hypothesis)

H3. b. A review posted online with a known source has higher impact on consumers' PI that one signed with unknown.

(H3. b.: $\mu_{known} > \mu_{unknown}$*)* =>H0: $\mu_{known} = \mu_{unknown}$ (null hypothesis)

H1: $\mu_{known} \neq \mu_{unknown}$ (alternative hypothesis)

Starting by testing the normality of the sample, it is possible to conclude that it follows, *approximately* a normal distribution.

- on the first hypothesis, the sample regards to all the respondents who answered to the questions concerning the effect of numerical ratings and written reviews on their PI;

- on the second one it includes all the individuals who answered the questions related to the kind of source of the eWOM and its impact on their PI;

- regarding the third, and last, hypothesis, its sample includes all the respondents who read a set of either neutral, or mixed valence, set of reviews and afterwards evaluated their PI regarding one item or service.

Namely, according to Kline (1998), if a normality test does not reveal the existence of a clear normal distribution (sig.<0.05) – which is verified within all of these samples-, we should look to the values of Skewness and Kurtosis, - which in turn should be lower than 3 and 7, correspondingly, and, this, confirms that these samples follow an approximately normal distribution.

	eWOM (type)	**Shapiro-Wilk**		**Skewness (SK)**		**Kurtosis (KV)**	
		df	Sig	Statistic	Std. Error	Statistic	Std. Error
PI	Neutral set of reviews	180	0.000	- 0.086	0.181	- 0.253	0.360
	Mixed set of reviews	171	0.000	- 0.129	0.186	- 0.293	0.369

Table 3: Sample's normality test – Neutral vs Mixed set of reviews

	eWOM (type)	**Shapiro-Wilk**		**Skewness (SK)**		**Kurtosis (KV)**	
		df	Sig	Statistic	Std. Error	Statistic	Std. Error
PI	Written Review	300	0.000	0.725	0.141	0.736	0.281
	Numerical Rating	303	0.000	1.118	0.140	1.379	0.279

Table 4: Sample's normality test – Written review vs Numerical rating

	eWOM (source)	**Shapiro-Wilk**		**Skewness (SK)**		**Kurtosis (KV)**	
		df	Sig	Statistic	Std. Error	Statistic	Std. Error
PI	Consumer Generated	324	0.000	0.565	0.135	0.797	0.270
	Expert Generated	279	0.000	0.788	0.146	1.248	0.291

Table 5: Sample's normality test – Consumer vs Expert generated rating

	eWOM (source)	Shapiro-Wilk		Skewness (SK)		Kurtosis (KV)	
		df	Sig	Statistic	Std. Error	Statistic	Std. Error
PI	Unknown Source	301	0.000	0.650	0.140	0.607	0.280
	Known Source	302	0.000	0.594	0.140	0.594	0.280

Table 6: Sample's normality test – Unknown source vs Known source

Being the independent samples *t*-test the following step, the first value to analyse is the one regarding the **Levene's test**, which concerns to the homogeneity of the variances, which shows that the equality of the variances is assumed on all of the hypotheses (sig=0.774, sig.=0.698, sig=0.310 and sig.=0.554, which are higher than 0.05), and then values of the two groups are not significantly different.

Levene's Test for Equality of Variances	F	**Sig.**
H1a. Neutral set & Mixed set of reviews	0.082	**0.774**
H2a. Written Reviews & Numerical Ratings	0.151	**0.698**
H3a. Consumer Generated Rating & Expert Generated Rating	0.351	**0.554**
H3b. Unknown Source & Known Source	1.030	**0.310**

Table 7: Levene's–eWOM vs purchase intention

Hence, by performing independent samples *t*-tests to these three hypotheses it is possible to reach the following conclusions.

- H1a. – The null hypothesis is fail to be rejected (p=0.845>0.05), and, thus, the difference among the average of consumers' PI after reading a set of neutral reviews and after reading a set of a mixed reviews is not significant. Moreover, the difference between these means is of -0.00358, which shows that the mean PI of individuals who read the set of mixed reviews presented a higher willingness to buy the product. However, we have to consider that this is not a significant difference and, therefore, H1 is rejected, eWOM valence will not impact consumers' PI.

- H2a. – The null hypothesis is rejected (p=0.000=>p≤0.05), meaning that the average of consumers' PI is different when faced with written reviews or numerical ratings. Furthermore, with a *Mean Difference*=0.31505, the difference between the average consumers' PI with written reviews is higher, by 0.31505, than the average consumers' PI with numerical ratings. Therefore, H2a. is not rejected, and, meaning that the form in which eWOM is presented (namely reviews vs ratings) will impact consumers' PI.

- H3a. – With a p=0.603 (p>0.05), the null hypothesis of this test is not rejected. Moreover, the difference on the averages of consumers' PIs when faced a consumer generated rating and with an expert generated rating is not significantly different and, thus, H3a. is rejected.

- H3b. – The null hypothesis is rejected (p=0.027=>p≤0.05), which means that the difference between the average of consumers' PI when they are faced with a "known" and an "unknown" source is significant. Namely, these means present a difference of 0.15040 and, thus, in this case, an "unknown" source presented a higher impact on consumers' PI than a known one. H3b. is not rejected.

Hypotheses	t	p	Mean difference
H1a. Neutral set of Reviews vs Mixed set of Reviews	- 0.196	0.845	- 0.01901
H2a. Written Reviews vs Numerical Ratings	4.346	0.000	0.31505
H3a. Consumer Generated Rating vs Expert Generated Rating	0.520	0.603	0.03355
H3b. Unknown Source vs Known Source	2.211	0.027	0.15040

Table 8 :Independent Samples t-tests-hypotheses 1 to 3

For further details on the previous independent samples *t*-tests presented, please consult the Appendix 5.

4.1.2.2 Hypothesis 4

As mentioned before, the following hypothesis includes another dependent variable, rather than PI, namely, it is measured on the need to resort to eWOM.

H4: The higher the price of the product/service, the higher the need to resort to eWOM.

To test the fourth hypothesis, two variables have to be computed. The variables to create are *eWOM need_lower*, which is the need to resort to eWOM in a situation of a lower price product/service, *eWOM need_higher*, that is the necessity to consult eWOM to evaluate a higher price product or service and, finally, a dummy variable which when 0 represents the lower price product/service, and when 1, represents the higher price product/service.

In addition, to later conduct an independent samples *t*-test, a third variable is needed. This last variable regards the overall need to resort to eWOM, without splitting both of the situations. (*Overall_eWOM_need)*

	N	**Min.**	**Max.**	**Mean (Need to resort to eWOM)**	**Std.Deviation**
Overall eWOM need	603	1.00	5.00	2.5041	1.23537

Table 9:Descriptive statistics-Overall need to resort to eWOM

Price	**N**	**Min.**	**Max.**	**Mean (Need to resort to eWOM)**	**Std.Deviation**
Lower	310	1.00	5.00	2.4387	1.11526
Higher	293	1.00	5.00	2.5734	1.34937

Table 10: Descriptive statistics – price vs need to resort to eWOM

Furthermore, the main goal is to test whether a higher price is associated with an average higher need to consult eWOM, or not, which is translated on the following hypotheses.

(H4.: $\mu_{higher\_price} > \mu_{lower\_price}$*)* => H0: $\mu_{higher\_price} = \mu_{lower\_price}$ (null hypothesis)

H1: $\mu_{higher\_price} \neq \mu_{lower\_price}$ (alternative hypothesis)

	Price	**Shapiro-Wilk**		**Skewness (SK)**		**Kurtosis (KV)**	
		df	Sig.	Statistic	Std. Error	Statistic	Std. Error
Need to resort to eWOM	Lower	310	0.000	0.606	0.138	- 0.359	0.276
	Higher	293	0.000	0.449	0.142	-1.506	0.284

Table 11:Sample's normality test-price vs need to resort to eWOM

With a *Sig.* < 0.05, in order to verify if the sample is approximately follows a Normal distribution, the values of SK must be inferior to 3 and KV must be inferior to 7. Therefore, these conditions are confirmed, with a SK = 0.606 and KV = - 0.359, and a SK = 0.449 and a KV = -1.506.

Levene's Test for Equality of Variances		
	F	**Sig.**
Need to resort to eWOM H4. Lower price vs Higher price	23.476	**0.000**

Table 12: Levene's-price vs need to resort to eWOM

Afterwards, with a Levene's test, it is possible to verify that *sig.*=0.000≤0.05 and, thus, it means that equal variances are assumed and there is no significant difference between both scenarios' average of need to resort to eWOM (lower price vs higher price).

Regarding the veracity of the hypothesis presented, the independent samples *t*-test shows a p-value of 0.181, which is superior to 0.05 and, hence, the difference between both groups' averages is not significant.
Therefore, with these values, we do not reject the null hypothesis and **reject H4**, meaning that the impact of higher price products/services on the need of eWOM is not different from the impact of lower price products/services.

Hypotheses	t	p	Mean difference
H4. Higher price products/services lead to a higher need to resort to eWOM than lower price products/services do	- 1.339	0.181	- 1.3467

Table 13: Independent Samples t-test – hypothesis 4

For further details on the previous independent sample *t*-test presented, please consult the Appendix 5.

4.1.2.3 Hypothesis 5

H5: The impact that eWOM has on consumers' purchase intention differs amongst different categories of products.

Given the structure of the online survey applied, eWOM is divided into seven types, written review with a known source, written review with an unknown source, a consumer generated rating, an expert generated rating, a simple rating, a simple review and a mix valence set of reviews. Therefore, in order to evaluate the potential moderation effect of *product category* in

the relationship of *eWOM* and *consumers' purchase intention*, a regression analysis was conducted for each sub type of eWOM and its correspondent PI.

The relationship to study is the moderation effect of one variable (*product category*), therefore, the tool used was the add-on *Process* developed by Professor Andrew F. Hayes for SPSS, and the model to test is the number 1 as following illustrated.

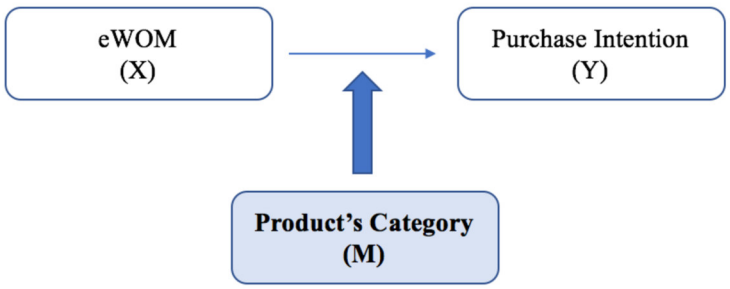


Figure 11: Conceptual Model-H4

Moreover, in order to verify the moderation effect, the p-value of the interaction should be inferior, or equal, to 0.05. This means that the confidence interval is totally positive, never showing a confidence of zero (Saunders et al. 2009).

- **Source –** Regression analysis: Model 1 – Moderation effect of the variable *Product Category* Known vs Unknown

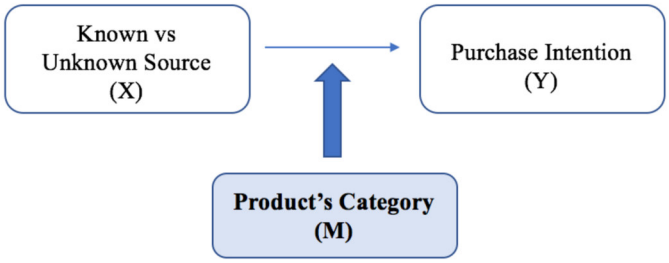


Figure 12: Conceptual Model - Moderation Role of Product's Category on the Relationship between Known/Unknown Sources and PI

Interaction: *Product's Category X Known/Unknown Source – PI* **(int_1)**	**p = 0.4017**

Table 14 : Regression analysis – moderation role of product's category on the effect of known and unknown sources on consumers' purchase intention

Through this result, it is possible to verify that there is no moderation effect of the variable *product's category* in the effect of a review, with a known or an unknown source, on consumers' PI.

Consumer Generated Rating vs Expert Generated Rating

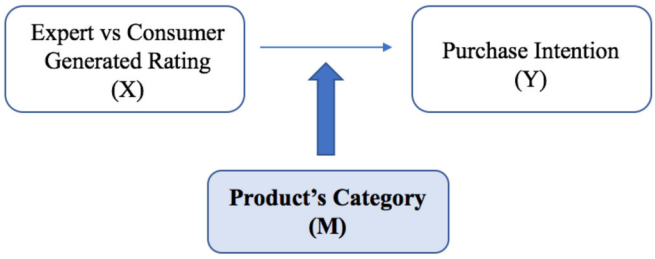


Figure 13: Conceptual Model - Moderation Role of Product's Category on the Relationship between Expert/Consumer Generated Rating and Purchase Intention

Interaction: *Product's Category X Expert/Consumer Generated Ratings – PI* **(int_1)**	**p = 0.1628**

Table 15 : Regression analysis – moderation role of product's category on the effect of expert and consumer generated ratings on consumers' purchase intention

With a p-value of 0.1628, the moderation effect of the variable *product's category* within this relationship is not significant. Therefore, the effect of expert and consumer generated ratings on consumers' PI is not moderated by the category of the product being evaluated.

- **Type –** Regression analysis: Model 1 – Moderation effect of the variable *Product Category*

Rating vs Review

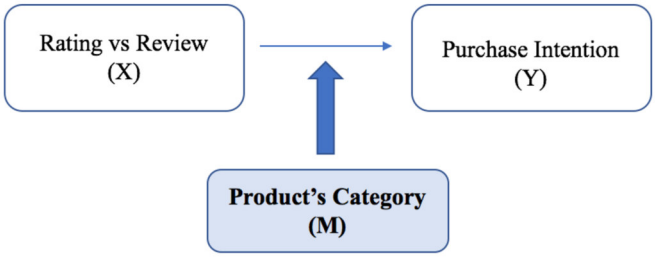


Figure 14: Conceptual Model - Moderation Role of Product's Category on the Relationship between Ratings/Reviews and Purchase Intention

Interaction: *Product's Category X Rating/Review – Purchase Intention* **(int_1)**	**p = 0.0518**

Table 16 : Regression analysis – moderation role of product's category on the effect of ratings and reviews on consumers' purchase intention

In which regards to the effect of numerical ratings or written reviews on consumers' PI, the moderation of the variable *product's category* is, also, not significant, which means that the influence of a numerical rating or a written review on a consumer's PI is not going to be affected by a product's category.

- Valence – Regression analysis: Model 1 – Moderation effect of the variable *Product Category*

Neutral set of reviews vs Mixed set of reviews

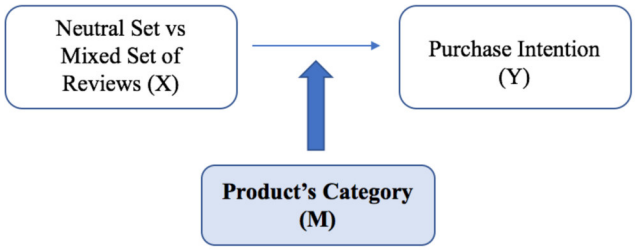


Figure 15: Conceptual Model - Moderation Role of Product's Category on the Relationship between a Neutral/Mixed Set of Reviews and Purchase Intention

Interaction: *Product's Category X Neutral set/Mixed set of reviews – Purchase Intention* **(int_1)**	**p = 0.7329**

Table 17 : Regression analysis – moderation role of product's category on the effect of a neutral and a mixed set of reviews on consumers' purchase intention

With a p-value of 0.7329, we can conclude that within a situation where the potential consumer is faced with a neutral set of reviews or a mixed set of reviews, the category of the product he/she is evaluating is not going to affect the impact of this eWOM on his/her PI.

Thus, the moderation role of the variable *product's category* on the impact of eWOM (within the scope of this dissertation) on consumers' PI is not verified. Therefore, the results obtained regarding the average of PI do not vary significantly within the different product categories and, thus, **H5 is rejected.**

4.1.3 Other conclusions

Outside the scope of the model concept, but also relevant for the study, the online questionnaire tested which was the moment when consumers usually resort to eWOM. Through a direct question, consumers were asked to indicate when do they usually look for online information regarding the product or service they pretend to buy.

Moreover, this test was applied within all the product's categories and generated the following results.

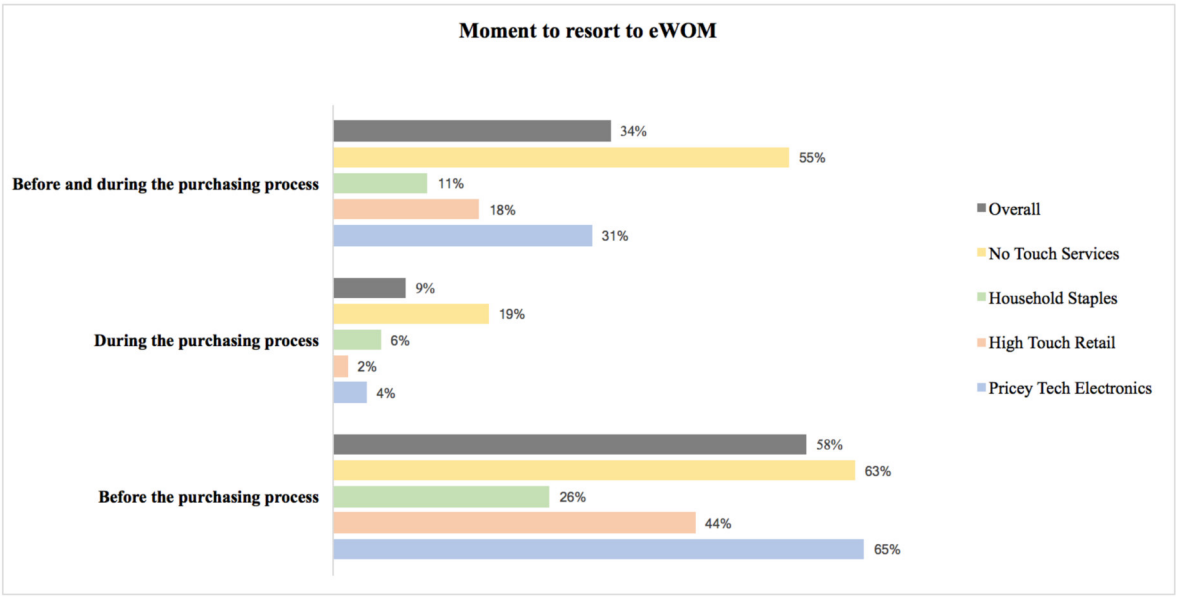


Figure 16: Moment to resort to eWOM by product's category

Besides a strong tendency for looking for online information before and during the buying process, overall, the results presented a clear preference in searching for online information before the purchasing process.

Considering the fact that the respondents did not equally answered to each category, the results are not linearly comparable within each other but, it is notable that the pricey tech electronics category is one of the most significant and presents one of the most different distribution among the three moments. It is clear that consumers usually tend to look for information before buying

within that category and, this could be a result of the need to go to a physical store when they want to purchase those products, - which is not verified with no touch services -, whose category presents almost the same willingness to resort to eWOM before and during the process.

Additionally, another interest topic studied was the factors that usually lead people to resort to eWOM, namely by asking respondents to put those factors by order of preference (being 1 the most influential factor and 7 the least influential factor).

Factors	1	2	3	4	5	6	7	Total
Price	14,09%	15,27%	14,93%	12,25%	14,43%	19,46%	9,56%	100%
Product/Service's novelty	10,07%	13,09%	13,09%	17,45%	12,42%	16,44%	12,25%	100%
Too many product/service's characteristics	**27,01%**	**17,45%**	13,42%	11,24%	13,26%	11,07%	6,54%	100%
Difficulty to evaluate/test the product/service before purchasing it	8,22%	12,42%	**17,79%**	**18,29%**	**17,45%**	**16,61%**	9,23%	100%
Too many substitute options on the market	15,60%	16,44%	15,77%	15,60%	15,44%	13,29%	7,89%	100%
Brand awareness	7,38%	12,25%	13,26%	15,44%	14,93%	11,58%	**25,17%**	100%
There is no factor that influence me, I usually resort to eWOM by habit	17,62%	13,09%	10,07%	10,91%	8,22%	9,56%	**30,54%**	100%

Table 18: Factors that lead people to resort to eWOM, by order of preference

Therefore, we can conclude that the most influent factor on consumers' decision to resort to eWOM is the too many characteristics that a product or a service may present, being thus, the factor most indicated as the first and second preferences. Moreover, the difficulty to test a product or a service before purchasing it was indicated as the second most relevant factor.

CHAPTER 5: CONCLUSIONS AND LIMITATIONS

Within the fast-paced internet's industry, it is becoming increasingly important for marketeers to be aware of the impact eWOM might perform on consumers' PI and how to take advantage of that. The main goal of this dissertation was to provide valuable insights about this technology's new trend among the Portuguese population, namely, by testing scenarios where the impact would be maximized, or maybe minimized. In this sense, this last chapter presents a summary of the principal findings, consequent academic relevance, research limitations and potential topics for future research.

5.1 Main Findings & Conclusions

eWOM is becoming the most famous online tool to spread the word and disclose information regarding products or services, either by marketeers or ordinary consumers who already tried/purchased it. Namely, according to de Matos and Rossi (2008), eWOM has been proved that influences both pre-purchase and post-purchase decisions. Therefore, the wide range of eWOM characteristics might influence consumers' predisposition to buy and, thus, brands may use those opportunities to promote their product/service, or even to turn its potential weaknesses in future strengths.

The scope of this dissertation focused on how the source, the type and the valence of eWOM might influence differently consumers' PI and how it may vary within different product's categories. Aiming for a reduction of the perceived risk, consumers usually resort to available information, either offline as online, concerning the product or service they intent to buy (Khammash and Griffiths 2011). Furthermore, this posterior evaluation of the product/service will be based on various attributes in order to estimate its value and their consequent willingness to buy it. The influence of eWOM, on consumers' purchase decisions, had already been proved to be real (Leskovec, Adamic, and Huberman 2007) and, thus, this dissertation narrows its scope to concrete cases of this type of communication in order to specify this real impact.

First of all, it is important to emphasize the fact that the sample of this research is neither significant nor possible to generalize to the Portuguese population, being the dimension of results for each hypothesis too reduced and not extensive. In fact, however, the results of this research were not always consensual with the ideas stated on the literature available, the overall conclusion is that eWOM indeed impacts consumers' PI but, the main difference of influence occurs only among written reviews and numerical ratings, - in which written reviews usually give rise to higher willingness to buy-, as well as within the fact of the source of the written

information being known or unknown, in which the mean consumers' PI was significantly different between scenarios.

More concretely, although the valence of the information had been proved to be a crucial influential factor in which concerns to consumers' PI, namely by reinforcing the higher effect of negative information in comparison with positive, (Forman, Ghose, and Wiesenfeld 2008) (Folkes and Patrick 2003), in this research, the impact of a mix valence (positive plus negative written reviews) is not significantly higher than the influence of a neutral set of reviews.

In addition, contrarily to the literature studied, a single consumer generated rating does not show a significant difference of influence on consumers' PI than a single expert generated rating. This occurrence also goes against the additional information available on the previous studies regarding the volume of the information. Namely, according to Utz, Kerkhof, and Van Den Bos (2012), in a situation where the volume of ratings and reviews is low, consumers are more willing to rely on EGI rather than on CGI. Nevertheless, although not significantly, the mean of PI when faced with a consumer generated rating was higher to the respondents than when faced with a one single expert generated rating. This fact may be a result of one of the disadvantages of eWOM, the lack of physical contact, because, in a certain way, individuals might call into question the personal motivations of an expert to publish certain ratings in comparison with a random consumer, who, most probably, cannot take advantages from their opinion, which raises their provided information's level of trustworthiness.

Consequently, within the scope of this dissertation, the answer to the first research question, which consisted in testing how does eWOM would influence consumers' PI, is that the effect that online information might perform on the willingness of a consumer buy a product or a service, will depend on the type of eWOM being presented. Concretely, this impact would be maximized within a scenario with focus on written reviews and unknown sources, pointing out the presented form and the source of the information as the main factors to consider eWOM as a significant power of influence on consumers' PI.

Finally, except the not significant number of respondents for each category of product and also the not equally distribution of answers among the categories, in which regards to the moderation role of products' category on the influence of eWOM on consumers' PI, no significant differences of effect were presented. Moreover, considering the four categories, such as pricey tech electronics, high touch retail, household staples products and no touch services, despite the fact that, within those, the impact of eWOM will be approximately the same on consumers' PI

– which means that the variable *product's category* does not moderate the influence that eWOM has on consumers' PI-, it was possible to identify that the category of no touch services is the one in which consumers most frequently resort to eWOM.

5.2 Managerial / Academic Implications

After going through previous academic findings, it was possible to verify that there are already some references regarding eWOM and its effects but very few focused on how this impact varies within different categories of products. Therefore, although with the already referenced limitations, this research provides a vision of how eWOM can be perceived in different ways and how it can be more prominent in some types of products and services.

In regards to managerial implications, this dissertation contributes, thus, greatly to understand how eWOM can be seen as a communication process, in which marketeers may take advantage of opportunities in its different stages. Namely, it shows that eWOM still have some limitations regarding the lack of physical contact, comparing to traditional WOM and advertising, as well as its impact is not linear to measure, being hence, influenced by the type of product or service, the structure form of the online content, valence and also, type of source. In addition, testing the moment when individuals usually tend to resort to eWOM might indicate to *marketeers* which are the contact points in time that allow them to act.

5.3 Limitations and Further Research

Firstly, the main limitation of this research, concerned the sample size and distribution. The gathered sample cannot be considered representative of the Portuguese population due to its reduced size and its unbalanced quotas for demographics (namely, gender, monthly income, professional situation and age range). Therefore, in future research, one limitation to overcome would be the sample selection, mainly, gathering more male and older generations, once this study presented a majority of 70% female respondents on the age range of 18 to 37 years old.

Besides, although identified as an increasingly remarkable online tool, about 13% of the respondents of the original total sample stated that they are not using, and never have used, eWOM, which automatically inhibited these individuals to proceed with the survey. Nevertheless, the dimension of this limitation is not significant and might be surpassed with the increasingly use of new technologies within all generations. Additionally, a too high percentage of the total respondents did not finish the survey on their own without any explicit reason, which

resulted on a significant reduction of the total sample size and, consequently, originated a non-random sample.

Furthermore, eWOM is a complex concept which can be measured through different categories, like structure type, valence, balance and source, within different product's categories – which will have various requirements according to the product, or service, characteristics. Therefore, further research may focus on different valences, structure type, sources and balances, in order to simulate different scenarios. This study only measured the impact of eWOM reduced to concrete types of this information, like expert and consumer generated ratings, known and unknown sources, written reviews and numerical ratings and mixed and neutral valence set of reviews. In fact, the type and the valence of eWOM could be extended to other combinations where included the video type of reviews and the disposition of different valences of the reviews.

Regarding the employed methodology, two major limitations concerning the design of the online survey were identified. Firstly, the choice of the representative products to each category was realised based on the categories' literary concept and thus, a pre-test to consumers concerning that should raise the relevance of the examples used, once giving the opportunity to the individuals to indicate which product they considered as the most representative of a certain category would increase their awareness regarding its specific characteristics and attributes.
Secondly, the underlying risk of dishonesty attached to the fact of the survey is being applied online and therefore, there is no control whether the respondents go through all the reviews presented or not. Despite of that, this last risk is too abstract to measure and, thus, will be always perceived as a potential risk which can be minimalised with short questions and easy answers.

Regardless the pointed limitations, further research should be able to overcome some difficulties and gaps and, also, to complement this topic with relevant and valuable information.

In this sense, this research tested the impact of the variable *price* on consumers' need to resort to eWOM during their purchase decision process, - within the reduced picture of a higher and a lower price-, and concluded that there were no differences within the two prices studied. Therefore, it would be interesting that further research focused their study in wider price ranges as well as within different types of eWOM.

REFERENCE LIST

Alba, Joseph W and J Wesley Hutchinson (1987), "Dimensions of Consumer Expertise," *Journal of Consumer Research*, 13(4), 411–54.

Bataineh, Abdallah Q. (2015), "The Impact of Perceived E-WOM on Purchase Intention: The Mediating Role of Corporate Image," *International Journal of Marketing Studies*, 7(1), 126–37.

Bronner, A E and Robert ; De Hoog (2010), "Consumer-Generated versus Marketer-Generated Websites in Consumer Decision Making," *International Journal of Market Research*, 52(2), 231–48.

Brown, Jacqueline Johnson and Peter H Reingen (1987), "Social Ties and Word-of-Mouth Referral Behavior *," 350–63.

Buhalis, Dimitrios and Rob Law (2008), "Progress in Information Technology and Tourism Management: 20 Years on and 10 Years after the Internet-The State of eTourism Research," *Tourism Management*, 29(4), 609–23.

Buttle, Francis a. (1998), "Word of Mouth: Understanding and Managing Referral Marketing," *Journal of Strategic Marketing*, 6(3), 241–54.

Buttner, Oliver B. and Anja S. Goritz (2007), "Perceived Trustworthiness of Online Shops," *Journal of Consumer Behaviour*.

Chang, Tung-Zong and Albert R. Wildt (1994), "Price, Product Information, and Purchase Intention: An Empirical Study," *Journal of the Academy of Marketing Science*, 22(1), 16–27.

Cheung, Christy M.K., Matthew K.O. Lee, and Neil Rabjohn (2008), "The Impact of Electronic Word-of- Mouth - The Adoption of Online Opinions in Online Customer Communities," *Internet Research*, 18, 229–47.

Cheung, Christy M K and Dimple R Thadani (2012), "The Impact of Electronic Word-of-Mouth Communication : A Literature Analysis and Integrative Model," *Decision Support Systems*, 54(1), 461–70, http://dx.doi.org/10.1016/j.dss.2012.06.008.

Cheung, Man Yee, Chuan Luo, Choon Ling Sia, and Huaping Chen (2009), "Credibility of Electronic Word-of-Mouth : Informational and Normative Determinants of On- Line Consumer Recommendations," *International Journal of Electronic Commerce*, 4415(4), 9–38.

Creswell, John W (2007), "Research Design: Qualitative, Quantitative and Mixed Method Aproaches," *SAGE Publications*, 203–23.

David R. Anderson, Dennis J. Sweeney, and Thomas A. Williams (1989), *STATISTICS FOR BUSINESS AND ECONOMICS 10e*, 53 Journal of Chemical Information and Modeling.

Dellarocas, Chrysanthos (2003), "The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms," *Management Science*, 49(10), 1407–24.

East, Robert, Kathy Hammond, and Wendy Lomax (2008), "Measuring the Impact of Positive and Negative Word of Mouth on Brand Purchase Probability," *International Journal of Research in Marketing*, (September).

Flanagin, Andrew J. and Miriam J. Metzger (2013), "Trusting Expert versus User-Generated Ratings Online: The Role of Information Volume, Valence, and Consumer Characteristics," *Computers in Human Behavior*, 29(4), 1626–34.

Folkes, Valerie S. and Vanessa M. Patrick (2003), "The Positivity Effect in Perceptions of Services : Seen One , Seen Them All ?," *Journal of Consumer Research*, 30.

Forman, Chris, Anindya Ghose, and Batia Wiesenfeld (2008), "Examining the Relationship between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets," *Information Systems Research*, 19(3), 291–313.

Fulgoni, Gian M. and Andrew Lipsman (2015), "Digital Word of Mouth and Its Offline Amplification: A Holistic Approach to Leveraging and Amplifying All Forms of WOM," *Journal of Advertising Research*, 55(1).

Goh, Khim-yong, Cheng-Suang Heng, and Zhijie Lin (2013), "Social Media Brand Community and Consumer Behavior: Quantifying the Relative Impact of User- and Marketer-Generated Content," *Information Systems Research*, 24(August 2014), 88–107.

Gruen, Thomas W., Talai Osmonbekov, and Andrew J. Czaplewski (2006), "eWOM: The Impact of Customer-to-Customer Online Know-How Exchange on Customer Value and Loyalty," *Journal of Business Research*, 59(4), 449–56.

Harlam, Bari; Krishna, Aradhna; Lehmann, Donald; Mela, Carl (1995), "Impact of Bundle Type, Price Framing and Familiarity on Purchase Intention for the Bundle," *Journal of Business Research*.

Hennig-Thurau, Thorsten, Kevin P. Gwinner, Gianfranco Walsh, and Dwayne D. Gremler (2004), "Electronic Word-of-Mouth via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?," *Journal of Interactive Marketing*, 18(1), 38–52.

Hoffman, Dl D.L. Donna L and Marek Fodor (2010), "Can You Measure the ROI of Your Social Media Marketing?," *MIT Sloan Management Review*, 52(1), 41–49.

Jalilvand, M.R. (2012), "The Effect of Electronic Word of Mouth on Brand Image and Purchase

Intention," *Marketing Intelligence & Planning*, 30(4), 460–76.

Khammash, Marwan and Gareth Havard Griffiths (2011), "'Arrivederci CIAO.com, Buongiorno Bing.com' - Electronic Word-of-Mouth (eWOM), Antecedences and Consequences," *International Journal of Information Management*, 31(1), 82–87.

Kotler, Philip and Kevin Lane Keller (2009), *Marketing Management*, 22 Organization.

Lee, Jumin, Do Hyung Park, and Ingoo Han (2008), "The Effect of Negative Online Consumer Reviews on Product Attitude: An Information Processing View," *Electronic Commerce Research and Applications*, 7(3), 341–52, http://dx.doi.org/10.1016/j.elerap.2007.05.004.

Lee, Jung and Jae-nam Lee (2009), "Information & Management Understanding the Product Information Inference Process in Electronic Word-of-Mouth : An Objectivity – Subjectivity Dichotomy Perspective," 46, 302–11.

Leskovec, J., L. A. Adamic, and B. A. Huberman (2007), "The Dynamics of Viral Marketing," *ACM Transactions on the Web (TWEB)*, 1(1), 1–39.

Levy, Michael, Dhruv Grewal, and Michael Levy (2007), "Retailing Research : Past , Present , and Future . Retailing Research : Past , Present , and Future," *Journal of Retailing*, 83(December), 447–64.

Libai, B., R. Bolton, M. S. Bugel, K. de Ruyter, O. Gotz, H. Risselada, and a. T. Stephen (2010), "Customer-to-Customer Interactions: Broadening the Scope of Word of Mouth Research," *Journal of Service Research*, 13(3), 267–82.

Lichtenstein, Donald R, Scot Burton, Eric J Karson, and Eric J Karson (2017), "The Effect of Semantic Cues on Consumer Perceptions of Reference Price Ads Linked References Are Available on JSTOR for This Article : The Effect of Semantic Cues on Consumer Perceptions of Reference Price Ads," *Journal of Consumer Research*, 18(3), 380–91.

Lis, Bettina (2013), *In eWOM We Trust A Framework of Factors That Determine the eWOM Credibility*.

de Matos, Celso Augusto and Carlos Alberto Vargas Rossi (2008), "Word-of-Mouth Communications in Marketing: A Meta-Analytic Review of the Antecedents and Moderators," *Journal of the Academy of Marketing Science*, 36(4), 578–96.

Mcknight, D .Harrison, Vivek Choudhury, and Charles Kacmar (2002), *Developing and Validating Trust Measures for E-Commerce : An Integrative Typology*.

Metzger, Miriam J. and Andrew J. Flanagin (2013), "Credibility and Trust of Information in Online Environments: The Use of Cognitive Heuristics," *Journal of Pragmatics*, 59, 210–20.

Metzger, Miriam J., Andrew J. Flanagin, and Ryan B. Medders (2010), "Social and Heuristic

Approaches to Credibility Evaluation Online," *Journal of Communication*, 60(3), 413–39.

Meuter, Matthew L., Deborah Brown McCabe, and James M. Curran (2013), "Electronic Word-of-Mouth Versus Interpersonal Word-of-Mouth: Are All Forms of Word-of-Mouth Equally Influential?," *Services Marketing Quarterly*, 34(3), 240–56.

Monroe, Kent; Grewal, Dhruv (1991), "Effects of Price , Brand , and Store Information on Buyers ' Product Evaluations," *Journal of Marketing Research*, (February 2014).

O'Reilly, Kelley and Sherry Marx (2011), "How Young , Technical Consumers Assess Online WOM Credibility," *Qualitative Market Research: An International Journal*, 14(4), 330–59.

Pan, Yue and Jason Q. Zhang (2011), "Born Unequal: A Study of the Helpfulness of User-Generated Product Reviews," *Journal of Retailing*, 87(4), 598–612.

Park, Cheol and Thae Min Lee (2009), "Information Direction, Website Reputation and eWOM Effect: A Moderating Role of Product Type," *Journal of Business Research*, 62(1), 61.

Park, Do-hyung and Sara Kim (2008), "The Effects of Consumer Knowledge on Message Processing of Electronic Word-of-Mouth via Online Consumer Reviews," *Electronic Commerce Research and Applications*, 7(4), 399–410.

Pavlou, Paul A (2002), "Evidence of the Effect of Trust Building Technology in Electronic Markets: Price Premiums and Buyer Behavior," 26(3), 243–68.

Purnawirawan, Nathalia, Patrick De Pelsmacker, and Nathalie Dens (2012), "Balance and Sequence in Online Reviews: How Perceived Usefulness Affects Attitudes and Intentions," *Journal of Interactive Marketing*, 26(4), 244–55.

Riegner, Cate (2007), "Word of Mouth on the Web: The Impact of Web 2 . 0 on Consumer Purchase Decisions," *Journal of Advertising Research*, December, 436–47.

Saunders, Mark, Philip Lewis, and Adrian Thornhill (2009), *RESEARCH METHODS FOR BUSINESS STUDENTS 5th Edition*.

Schindler, Robert M. and Barbara Bickart (2012), "Perceived Helpfulness of Online Consumer Reviews : The Role of Message Content and Style," *Journal of Consumer Behaviour*, 243(March), 234–43.

See-To, Eric W K and Kevin K W Ho (2014), "Value Co-Creation and Purchase Intention in Social Network Sites: The Role of Electronic Word-of-Mouth and Trust - A Theoretical Analysis," *Computers in Human Behavior*, 31(1), 182–89.

Sen, Shahana and Dawn Lerman (2007), "Why Are You Telling Me This? An Examination into Negative Consumer Reviews on the Web," *Journal of Interactive Marketing*, 21(4), 76–94.

Senecal, Sylvain and Jacques Nantel (2004), "The Influence of Online Product Recommendations on Consumers ' Online Choices," *Journal of Retailing*, 80, 159–69.

Sheth, Jagdish N (1967), "Word-of-Mouth in Low-Risk Innovations," *Journal of Advertising Research*, (June 1971).

Smith, Andrew N., Eileen Fischer, and Chen Yongjian (2012), "How Does Brand-Related User-Generated Content Differ across YouTube, Facebook, and Twitter?," *Journal of Interactive Marketing*, 26(2), 102–13.

Smith, Donnavieve, Satya Menon, and K. Sivakumar (2005), "Online Peer and Editorial Recommendations, Trust and Choice in Virtual Markets," *Journal of Interactive Marketing*, 19(3), 15–38.

Sun, Tao, Seounmi Youn, Guohua Wu, and Mana Kuntaraporn (2006), "Online Word-of-Mouth (or Mouse): An Exploration of Its Antecedents and Consequences," *Journal of Computer-Mediated Communication*, 11(4), 1104–27.

Utz, Sonja, Peter Kerkhof, and Joost Van Den Bos (2012), "Consumers Rule: How Consumer Reviews Influence Perceived Trustworthiness of Online Stores," *Electronic Commerce Research and Applications*, 11(1), 49–58.

Wathen, C Nadine and Jacquelyn Burkell (2002), "Believe It or Not : Factors Influencing Credibility on the Web," (January).

Xiang, Zheng, Vincent P. Magnini, and Daniel R. Fesenmaier (2015), "Information Technology and Consumer Behavior in Travel and Tourism: Insights from Travel Planning Using the Internet," *Journal of Retailing and Consumer Services*, 22, 244–49.

Xinxin LiHitt, Lorin M. (2010), "Price Effects in Online Product Reviews: An Analytical Model and Empirical Analysis," *MIS Quarterly*, 34(4), 809-A5.

Chatterjee, P. (2001). Online reviews: do consumers use them? In Gilly, M.C. & Myers-Levy, J. (eds.), Association for Consumer Research 2001 Proceedings, Provo, UT, pp. 129–134.

Creswell, John W (2003), Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 2nd ed., University of Nebraska, Lincoln: SAGE Publications.

Kline, R. (1998). Principles and practice of SEM. New York: The Guilford Press.

Malhotra, Naresh K. (2010), Marketing Research - An Applied Orientation, 6th ed., New Jersey: Prentice Hall.

White, Brian and Stephen Rayner (2014), "Dissertation Skills for Business and Management Students", Hampshire: Cengage Learning EMEA.

APPENDICES

Appendix 1: Survey (English version)

Due to Católica Lisbon School of Business and Economics' page limit constrains the figures used as stimulus in each question will be presented in a summary table in the end of the survey.

Dear participant,

This survey was developed within the scope of my Master in Management with Specialization in Strategy and Entrepreneurship by Católica Lisbon School of Business and Economics. The main goal is to evaluate the potential impact that eWOM (electronic word-of-mouth) has on consumers' purchase intention.

This survey will last approximately 5 minutes and all the data collected is confidential and will be used only for this academic purpose.

Thank you in advance for your availability, Madalena Trigueiros Ventura.

Internet's development brought a new range of opportunities that have been changing consumers' behaviour and, consequently, their needs and expectations. Thus, consumers started to use web tools, like social networks and blogs, in order to communicate and share information about products and services. Therefore, the old concept of "Word-of-Mouth" (WOM), which represents the share of information and opinions regarding a certain product, service or subject, wan a new meaning and started to exist on the online world as "Electronic Word-of-Mouth" (eWOM). eWOM may be take different forms but the two most relevant for this study are the written reviews and the numerical ratings.

On the following, and first question, if the respondent answers "Yes" in one of the categories, the questions he/she will be answering are regarding that same category. Otherwise, if the respondent answers "No" in all the available options, the survey ends because he/she is not a user of eWOM. On the other hand, in case a respondent answer "Yes" in more than one product/service category, the software Qualtrics, will randomly present the questions regarding to one of those categories.

1. Recorre ou alguma vez recorreu a reviews e ratings online de modo a avaliar os seguintes tipos de produtos?

Products' Category	*I resort, or I have resorted at least once, to eWOM to evaluate the following products or services*	
	Yes	No
"Pricey Tech-Electronics" – Technological products	○	○
"High Touch Retail" – Furniture, appliances and clothes	○	○
"Household Staples" – Fast consuming goods/House Suppliers	○	○
"No Touch Services" - (e.g. flight and hotel booking financial services)	○	○

Intro

2. Considering that you are evaluating a product of the category of Pricey Tech Electronics/High Touch Retail/Household Staples/No Touch Services. Through the available online information, indicate the 3 Portuguese personalities that you would consider an expert on the category and, consequently, would influence your purchase intention with his/her comments and online opinions.

- o João Manzarra
- o Mia Rose
- o Manuel Luís Goucha
- o Cristina Ferreira
- o A pipoca mais doce - Ana Garcia Martins
- o Cristiano Ronaldo
- o Ruben Remédios, The Remedy Channel
- o Miguel Pessanha – Fhorsaken
- o Alexandre Santos - alexandreee07
- o Miguel Luz
- o Sara Sampaio
- o José Avillez
- o Outro _____

- The source of the reviews and the ratings that I read is not relevant for my evaluation of this product's category.

3. **Consumer vs Expert generated rating:** each respondent only answered to one of the two questions displayed on this section – the attribution was random
   3.1. Suppose you want to buy the following product/service and therefore, decided to read comments, opinions and detailed information on the internet. Considering this online rating regarding the product you intend to buy, on a scale from 1 to 5, indicate what is your purchase intention after reading the rating.
      - 5 – Very high
      - 4 – High
      - 3 – Neither high nor low
      - 2 – Low
      - 1 – Very low

   3.2. Suppose you want to buy the following product/service and therefore, decided to read comments, opinions and detailed information on the internet. Considering this online rating regarding the product you intend to buy, on a scale from 1 to 5, indicate what is your purchase intention after reading the rating.
      - 5 – Very high
      - 4 – High
      - 3 – Neither high nor low
      - 2 – Low
      - 1 – Very low

4. **Known vs Unknown source:** each respondent only answered to one of the two questions displayed on this section – the attribution was random
   4.1. Considering the following online review regarding the product you intend to buy. On a scale from 1 to 5, indicate what is your purchase intention after reading the review.
      - 5 – Very high
      - 4 – High
      - 3 – Neither high nor low
      - 2 – Low
      - 1 – Very low

   4.2. Considering the following online review regarding the product you intend to buy. On a scale from 1 to 5, indicate what is your purchase intention after reading the review.

- 5 – Very high
- 4 – High
- 3 – Neither high nor low
- 2 – Low
- 1 – Very low

5. **Mix vs Neutral valence set of reviews:** each respondent only answered to one of the two questions displayed on this section – the attribution was random.

5.1. Consider that after some online search the following reviews were presented. On a scale from 1 to 5, indicate what is your purchase intention after reading this set of reviews.

- 5 – Very high
- 4 – High
- 3 – Neither high nor low
- 2 – Low
- 1 – Very low

5.2. Consider that after some online search the following reviews were presented. On a scale from 1 to 5, indicate what is your purchase intention after reading this set of reviews.

- 5 – Very high
- 4 – High
- 3 – Neither high nor low
- 2 – Low
- 1 – Very low

6. **Numerical rating vs Written review:** each respondent only answered to one of the two questions displayed on this section – the attribution was random.

6.1. Considering now the following numerical rating, indicate, on a scale from 1 to 5, what is your intention to purchase this product after reading it.

- 5 – Very high
- 4 – High
- 3 – Neither high nor low
- 2 – Low
- 1 – Very low

6.2. Considering now the following numerical rating, indicate, on a scale from 1 to 5, what is your intention to purchase this product after reading it.

- 5 – Very high

- 4 – High
- 3 – Neither high nor low
- 2 – Low
- 1 – Very low

7. **Higher price vs Lower price:** each respondent only answered to one of the two questions displayed on this section – the attribution was random.

7.1. Supposing that you want to purchase this item, indicate, on a scale from 1 to 5, which is your need to resort to eWOM, namely online reviews and ratings, in order to evaluate your intention to purchase it.

- 5 – Very high
- 4 – High
- 3 – Neither high nor low
- 2 – Low
- 1 – Very low

7.2. Supposing that you want to purchase this item, indicate, on a scale from 1 to 5, which is your need to resort to eWOM, namely online reviews and ratings, in order to evaluate your intention to purchase it.

- 5 – Very high
- 4 – High
- 3 – Neither high nor low
- 2 – Low
- 1 – Very low

8. **Moment**

Considering the same situation, in which moment would you consider to resort to eWOM. In order to obtain information regarding the product/service?

- Before the purchasing process
- During the purchasing process
- Before and during the purchasing process

9. **Factors**

Indicate, in order of preference, the factors that most influence you to resort to online reviews and ratings within the scope of your purchase decision process. Consider the position 1 as the most important and the position 7 as the least important.

__ Price

__ Too many product/service's characteristics

__ Brand awareness

__ Too many substitute options on the market

__ Difficulty to evaluate/test the product/service before purchasing it

__ Product/Service's novelty

__ There is no factor that influence me, I usually resort to eWOM by habit

Demographics

Gender

- Female
- Male

Age range

- Less than 18
- 18 – 21
- 22-37
- 38-54
- More than 57

Professional Situation

- Unemployed
- Student
- Employed
- Retired

Monthly income (before tax):

- Less than 500€
- 500€ - 1 000€
- 1 001€ - 1 500€
- 1 501€ - 2 000€
- 2 001€ - 2 500€
- More than 2 500€

Academic background

- Primary School
- High School
- Bachelor degree
- Master degree
- PhD

Appendix 2: Survey (Original version - Portuguese)

Due to Católica Lisbon School of Business and Economics' page limit constrains the figures used as stimulus in each question will be presented in a summary table in the end of the survey.

Caro participante,

Este questionário foi desenvolvido no âmbito da minha tese do Mestrado em Gestão com especialização em Estratégia e Empreendedorismo pela Católica Lisbon School of Business and Economics. O principal objetivo do mesmo é avaliar o potencial impacto que a eWOM (electronic word-of-mouth) tem na intenção de compra dos consumidores. O questionário terá uma duração aproximada de 5 minutos e todos os dados recolhidos são anónimos e confidenciais, sendo o seu uso exclusivo deste estudo académico.

Desde já agradeço a sua disponibilidade, Madalena Trigueiros Ventura

O desenvolvimento da Internet trouxe um novo leque de oportunidades que tem vindo a mudar o comportamento dos consumidores e, consequentemente, as suas expectativas e necessidades. Desta forma, os consumidores começaram a utilizar ferramentas da web, como por exemplo redes sociais e blogs, com o objetivo comunicar e trocar informação sobre produtos e serviços. Assim, o antigo termo "Word-of-Mouth" (WOM), que representa a partilha de informação e opiniões sobre um determinado produto, serviço ou assunto, ganhou um novo significado e passou a existir no meio electrónico, dando origem à "Electronic Word-of-Mouth" (eWOM). A eWOM pode ser representada de diversas formas, sendo as duas mais relevantes para este estudo os comentários escritos "Reviews" e as classificações numéricas "Ratings".

On the following, and first question, if the respondent answers "Sim" in one of the categories, the questions he/she will be answering are regarding that same category. Otherwise, if the respondent answers "Não" in all the available options, the survey ends because he/she is not a

user of eWOM. On the other hand, in case a respondent answer "Sim" in more than one product/service category, the software Qualtrics, will randomly present the questions regarding to one of those categories.

1. **Recorre ou alguma vez recorreu a reviews e ratings online de modo a avaliar os seguintes tipos de produtos?**

Categorias de Produto	*Eu recorro, ou já recorri, a eWOM de modo a avaliar os seguintes tipos de produtos*	
	Sim	Não
"Pricey Tech-Electronics" – Produtos tecnológicos	○	○
"High Touch Retail" – Mobília, electrodomésticos e roupa	○	○
"Household Staples" – Produtos de grande consumo/Artigos para fornecer a casa (p.e bebidas, comida, comida de animais, entre outros)	○	○
"No Touch Services" - Serviços sem contacto físico (p.e. marcação de voos, reserva de hotéis, restaurantes, serviços financeiros, entre outros)	○	○

Introdução

2. Considerando que está a avaliar um produto, pertencente à categoria Pricey Tech Electronics/High Touch Retail/Household Staples/No Touch Services, através de informação publicada online. Indique quais as três personalidades portuguesas que consideraria ser um expert e que, devido a isso, os seus comentários e opiniões online poderiam ter mais influência na sua intenção de compra.
   - João Manzarra
   - Mia Rose
   - Manuel Luís Goucha
   - Cristina Ferreira
   - A pipoca mais doce - Ana Garcia Martins
   - Cristiano Ronaldo
   - Ruben Remédios, The Remedy Channel
   - Miguel Pessanha – Fhorsaken

- Alexandre Santos - alexandreee07
- Miguel Luz
- Sara Sampaio
- José Avillez
- Outro _____
- The source of the reviews and the ratings that I read is not relevant for my evaluation of this product's category.

3. **Consumer vs Expert generated rating:** each respondent only answered to one of the two questions displayed on this section – the attribution was random

   3.1. Supondo que tenciona comprar o seguinte produto/serviço e, nesse sentido, resolveu ler comentários, opiniões e informações publicadas na internet de modo a facilitar a sua decisão de compra. Considerando o rating publicado online apresentado, indique, numa escala de 1 a 5, qual a sua intenção de compra após ler o mesmo.
   - 5 – Muito alta
   - 4 – Alta
   - 3 – Nem alta nem baixa
   - 2 – Baixa
   - 1 – Muito baixa

   3.2. Supondo que tenciona comprar o seguinte produto/serviço e, nesse sentido, resolveu ler comentários, opiniões e informações publicadas na internet de modo a facilitar a sua decisão de compra. Considerando o rating publicado online apresentado, indique, numa escala de 1 a 5, qual a sua intenção de compra após ler o mesmo.
   - 5 – Muito alta
   - 4 – Alta
   - 3 – Nem alta nem baixa
   - 2 – Baixa
   - 1 – Muito baixa

4. **Known vs Unknown source:** each respondent only answered to one of the two questions displayed on this section – the attribution was random.

   4.1. Considerando o seguinte online review relative ao produto/serviço que pretende adquirir, indique, numa escala de 1 a 5, qual a sua intenção de compra após ler o mesmo.

- 5 – Muito alta
- 4 – Alta
- 3 – Nem alta nem baixa
- 2 – Baixa
- 1 – Muito baixa

4.2. Considerando o seguinte online review relativo ao produto/serviço que pretende adquirir, indique, numa escala de 1 a 5, qual a sua intenção de compra após ler o mesmo.

- 5 – Muito alta
- 4 – Alta
- 3 – Nem alta nem baixa
- 2 – Baixa
- 1 – Muito baixa

5. Mix vs Neutral valence set of reviews: each respondent only answered to one of the two questions displayed on this section – the attribution was random.

5.1. Considerando que, após uma pesquisa online, o seguinte set de reviews foi apresentado. Numa escala de 1 a 5, indique qual é a sua intenção de compra após ler os mesmos.

- 5 – Muito alta
- 4 – Alta
- 3 – Nem alta nem baixa
- 2 – Baixa
- 1 – Muito baixa

5.2. Considerando que, após uma pesquisa online, o seguinte set de reviews foi apresentado. Numa escala de 1 a 5, indique qual é a sua intenção de compra após ler os mesmos.

- 5 – Muito alta
- 4 – Alta
- 3 – Nem alta nem baixa
- 2 – Baixa
- 1 – Muito baixa

6. Numerical rating vs Written review: each respondent only answered to one of the two questions displayed on this section – the attribution was random

6.1. Agora considere o seguinte rating numérico e indique, numa escala de 1 a 5, qual é a sua intenção de compra após ler o mesmo.
    - 5 – Muito alta
    - 4 – Alta
    - 3 – Nem alta nem baixa
    - 2 – Baixa
    - 1 – Muito baixa

6.2. Agora considere o seguinte reviews escrito e indique, numa escala de 1 a 5, qual é a sua intenção de compra após ler o mesmo.
    - 5 – Muito alta
    - 4 – Alta
    - 3 – Nem alta nem baixa
    - 2 – Baixa
    - 1 – Muito baixa

7. **Higher price vs Lower price:** each respondent only answered to one of the two questions displayed on this section – the attribution was random.

7.1. Supondo que pretende comprar o item apresentado, indique, numa escala de 1 a 5, qual é a sua necessidade de recorrer a eWOM de modo a avaliar o mesmo e a sua posterior intenção de o comprar.
    - 5 – Muito alta
    - 4 – Alta
    - 3 – Nem alta nem baixa
    - 2 – Baixa
    - 1 – Muito baixa

7.2. Supondo que pretende comprar o item apresentado, indique, numa escala de 1 a 5, qual é a sua necessidade de recorrer a eWOM de modo a avaliar o mesmo e a sua posterior intenção de o comprar.
    - 5 – Muito alta
    - 4 – Alta
    - 3 – Nem alta nem baixa
    - 2 – Baixa
    - 1 – Muito baixa

8. Momento

Dentro da mesma situação, em que momento estaria disposto a recorrer a eWOM para avaliar o produto/serviço que pretende comprar?

- Antes da compra
- Durante a compra
- Antes e durante a compra

9. Factores

Indique, por ordem de preferência os fatores que mais o influenciam a recorrer a reviews e ratings online de modo a avaliar se compra, ou não, um produto desta categoria.

Considere como mais importante o fator que colocar na posição 1 e como menos importante o colocado na posição 7.

__ Preço

__ Elevado número de características do produto

__ Notoriedade da marca

__ Elevado número de opções de produto disponíveis no mercado

__ Dificuldade em avaliar/testar antes da compra

__ Novidade do produto

__ Não existe um fator específico, recorro usualmente por hábito

Sócio demográficas

Género

- Feminino
- Masculino

Faixa Etária

- Menos de 18
- 18 – 21
- 22-37
- 38-54
- Mais de 57

Situação Profissional

- Desempregado/a

- Estudante
- Empregado/a
- Reformado/a

Rendimento mensal líquido (após impostos)

- Menos de 500€
- 500€ - 1 000€
- 1 001€ - 1 500€
- 1 501€ - 2 000€
- 2 001€ - 2 500€
- Mais de 2 500€

Habilitações literárias

- Ensino Primário
- Ensino Secundário
- Licenciatura
- Mestrado
- Doutoramento

Appendix 3: Figures used on the online survey

Product Category: Pricey Tech Electronics

Question	Figure/Stimulus
3.1	
3.2	

4.1	**Fantástico!** Por: **Joana Gomes** Formidável! Os meus dentes ficam muito mais limpos quando uso a minha nova escova de dentes elétrica. As 6 velocidades diferentes são ótimas para ajustar a pressão que desejamos sentir na escovagem, tornando-a num processo personalizável! Sem dúvida que foi um bom investimento. Recomendo vivamente. 
4.2	**Fantástico!** Por: **Anónimo** Formidável! Os meus dentes ficam muito mais limpos quando uso a minha nova escova de dentes elétrica. As 6 velocidades diferentes são ótimas para ajustar a pressão que desejamos sentir na escovagem, tornando-a num processo personalizável! Sem dúvida que foi um bom investimento. Recomendo vivamente. 
5.1	 ★★★☆☆ **Mais ou menos** Por: **Madalena Figueiredo** Color: Black | Style Name: Electric Toothbrush | Verified Purchase O desempenho desta escova de dentes elétrica é mediano. Não tenho grande opinião. ★★★☆☆ **Compra básica** Por: **Paula Inácio** Color: Black | Style Name: Electric Toothbrush | Verified Purchase Considero que foi uma compra por necessária. Não ponderei várias hipóteses e o desempenho deste produto é normal. ★★★☆☆ **Média** Por: **Filipa Guedes** Color: Black | Style Name: Electric Toothbrush | Verified Purchase A qualidade desta escova elétrica é mais ou menos bom. Apresenta algumas características variadas. ★★★☆☆ **Qualidade mediana** Por: **José Martins** Color: Black | Style Name: Electric Toothbrush | Verified Purchase Apesar de ser um produto de uma marca com bastante notoriedade, o seu desempenho é mediano, permitindo assim uma escovagem normal para uma escova de dentes elétrica.
5.2	 ★☆☆☆☆ **Não correspondeu às expectativas** Por: **Filipa Guedes** Color: Black | Style Name: Electric Toothbrush | Verified Purchase Escolhi esta escova devido à variedade de características e pela notoriedade da sua marca. Acontece que o preço é demasiado elevado para a qualidade conferida, a bateria não é duradoura como esperado e o resultado da escovagem é bom mas podia ser melhor. Acho que como escova elétrica corresponde aos padrões normais mas precisaria de mais qualidade para igualar o seu preço e popularidade da sua marca. ★★★★★ **Compra fantástica, ótima relação qualidade/preço** Por: **Catarina Luís** Color: Black | Style Name: Electric Toothbrush | Verified Purchase Sem dúvida que é preciso fazer referência a este produto. Esta é a terceira escova de dentes elétrica que tenho desta marca. Na minha opinião os benefícios desta escova ultrapassam de longe o custo da mesma. ★☆☆☆☆ **Desilusão** Por: **João Pinheiro** Color: Black | Style Name: Electric Toothbrush | Verified Purchase Apesar de considerar este preço justificativo da marca que estava a adquirir penso que as escovagens que faz ficam um pouco longe das expectativas. Sem dúvida que faz uma escovagem razoável mas, pelo preço apresentado, esperava-se outro tipo de qualidade, não só na escovagem mas também no resto das suas características. ★★★★☆ **Após 3 meses de uso continuo a dizer que fiz compra muito boa** Por: **Gonçalo Pinto** Color: Black | Style Name: Electric Toothbrush | Verified Purchase Apesar de não ser muito barata, esta escova consegue sem dúvida corresponder às expectativas. A qualidade da escovagem surpreendeu-me bastante e fiquei muito satisfeito com o resultado final. Na minha opinião, o único aspeto que poderia ser melhorado é a bateria que, apesar de duradoura, poderia ainda ser mais. Não comprometendo a qualidade do produto, pois a duração atual é bastante aceitável.
6.1	OVERALL RATING 9.35 / 10 

6.2	 **Recomendo!** Por: **Joana Martins** Sem dúvida que foi uma compra fantástica. Bastante versátil no que diz respeito à inserção de diferentes tipos de escovas e com boa velocidade e força de escovagem. Estou bastante satisfeita com esta compra.
7.1	 **Escova dentes eléctrica AEG EZS 5664** Vibrações ultra sónicas / Recarregável €39,99
7.2	 **Escova dentes eléctrica AEG EZS 5664** Vibrações ultra sónicas / Recarregável €149,99

Product Category: High Touch Retail

Question	Figure/Stimulus
3.1	 7.80 / 10 por **Ana Cláudia Lima**
3.2	 7.80 / 10 por **Expert em sofás**
4.1	**Grande conforto** Por: **João Luz** O tecido utilizado neste sofá é, sem dúvida, de grande qualidade. A cor é exatamente igual como na fotografia e foi facilmente montado. Grande conforto num tamanho ideal de sofá. 
4.2	**Grande conforto** Por: **Anónimo** O tecido utilizado neste sofá é, sem dúvida, de grande qualidade. A cor é exatamente igual como na fotografia e foi facilmente montado. Grande conforto num tamanho ideal de sofá. 

5.1	 ★★★☆☆ **Conforto normal** Por: **Manuel Guerra** O conforto deste sofá ficou abaixo das expectativas. Apresenta um conforto mediano, sem grandes aspetos a salientar. ★★★☆☆ **Compra básica** Por: **Victor Seixas** Na minha opinião é um sofá como todos os outros. Conforto normal, tecido regular. ★★★☆☆ **Sofá normal** Por: **Margarida Faria** Qualidade e conforto mais ou menos. Design engraçado. Desempenha bem a sua função sem grandes problemas. Tecido normal. ★★★☆☆ **Qualidade mediana** Por: **José Martins** Apesar de ser um produto de uma marca com alguma notoriedade, o seu conforto é mediano, permitindo assim um momento de descanso normal, sem aspetos a salientar.
5.2	 ☆☆☆☆☆ **Não correspondeu às expectativas** Por: **Maria Rebelo** O sofá, na minha opinião, tem muitas falhas. Começo por referir que acho que o preço do mesmo é demasiado alto para a qualidade que oferece. O tecido não é muito forte e desgasta-se muito com qualquer limpeza. Em termos de conforto fica aquém das expectativas. ★★★★★ **Muito boa compra** Por: **Leonardo Luís** Sem dúvida que se trata de um bom investimento. Conforto ao máximo nível com uma elegância notável. ☆☆☆☆☆ **Desilusão** Por: **Guilherme Lopes** Na minha opinião este sofá não apresenta a qualidade que deveria com base no preço que lhe está atribuído. Apesar de ser confortável o tecido está longe de ser o melhor e torna-se demasiado pesado para transportar e montar. ★★★★☆ **Bastante confortável** Por: **Filipe Rito** O nível de conforto está dentro das expectativas. Apesar de ser um pouco difícil de transportar devido ao seu peso, o seu material apresenta todo grande qualidade, o que se traduz no nível de conforto já mencionado.
6.1	 OVERALL RATING 9.35 / 10
6.2	 **Recomendo!** Por: **Filipa Afonso** Este sofá apresenta uma boa relação qualidade/preço. Adicionalmente à boa qualidade apresenta também uma grande vantagem de extra arrumação assim como uma liberdade de disposição do mesmo.
7.1	 **SÖDERHAMN** Módulo 3 lugares **419€/ud**
7.2	 **SÖDERHAMN** Módulo 3 lugares **2.080€/ud**

Product Category: Household Staples

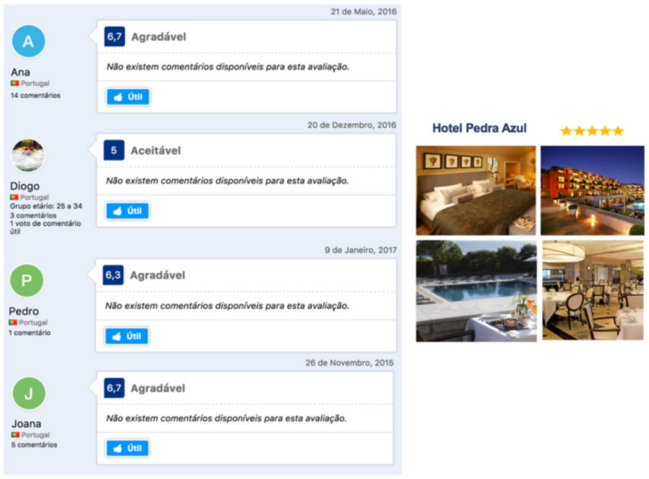
Question	Figure/Stimulus

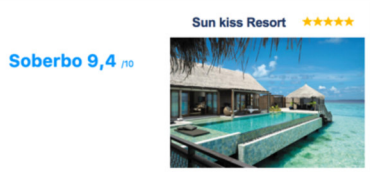
3.1	 4,0 ★★★★☆ por **Alexandre Soares**
3.2	 4,0 ★★★★☆ por **Enólogo Tomás Santos**
4.1	Por: **Carlos Ribeiro** É um bom e interessante vinho tendo em conta o preço que apresenta. Sem ser doce, é frutado e bastante agradável de beber. 
4.2	Por: **Anónimo** É um bom e interessante vinho tendo em conta o preço que apresenta. Sem ser doce, é frutado e bastante agradável de beber. 
5.1	 ★☆☆☆☆ **Pouco agradável** Por: **Maria Rebelo** Este vinho, apesar de não ser dos mais caros, não apresenta grande qualidade de sabor que justifique o seu preço. Na minha opinião, tem um toque demasiado áspero. ★★★★★ **Bom vinho a preço acessível** Por: **Leonardo Luís** Na minha opinião é uma ótima escolha quando se pretende comprar um vinho que tenha uma qualidade razoável a um preço também razoável. Apesar de forte, é bastante agradável. Recomendo a 100%. ★☆☆☆☆ **Demasiado leve** Por: **Guilherme Lopes** Para mim este vinho é muito forte, o seu toque é demasiado áspero, não justifica o seu preço. ★★★★★ **Boa qualidade. Leve, ligeiramente seco e frutado** Por: **Filipe Rito** Sem dúvida uma boa escolha a um preço acessível. O seu toque torna este vinho bastante peculiar, com um sabor forte que o caracteriza.
5.2	 ★★½☆☆ **Mediano** Por: **Paulo Moura** Para mim é um vinho comum, preço normal, qualidade normal. ★★½☆☆ **Agradável** Por: **Bernardo Figueiredo** Sem grandes destaques, bebe-se bem e tem um preço acessível. ★★½☆☆ **Qualidade normal** Por: **Patrícia Marques** Sabor e textura normais, agradável e com preço relativamente baixo. ★★½☆☆ **Bom sabor** Por: **Maria José Silva** Gosto do sabor, assim como da sua intensidade e textura. Aconselho como um vinho agradável.

6.1	
6.2	 
7.1	
7.2	

Product Category: No Touch Services

Question	Figure/Stimulus
3.1	

3.2	 Fabuloso 8,7 /10 Pontuação obtida a partir de 1 132 comentários dos melhores experts em hotelaria Deluxe Via Santa Catarina Rua das Flores, 100, 2647-067 Cascais, Portugal
4.1	 Hotel Luz da Costa "Simpatia ao mais alto nível - excelente" Jorge Silva 18 Portugal 12 comentários 2 votos de comentário útil pequeno reparo ao colchão um pouco cansado de uso Tudo funcionou maravilhosamente desde a recepção ao jantar o dormir e o pequeno-almoço. Hotel a recomendar e repetir estadia
4.2	 Hotel Luz da Costa A Anónimo "Simpatia ao mais alto nível - excelente" pequeno reparo ao colchão um pouco cansado de uso Tudo funcionou maravilhosamente desde a recepção ao jantar o dormir e o pequeno-almoço. Hotel a recomendar e repetir estadia
5.1	 21 de Maio, 2016 A Ana Portugal 14 comentários 6,7 Agradável Não existem comentários disponíveis para esta avaliação. Útil 20 de Dezembro, 2016 Diogo Portugal Grupo etário: 25 a 34 3 comentários 1 voto de comentário útil 5 Aceitável Não existem comentários disponíveis para esta avaliação. Útil 9 de Janeiro, 2017 P Pedro Portugal 1 comentário 6,3 Agradável Não existem comentários disponíveis para esta avaliação. Útil 26 de Novembro, 2015 J Joana Portugal 5 comentários 6,7 Agradável Não existem comentários disponíveis para esta avaliação. Útil Hotel Pedra Azul

6.1	
6.2	
7.1	
7.2	

Appendix 4: Demographics

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	418	69.3	69.3	69.3
	Male	185	30.7	30.7	100.0
	Total	603	100.0	100.0	

Age * Gender Crosstabulation

Count

		Gender		
		Female	Male	Total
Age	Less than 18	2	1	3
	18 - 21	112	37	149
	22-37	205	109	314
	38-57	93	32	125
	More than 57	6	6	12
Total		418	185	603

Academic Background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary school	2	.3	.3	.3
	High School	157	26.0	26.0	26.4
	Bachelor/Underg raduate degree	285	47.3	47.3	73.6
	Master degree	147	24.4	24.4	98.0
	PhD/Doctorate	12	2.0	2.0	100.0
	Total	603	100.0	100.0	

Professional Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unemployed	15	2.5	2.5	2.5
	Student	312	51.7	51.7	54.2
	Employed	269	44.6	44.6	98.8
	Retired	7	1.2	1.2	100.0
	Total	603	100.0	100.0	

Product_Category

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pricey Tech Electronics	175	29.0	29.0	29.0
	High Touch Retail	111	18.4	18.4	47.4
	Household Staples	76	12.6	12.6	60.0
	No Touch Services	241	40.0	40.0	100.0
	Total	603	100.0	100.0	

Appendix 5: Testing hypotheses 1, 2, 3 and 4 – Independent Samples t-test

Hypothesis 1 a.

1. Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Purchase Intention Mixed set	289	1.00	5.00	3.3633	.93328
Purchase Intention Neutral Valence	314	1.00	5.00	3.3153	.87891
PI_valence	603	1.00	5.00	3.3383	.90494
Valid N (listwise)	0				

2. Normality test

Case Processing Summary

	neutral and mixed set of reviews	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
PI_valence	Neutral set of reviews	180	57.3%	134	42.7%	314	100.0%
	Mixed set of reviews	171	59.2%	118	40.8%	289	100.0%

Descriptives

	neutral and mixed set of reviews			Statistic	Std. Error
PI_valence	Neutral set of reviews	Mean		3.3611	.06721
		95% Confidence Interval for Mean	Lower Bound	3.2285	
			Upper Bound	3.4937	
		5% Trimmed Mean		3.3642	
		Median		3.0000	
		Variance		.813	
		Std. Deviation		.90167	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.00	
		Skewness		-.086	.181
		Kurtosis		-.253	.360
	Mixed set of reviews	Mean		3.3801	.06996
		95% Confidence Interval for Mean	Lower Bound	3.2420	
			Upper Bound	3.5182	
		5% Trimmed Mean		3.3863	
		Median		3.0000	
		Variance		.837	
		Std. Deviation		.91488	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.00	
		Skewness		-.129	.186
		Kurtosis		-.293	.369

Tests of Normality

	neutral and mixed set of reviews	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PI_valence	Neutral set of reviews	.222	180	.000	.892	180	.000
	Mixed set of reviews	.211	171	.000	.894	171	.000

a. Lilliefors Significance Correction

3. Independent Sample t-test

Group Statistics

	neutral and mixed set of reviews	N	Mean	Std. Deviation	Std. Error Mean
PI_valence	Neutral set of reviews	180	3.3611	.90167	.06721
	Mixed set of reviews	171	3.3801	.91488	.06996

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
PI_valence	Equal variances assumed	.082	.774	-.196	349	.845	-.01901	.09698	-.20974	.17173
	Equal variances not assumed			-.196	347.487	.845	-.01901	.09701	-.20981	.17180

Hypothesis 2 a.

1. Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Purchase Intention Rating Type	303	1.00	5.00	1.8383	.88974
Purchase Intention Review Type	300	1.00	5.00	2.1533	.89020
Overall Purchase Intention Review_vs_Rating	603	1.00	5.00	1.9950	.90310
Valid N (listwise)	0				

2. Normality test

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Rating and Review Type	N	Percent	N	Percent	N	Percent
Overall Purchase Intention Review_vs_Rating	Review	300	100.0%	0	0.0%	300	100.0%
	Rating	303	100.0%	0	0.0%	303	100.0%

Descriptives

	Rating and Review Type			Statistic	Std. Error
Overall Purchase Intention Review_vs_Rating	Review	Mean		2.1533	.05140
		95% Confidence Interval for Mean	Lower Bound	2.0522	
			Upper Bound	2.2545	
		5% Trimmed Mean		2.0926	
		Median		2.0000	
		Variance		.792	
		Std. Deviation		.89020	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.00	
		Skewness		.725	.141
		Kurtosis		.736	.281
	Rating	Mean		1.8383	.05111
		95% Confidence Interval for Mean	Lower Bound	1.7377	
			Upper Bound	1.9389	
		5% Trimmed Mean		1.7543	
		Median		2.0000	
		Variance		.792	
		Std. Deviation		.88974	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.00	
		Skewness		1.118	.140
		Kurtosis		1.379	.279

Tests of Normality

	Rating and Review Type	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Overall Purchase Intention Review_vs_Rating	Review	.265	300	.000	.853	300	.000
	Rating	.239	303	.000	.800	303	.000

a. Lilliefors Significance Correction

3. Independent Sample t-test

Group Statistics

	Rating and Review Type	N	Mean	Std. Deviation	Std. Error Mean
Overall Purchase Intention Review_vs_Rating	Review	300	2.1533	.89020	.05140
	Rating	303	1.8383	.88974	.05111

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Overall Purchase Intention Review_vs_Rating	Equal variances assumed	.151	.698	4.346	601	.000	.31505	.07249	.17269	.45741
	Equal variances not assumed			4.346	600.934	.000	.31505	.07249	.17269	.45741

Hypothesis 3a.

1. Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Purchase Intention Consumer Source	324	1.00	5.00	2.3920	.79320
Purchase Intention Expert Source	279	1.00	5.00	2.3584	.78694
Overall Purchase intention Consumer_vs_Expert	603	1.00	5.00	2.3765	.78983
Valid N (listwise)	0				

2. Normality test

Case Processing Summary

	Expert and Consumer Source	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Overall Purchase intention Consumer_vs_Expert	Consumer Source	324	100.0%	0	0.0%	324	100.0%
	Expert Source	279	100.0%	0	0.0%	279	100.0%

Descriptives

	Expert and Consumer Source			Statistic	Std. Error
Overall Purchase intention Consumer_vs_Expert	Consumer Source	Mean		2.3920	.04407
		95% Confidence Interval for Mean	Lower Bound	2.3053	
			Upper Bound	2.4787	
		5% Trimmed Mean		2.3628	
		Median		2.0000	
		Variance		.629	
		Std. Deviation		.79320	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.00	
		Skewness		.565	.135
		Kurtosis		.797	.270
	Expert Source	Mean		2.3584	.04711
		95% Confidence Interval for Mean	Lower Bound	2.2657	
			Upper Bound	2.4512	
		5% Trimmed Mean		2.3228	
		Median		2.0000	
		Variance		.619	
		Std. Deviation		.78694	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.00	
		Skewness		.788	.146
		Kurtosis		1.248	.291

Tests of Normality

	Expert and Consumer Source	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
Overall Purchase intention Consumer_vs_Expert	Consumer Source	.285	324	.000	.843	324	.000
	Expert Source	.314	279	.000	.822	279	.000

a. Lilliefors Significance Correction

3. Independent Sample t-test

Group Statistics

	Expert and Consumer Source	N	Mean	Std. Deviation	Std. Error Mean
Overall Purchase intention Consumer_vs_Expert	Consumer Source	324	2.3920	.79320	.04407
	Expert Source	279	2.3584	.78694	.04711

Independent Samples Test

		Levene's Test for Equality of Variances F	Sig.	t-test for Equality of Means t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Overall Purchase intention Consumer_vs_Expert	Equal variances assumed	.351	.554	.520	601	.603	.03355	.06455	-.09321	.16032
	Equal variances not assumed			.520	589.118	.603	.03355	.06451	-.09314	.16025

Hypothesis 3b.

1. Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Purchase Intention Known Source	302	1.00	5.00	2.2715	.82674
Purchase Intention Unknown Source	301	1.00	5.00	2.4219	.84344
Overall Purchase Intention Known_vs_Unknown	603	1.00	5.00	2.3466	.83781
Valid N (listwise)	0				

2. Normality test

Case Processing Summary

	Known and Unknown Source	Cases Valid N	Valid Percent	Missing N	Missing Percent	Total N	Total Percent
Overall Purchase Intention Known_vs_Unknown	Unknown Source	301	100.0%	0	0.0%	301	100.0%
	Known Source	302	100.0%	0	0.0%	302	100.0%

Descriptives

	Known and Unknown Source			Statistic	Std. Error
Overall Purchase Intention Known_vs_Unknown	Unknown Source	Mean		2.4219	.04861
		95% Confidence Interval for Mean	Lower Bound	2.3263	
			Upper Bound	2.5176	
		5% Trimmed Mean		2.3911	
		Median		2.0000	
		Variance		.711	
		Std. Deviation		.84344	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.00	
		Skewness		.650	.140
		Kurtosis		.607	.280
	Known Source	Mean		2.2715	.04757
		95% Confidence Interval for Mean	Lower Bound	2.1779	
			Upper Bound	2.3651	
		5% Trimmed Mean		2.2277	
		Median		2.0000	
		Variance		.684	
		Std. Deviation		.82674	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.00	
		Skewness		.594	.140
		Kurtosis		.817	.280

Tests of Normality

	Known and Unknown Source	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Overall Purchase Intention Known_vs_Unknown	Unknown Source	.290	301	.000	.851	301	.000
	Known Source	.278	302	.000	.850	302	.000

a. Lilliefors Significance Correction

3. Independent Sample t-test

Group Statistics

	Known and Unknown Source	N	Mean	Std. Deviation	Std. Error Mean
Overall Purchase Intention Known_vs_Unknown	Unknown Source	301	2.4219	.84344	.04861
	Known Source	302	2.2715	.82674	.04757

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Overall Purchase Intention Known_vs_Unknown	Equal variances assumed	1.030	.310	2.211	601	.027	.15040	.06802	.01682	.28398
	Equal variances not assumed			2.211	600.674	.027	.15040	.06802	.01682	.28399

Hypothesis 4

1. Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Overall_eWOM_need	603	1.00	5.00	2.5041	1.23537
Valid N (listwise)	603				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Need to resort to eWOM Lower Price	310	1.00	5.00	2.4387	1.11526
Need to resort to eWOM Higher Price	293	1.00	5.00	2.5734	1.34937
Valid N (listwise)	0				

2. Normality test

Case Processing Summary

	Lower and Higher price	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Overall_eWOM_need	Lower Price	310	100.0%	0	0.0%	310	100.0%
	Higher Price	293	100.0%	0	0.0%	293	100.0%

Descriptives

	Lower and Higher price			Statistic	Std. Error
Overall_eWOM_need	Lower Price	Mean		2.4387	.06334
		95% Confidence Interval for Mean	Lower Bound	2.3141	
			Upper Bound	2.5633	
		5% Trimmed Mean		2.3763	
		Median		2.0000	
		Variance		1.244	
		Std. Deviation		1.11526	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.00	
		Skewness		.606	.138
		Kurtosis		-.359	.276
	Higher Price	Mean		2.5734	.07883
		95% Confidence Interval for Mean	Lower Bound	2.4182	
			Upper Bound	2.7285	
		5% Trimmed Mean		2.5260	
		Median		2.0000	
		Variance		1.821	
		Std. Deviation		1.34937	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		3.00	
		Skewness		.449	.142
		Kurtosis		-1.056	.284

Tests of Normality

	Lower and Higher price	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Overall_eWOM_need	Lower Price	.256	310	.000	.881	310	.000
	Higher Price	.235	293	.000	.870	293	.000

a. Lilliefors Significance Correction

3. Independent Sample t-test

Group Statistics

	Lower and Higher price	N	Mean	Std. Deviation	Std. Error Mean
Overall_eWOM_need	Lower Price	310	2.4387	1.11526	.06334
	Higher Price	293	2.5734	1.34937	.07883

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Overall_eWOM_need	Equal variances assumed	23.476	.000	-1.339	601	.181	-.13467	.10059	-.33222	.06288
	Equal variances not assumed			-1.332	567.305	.183	-.13467	.10113	-.33330	.06396

Appendix 6: Testing hypothesis 5 – Regression analysis: Moderation effect of Product's Category

Hypothesis 5

1. Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pricey Tech Electronics	175	1.00	1.00	1.0000	.00000
High Touch Retail	111	2.00	2.00	2.0000	.00000
Household Staples	76	3.00	3.00	3.0000	.00000
No Touch Services	241	4.00	4.00	4.0000	.00000
Valid N (listwise)	0				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cat.1 Purchase Intention Mixed set	79	1.00	5.00	3.1646	.93959
Cat.1 Purchase Intention Neutral set	96	2.00	5.00	3.5625	.80541
Cat1 Purchase Intention Consumer Source	98	1.00	5.00	2.7041	.78922
Cat1 Purchase Intention Expert Source	77	1.00	5.00	2.5195	.78824
Cat1 Purchase Intention Type Rating	90	1.00	5.00	1.8889	.97663
Cat1 Purchase Intention Type Review	85	1.00	5.00	2.3412	.69954
Cat1 Purchase Intention Source Known	92	1.00	5.00	2.3478	.84431
Cat1 Purchase Intention Source Unknown	83	1.00	5.00	2.5422	.91467
Valid N (listwise)	0				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cat.2 Purchase Intention Mixed set	59	1.00	5.00	3.6102	.85131
Cat.2 Purchase Intention Neutral set	52	1.00	5.00	3.3846	1.01274
Cat2 Purchase Intention Consumer Source	61	1.00	5.00	2.6721	.70051
Cat2 Purchase Intention Expert Source	50	2.00	5.00	2.6600	.71742
Cat2 Purchase Intention Type Rating	58	1.00	5.00	2.1207	.99256
Cat2 Purchase Intention Type Review	53	1.00	5.00	2.5094	.93279
Cat2 Purchase Intention Source Known	55	1.00	5.00	2.3455	.84367
Cat2 Purchase Intention Source Unknown	56	1.00	5.00	2.6250	.92564
Valid N (listwise)	0				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cat.3 Purchase Intention Mixed set	35	1.00	5.00	3.1143	.96319
Cat.3 Purchase Intention Neutral set	41	2.00	5.00	3.1951	.74898
Cat3 Purchase Intention Consumer Source	34	1.00	5.00	2.5588	.74635
Cat3 Purchase Intention Expert Source	42	2.00	5.00	2.5952	.73450
Cat3 Purchase Intention Type Rating	36	1.00	4.00	2.0556	.86005
Cat3 Purchase Intention Type Review	40	1.00	5.00	2.5000	.96077
Cat3 Purchase Intention Source Known	33	1.00	5.00	2.4545	.79415
Cat3 Purchase Intention Source Unknown	43	1.00	5.00	2.5581	.79589
Valid N (listwise)	0				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cat.4 Purchase Intention Mixed set	116	1.00	5.00	3.4483	.92638
Cat.4 Purchase Intention Neutral set	125	1.00	5.00	3.1360	.87385
Cat4 Purchase Intention Consumer Source	131	1.00	4.00	1.9847	.66777
Cat4 Purchase Intention Expert Source	110	1.00	5.00	2.0182	.71654
Cat4 Purchase Intention Type Rating	119	1.00	3.00	1.5966	.70494
Cat4 Purchase Intention Type Review	122	1.00	5.00	1.7541	.81628
Cat4 Purchase Intention Source Known	122	1.00	4.00	2.1311	.80238
Cat4 Purchase Intention Source Unknown	119	1.00	4.00	2.1933	.71636
Valid N (listwise)	0				

2. *Process* add-on for SPSS and SAS developed by Prof.Andrew F.Hayes

```
Run MATRIX procedure:

************* PROCESS Procedure for SPSS Release 2.15 ******************


         Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2013). www.guilford.com/p/hayes3

**************************************************************************

Model = 1
    Y = PI_valen
    X = neutral_
    M = Product_

Statistical Controls:
CONTROL= age      gender   prof_sit monthly_ academic

Sample size
        343
```

```
Outcome: PI_valen

Model Summary
          R       R-sq        MSE          F        df1        df2
  p
     .1375      .0189      .8349      .8044     8.0000   334.0000      .5
991

Model
              coeff         se          t          p       LLCI       ULCI

constant     3.7712      .3618    10.4246      .0000     3.0596     4.4828

Product_     -.0804      .0532    -1.5114      .1316     -.1850      .0242

neutral_     -.0417      .2239     -.1862      .8524     -.4820      .3987

int_1         .0272      .0771      .3535      .7239     -.1244      .1788

age          -.0567      .0848     -.6693      .5037     -.2235      .1100

gender        .0505      .1038      .4870      .6266     -.1536      .2547

prof_sit     -.1047      .1079     -.9711      .3322     -.3169      .1074

monthly_      .0008      .0414      .0184      .9853     -.0808      .0823

academic      .0492      .0685      .7182      .4732     -.0856      .1840


   Data for visualizing conditional effect of X on Y
   Paste text below into a SPSS syntax window and execute to produce plot.

   DATA LIST FREE/neutral_mixed_set Product_Category PI_valence.
   BEGIN DATA.

        .0000     1.3011     3.4634
       1.0000     1.3011     3.4571
        .0000     2.6035     3.3587
       1.0000     2.6035     3.3879
        .0000     3.9059     3.2540
       1.0000     3.9059     3.3187

   END DATA.
   GRAPH/SCATTERPLOT=Product_Category WITH PI_valence BY neutral_mixed_set.

   * Estimates are based on setting covariates to their sample means.



 Run MATRIX procedure:

************** PROCESS Procedure for SPSS Release 2.15 *******************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2013). www.guilford.com/p/hayes3

**************************************************************************
Model = 1
    Y = PI_type
    X = rating_r
    M = Product_

Statistical Controls:
CONTROL= age      gender   prof_sit monthly_ academic

Sample size
        586



     Outcome: PI_type

     Model Summary
               R       R-sq        MSE          F        df1        df2
       p
          .3386      .1147      .7133     9.3409     8.0000   577.0000      .0
     000

     Model
                   coeff         se          t          p       LLCI       ULCI
     constant     2.0978      .2459     8.5304      .0000     1.6148     2.5808
     Product_     -.2143      .0398    -5.3818      .0000     -.2925     -.1361
     rating_r     -.5915      .1621    -3.6502      .0003     -.9098     -.2732
     int_1         .1078      .0553     1.9487      .0518     -.0008      .2164
     age           .1902      .0563     3.3756      .0008      .0795      .3008
     gender        .1424      .0756     1.8838      .0601     -.0061      .2910
     prof_sit     -.0158      .0772     -.2042      .8383     -.1673      .1358
     monthly_      .0049      .0291      .1702      .8649     -.0521      .0620
     academic     -.0396      .0464     -.8536      .3937     -.1309      .0516

     Product terms key:

      int_1    rating_r    X     Product_

     R-square increase due to interaction(s):
             R2-chng          F        df1        df2          p
     int_1      .0058     3.7976     1.0000   577.0000      .0518

     **************************************************************************

     Conditional effect of X on Y at values of the moderator(s):
```

```
   Product_     Effect         se          t          p       LLCI       U
LCI
     1.3668     -.4442      .0994    -4.4670      .0000     -.6395     -.2
489
     2.6331     -.3077      .0701    -4.3861      .0000     -.4454     -.1
699
     3.8994     -.1712      .0988    -1.7318      .0838     -.3653      .0
230

Values for quantitative moderators are the mean and plus/minus one SD from
 mean.
Values for dichotomous moderators are the two values of the moderator.

**************************************************************************

Data for visualizing conditional effect of X on Y
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/rating_review Product_Category PI_type.
BEGIN DATA.

      .0000     1.3668     2.4144
     1.0000     1.3668     1.9702
      .0000     2.6331     2.1431
     1.0000     2.6331     1.8354
      .0000     3.8994     1.8717
     1.0000     3.8994     1.7006

END DATA.
GRAPH/SCATTERPLOT=Product_Category WITH PI_type BY rating_review.

* Estimates are based on setting covariates to their sample means.



  Outcome: PI_sourc

  Model Summary
            R       R-sq        MSE          F        df1        df2
    p
       .3725      .1387      .5383    11.6169     8.0000   577.0000      .0
000

  Model
                coeff         se          t          p       LLCI       ULCI

  constant     2.7439      .2148    12.7727      .0000     2.3219     3.1658

  Product_     -.2425      .0322    -7.5336      .0000     -.3057     -.1792

  expert_c     -.1926      .1414    -1.3618      .1738     -.4703      .0852

  int_1         .0676      .0483     1.3975      .1628     -.0274      .1625

  age           .1124      .0490     2.2965      .0220      .0163      .2086

  gender        .0935      .0657     1.4235      .1551     -.0355      .2226

  prof_sit     -.1152      .0668    -1.7246      .0851     -.2464      .0160

  monthly_      .0441      .0252     1.7487      .0809     -.0054      .0935

  academic     -.0035      .0404     -.0859      .9316     -.0829      .0759


   Product terms key:

    int_1    expert_c    X     Product_

   R-square increase due to interaction(s):
           R2-chng         F        df1        df2          p
   int_1      .0029     1.9530     1.0000   577.0000      .1628

   **************************************************************************

   Conditional effect of X on Y at values of the moderator(s):
      Product_     Effect         se          t          p       LLCI       U
   LCI
        1.3668     -.1002      .0866    -1.1572      .2477     -.2704      .0
   699
        2.6331     -.0147      .0610     -.2405      .8100     -.1345      .1
   051
        3.8994      .0709      .0862      .8221      .4113     -.0985      .2
   402

   Values for quantitative moderators are the mean and plus/minus one SD from
    mean.
   Values for dichotomous moderators are the two values of the moderator.



Data for visualizing conditional effect of X on Y
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/expert_consumer Product_Category PI_source_2.
BEGIN DATA.

      .0000     1.3668     2.6831
     1.0000     1.3668     2.5828
      .0000     2.6331     2.3760
     1.0000     2.6331     2.3614
      .0000     3.8994     2.0690
     1.0000     3.8994     2.1399

END DATA.
GRAPH/SCATTERPLOT=Product_Category WITH PI_source_2 BY expert_consumer.

* Estimates are based on setting covariates to their sample means.
```

```
Run MATRIX procedure:

************* PROCESS Procedure for SPSS Release 2.15 ******************

         Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2013). www.guilford.com/p/hayes3

**************************************************************************

Model = 1
    Y = PI_sourc
    X = known_un
    M = Product_

Statistical Controls:
CONTROL= age      gender   prof_sit monthly_ academic

Sample size
        586


    Outcome: PI_sourc

    Model Summary
              R       R-sq        MSE          F        df1        df2
      p
         .1871      .0350      .6847     2.6167     8.0000   577.0000      .0
081

    Model
                coeff         se          t          p       LLCI       ULCI

    constant     2.6014      .2464    10.5576      .0000     2.1174     3.0853

    Product_     -.1135      .0392    -2.8934      .0040     -.1905     -.0364

    known_un     -.2660      .1586    -1.6774      .0940     -.5774      .0455

    int_1         .0455      .0543      .8393      .4017     -.0610      .1521

    age           .0850      .0553     1.5364      .1250     -.0237      .1937

    gender        .0388      .0741      .5240      .6005     -.1067      .1843

    prof_sit     -.0621      .0755     -.8222      .4113     -.2104      .0862

    monthly_      .0227      .0284      .8011      .4234     -.0330      .0784

    academic     -.0316      .0456     -.6933      .4884     -.1212      .0579


Product terms key:

 int_1    known_un    X     Product_

R-square increase due to interaction(s):
         R2-chng          F        df1        df2          p
int_1      .0012      .7044     1.0000   577.0000      .4017

**************************************************************************

Conditional effect of X on Y at values of the moderator(s):
   Product_     Effect         se          t          p       LLCI       U
LCI
     1.3668     -.2037      .0972    -2.0962      .0365     -.3946     -.0
128
     2.6331     -.1461      .0687    -2.1257      .0339     -.2810     -.0
111
     3.8994     -.0884      .0972     -.9097      .3634     -.2792      .1
025

Values for quantitative moderators are the mean and plus/minus one SD from
 mean.
Values for dichotomous moderators are the two values of the moderator.

**************************************************************************


Data for visualizing conditional effect of X on Y
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/known_unknow Product_Category PI_source_1.
BEGIN DATA.

      .0000     1.3668     2.5577
     1.0000     1.3668     2.3540
      .0000     2.6331     2.4140
     1.0000     2.6331     2.2679
      .0000     3.8994     2.2703
     1.0000     3.8994     2.1819

END DATA.
```