CHOICE ARCHITECTURE

The role of users' reviews as tools for mitigating consumers' perceived risks when purchasing electronics online.

A Dissertation for the award of

Master of Business Administration

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ABSTRACT

Electronic commerce has been continuously growing in the last decades and organisations have adapted designing new strategies and launching platforms on the web for online sales. Consumers with the intention to purchase a product online have to go through a decision-making process that involves both the product to buy and the seller to buy from. In this area of interest choice architecture is a discipline that study human behaviour in the act of making a choice and provide insights and techniques that choice architects can use and put in place to assist the consumers in their decision making process. Perceived risks both product and seller related are those barriers that might discourage consumers from successfully completing their evaluation process. Websites features and cues are the visible outputs of choice architects strategic decisions and have the purpose to attract and persuade consumers to proceeding with a purchase. Users' reviews are one of the most known and effective tools used for the purpose and therefore they are selected as the area of interest of this dissertation.

The purpose of the study is to discuss the role of users' reviews as a tool for mitigating consumers' perceived risks both during the product and the seller evaluation stage. Specifically the interest is on the role of each component in a user's review: volume, valence or rating and textual sentiments.

Interviews with a sample of online consumers selected in Ireland showed that both for product and seller evaluation stage, volume and valence do not have a direct role of mitigating the perceived risks but an initial function of screening good products or sellers from bad ones; on the other side textual sentiments are considered adding value information that mitigate the residual perceived risk.

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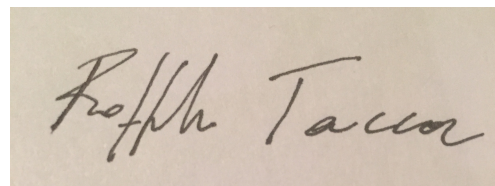
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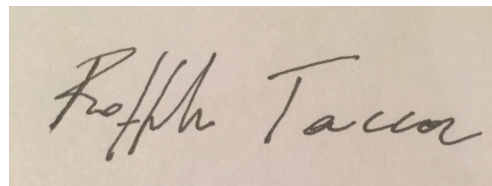
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CHAPTER 1: OVERVIEW

1.1 INTRODUCTION

Electronic commerce is a sale channel that has seen in the last decade a huge growth in terms of volume of products sold. From the prospective of the organisations the nature of business has changed with consequence necessity of revisiting business models and strategies; in this context creating online platforms has become more than an opportunity but a real necessity to be competitive (Hwang and Jeong 2016).

Being online shopping related websites the main platforms and interfaces for consumers to purchase online, the design of features and cues might make the difference between a successful business and a failure. A well done website needs to be designed considering the expected behaviours of consumers in their decision-making process; this area of knowledge is called choice architecture. In the last decade the discipline of choice architecture has become more and more relevant developing tools and techniques to drive and assist consumers in their decision making process; each feature and cue of a website is the visible layout of a tactic implemented by the choice architect (Munscher, Vetter and Scheuerle 2016).

From the consumers prospective the amount of available websites for online shopping gives multiple opportunities of choice but multiple sources of risks as well. The perceived risks therefore have a decisive role in the product and seller evaluation stage (Forsythe and Shi 2003). In this context social media have a role in consumers behaviour; people rely more and more on other users' opinion and experiences; users' review have an impact on the decision making process. Review valence, volume and sentiment are the three factors that influence consumers when searching information about a product or a website (Tang, Fang and Wang 2014).

The dissertation seeks to add to existing literature information related to the role of users' reviews in mitigating the consumers' perceived risks. It takes existing literature findings in the area of choice architecture and perceived risks to design research aims and objectives with the focus on user's reviews as a tool to mitigate consumers' perceived risks.

The following study has a descripto-explanatory nature. It aims to both describe consumers' behaviour in the act of using users' reviews for clarifying doubts product and sellers related and to create the basis for a potential explanatory research. Applying an inductive approach the research aims to suggest theoretical premises.

1.2 JUSTIFICATION FOR THE RESEARCH

Electronic commerce and consumers' behaviours are two areas that have been vastly studied and which literature is rich of researches. Reasonable amount of studies is available for both users' reviews and consumers' perceived risks as well. Studies on users' reviews tend to describe the three main components (volume, valence and sentiment) (Li, Wu and Mai 2018) and correlate them directly to sales (Chong, et al. 2016); studies seldom involve the consumers' perceived risks as behavioural component that have to be mitigated in order to get to the purchasing phase in the consumer decision-making process. It seems relevant for the author of this dissertation to involve the perceived risks mitigation activity as a fundamental step that has to happen in the decision-making process before the actual purchase.

Another area where the author of this dissertation wants to expand the existing literature is the different role that users' reviews might have whether they are product or seller related. Few existing studies divide the consumer decision process into two stages; the first stage is the product evaluation where the consumer assesses product uncertainty through the users' reviews; the second stage is very similar but in this case the assessment is toward the seller (Wu, et al. 2013). The distinction seems important to the author of this dissertation that therefore has the interest of distinguish the role of users' reviews as a tool for mitigating consumers' perceived risks in both stages of the evaluation process.

Moreover it seems to the author of this research that existing studies have either a too general approach or too specific; in the first case studies are focused on merely describing the features and components of users reviews and perceived risks without connecting to practical aspects of online shopping; in the second case the connection with the intention to purchase or sales is studied component per component of the user review assuming that there is no interaction between the components (Li, Wu and Mai 2018). The author do not exclude that components might interact with each other's as well and do not exclude that a component might be dominant over the others.

Based on the above considerations about the existing literature this piece of research wants to fill these gaps by approaching the problem and differentiating whether the consumers' activity is product or seller related. Furthermore for both the product and the seller the attention is on what effect each one of the three components of users' reviews (volume, valence and sentiment) has on mitigating the perceived risks and to investigate whether each component has a direct effect or combines with other components of the users review.

1.3 RESEARCH AIMS AND OBJECTIVES

The aim of this research is to understand what is the role of users' reviews in terms of mitigating the perceived risks that consumers might face when in the decision-making process for purchasing electronics online; both product and seller evaluation stage are areas of interest. The second aim is to draw a qualitative idea of effective users' reviews with the scope of understanding what characteristics really support the consumer. Last aim of the study is to suggest recommendations for both future academic researches and for practitioners. The paper could help online sellers to use user's reviews as a useful tool for increasing their sales volumes through their online platforms.

The dissertation will focus on the role of users' reviews components as part of choice architecture in the consumers decision-making process; specifically how each component is an active actor on mitigating and clarifying consumers' doubts and concerns generated by perceived risks.

Moreover the research will focus on consumers that purchase electronics; the reason is that electronics have the characteristics of being very popular products and with short shelf lives (Chong, et al. 2016). Furthermore electronics are products which characteristics and specs are more objective rather than subjective; for this reason the author of the dissertation wants to exclude subjectivity that might mislead the consumer's decision-making process during the product evaluation stage (Luan, et al. 2016); products like clothes and shoes or services like hotel experiences etc. introduce unwanted variable on the consumer' perceived risks of the product. Another reason for being focused on electronics is that because most of the products have high price people tend to search as many information as possible before proceeding with the purchase. These conditions perfectly fit the purpose of the research.

Six objectives have been identified in order to approach the primary research and structure the whole research:

- Objective 1: to investigate numerical users reviews' volume of a product as a tool for mitigating consumers' perceived product risk
- Objective 2: to investigate numerical users reviews' Valence of a product as a tool for mitigating consumers' perceived product risk
- Objective 3: to investigate textual users reviews' sentiment of a product as a tool for mitigating consumers' perceived product risk
- Objective 4: to investigate numerical users reviews' volume of a seller as a tool for mitigating consumers' perceived seller risk
- Objective 5: to investigate numerical users reviews' valence of a seller as a tool for mitigating consumers' perceived seller risk
- Objective 6: to investigate textual users reviews' sentiment of a seller as a tool for mitigating consumers' perceived seller risk

1.4 RESEARCH QUESTION

The research question is defined as: *What is the role of product and seller users reviews in mitigating consumers' perceived risks when purchasing electronics online?*

1.5 SCOPE AND LIMITATIONS

The dissertation is focused on the role of users' reviews as a tool for mitigating consumers' perceived risks when purchasing electronics online. The attention is on identifying the perceived risks product and seller related and successively to connect the components of users' reviews to them. There won't be any numerical data collection or quantitative analysis for the limitations faced during the secondary data collection; lack of previous specific studies leave the researcher with no existing framework and assumptions for defining proper hypotheses.

1.6 DISSERTATION STRUCTURE

The dissertation has been structure in 4 main chapters. Chapter two presents the literature review of the research including websites features and cues, choice architecture, perceived risks when shopping online and final part dedicated to users' reviews in the product/seller evaluation process. Only the most relevant studies have been considered and referenced. Chapter three describes the research methodology applied; research Onion model by Saunders, Lewis and Thornill has been used as a framework for well organising the methodology. Chapter four presents the findings of the research according to the objective structure. Chapter five presents the discussion of the findings, recommendations for future academic researches and for the practitioners.

CHAPTER 2: LITERATURE REVIEW

2.0 INTRODUCTION

The intent of this piece of research is to describe how users' reviews can mitigate the perceived risks that consumers might face in their process of deciding whether to purchase a product or not in an online shop. Particularly the interest is on how useful and effective are users' reviews in the decision-making process that brings the consumer to overtake the barriers created by perceived risks product and seller related. In preparation for the primary research this literature review wants to back up the idea that users' reviews have a decisive role when consumers have to first identify a specific product and secondly to evaluate the risks to purchase online.

The starting point to approach the problem is to analyse the features and cues presented in the online shops and among them to focus on consumers' reviews; all these elements are specifically designed by the choice architects with the scope of triggering the intention to purchase on a potential customer. The first part of this chapter has the scope of providing an overview of the features and cues that online websites presents and affects decision-making process with a dedicated section for users' reviews.

Having observed how the websites are designed, it is natural to think that their design is based on techniques and tools to influence and stimulate the consumer to proceed with the purchase; it is of particular interest to understand the reasons that bring choice architects to design websites using such features and cues. Choice architecture is an emerging field of researches that investigates how the design of the structure and presentation of a choice can impact the consumer decision-making process. Therefore the second part of this chapter has the scope of reviewing literature in the area of choice architecture providing insights of its components, tools and techniques.

Choice architecture defines tools and techniques to influence consumers in their decision making process; the basis of the discipline are the expected behaviour in the process of making a choice. Perceived risks are important drivers for a consumer to proceed with the purchase. Online reviews have an important role for people to eliminate perceived risks and therefore to proceed with the purchase. The third part of the chapter therefore has the scope of describing consumers' perceived risk and allocates them to categories like product perceived risks and seller perceived risks.

The final part of the chapter gathers all the necessary concepts in order to define the objectives that will be investigated. The scope is to recap the whole literature review and create the background for the primary research.

2.1 WEBSITES FEATURES AND CUES

Electronic commerce is a sales channel that has seen volumes continuously increasing over the past ten years. According to Eurostat Statistics Explained (2018), in 2016 in Europe (EU-28) 20% of sales were made online with a value of 18% of the total revenue generated (sales turnover). They further outline that from 2008 to 2016 the percentage of companies that had e-sales increased by 7% with a sales turnover increased by 6%. The growth of the sector is involving all types of enterprises; from large to small companies, the increase is visible for both parameters (Eurostat Statistics Explained 2018).

2.1.1 ELEMENTS OF WEBSITES THAT AFFECT INTENTION TO PURCHASE

Traditional marketing studies underline the importance of the sales counter on consumers' behaviour; the available literature is vast and with long history of research; already in the 90s academics found that visible features of stores and their atmosphere are more persuasive than any other marketing variable that is not related to the counter (Baker, Dhruv and Parasuraman 1994). Applying the same idea to online stores, academics found that proper design of the web environment causes a positive response from consumers (Dailey 2004). Online retailers have to ponder such considerations and create the best atmosphere on their online platform in order to attract and influence consumers (Eroglu, Machleit and Davis 2003).

Existing literature identifies two groups of features that influence the atmosphere of an online store; they can be related to website design and website contents. The first group includes the type of fonts, colours etc. anyway all those cues that are part of the website design. Studies have shown that these cues can affect emotions on those who browse the website (Davis, Wang and Lindridge 2008). The second group includes more pragmatic characteristics like informativeness, effectiveness and entertainment, all elements that enrich the quality of the information and experience provided. This second group will be further described in this section.

Already in the 90s academics described web informativeness (WI) as the ability of a website to let the visitors easily access information; in this area the focus is on the accessibility of the information. Many online stores offer features like customers and experts review, links, opinions, questions and answers etc. (Hoffman and Novak 1996).

According to Chen and Wells, web entertainment (WE) refers to the ability of generating exciting, cheerful, playful experiences; conditions that stimulate human imagination and creativity (Boostrom, Balasubramanian and Summey 2013). Web consumers have the attitude of searching information in the web portals and eventually proceeding with the purchase of the product or the service; this activity tends to be completed by using the lowest time and

effort possible (Prashar, Vijay and Parsad 2017). The level of time and effort spent depends on the type of consumer: hedonic or utilitarian. In both cases the features of the website have an impact; precise, clear, pertinent information displayed in an user friendly and enjoyable way, help the shopper to take a decision minimizing time and energies (Beyari and Abareshi 2018).

In this scenario "effectiveness of information content" (EIC) is equally important as informativeness and entertainment.   Online shoppers are interested in quality of both product/service and information/experience received; how information are reached and how significant the information are for the consumer research, have similar value on the eyes of the online user (Richard 2005).

2.1.2 CONSUMERS' REVIEW

Among all the source of information available, the exponential growth of online social media has brought the users to be more attentive and active on sharing opinions. Platforms like Facebook, Twitter etc. have increased the attention to contents generated by users (UGC) (Tang, Fang and Wang 2014). UGCs applied to electronic commerce are also called e-UGC and are mainly constituted by online reviews and comments.

Several studies have investigated the area of users' reviews with the scope of describing and understanding the effect on consumers' behaviour. According to some studies on e-UGC, online reviews can be described by three different characteristics: valence, volume and rate of dispersion or sentiment (Lu, et al. 2013). Valence refers to the rating that the user provides about the service/product purchased and described in the review. Usually it is a score that numerically rate the value of the product and experience. Volume refers to the amount of reviews provided by the users for the product. Both valence and volumes has been found to positively affect the amount of service/goods sold   (Davis and Khazanchi 2008). Review sentiment refers to the content itself of the review, more specifically positive or negative. In this case the information provided is qualitative as it refers to text contents.

2.2 WEBSITES' DESIGN IS A STRATEGIC CHOICE

2.2.1 CHOICE ARCHITECTURE

Having observed in the area of electronic commerce the variety of features presented to the consumer; it is fair to ask what the behavioural basis are that lead the organisations to build web platforms structured with such quantity of information and choices. Decision-makers psychology and behaviour is therefore an essential area of studies. The behavioural logics are particularly important for those organisations that have the intention of

planning their own sales environment; regardless it is a shop retail or online platform.

An interesting concept in the area of decision-making literature is the so-called "choice architecture". Choice architecture is a term defined by Thales and Sunstein in 2008. It is meant to describe both ideas that a single choice can be presented to the decision-maker in many different ways and depending on how the choice is presented, the decision-maker decide what to choose. As a consequence of this meaning the implications are that the "architects" have the possibility to influence the choice in several ways. The influence may be obtained by varying the choice presentation order, the order attributes and how they are easy to use, the selection of default options etc. Interesting is the concept of "neutral" way to offer an option assuming that the choice is presented without the intent of influencing at all the user; regardless the real intent of the architect, whether it is meant to influence or genuinely just describe the choice, literature suggest that in reality there is no "neutral architecture". Any way the architect presents a choice the users will be influenced by how the choice is presented. Generally in every choice offer there is a default option. Usually the most chosen option is always the default option even if it is a no-choice. The above example suggests that despite there may be no intention of influencing the user the final result is that a certain level of manipulation will occur (Johnson, et al. 2012). It is also true that the user is always in the freedom of choosing the option that suits best. Therefore choice architecture refers to the idea that the way a choice is presented and how the environment where it's presented, affects the user behaviour decision-making process preserving the freedom of choice (Thaler and Sunstein 2008).

Therefore considering as validated the importance of choice architecture in driving and influencing consumers' decision-making process next step is to discuss its components from how the choice is presented to the actual tools and techniques used.

2.2.2 COMPONENTS OF CHOICE ARCHITECTURE

Choice architecture intervention techniques can be divided in three main categories: decision information, decision structure and decision assistance. Decision information is a set of techniques related to how information is presented; in this case the main concern is how the relevant information is visually displayed without altering the core of the option itself; for example architects have the possibility of rearranging information or changing the way they are presented. The second category is the decision structure; its techniques are developed considering the assumption that decision makers always compare the different alternatives available; therefore these techniques have the scope of supporting architects in changing the structure

of a choice; for example rearranging the available options, increasing or decreasing the amount of options, modifying the default option or the effort required to select an option. The third category is the decision assistance; in this case the focus is on creating a bridge between the decision-makers intention and actual behaviour; choice architects have the possibility of providing assistance to the decision-makers with the scope of helping them to behave according to their intentions; for examples decision-makers can be provided with reminders or they can be facilitated to deliver more commitment (Munscher, Vetter and Scheuerle 2016)

Each category involves different techniques that are designed to specifically target certain decision-makers behaviour. It seems pertinent to better explore each technique and the benefit derived.

2.2.3 CATEGORY: DECISION INFORMATION

The focus of this group of techniques is the information; information can be presented in many different ways without altering the choice that is offered. Decision-makers usually base their decisions on the available information; therefore how the information is presented is part of the architect's role (Thaler and Sunstein 2008). In this paragraph some techniques are described: translate information, make information visible and provide social reference point.

Translate information refers to techniques where the choice architect change the format or presentation but not the content. For instance the information can be re-framed and presented in terms of loss rather than benefit; for example healthy food can be promoted as life-saver or death-preventing; therefore framing is not adding new or different information but shifting the focus of decision-makers by presenting information differently (E. U. Weber 2012). Another technique is to simplify the information in order to be more accessible to the decision-makers; for instance it involves the use of plain language or numerical formats.

A second group of techniques is to make the information visible. It often happens that the information for making a decision or influencing behaviour is not available. For instance feedbacks are features that may make own behaviour visible (Hattie and Timperley 2007); this is the case when users are facing usage of certain product or service; feedbacks help to realize the actual usage of the product. For example communication companies send texts to inform about data roaming allowance left. The information might not necessary be related to own behaviour but to actual specs of the product or service; in this case the information is defined as external information. It is task of the architect to reveal external information in order to trigger mechanisms of decision-making.

A third group of techniques relates to the idea of providing social reference points. It's natural people's behaviour to take decision in a social environment; this means that behaviour of others has influence on the individual and serves as social reference point (Cialdini and Goldstein 2004). The behaviour of other people can manifest in various forms including group behaviour or specific individual behaviour; the specific individual behaviour is quite interesting because it happens when the person is particularly valuable in terms of knowledge or fame or specific function. The techniques used by the architect therefore are based on referring to either a descriptive social norm or to opinion leaders. In the first case the mechanism that triggers the decision is that people tend to comply with norms when they are in ambiguous situation or behavioural uncertainty and want to behave appropriately. Choice architects, referring to well-accepted norms, trigger the compliance need of the decision-maker. Referring to opinion leaders is an equally strong technique; it is based on the concept that content of information matter as much as the source of information; advertising campaigns make big use of opinion leaders, testimonials and famous people.

The way information is presented in conjunction with visibility and social reference points is one branch of choice architecture techniques; anyway the information is not the only factor that determine whether a decision is taken or not; the way how the choice is structured is equally important as the information (Munscher, Vetter and Scheuerle 2016). The next section moves the attention from information to decision structure.

2.2.4 CATEGORY: DECISION STRUCTURE

Decision information is just one area of intervention where an architect can work with but it might be limited and not efficient. Sometimes the choice architect has to apply techniques related to the decision structure. Decision structure techniques refer to elements like the arrangement of options and decision-making formats; this last group includes setting defaults, composition of options and change option-related effort and consequences. The next paragraphs in this section are meant to give more details about decision structures techniques

The first technique is the change of default choice; defaults are pre-selected options that are offered to the decision-maker as first choice; the decision-maker still has the possibility to change the option and select the most desired one. Anyway research has shown that the most selected option is the default one. The effect of defaults on behaviours is related to the tendency that people have to reduce effort in general and receive endorsement (Dinner, Johnson and Goldstein n.d.). Therefore defaults have influence on decision-makers and the choice architect has the possibility to influence decision-makers by setting the most appropriate default. No-action default is

the absence of need to make a choice; it can vary from universal mass defaults or defaults based on past behaviours and choices. Setting the appropriate default choice can be a very successful technique in case the target group is homogeneous; for heterogeneous groups setting a specific default could be proven difficult or not effective (Choi, et al. 2003). For heterogeneous groups more efficient tactic is the use of prompted choice that is to force people to actively make a choice; in this case the choice architect doesn't have to set a default (Sunstein 2014).

The second technique is the change option-related effort; it is related to the effort involved in choosing an option compared to another. In general the higher is the effort to make a choice the more the effort results as an impediment to proceed with the choice. Efforts can be classed as physical and financial. Physical efforts are mainly related to the accessibility or distance of a certain target object; the effort has to be marginal but still leads to change in behaviour. Financial efforts refers to decisions concerning to monetary transactions without anyway affecting the final price. Examples include postponing payments to the future or set monthly repayments rather that process the full payment in present time. In terms of human behaviour small but frequent payments are not perceived as costly as a full payment even if the full amount doesn't change. The effect is called "peanuts effect" and it is a valuable tool for choice architects (Weber and Chapman 2005).

The third technique is the change or composition of options; the technique is based on the idea that not only how something is presented can influence the decision-maker but what is presented has an impact too (Chang and Liu 2008). Assuming that behaviour can't always be guided by fixed preferences it is necessary then to offer alternatives introducing additional options. The choice architect therefore has to tactically think how to group and categorize the various alternatives. The scope is to create a bias on the decision-maker considering that very often resources like money and time are limited. Research has shown that elements like size of monetary units have the effect of influencing people; specifically small units are perceived more attractive than large units. On the same level the amount of options has an effect on the decision-maker and the choice architect has to evaluate the option to arrange the allocation of alternatives into a diverse lot of categories.

The fourth and last technique refers to change option-consequences, which is the possibility for the choice architect to involve positive and negative consequences if a choice is made. In this scenario the consequence can be seen as an incentive or disincentive for certain behaviours. An example could be to have a gift or being part of a lottery if a certain choice is made. One mechanism involved is the connection with potential costs or benefits associated with the choice. Connecting the choice or behaviour with a desired

benefit or undesired cost might modify the chance that a choice is made (Thaler and Sunstein 2008). Important to keep in mind is that cost/benefits interventions have the scope of adding extra motivation for people rather than persuade then to choose a specific option. Another mechanism involved is related to the social consequences of a choice; this is the case when the consequence goes beyond a merely monetary cost/benefit. Examples are the social integrity of the individual or environmental effects related to the choice.

Having analysed the vast range of tactics for presenting information and designing the structure where to fit the options it seems logic to explore other techniques where the core element is to assist the decision-maker. The next section moves the attention to supporting techniques that the choice architect can implement to help the decision-makers to put in place behaviours that best fit their intentions.

2.2.5 CATEGORY: DECISION ASSISTANCE

Decision assistance is an area of choice architecture where the architect provide reminders to the individuals in terms of preferred alternatives and foster commitment that could be beneficial.

The first technique is to provide reminders that help to select salient information among the vast spectrum available. Very often information is judged as important but might not be relevant to the decision-maker. In this scenario the choice architect has the possibility to provide reminders that highlight the salience of the option. For example airline companies that remind the passenger to check in online in order to skip queues at the airport. Providing reminders shouldn't be confused with make information visible technique that refers to present unknown or not accessible information to the decision-makers. An alternative tactic for the choice architects is to avoid undesired cues that might lead people to undesired options (Munscher, Vetter and Scheuerle 2016).

The second technique is to facilitate and support commitment either private or public (or both). The scope of both techniques is to overcome the persistent problem of people self-control and place a bridge between their intention and actual behaviour. Private or self-commitment has basis on people understanding of their own lack in self-control when facing temptation or procrastination; the choice architect support people by setting deadlines and activities to minimize such behaviours (Bryan, Karlan and Nelson 2010). Examples of such technique are websites that offer formal commitment by signing a contract or setting penalties for certain behaviours or the lecturer that agrees with the student certain deadline for delivering a piece of research. Public commitment works along the same line; in this case

the commitment is made in front of other people that have the function of supervisor. Committing in public creates external pressure and possible negative consequences if promises are not met. The level of public commitment depends on the form used to set it from public announcement to formal written agreement. Despite working on the same process of social pressure, public commitment shouldn't be confused with changing the social consequences technique where the architect is providing a link to social consequences but not formally setting it.

The role of the choice architect is therefore to design an environment where the decision-maker feels supported in three different levels. In first instance the amount, clarity and reliability of the information provided can determine whether the decision-maker proceed with the decision or not. In second instance the decision-makers need support in terms of taking the actual decision where barriers might come from effort, consequences, too many and misleading options. In third instance decision-makers need support on their behaviours to be congruent with their initial intention; the assistance is pointed to bridge the intention-behaviour gap that might lead the decision-makers to take decisions that are not meeting their intentions. The three categories of techniques in choice architecture are used in designing websites for online shopping; in this context important parts have the risks perceived by the consumers when searching products. The next section of this literature review has the scope to identify perceived risks that consumers might associate with online shopping.

2.3 CONSUMERS' PERCEIVED RISKS

This part of the chapter have the scope of providing to the reader an overview of the perceived risks that a consumer might face when in the process of purchasing online. Level of perceived risks might vary depending on the purpose or the motivation a consumer might have when searching for a certain product. In the area of scope and motivation literature distinguish between utilitarian and hedonic shopping values where utilitarian is meant to categorize those who purchase online purely on functional basis and hedonic those that search and purchase involving feelings like hunt enjoyment, consumer experience and other emotions. Studies and research support the idea that those with utilitarian shopping value are more confident on shopping online; those with hedonic shopping values tend more to be reluctant or to purchase through direct channels (Sarkar 2011). The following section has the scope of providing more details about utilitarian and hedonic shopping values to then move to describe perceived risks that a consumer might face when purchasing online.

2.3.1 UTILITARIAN AND HEDONIC SHOPPING VALUES

Literature suggests that consumers experience, while shopping, depends on two sets of values that influence the motivation of the consumer for searching information about a product and eventually to purchase it: utilitarian shopping values (USV) and hedonic shopping values (HSV) (Liu and Forsythe 2010).

Academics describe utilitarian shopping values (USV) as functional attribute that motives people to purchase online (Sorce, Perotti and Widrick 2005). The attribute is to achieve a precise goal, a mission or a task (Huseynov and Yildirim 2016). In this case for example consumers are interested on price, availability, quick delivery etc. the focus is on the transaction itself rather than the emotional component of an online purchase (Wolfinbarger and Gilly 2001).

Studies on consumers' behaviour described hedonic shopping value (HSV) as a stimulus for people to seek a consumer experience rather than a pure transaction (Wolfinbarger and Gilly 2001). Shoppers for personal needs or hobbies perfectly fit in this category; whoever is looking for experiences like hunting a product, searching for information, learning and entertainment are moved by hedonic motivation. Elements like enjoyment, satisfaction, happiness, playfulness etc. are all emotions involved as well (Huseynov and Yildirim 2016).

Researchers suggest that those who have utilitarian shopping values are more inclined to purchase online where the expected benefits have stronger effect than the risks. On the other side those who have hedonic shopping values are more subject to risks than benefit that online shopping might rise; those consumers therefore might prefer direct shopping channels and refrain from purchasing online (Sarkar 2011). In this context choice architects have to design features and cues in order to minimize the perceived risks and trigger the right decision-making process to the hedonic consumers. Next section has the scope of providing more details about the perceived risks that hedonic consumers might face when searching on websites and online shops.

2.3.2 CONSUMER'S PERCEIVED RISKS

Literature in the area of willingness-to-purchase suggest that consumers follow two stages of evaluation in the purchase process; the first stage is called product evaluation stage where consumers search information about the product and decide whether it fits the necessary characteristics they are looking for. The second stage is called seller evaluation stage; in this case consumers evaluate the seller in regard to all the necessary components that sellers should offer in order to be judged as reliable; those components include delivery time, post purchase services, refund policies, security etc.

Therefore risks are perceived by consumers and associated to the two stages of evaluation (Wu, et al. 2013). This section has the scope of presenting the consumers' perceived risks.

Studies on consumers' attitude toward online shopping, classed perceived risks that a shopper might incur into 5 groups: financial, refund, product, delivery and security/privacy risks (Huseynov and Yıldırım 2016).

Financial risks refer to the uncertainty that consumers have when using credit cards online; the risk of frauds, monetary loss are seen as potential damage from the shopper point of view. Academics found that it has a negative influence on consumers' intention to purchase online (Forsythe and Shi 2003).

Refund risks refer to situations where the consumer is not allowed to return the product/service purchased and receive an adequate refund. Mainly the risk is related to online shopping because it is not always easy for the shopper to check the real quality of the product/service purchased before receiving it. The risk involves also the situation when the product is received damaged and return is required. Literature shows that refund risk has a negative influence toward the intention to purchase (Lian and Lin 2008) (Huseynov and Yıldırım 2016).

Product risks refer to the actual performance of the product/service purchased. Online shoppers fear that the product when received is not meeting the expectation in terms of quality, functionality, general satisfaction etc. Past studies showed that product risk negatively influence the intention to purchase (Forsythe and Shi 2003).

Delivery risks refer to consumers' fear that problems might occur with the delivery of the product. Situations that might occur are delays, product is lost, product is damaged or not shipped, etc. It has been found that delivery risk negatively influence the intention to purchase (Naiyi 2004).

Security/privacy risks refer to both financial risks related to both security of web portals and treatment of personal data. Studies have shown that security and privacy risks negatively influence the attitude to purchase online (Jiunn-Woei and Tzu-Ming 2008).

Financial, refund, product, delivery and security/privacy risks are therefore elements that might limit consumers when purchasing online; specifically hedonic consumers might see those risks as too strong limiting factors when coming to the decision of purchasing. The next section of this chapter suggest how other users experience communicated through users review might have the mitigating effect on those who perceive risks as limiting factors.

2.4 WEBSITE PRODUCT REVIEWS AS A SOURCE OF INFORMATION AND SECURITY

The literature review chapter so far has been focused on describing the elements, features and cues in online shops as examples of what logics a choice architect follows when designing a website and the theoretical concept that are the basis for those designs. These techniques are the tools used to influence consumers on taking a decision and select a choice among the options offered. The architect has to be aware of consumers' motivation, evaluation processes and out of the two to provide features to mitigate the perceived risks associated. Users' reviews have been identified as features that facilitate consumers' decision process when evaluating the potential risks. In this context the intent of the whole research is to evaluate how users' reviews mitigate perceived risks in both product and seller evaluation stages. The next sections have the scope of recapping the main concepts discussed and prepare the reader for the primary research discussion in the next chapters.

2.4.1 USERS' REVIEWS IN THE PRODUCT EVALUATION STAGE

User's reviews related to product evaluation consist of three components: volume, valence and sentiment. Volume is the amount of reviews available for certain product. It's purely numeric parameter and no judgement of the product is present. Valence refers to the rating that consumers gave to the product; it is also visualized as a percentage, a star rating or other scales. Valence is a numerical parameter that usually goes from one to five or 0% to 100%; the score represents the users overall assessment toward the product and it indicates the quality of the product and reflect the value of the product. Literature suggests that valence directly or indirectly impacts sales and moreover influences future ratings (Chong, et al. 2016). Sentiment is the textual comment of the review and reveals thoughts and experience of previous consumers about the product. Sentiments not only are useful for passing information from customer to customer but serve as emotional contagion as well; positive or negative emotions are passed through the textual comments of the reviews (Li, Wu and Mai 2018).

Being the product evaluation stage focused on collecting information about the product, the consumer's perceived risk is that the product doesn't meet the expectations in terms of functionality, general quality and general satisfaction.

Based on the above consideration objectives one to three are defined as follow:

- Objective 1: to investigate numerical users reviews' volume of a product as a tool for mitigating consumers' perceived product risk
- Objective 2: to investigate numerical users reviews' Valence of a product as a tool for mitigating consumers' perceived product risk
- Objective 3: to investigate textual users reviews' sentiment of a product as a tool for mitigating consumers' perceived product risk

2.4.2 Users' reviews in the seller evaluation stage

Users' reviews related to seller evaluation have the same components of product evaluation; in this case volume, valence and sentiment describe values related to the seller. They address the uncertainty that consumers might have in terms of seller reliability and trust. In this case the emotional part is described by the financial, refund, delivery and security/privacy risks (Wu, et al. 2013).

Based on the above consideration objectives four to six are defined as follow:

- Objective 4: to investigate numerical users reviews' volume of a seller as a tool for mitigating consumers' perceived seller risk
- Objective 5: to investigate numerical users reviews' valence of a seller as a tool for mitigating consumers' perceived seller risk
- Objective 6: to investigate textual users reviews' sentiment of a seller as a tool for mitigating consumers' perceived seller risk

CHAPTER 3: RESEARCH METHODOLOGY AND METHODS

3.0 INTRODUCTION

Academics describe research as a structured list of actions accepted by researchers that have the scope of discovering things using a methodical and organised process (Saunders, Lewis and Thornhill 2016). The aim of the research is to increase the general knowledge of a topic using a general and broadly academically accepted methodology. Academics suggest that the core part of the methodology is the framework used in designing the instruments and tools for the research; for the researchers therefore it is a source of inspiration and models useful for developing their own research methods (Blumberg, Cooper and Schindler 2011). This research has the scope of describing to what level user's reviews can mitigate perceived risks on consumers that have the intention to purchase electronics online in Ireland. This chapter describes all the aspects of the methodology used for collecting data through a primary research that will help on answering the research question; it includes the methodology, the philosophy, the approach, the strategy, the population, the data collection and the data analyses.

The next part of the chapter describes the framework used as model for designing the research methodology; the chosen framework is the Research Onion model by Saunders, Lewis and Thornill (Saunders, Lewis and Thornhill 2016).

3.1 PROPOSED RESEARCH METHODOLOGY

This piece of research applies the Research Onion framework described by Saunders, Lewis and Thornill: the model offers a set of layers that from the external one to the core provide a structure to the research. The two external layers refer to the philosophy and approach options that the researcher can choose; the three middle layers refer to the strategy, choice and time horizon options; the core layer is the data collection and data analyses. When adopting the framework the researcher has to choose the optimal option for each layer that suits the objectives of the research.
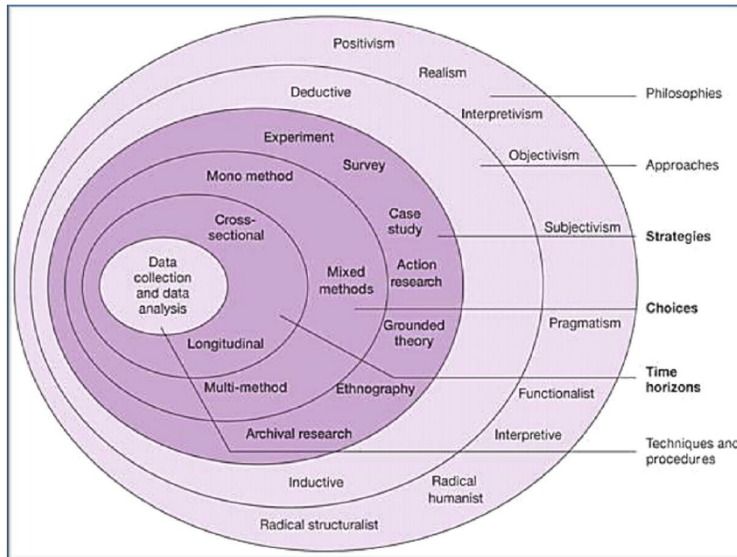
FIGURE 1 SAUNDERS, LEWIS AND THORNILL FRAMEWORK (2016)

Beside the structure offered by the Onion model the methodology contains some considerations about the potential Ethical issues when conducting any investigation and the limitation for the current research.

The next sections of the chapter focus on each single layer of the structure and on the final considerations about ethical issues and limitations.

3.2 RESEARCH PHILOSOPHY

The first and most external layer of the onion is occupied by the research philosophy. The research philosophy can be considered as the assumptions that the researchers make in regard to how they view the world; the essence is to assess what can be considered as acceptable knowledge and the process by which that knowledge is learnt. Moreover it involves considerations about what is important and useful for the scope of the research (Saunders, Lewis and Thornhill 2016). The role of the research philosophy is therefore to justify the researcher's choice upfront of multiple alternatives that might have been adopted. Moreover the researcher has to make assumptions in regard to the nature of society and the nature of science (Collins and Hussey 2009).

In these scenario academics Saunders, Lewis and Thornill (2016) suggest two dimensions related to research philosophy, which drive the researchers to select their approach and processes. The dimensions are ontology and epistemology that are related to relevant questions: for ontology: what is the nature of reality? And for epistemology: what is considered acceptable knowledge? The content of the core questions portray the meaning of the two dimensions. Ontology refers to the view of the nature of reality and it is associated with considerations whether "social phenomena and their

meanings have an existence that is independent of social actors" (objectivism) or "social phenomena and their meanings are continually being accomplished by social actors" (subjectivism or constructionism) (Bryman and Bell 2011). Epistemology refers to the researchers' view of what should be considered acceptable in an area of study and it is associated with considerations whether only the measurable and observable phenomena can be considered valid (positivism) or acknowledge the difference between people and objects in nature and focus on the subjective meanings of social actions (interpretivism) (Bryman and Bell 2011).

The dimension selected for this piece of research is the epistemological and the reason is related to the scope of the research that is to describe the role of users' review as form of mitigation of perceived risks in consumers' intention to purchase online. The topic involves people irrational behaviour when making a choice; in the researcher's opinion the interest is not focused on explaining human nature in the act of making a choice but instead to acknowledge the behaviour and accept it as it is; therefore ontological definition is rejected in favour of epistemological one. Furthermore people opinions are considered as acceptable and the information gathered from people considered valid as material for answering the research question.

Between the two considerations in the epistemological dimension in terms of what can be considered valid, interpretivism is adopted in this research. The reason of the choice is that perceived risks are a reality that is constructed through individual feelings and perceptions therefore can be considered subjective rather than objective. In this scenario people opinions are source of information rather than objectively measurable and observable phenomena. Along the same line how people receive users' reviews is a subjective action of perception and depends on the recipient attitude and personality rather than having a unilateral and unique valence.

In conclusion the first layer of the onion model has been considered by choosing the most appropriate philosophy; epistemology dimension is adopted because the scope of the research is to embrace people behaviour and account it as new piece of knowledge; the position adopted within the epistemology is the interpretivism because human behaviour and feelings can't be objectively and universally be measured or observe; in this case the researcher has to take people opinion as their true vision of reality. Next section of the chapter has the scope of applying the second layer of the framework and therefore to describe the approach adopted for the research.

3.3 RESEARCH APPROACH

The second external layer of the research onion is dedicated to the selection of the research approach. Literature suggests two different logics of approach: deductive and inductive. The deductive approach is a logical sequence of actions that starts by taking an existing scientific theory, moving to the method, collection of data and eventually providing findings that validate the theory. The purpose is to test hypotheses based on theoretical background through a research strategy for data collection and analyses; conclusion follow from the premises presented so that it can't be false if the premises are true. Opposite to deduction, the inductive approach starts by defining a method, moving to data collection and analyses and eventually to develop the theoretical premises. Inductive approach has a lower strength compared to deduction because of lacking of strong logical link between cause and effect (Cameron and Price 2009). For the purpose of this research an inductive approach has been adopted which imply that data is collected to describe a phenomena with the eventual goal of producing theoretical premises. Furthermore for both reasons of limited time and contents of the research it best fits the researcher's needs; specifically the nature of the topic involving human perceived feelings, particularly risks associated with purchasing online, drive the choice of the researcher to this direction. As the inductive approach is focus on the circumstance and mechanisms in which the phenomena is taking place rather than on applying a scientific model with the support of big data, the primary research can be applied to a small sample of people. Contrary deductive approach requires a large sample to be applicable (Saunders, Lewis and Thornhill 2016).

As a consequence of these considerations on the inductive approach it is appropriate to use qualitative data for the research where data is collected by involving a small group of people and using the appropriate method.

In combination with the type of approach academics refer to three different natures of research that can be used depending on the purpose of the research, particularly they are exploratory, descriptive and explanatory studies.

Exploratory study is valuable to discover what certain behaviour is and gain more information about a topic; it is particularly used to discover or clarify a specific issue or phenomena (Cooper and Schindler 2014).

Explanatory studies are meant to establish relationship between variables; they are cause-orientated and produce conclusions about the relationship between an independent and dependent variable (Cooper and Schindler 2014).

The purpose of descriptive study is to gain an accurate insight of behaviours, events or group of people (Cooper and Schindler 2014). This type of research might be an extension of an exploratory study or a pre-research before an explanatory one. In this last case they are known as descripto-explanatory (Saunders, Lewis and Thornhill 2016).

In the context of the topic of this piece of research, the chosen philosophy and approach it seems natural for the researcher to design the research as a descripto-explanatory one. The justification for the choice is that despite the literature of consumers' behaviour is rich of contents the area of users reviews as tools for mitigating perceived risks seems open to further studies; in addition reason to reject the explanatory approach is that it seems to the researcher that literature is not rich enough to perform a pure explanatory study.

In conclusion the selected research approach is the inductive justified by the content itself of the research question; in addition the nature of the research is descripto-explanatory. The next section has the scope of gathering the reasons expressed in the first two layers of the onion research model and produce a research strategy.

3.4 RESEARCH STRATEGY

The third layer of the research onion model refers to the choice of the research strategy. Academics suggest that the research strategy may be seen as the action plan drawn by the researchers in order to achieve their goal (Cooper and Schindler 2014). Furthermore it is the link between the selected philosophy and research approach. The strategy might be one or more out of: experiment, survey, archival and documentary research, case study, ethnography, action research, grounded theory and narrative enquire (Saunders, Lewis and Thornhill 2016). Within the spectrum of strategies the most appropriated for the purpose of this piece of research is belonging to the group of Grounded Theory. Grounded Theory was developed by Glaser and Strauss in 1967 "as a process to analyse, interpret and explain the meanings that social actors construct to make sense of their everyday experiences in specific situations". Grounded theory is suggested to take an inductive approach (Cameron and Price 2009), which is anyway moving from induction to deduction or called abductive approach. The justifications for choosing this strategy are related to the philosophy and approach selected and more important to the scope of the research that is to describe the role of users' reviews as elements to mitigate the consumers' perceived risk when shopping online. As mentioned the topic is involving human perceived feelings, particularly risks associated with purchasing online therefore consumers can be seen as social actors and the research wants to dig into

their experiences when facing the decision of purchasing online. In order to fulfil the aim of the strategy, semi-structured interviews are the tools that best fits the final goal; the justification is that semi-structured interviews are determined by a list of categories or questions with the possibility of spacing further whenever the interviewer see the necessity.

3.5 RESEARCH CHOICE

The fourth layer in the research onion model by Saunders, Lewis and Thornill (2016) refers to the research choice that distinguishes whether the researcher uses a mono-method or multiple methods design.
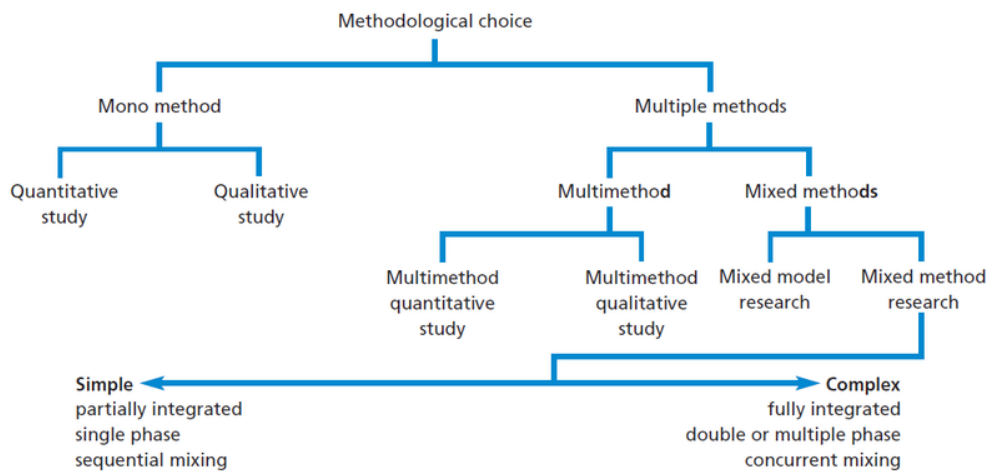
FIGURE 2 METHODOLOGICAL CHOICE (SAUNDERS, LEWIS AND THORNILL, 2016)

In the area of mono-methods two options are suggested: quantitative and qualitative study. Taking in consideration the research philosophy, approach and strategy it is appropriated for the scope of this piece of research to use a qualitative study method. The justification for the choice is similar to the adoption of an inductive research approach and that is, the nature of the topic involving human perceived feelings, particularly risks associated with purchasing online and the effect of users' reviews. The opinion of the researcher is that despite the literature of consumers' behaviour is vastly populated with studies and researches, it is not very well explored in terms of users' reviews as a tool for mitigating perceived risks; therefore the existing literature is not rich enough for approaching a quantitative research. Contrary literature provides many ideas and suggestions for a qualitative research on the topic.

In conclusion qualitative method is adopted as to be the most suitable for the scope of the research and research strategy.

3.6 TIME HORIZON

The fifth layer of the research onion model refers to the time horizon of the research. The model suggests two options: cross-sectional and longitudinal. Cross-sectional studies are one-off researches and have the scope of presenting results related to the present state. Longitudinal studies have a longer duration that can vary from months to decades.

The time horizon selected for this piece of research is a cross-sectional one since the time frame available is limited, which is the primary reason for rejecting longitudinal time horizon in first place. The qualitative data collection has been conducted over a period of two weeks.

The next section of the chapter has the scope of describing the core layer of the research onion model that is the data collection. This last part includes all the attributes necessary for the researcher in order to collect and properly analyse the data.

3.7 DATA COLLECTION

3.7.1 SECONDARY DATA COLLECTION

Data collection techniques like surveys, interviews, observation etc. very often are time consuming and expensive. Researchers and students might not have such resources as time and financials to afford to collect all the data through primary researches. In this scenario collecting information and data from existing researches allow to save time and financial effort. Therefore secondary data refers to existing studies and researchers use it as a starting point for developing further knowledge (Bryman and Bell 2011). Academics listed secondary data into three main groups that includes documentary, survey-based and multiple sources (Saunders, Lewis and Thornhill 2016).
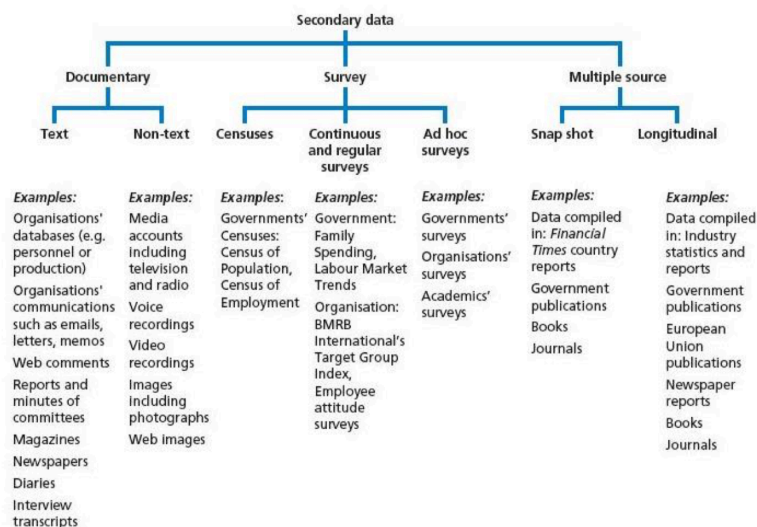

FIGURE 3 TYPES OF SECONDARY DATA (SAUNDERS, LEWIS AND THORNILL, 2016)

Secondary data used in this piece of research belongs to the "multiple source" group, specifically to the two subgroups of Snap shot and Longitudinal. Therefore any source of information used has been collected from Journals, Books, European Union publications etc. The main tool used has been the National College of Ireland library section and its search engine; information has been searched within the most known available database (SAGE, Emerald etc.).

3.7.2 QUALITATIVE PRIMARY DATA COLLECTION

Qualitative data can be collected using different methods; the most known and cited by academics are: ethnography/participant observation, qualitative interviewing, focus groups and discourse/conversations (Bryman and Bell 2011). Among the list of techniques semi-structured interviews method has been selected.

The researcher conducted six face-to-face semi-structured interviews with selected frequent on-line shoppers. The method choice allows the researcher to design a set of specific questions but anyway leave some space to the interviewees to provide their own insights (Saunders, Lewis and Thornhill 2016). Focus group method has been considered as well but eventually rejected because of its own nature of having a group of people involved all together; since the individual opinion can be biased by others, the researcher was interested in listening the single opinion rather than the group one as a collective.

The semi-structured interviews questionnaire has been designed using a combination of open questions, probing questions and specific/closed questions. The reason of using open questions is that they allows the interviewee to space in the topic and maybe to provide unforeseen insights. Probing questions have been used to explore further the objectives of the research and therefore to keep the interview in the right direction. Specific/closed questions have been used firstly as introduction to the opening and probing questions and secondly for obtaining specific information (Cooper and Schindler 2014). The questionnaire designed consists of two set of question each of them related to three objectives (1 to 3 and 4 to 6) for a total of 21 questions related to the 6 objectives.

3.7.3 POPULATION

The sample selected for the interviews consists of 6 people that commonly use online channels for shopping. The interviews were conducted face-to-face; they were recorded and transcribed using an application for mobiles.

The 6 people selected were 3 women and 3 men; the reason for selecting both genders was to have multiple points of view on the topic. All of them aged between 25 and 45 years old; reason for selecting that age spectrum

was to have a range that covers the main online buyers. The sample was selected among friends, colleagues and college mates. Different nationalities were covered with the scope of reaching different prospective.

3.7.4 ANALYSING QUALITATIVE DATA

In accordance with the research strategy Grounded Theory method applies to data analysis. Academics suggest several processed that can be applied; Charmaz (2006) suggested that data collected and recorded through semi-structured interviews are then transcribed; once the answers have been transcribed the analysis consist on identifying a list of initial codes that can be used for labelling the data collected; second step is to grouping the full list of codes into a shorter list of codes; the result is a list of focused codes, each of them group one or more of the initial codes (Saunders, Lewis and Thornhill 2016).

Applying Charmaz approach the author created a template, which was filled with the transcribed answers; each answer was labelled applying initial codes. Once each section was labelled the initial codes were grouped into focused codes that were selected to identify each theme of the research. The use of the template helped the researcher to give a structure to the amount of data collected and discern the core elements.

3.8 ETHICAL ISSUES

The word ethics refer to standards of behaviours that the researchers have to comply with in relation to those who are subjects of the research or somehow affected. Those standards behaviours are not unilaterally accepted and different philosophies apply to the problem. A deontological view suggests that researchers should behave according to a pre-set list of rules and not complying with those can never be justified. Contrary, the teleological view argues that the judgement whether an act of conduct can be justified or not should be based of the consequences of the act itself rather than a pre-existent list of rules. Institutions like Universities in order to overcome those dilemmas develop a code of ethics; the code lists principles and rule that are judged as accepted by the institution and are meant to guide and support the researcher's conduct (Saunders, Lewis and Thornhill 2016).

In accordance with National College of Ireland code of ethics all the activities of the research were conducted in respect of all the parties involved. Data collected during the semi-structured interviews was stored in a local drive and access was limited to the researcher only with the purpose of maintaining individual privacy. All the interviewees agreed on participating to the interviews on a voluntary basis and they were free to withdraw at any time.

3.9 LIMITATIONS TO RESEARCH

Limitations can be considered as external factors that limit the researchers when doing their investigations; those impediments are extraneous to the researcher's will and must be identified and considered when conducting the research. As any other study, the author of this piece of research faced some limitations.

Limitations related to secondary data collection and literature review are related to the lack of published material. Despite the literature related to consumers' behaviour, website features and cues, consumers' perceived risks is vastly populated with studies and researches, the researcher faced limitations on finding material that investigates the websites users' reviews as tool for mitigating consumers perceived risks.

The lack of literature in the specific topic selected is source of limitations for the methodology as well. Many journal articles and publications that suggest correlations between website features and consumers' intention to purchase used quantitative data collection method; in these cases the academic background was strong and several frameworks/models were available. In regard to correlation between websites users' reviews and perceived risks where the focus is the understanding whether there is an element of mitigation of the risks and its nature, literature background is not so strong; assuming those reflections, data of this piece of research has been collected using a qualitative methods. Recommendation for further studies is to apply a quantitative approach to a bigger sample and search for statistically significant correlations between the elements involved.

CHAPTER 4: RESEARCH FINDINGS

4.0 INTRODUCTION

The interest of this piece of research is to explore and describe how the users' reviews have the functionality of mitigating the consumers' perceived risks on both the product and the seller. The topic has been investigated using a qualitative methodology particularly performing a set of semi-structured interviews to a sample of people who normally search and purchase on-line.

The findings of the process are listed in this chapter section by section in accordance with the objectives of the research. Whereas objectives 1 to 3 are related to the effects of users reviews on consumers during the product evaluation stage of their research, objective 4 to 6 are related to the effects of users reviews on consumers during the seller evaluation stage.

4.0.1 PRODUCT AND SELLER REQUIREMENTS FROM THE CONSUMER PROSPECTIVE

Preliminary information has been collected with the scope of understanding what requirements consumers expect when they have the intention to purchase on-line some electronic product. The requirements are classed as product and seller requirements. These requirements are important for the research because they are strictly related to the perceived risks that consumers are facing in their decision-making process.

The research shows that consumers are very attentive on collecting information about the product they want to purchase; in first instance the product has to meet the performance expected by the buyer therefore information about specifications, user experience and reliability are the top researched. This observation recalls the description of hedonic shopping value (HSV) described by Wolfinbarger and Gilly in 2011 where consumer experience is the main stimulus for hunting online. The second top requirement is the price of the product especially related to the existing alternatives with the same specifications. In this case important factor is the value of the brand of the product researched and the final value for money. Transactional elements like price and value for money are correlated with utilitarian shopping value (USV) described by Sorce et al. in 2005.

The research shows that consumers are very attentive on collecting information about the seller as well; the general requirement is the seller reliability that can be broken down into: payment methods and security, post purchase policies like returns and refunds, seller reputation; these consideration can be correlated with Huseynov and Yildirimin risks description and classification (2016).

In conclusion this preliminary part of the research shows that consumers spend long time researching information about both the product and the seller; particularly the most common channels are forums, general and specific Internet searches through the search engines and manufacturer websites, users' reviews and word of mouth. Hedonic and utilitarian shopping values are present with nearly equal weight on consumers evaluation of both product and seller requirements.

The next sections of the chapter have the purpose of exploring and describing what is the role of users' reviews in the consumers' process of identifying the product and seller that meet their requirements.

4.1 OBJECTIVE 1 RESEARCH FINDINGS – PRODUCT USERS REVIEWS' VOLUME

"To investigate numerical users reviews' volume of a product as a tool for mitigating perceived product risk".

The research findings outline the role of users' reviews' volume in the process of evaluating a product before purchasing online. The questions asked have the purpose of gaining insights about how important is the number of users reviews in the decision making process and give an approximated value of a minimum amount necessary for proceeding with the next steps.

4.1.1 THE ROLE OF USERS REVIEWS' VOLUME IN THE PRODUCT EVALUATION STAGE

The research shows that reviews' volume in the product evaluation stage is not a very strong tool for mitigating perceived product risk if it stands alone as a judging parameter. The added value of reviews' volume increases in strength if combined with valence and sentiment of the reviews. The combination volume plus valence is considered sufficient in some cases.

The result can be correlated to the study of Chong et al. where the authors conclude that interactions between volume and sentiment are more effective that the single element (2016). The limitations of Chong et al. results are that the correlation is directed onto the potential sale rather than the possibility of mitigating perceived risk; furthermore the study do not distinguish whether the online users reviews apply to the product or seller evaluation stage.

4.1.2 THE EFFECTIVE AMOUNT OF REVIEWS

The research shows that there is no unilaterally accepted amount of users reviews that can be considered as the minimum to proceed with the next steps of the decision making process. The main area of uncertainty is the popularity of the product selected; consumers in the process of purchasing

popular products identify as more than one hundred the minimum amount of reviews; on the other side for niche products few reviews might be enough.

This observation is aligned with studies on correlation between information overload and increase on people trust; in this case the higher is the amount of information available the higher is the trust that the recipient place on the source of information; however a limit in the amount of information exists over that the trust decreases (Furner and Zinko 2017). However it has to be noted that reviews' volume is usually express by a single number therefore at this stage of the evaluation process there is no risk to have information overload because whether the volume is high or low it would be displayed as a single number; completely different scenario is for the textual sentiment component.

4.1.3 SUMMARY OF OBJECTIVE 1 FINDINGS

The research confirms studies stating that number of users' reviews is not a factor that directly mitigates product perceived risk; it has anyway an initial role of driving consumers into the next steps of the evaluation process and can be considered valuable as initial screening.

Furthermore the power of volume depends on the type of product investigated; whereas popular products require high amount of reviews, niche products require just few reviews; it seems therefore that reviews volume is more effective on popular products.

These observations bring the author to conclude that product users' reviews' volume have the function of giving the initial information to the consumer when purchasing popular product; the information however is not enough to mitigate the perceived product risk.

4.2 OBJECTIVE 2 RESEARCH FINDINGS - PRODUCT USERS REVIEWS' VALENCE

"To investigate numerical users reviews' valence of a product as a tool for mitigating consumers' perceived product risk".

The research findings outline the role of users' reviews' score or rating in the process of evaluating a product before purchasing online. The questions asked have the purpose of gaining insights about how important is the score of users' reviews in the decision making process and give an approximated value of a minimum score necessary for proceeding with the next steps.

4.2.1 THE ROLE OF USERS REVIEWS' VALENCE IN THE PRODUCT EVALUATION STAGE

The research shows that the score of reviews as well as the volume do not directly mitigate product perceived risks. The value of the valence is taken in

consideration if combined with the volume of the reviews and has the main function of initial screening in the decision making process.

The result is closely aligned to the conclusions of the study published by Hu, Kho and Reddy which conclusion is that valence do not have direct impact on sales (Hu, Koh and Reddy 2014). The limitation of this comparison is that Hu et al. piece of work investigates effect of reviews on sale and not on mitigating perceived risk. The results partially match the conclusions of Coursaris et al. (2018) that found in their study that positive valence could be considered useful as source of information; in this case the limitation is that they studied users' reviews where valence was displayed together with the sentiment therefore it is not clear whether pure rating or textual comments are the key drivers (Coursaris, Van Osch and Albini 2018).

4.2.2 THE EFFECTIVE SCORE OF REVIEWS

The research shows that people have different perception of what should be the minimum score for an effective product rating. In some cases more than 60% or equivalent might be enough, in other cases 80% or equivalent.

Further finding is that some people perceive the scale of rating important in the judgement. Scale could be a value from 1 to 5 or percentage based or any other; the research shows that percentage scale is more effective than any other scale (ex. 1 to 5); interviewees have different perception of the scale 1 to 5 in comparison with percentage one; a value of 3 is perceived as 50% instead of the mathematical equivalent 60%.

4.2.3 SUMMARY OF OBJECTIVE 2 FINDINGS

The research shows that score of users reviews is not a factor that directly mitigates product perceived risk unless it is combined with a high volume. As well as the review volume, score is part of the initial screening in the decision making process. Important is the scale of the score; percentage score seems to be the most effective.

4.3 OBJECTIVE 3 RESEARCH FINDINGS - PRODUCT USERS REVIEWS' SENTIMENT

"To investigate textual users reviews' sentiment of a product as a tool for mitigating consumers' perceived product risk".

The research findings outline the role of users' reviews' text or sentiment in the process of evaluating a product before purchasing online. The questions asked have the purpose of gaining insights about how important is the sentiment of users' reviews in the decision making process and what are the elements that effective text reviews have in common.

4.3.1 THE ROLE OF USERS REVIEWS' TEXT IN THE PRODUCT EVALUATION STAGE

The research shows that textual part of users' reviews has a high impact on consumers' decision-making process; particularly when combined with high volume and high valence or rating as a source of information to explain the reason of such high volume and high score.

Furthermore when reading users reviews consumers are looking for some specific information or sentiments. In first instance people are concerned about the authenticity of the review therefore they screen the language used to make sure that they are reading a genuine and authentic users' review. The results is supported by Yusuf et al. study that suggests that the credibility of electronic word of mouth (eWOM) is positively related to the eWOM engagement on consumer intention to purchase (Yusuf, Hussin and Busalim 2018).

In second instance the consumers are looking for common sentiments and feedback; it seems that they are not interested on reading all the reviews and the whole text of each one but they are more interested on finding some keywords related to other people experience. The result recalls the study of Furner and Zynco in 2017 about the information overload where they suggest that high amount of information is useful unless it exceed a certain upper limit.

4.3.2 THE COMMON SENTIMENTS IN EFFECTIVE REVIEWS

The research shows that consumers in the product evaluation stage when reading users' reviews are looking for recurrent sentiments or keywords. In first instance product specifications related words are the top searched; secondly sentiments related to the product users experience and positive feedback. Negative feedback are searched as well but with limitations; specifically people seems to have high awareness that in the pool of negative feedbacks some might be driven by negative experience with the seller or just related to the human nature of complaining even if not necessary. Furthermore other elements like price and other benefits seem to mitigate the impact of negative reviews; this observation is aligned with Pee's study on negative reviews (Pee 2016)

4.3.3 THE MOST EFFECTIVE PART OF THE USERS REVIEWS AND DYNAMICS

The research shows that textual part of the users reviews is considered as the most important compared to volume and valence; it is also true that preliminary screening is done through number and score of the reviews and then completed using the textual part.

4.3.4 SUMMARY OF OBJECTIVE 3 FINDINGS

The research shows that text component of users reviews is the most effective on mitigating perceived product risks; the power of the text part is enhanced by the amount and score of the reviews. The contents of the text

have a key role in the decision making process; particularly consumers are looking for product spec and product user experience keywords. Positive feedbacks have the effect of reassuring consumers and generate satisfaction; negative comments are considered but deeply evaluated to understand whether the negative feedback is genuinely related to product or to other component like the seller or human attitude to complain. Volume and score have the value of initial screening in preparation of the pure info searching through the text. Another element is the authenticity of the users review; in this area important is the language that is found by the reader; more the language is genuine more the text review appears reliable.

The result confirms Hu, Koh and Reddy study that suggest that textual sentiment have a direct impact on sales (Hu, Koh and Reddy 2014). Chong et al. as well confirm the result concluding in their research that valence in combination with sentiment have a positive effect; sentiment is considered as the element that have direct impact on sales (Chong, et al. 2016). The limitation in these two cases is that they correlate users review to sales rather than perceived risks

4.4 OBJECTIVE 4 RESEARCH FINDINGS - SELLER USERS REVIEWS' VOLUME

"To investigate numerical users reviews' volume of a seller as a tool for mitigating consumers' perceived seller risk".

The research findings outline the role of numerical users' reviews' volume in the process of evaluating a seller before proceeding with a purchase online. The next sections discuss the perceived risks that a consumer wants to clarify when looking at reviews volume, how helpful is the volume of reviews and if there is a common perception of a minimum amount of reviews that satisfy the consumer.

4.4.1 THE RISKS INVOLVED IN THE SELLER EVALUATION STAGE

The research shows that consumers look at users' reviews for clarifying doubts about the seller; doubts are generated by perceived potential risks and users reviews are considered source of valuable information. Volume of reviews is a piece of information that helps to clarify general risks related to the seller. Interviewees mentioned that reputation is an important requirement for a seller; high amount of reviews provide at first glance an indication of the popularity of the seller evaluated and gives a first indication of its reputation. Discussing seller reputation the respondents mentioned specifically the reliability in terms of payment methods and security. Payment methods and security are confirmed to be main risks seller related by several studies like Huseynov and Yildirim (2016), Forsythe and Shi (2003), Lian and Lin (2008).

4.4.2 THE ROLE OF USERS REVIEWS' VOLUME IN THE SELLER EVALUATION STAGE

The research shows that respondents consider high number of consumers' reviews as a first valuable indication that a seller meets the requirements expected. However the volume if standing alone doesn't sort all the concerns about the seller; in addition to the amount of reviews respondents mentioned other elements like individual researches and actual text of the reviews. The result is confirmed by Chong et al. research where they suggest that volume do not have direct impact on sales unless it is interacting with sentiment (Chong, et al. 2016). Limitations are that in this case the study is focused on sales rather than perceived risks and there is no distinction between product and seller evaluation stage.

4.4.3 THE EFFECTIVE AMOUNT OF REVIEWS

The research shows that consumers rely on the information given by consumers' reviews if the amount is considered fairly high; however respondents recognize that high amount of seller's reviews is linked to the product popularity and therefore in that case they accept the existence of a minimum value. The observation is in accordance with Furner and Zinko information overload study (2017). For not popular product respondents realize that low amount of seller reviews doesn't necessary mean that the seller is not reliable; in this case reading actual text and doing other researches seem necessary.

4.4.4 SUMMARY OF OBJECTIVE 4 FINDINGS

The research shows that consumers want to clarify concerns about seller general reliability and reputation when looking at the amount of users' reviews. High amount of reviews gives the message that the seller is popular and therefore reliable; however users' reviews' volume do not directly mitigate perceived risks and extra source of information is necessary.

Moreover an important role is given to the popularity of the product; non-popular products might have few reviews and consumers are aware that it is not a negative indication but further researches are needed.

4.5 OBJECTIVE 5 RESEARCH FINDINGS - SELLER USERS REVIEWS' VALENCE

"To investigate numerical users reviews' valence of a seller as a tool for mitigating consumers' perceived seller risk".

The research findings outline the role of numerical users' reviews' valence or score in the consumers' seller evaluation process. The next sections aim to discuss the risks seller related that consumers want to clarify when looking at the reviews' score, the importance of sellers' score when in the decision-making process and the components of an effective seller score.

4.5.1 THE RISKS INVOLVED IN THE SELLER EVALUATION STAGE

Similar to review volume correlation with seller related risks the research shows the consumers when looking at sellers' users' reviews aim to clarify doubts related to payment methods, security and post purchase services like refunding policies. Seller general reliability is as well part of the evaluation process and risks related to data protection and delivery reliability are included even if with lower priority compared to payment security.

4.5.2 The role of users reviews' valence in the seller evaluation stage

Research findings show that the value added by the users' reviews' valence or score to the seller evaluation stage is similar to the volume. Respondents perceive the score valuable, however further researches are required either from alternative sources or from the actual text of the reviews. As found for the product evaluation stage volume and valence seems to be a preliminary source of info aimed to perform an initial screening of both the product and the seller.

The result is in contrast with Ayala and Wu cited in Wu et al. (2013) where in their study they suggest that valence always mitigate the consumers' perceived risks about the seller. On the other side the finding aligns with the research made by Hu, Kho and Reddy where they suggest that valence alone have indirect effect on sales but when interacts with sentiments it has a positive effect (Hu, Koh and Reddy 2014). In this case the limitation is that the study investigates effects on sales rather than mitigation of perceived risks.

4.5.3 The effective score of reviews

Research shows that there is no unanimous judgement in regard to the minimum score value that a seller should have to be considered reliable. The feedback from the respondents is very similar for both product and seller; someone consider 80% as the minimum necessary others 60-70%. The main concern is that score is not explaining the reason why previous buyers didn't reach the full satisfaction therefore further researches are required.

4.5.4 Summary of Objective 5 findings

The research shows that seller users' reviews valence is valuable when integrated with other source of information; it helps to clarify doubts related to the reliability of the seller in terms of payment security and post purchase services. As well as for the reviews volume it seems to be part of an initial screening process; a process that requires further information to be completed.

4.6 Objective 6 Research findings - Seller users reviews' sentiment

"To investigate textual users reviews' sentiment of a seller as a tool for mitigating consumers' perceived seller risk".

The research findings outline the role of textual sentiments of users' consumers' reviews in the seller evaluation process. In first instance the interest is focused on the risks that the actual text of users reviews might clarify; in second instance the interest is in the importance and role of text reviews from the consumer prospective; third section is focused on finding common grounds and sentiments that consumers are looking for in the textual users' review; last section discuss how volume, score and text interact each other.

4.6.1 The risks involved in the seller evaluation stage

The research shows that consumers when screening through the text of users reviews are looking for information that can clarify concerns and doubts about the seller. The main focus is on a general evaluation of the seller; as well as the risks related describe in volume and valence section, the respondents focus their attention on payment reliability and security and refund policies; results confirmed by Forsythe et al. (2003), Huseynov and Yildirim (2016). However when discussing about text of the reviews the information seeking process seems to involve more topics compared to volume and valence discussions like delivery time, post purchase service etc. This observation seems to confirm that volume and valence have the role of initial screening and confirmation is required through the actual text.

4.6.2 The role of users reviews' text in the seller evaluation stage

The research shows that textual sentiments of the users' reviews have an important role in the seller evaluation process. Volume and valence might not clarify all the doubts or anyway leave a certain level of uncertainty that need to be further clarified. However some respondent mentioned that reading the actual text of reviews is time consuming and produces extra effort than just looking at the numerical values of volume and valence. This observation brings to think that volume and valence give valuable information that need to be confirmed by actual description of the experience; it would confirm that volume and valence produce an initial screening that the text can confirm or deny. The result is in accordance with Chong et al. study (2016).

4.6.3 The common sentiments in effective reviews

The research findings show that effective textual users' reviews have in common key sentiments or keywords. Respondents mentioned that they are looking for positive feedbacks and comment that can confirm the seller

reputation. As well as for the product evaluation stage it seems that negative feedback are useful but need to be investigated further to understand the nature of them. Respondents tend to be reassured by positive comments but not to be demotivated by negative ones; this is the case especially if the price offered by the seller is competitive. The same conclusion was reached by Pee (2016); price and other components of the marketing mix have the role of mitigating effect of negative reviews.

4.6.4 THE MOST EFFECTIVE PART OF THE USERS REVIEWS AND DYNAMICS

All the observations related to the seller evaluation process lead to the conclusion that the textual sentiment of the reviews is the most effective component. However volume and valence has the positive role of first screening.

4.6.5 SUMMARY OBJECTIVE 6 FINDINGS

The research shows that text reviews are the last part of the seller evaluation process and become important to clarify residual doubts in regard to the seller; doubts are related to general seller reliability especially payment security and post purchase services; however other components of seller reliability are evaluated at this stage like delivery times and data protection. Consumers are looking for specific information in the text part of the reviews, particularly information that can confirm or deny the initial opinion grown in the initial part of the seller evaluation process; it seems that positive feedbacks are accepted doubtlessly while negative feedbacks require a better understanding of the reasons.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION

Existing literature shows limitations on expanding the role of users reviews as a tool for mitigating consumers perceived risks. Studies on users reviews are focused on the relationship between the review components and the consumer intention to purchase without taking in consideration what are the risks involved in the process (Chong, et al. 2016). Studies on consumers' perceived risks purely describe and list the risks perceived by the consumer with no considerations about the potential role of users' reviews on mitigating those risks (Wu, et al. 2013).

5.1 THE ROLE OF USERS REVIEWS TO MITIGATE CONSUMERS PERCEIVED RISKS

The research aims are in first place to investigate if users reviews could be considered useful tools for clarifying doubts and concerns that generates perceived risks; secondly the aim is to investigate the role of users reviews' components in mitigating perceived risk during the product and seller evaluation stages; last aim is to discuss the characteristics of effective users reviews.

5.1.1 USERS REVIEWS AS USEFUL SOURCE OF INFORMATION

The research findings show that consumers when approaching the process of purchasing electronics online define certain requirements that both the product and the seller have to meet in order to be considered for further evaluation (Wu, et al. 2013). While requirements for product are mostly related to the specs, performance, user experience and price, for seller the main focus is on payment methods, security, post purchase policies and reputation (Huseynov and Yildirim 2016). During the decision-making process consumers research the necessary information through different channels like websites, forum, word of mouth etc.; in any case other people personal experience and opinion is the most valuable piece of information. Research findings show that users reviews together with word of mouth are the most used and reliable source of information when it comes to evaluate a product or a seller especially if the selection is among multiple options.

5.1.2 USERS REVIEWS IN THE PRODUCT EVALUATION STAGE

The research findings extrapolate the role of volume, valence and sentiment in the process of evaluating a product. Consumers utilise the information about volume and valence as initial screening to select the product that might potentially suit their expectations. Both volume and valence do not completely mitigate perceived risks product related and the information is

not sufficient for judging the product as satisfactory. The added value is given by the textual sentiment of the review (Hu, Koh and Reddy 2014); the contents of the text have a decisive part; keywords related to product specs and positive personal experience increase the chance that the consumer overcomes the perceived risk about the product. Negative feedback doesn't necessary demotivate the consumer but initiate a process to clarify the reason behind it (Pee 2016). The mitigating power of the textual sentiment is enhanced in case both the volume and the valence have high values (Chong, et al. 2016). Users reviews' volume do not affect at all the consumers' intention to purchase in case of niche products; people realise and accept that they can't expect high amount of feedbacks on non-popular product; in this case reviews volume is ignored.

5.1.3 USERS REVIEWS IN THE SELLER EVALUATION STAGE

Extrapolating the key concepts out of the findings of the research, users reviews in the seller evaluation process has a role similar to the product evaluation ones. Volume and valence have joint effect of providing information for initial evaluations. High volume and valence suggest the idea to the consumer that the seller is popular and therefore reliable with high reputation; anyway standing alone they do not completely mitigate perceived risks (Chong, et al. 2016). Reputation and popularity do not necessarily imply low risk especially for risks concerning payment methods and post purchase service. Textual sentiment strengthen the initial idea that the consumer generated in the initial screening; however the textual description of both positive and negative feedback helps the consumer to clarify residual doubts.

5.1.4 THE EFFECTIVE USERS' REVIEW

The role of users reviews in both the seller and the product evaluation processes is to mitigate perceived risks. Especially the textual component of the review has a positive effect. Effective reviews therefore are those that are able to give information about the popularity of both product and seller adding description of the quality of the product or service delivered by the seller. High amount of reviews combined with high valence or score have the initial effect of drawing attention on the product or seller. Textual feedbacks are effective when they have common keywords; in case of product related reviews keywords refers to the specifications and to positive users' experience; in case of seller related reviews keywords refers to reliability factors like payment security and refund policies.

5.2 RECOMMENDATIONS FOR FURTHER RESEARCH

The research has obtained a better overview of the relationship between the different components of users reviews and the consumers perceived risk. Despite the results obtained there are areas where more in-depth investigations are necessary.

5.2.1 ACADEMIC RESEARCH

From an academic prospective the researcher identifies three areas where further studies would be required.

In first instance due to the limitation of the present study a more numerical and quantitative approach would produce stronger results and validation to the premises discussed. Quantitative methodology is strongly recommended including survey tool focused on both product and seller topics, perceived risks on both stages of the evaluation process and relationship between reviews' components and perceived risks.

Secondly the literature related to UK and Ireland markets and consumers is nearly non-existing; the researcher's recommendation for future studies is to select samples in size and location that could describe the UK and Irish markets. Most of the existing studies have been performed in China (Wu, et al. 2013), other Asian countries or US (Hu, Koh and Reddy 2014); European, Irish and UK markets seem not to be studied at the same level as other mentioned regions.

Third recommendation is related to the general approach to the research; current literature shows a generic academic approach (Hu, Koh and Reddy 2014); researcher's opinion is that being the nature of the topic very practical and industrial, it would be appropriated to produce quantitative studies specifically targeted to current big companies that operate in the sector (ex. eBay, Amazon etc.). Furthermore the research might be extended to different product types and not only electronics; users' reviews are very popular in many other industries, for example tourism (bookings.com, Tripadvisor et al.). Because of nature of service and product related industries (Luan, et al. 2016) it seems to the author that different results might be found.

5.2.2 PRACTITIONERS IN THE INDUSTRY

Practitioners in the consumers electronics e-commerce industry should implement the users' reviews functionality to allow their existing or potential new customers to access valuable information about product and seller. Most important companies already do it with positive results. For those who have already the functionality it is recommendable to further develop the interface and accessibility to it.

REFERENCES

Baker, Julie, Grewal Dhruv, and A Parasuraman. "The influence of Store Environment on Quality Inferences and Store Image." *Journal of Marketing Science*, 1994: 328-39.

Beyari, Hasan, and Ahmad Abareshi. "Consumer Satisfaction in Social Commerce: An Exploration of Its Antecedents and Consequences." *Journal of Developing Areas*, 2018: 55–72.

Blumberg, B., D. R. Cooper, and S. Schindler. *Business Research Methods.* Third Edition. 2011.

Boostrom, Robert, Siva K Balasubramanian, and John H Summey. "Plenty of Attitude: Evaluating Measures of Attitude toward the Site." *Journal of Research in Interactive Marketing*, 2013: 201–15.

Bryan, G., D. Karlan, and S. Nelson. "Commitment Devices." *Annual Review of Economics*, 2010: 671-98.

Bryman, Alan, and Emma Bell. *Business Research Methods.* Third Edition. Oxford, 2011.

Cameron, Sheila, and Deborah Price. *Business Research Methods: a practical approach.* 2009.

Chang, C., and H. Liu. "Which is the compromiseoption? Information format and task format as determinants." *Journal of Behavioural Decision Making*, 2008: 59-75.

Choi, J. J., D. Laibson, B. C. Madrian, and A. Metrick. "Optimal defaults." *The American Economic Review*, 2003: 180-185.

Chong, Alan Yee Loong, Boying Li, Eric W.T Ngai, Eugene Ch'ng, and Filbert Lee. "Prediciting online product sales via online reveiws, sentiments, and promotion strategies." *International Journal of Operations & Production Management*, 2016.

Cialdini, R. B., and N. J. Goldstein. "Social Influence: Compliance and Conformity." *Annual Review of psychology*, 2004: 591-621.

Collins, Jill, and Roger Hussey. *Business Research: a practical guide for undergraduate & postgraduate students.* Third Edition. 2009.

Cooper, Donald R., and Pamela S. Schindler. *Business Research Methods.* Twelfth Edition. 2014.

Coursaris, Constantinos K, Wietske Van Osch, and Alice Claudia Patrizia Albini. "Antecedents and Consequents of Information Usefulness in User-generated Online Reviews: A Multi-group Moderation Analysis of Review Valence." *AIS Transactions on Human- Computer Interaction,*, 2018: 1-25.

Dailey, Lynn. "Navigational Web Atmospherics: Explaining the Influence of Restrictive Navigation Cues." *Journal of Business Research*, 2004: 795-803.

Davis, Alanah, and Deepak Khazanchi. "An Empirical Study of Online Word of Mouth as a Predictor for Multi-product Category E-Commerce Sales." *Electonic Markets*, 2008: 130-41.

Davis, Lenita, Sijiun Wang, and Andrew Lindridge. "Culture Influences on EMotional Responses to On-line Store Atmospheric Cues." *Journal of Business Research*, 2008: 806-12.

Dinner, I., E. J. Johnson, and D. G. Goldstein. "Partitioning Degfault effects: Why people choose not to choose." *Journal of Experimental Psychology* 332-341.

Eroglu, Sevgin A, Karen A Machleit, and Lenita M. Davis. "Empirical Testing of a Model of Online Store Atmospherics and Shopper Responses." *Psychology & Marketing*, 2003: 139-150.

Eurostat Statistics Explained, -. *Eurostat Statistics Explained.* 2018. http://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce_statistics.

Forsythe, Sandra M., and Bo Shi. "Consumer Patronage and Risk Perceptions in Internet Shopping." *Journal of Business Research*, 2003: 867–75.

Furner, Christopher P., and Robert A. Zinko. "The influence of information overload on the development of trust and purchase intention based on online product reviews in a mobile vs. web environment: an empirical investigation." *Electronic Markets*, 2017: 211-225.

Hattie, J., and H. Timperley. "The power of feedback." *Review of Educational Research*, 2007: 81-112.

Hoffman, Donna, and Thomas P Novak. "Marketing in Hypermedia Computer-Mediated Environments: conceptual framework." *Journal of Marketing*, 1996: 50.

Hu, Nan, Noi Sian Koh, and Srinivas K. Reddy. "Rating lead you to the product, reviews help you to clinch it? The mediating role of online review sentiments on product sales." *Decision Support Systems*, 2014.

Huseynov, Farid, and Sevgi Özkan Yıldırım. "Internet Users' Attitudes toward Business-to-Consumer Online Shopping: A Survey." *Information Development*, 2016: 452–65.

Huseynov, Farid, and Sevgi Ozan Yildirim. "Behavioural Issues in B2C E-commerce: state of teh art." *Information Development*, 2016: 1353-58.

Hwang, Yujong, and Jaeseok Jeong. "Electronic commerce and online consumer behavior research: A literature review." *Information Development*, 2016.

Jiunn-Woei, Lian, and Lin Tzu-Ming. "Effects of Consumer Characteristics on Their Acceptance of Online Shopping: Comparisons among Different Product Types." *Computers in Human Behavior*, 2008: 48–65.

Johnson, Eric, et al. "Beyond nudges: Tools of a choice architecture." *Merketing Letters*, 2012.

Li, Xialolin, Chaojiang Wu, and Feng Mai. "The effect of online reviews on product sales: A joint sentiment-topic analysis." *Information and Management*, 2018.

Lian, Jiunn-Woei, and Tzu-Ming Lin. "Effects of consumer characteristics on their acceptance of online shopping: Comparisons among different product types." *Computers in Human Behavior*, 2008.

Liu, Chuanlan, and Sandra Forsythe. "Sustaining Online Shopping: Moderating Role of Online Shopping Motives." *Journal of Internet Commerce*, 2010: 83-103.

Lu, X, S Ba, L Huang, and Y Feng. "Promotional marketing on word of mouth? Evidence from online restaurant reviews." *Information System Research*, 2013: 596-612.

Luan, Jing, Zhong Yao, FuTao Zhao, and Hao Liu. "Search product and experience product online reviews: An eyetracking study on consumers' review search behavior." *Computers in Human Behavior*, 2016.

Munscher, Robert, Max Vetter, and Thomas Scheuerle. "A Review and Taxonomy of Choice Architecture Techniques." *Journal of Behavioural Decision Making*, 2016: 511-24.

Naiyi, Y. "Dimensions of consumer's perceived risk in online shopping." *Journal of Electronic Science and Technology of China*, 2004: 177–82.

Pee, L.G. "Negative online consumer reviews Can the impact be mitigated?" *International Journal of Market Research*, 2016.

Prashar, Sanjeev, Sai T Vijay, and Chandan Parsad. "Effects of Online Shopping Values and Websites Cues on Purchase Behaviour: A Study Using S-O-R Framework." *Vikalpa*, 2017: 1-18.

Richard, Marie-Odile. "Modeling the Impact of Internet Atmospherics on Surfer Behavior." *Journal of Business Research*, 2005: 1632-42.

Sarkar, Abhigyan. "Impact of Utilitarian and Hedonic Shopping Values on Individual's Perceived Benefits and Risks in Online Shopping." *International Management Review*, 2011: 58-65.

Saunders, Mark, Philip Lewis, and Adrian Thornhill. *Research Methods for Business Students.* Seventh Edition. 2016.

Sorce, Patricia, Victor Perotti, and Stanley Widrick. "Attitude and Age Differences in Online Buying." *International Journal of Retail & Distribution Management*, 2005: 122-32.

Sunstein, C. R. "Choosing not to choose." *Duke Law Journal*, 2014: 1-51.

Tang, Tanya Ya, Eric Er Fang, and Feng Wang. "Is Neutral Really Neutral? The Effects of Neutral User-Generated Content on Product Sales." *Journal of Marketing* 78 (2014): 41-58.

Thaler, R H, and C. R. Sunstein. *Nudge: Improving decisions about health, wealth and happiness.* New Haven, 2008.

Weber, B. J., and G. B. Chapman. "Playing for Peanuts: Why is risk seeking more common for low-stakes gambles?" *Organisational Behaviour and Human Decision Processes*, 2005: 380-97.

Weber, E. U. "Doing the right thing willingly: Using the insights of behavioural decision research for better environmental decisions." *The behavioural foundations of public policy*, 2012: 380-97.

Wolfinbarger, Mary, and Mary C Gilly. "Shopping Online for Freedom, Control and Fun." *California Management Review*, 2001: 83-103.

Wu, Jianan, Yinglu Wu, Jie Sun, and Zhilin Yang. "User reviews and uncertainty assessment: A two stage model of consumers' willingness-to-pay in online markets." *Decision Support System*, 2013: 175-85.

Yusuf, Ali Sahabi, Ab Razak Che Hussin, and Abdelsalam H. Busalim. "Influence of e-WOM engagement on consumer purchase intention in social commerce." *Journal of Services Marketing*, 2018.