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The impact of reviews on Consumers' consideration towards Electric Vehicles (EV)

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by Emanuel Seixas de Almeida e Sousa

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Abstract

The development of the Internet and technology led to increasingly more digital consumers, who are tired of being marketed to. Thus, many companies started adopting reviews as part of their marketing strategy to reach the target audience in social media. This trend is also present in the market of electric vehicle (EV).

This dissertation was developed with the aim of understanding how EV consumers perceive social media online posts as endorsers of EV as a mobility product, through the lens of the Source Credibility Model. These objectives were addressed using a quantitative research method that adopted an experiment between subjects, comparing firm-created reviews (firm-created content) with user-created reviews (user-generated content) . Previous literature was reviewed, and an online questionnaire was conducted, with 243 obtained valid answers. Moreover, the willingness to consider and willingness to buy an EV were considered as a variable in the analysis, being proposed because of trustworthiness communicated by the type of review.

The results of this dissertation found that the difference between User-Generated Content and car brand reviews (firm-created content) is not statistically significant in the moment of influencing decision of considering or buying an EV as a mobility product. It was observed that there is a valid positive influence relationship of trustworthiness on the relationship between the types of review and the consideration of buying an EV.

Lastly, with this model and this research, it was confirmed that there is a positive influence of the trustworthiness on willingness to buy and consideration to buy.

Keywords: electric vehicle (EV); willingness to buy; trustworthiness; User-Generated Content; online reviews; Source Credibility model

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O impacto das críticas online na consideração dos consumidores em relação aos veículos elétricos (VE)

Por Emanuel Seixas de Almeida e Sousa

Janeiro de 2023

Resumo

A emergência da Internet e o desenvolvimento da tecnologia levou a um número crescente de consumidores digitais, cansados de serem comercializados. Assim, muitas empresas começaram a adotar o marketing de publicação em linha para chegar às pessoas nas redes sociais. Esta nova abordagem do marketing é também utilizada como uma ferramenta no marketing social para promover a mudança de comportamento, especialmente quanto ao processo de decisão de aquisição de um novo veículo elétrico (VE). Esta dissertação foi desenvolvida com o objetivo de compreender como os consumidores de VE veem os anúncios online nas redes sociais como endossantes de VE como um produto de mobilidade, partindo do Modelos de Credibilidade na Fonte. Estes objectivos foram abordados utilizando um método de investigação quantitativa que adoptou uma experiência entre sujeitos, comparando conteúdo criado por empresas, com conteúdo criado por utilizadores online. A literatura anterior foi revista e foi conduzido um questionário online, com 243 respostas bem-sucedidas. Além disso, a vontade de considerar foi incluída como uma variável na análise com influência direta na fiabilidade, dificilmente abordada na literatura. Os resultados constataram que a diferença entre o Conteúdo Gerado pelo Utilizador e o conteúdo de marcas de automóveis não é estatisticamente significativa, no momento de influenciar a decisão de considerar um VE como um produto de mobilidade. Observou-se que existe uma relação de influência positiva válida de confiança na relação entre os tipos de revisão e a consideração da compra. Finalmente, foi confirmado que existe uma influência positiva da fiablilidade na vontade de comprar.

Palavras-chave: veículo elétrico (VE); vontade de comprar; fidedignidade; Conteúdo gerado pelo utilizador; revisões on-line; Modelo de Credibilidade da Fonte

Table of Contents

List of Tables

List of Figures

1. Introduction

1.1. Topic Presentation

Electric vehicles (EVs) as a new mobility system have many advantages in comparison to traditional vehicles, namely, economic (a much higher efficiency with regard to fuel), and environmental (lower greenhouse gas emissions) (Mandys, 2021), . Despite that, there is still a long way to go regarding the transition to electric vehicles. The current dissertation intents to contribute to the knowledge regarding consumers adoption of EVs. While doing that the author focuses on exploring the role of online reviews on influencing the purchase consideration, as captured in the following research problem: *How are consumers impacted by online reviews in the moment of planning the purchase of an EV?*

Thus, the objective of this thesis is to more thoroughly understand the influence of EV reviews. More specifically, what are the effects of the source and type of content on the pre-purchase decision phase.

Ratings from others are the second most-trusted source of brand information, after recommendations from friends and family) (Nielsen, 2012), with impact on decision making and price acceptance. According to ComScore (2007), user-generated reviews were impactful when consumers had to decide what price they would pay for an offline-delivered service, with 5-star rating being associated with consumers' willingness to pay at least 20 percent more when compared to 4-star ratings (Gavilan et al., 2018).

1.2. Problem Statement

The key problem intended to be addressed in this dissertation is the importance of online reviews on the decision process of buying an EV. According to Cialdini (2009), there is a tendency to base one's decisions on ratings which follows from heuristic, called social proof. The term "heuristics" refers to the rules of thumb through which the decision-making process is facilitated and that exclude part of the information (Gigerenzer & Gaissmaier, 2011). The presentation of reviews, be it professionals (Boatwright et al., 2007) be it solely peers (Rao et al., 2001) can trigger this heuristic of social proof.

The field of social media communications has been the focus of scholars for many years with several related topics being explored, among them it is the type of content source, with user-

generated content (UGC) being created by the user and firm-created content, by the firm (Schivinski & Dabrowski, 2016) Yet, even if studies have explored the impact of the type of source in social media, there is still little understanding of how firm-created and user-generated social media communication influence consumer perceptions of brands and consumer behaviour in the context of reviews. Distinguishing both types and identifying their implications is of upmost relevance as one form of communication is controlled by the company, whereas the other is independent of the firm's control (Schivinski & Dabrowski, 2016). In fact, Schivinski and Dabrowski (2016) have concluded that both of these types of sources are quite different when it comes to a strategic approach to social media and may differ in view of industry-specifics.

In RQ1, the direct influence of the review content is intended to be tested, regarding the type of source, on the product consideration. The content of the reviews will be considered to be tested.

RQ1: What is the impact of different types of sources of reviews (FCC and UGC) on consumers' consideration regarding the purchase of an EV and willingness to buy? Do the effects differ when different types of content are considered?

RQ2 will study a the effect of trustworthiness of the review on product consideration, in view of different types of source. According to Zhang et al. (2014), on online review sites, we expect that when consumers find online reviews are from other users rather than from the firm, they develop expectations regarding the argument quality of these reviews. As contended by Chaiken and Maheswaran (1994), such expectations of the probable validity of arguments can strengthen the final perceptions and evaluations of argument quality, which are likely to be perceived as more informative and persuasive. Trustworthiness of the reviews influences the argument quality (Zhang et al., 2014), therefore its effects on product consideration are captured by means of the following RQ:

RQ2: How does the trustworthiness of the review influence the relationship between the review content type and source and product consideration and willingness to buy?

According to Van der Waldt et al. (2009, pp: 104), the trustworthiness is defined as "the honesty, integrity and believability the endorser possesses". The extent of trust and loyalty

between the consumers and their influencers has been seen to positively affect the sustainability of the relationships between the followers and the influencers, the sales, and the brand (AlFarraj et al., 2021).

Lim et al. (2017) analysed the impact of social media influencers' effectiveness mainly for their attractiveness on the purchase intention/willingness to buy and found a positive effect.

1.3. Scope of Analysis

In order to avoid cultural biases, as EV adoption behaviours can vary between countries and the adoption of these may depend on cultural factors, only Portuguese people will be considered for the study.

Moreover, this research presents the goal of testing how the different types of sources and content will influence the consumers process of purchasing an EV (Zhang et al., 2014). Trustworthiness of the review will be considered for its influence on driving effects, regarding the consideration of buying and willingness to buy an EV.

1.4. Academic and Managerial Relevance

The academic relevance of this dissertation is to explain how the consumers will be impacted by online reviews, in the moment of planning the purchase of an EV. This study will test how the type of source influences the relationship between the review type and product consideration, whether it is a peer review (UGC), or a review of a credible institution (FCC), and the trustworthiness of the review on the product consideration.

Moreover, this study will approach this topic from a new perspective, because it will study, in the topic of EV, how the trustworthiness of the contents will contribute to explain the effects of the source type while doing the consideration process.

The applicability for managers and academics will comprise of acquiring a more thorough knowledge of how the choices of consumers are influenced by product reviews. This is essential from a business perspective to more deeply comprehend how online customer reviews are related to business performance, and vice-versa (Gavilan et al., 2018).

From an academic perspective, it will also develop the knowledge in concepts like online reviews, UGC, FCC online purchasing and eWOM, all directly applied to the EV market.

1.5. Dissertation Outline

This dissertation is divided into 5 chapters. Chapter 1 is the introduction to this research, which contains Topic Presentation, Problem Statement, Scope of Analysis, and Academic and Managerial Relevance. Chapter 2 is the Literature Review and it provides previous findings and models from academic articles and papers, which are useful for the study. Chapter 3 informs the readers about the methodology used for the research and the data collection. Following this, Chapter 4 is comprised of the analysis and interpretation of the results of the questionnaire, according to the hypothesis proposed. Lastly, Chapter 5 presents the main conclusions of this study, as well as limitations and recommendations for future research on the topic.

2. Literature Review

2.1. Social Media

Social media has been recently defined in many different ways within the scope of the communication discipline as well as other similar subjects, such as public relations, mass media, and information science. The term social media was firstly used in 1994, on a Tokyo online media environment. Since then, according to Aichner et al. (2021), both the number of social media platforms and the number of active social media users have increased significantly, making it one of the most important uses of the Internet.

Existing definitions of social media differ tremendously in terms of focus, complexity, and how they apply outside the communication subject. Some definitions can be considered straightforward, as they mainly concentrate on the nature of message construction in social media, as in Russo et al. (2008, p. 22) who defines it as "those that facilitate online communication, networking, and/or collaboration". In the current study, the author focuses on the definition offered by Kaplan and Haenlein (2010, p. 62) according to which social media is "a group of Internet based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content".

2.2. User-Generated Content and Social Media

User-generated content (UGC) involves all the means people use social media for interacting and creating content, considering Web 2.0 as the representation of the technological foundation (Kaplan & Haenlein, 2010). There are three main requirements that UGC must satisfy to fit in this category, according to the Organisation for Economic Cooperation and Development (OECD, 2007). Firstly, the website or social networking site in which this content is published needs to be either publicly accessible or accessible to a specific group of people. Thus, content exchanged in e-mails or instant messages must be excluded. Secondly, it must display that creative effort was involved in its creation, which means that it does not include posts in which a user merely copies existing content without modifying or commenting it. Finally, it cannot stem from a professional setting, which excludes all content with a commercial purpose.

UGC was already in existence before Web 2.0, but there have been several combined drivers that have transformed UGC into a different reality today from what could be observed in the beginning of the 1980s (Kaplan & Haenlein, 2010). On the one hand, there were technological

drivers, such as increased broadband availability and hardware capacity. On the other hand, there were technological drivers, for instance increased availability of tools used to create UGC, as well as social drivers, which refer to the rise of a generation of digital natives and screenagers, younger age groups with extensive technical skills who are willing to engage others digitally (Kaplan & Haenlein, 2010)

In the context of businesses, UGC has grown into an important source of value with influence on product development and adoption (Ho-Dac, 2020) .

2.2.1. User-Generated Content and Product Reviews

The way people deal with information, i.e., searching, reading, sharing, creating and consuming it, has been constantly changing by Web 2.0 and UGC. This trend will likely continue in the future, as well. According to Sigala (2008), both Web 2.0 and UGC bring huge potential for E-commerce. UGC in particular can be considered by providers as a type of word-of-mouth for their products and services (Ye et al., 2011). Reviews as a format of UGC has grown in relevance in various contexts related to services (Pan et al., 2007). According to Ye et al. (2011), it has been reported that hundreds of millions of potential visitors access online reviews every year, and 84 percent of these visitors acknowledge the impact of reviews when making their purchase decisions (Travelindustrywire, 2007).

Furthermore, readers often perceive reviews from other travellers as being more up-to-date, trustworthy and pleasing to read, when compared to what travel service providers communicate (Gretzel & Yoo, 2008 ; Ye et al., 2011; Dickinger & Mazanec (2008). Duan et al., (2008) According to Bathar and Muda (2016), UGC´s perception of message credibility justifies the positive effects, as no commercial purposes are present. The impact of online reviews on product sales for a myriad of products was studied by Ghose and Ipeirotis (2006), and it was concluded that online sales of specific products were affected by how subjective and polarized the ratings were. In their study, Ghose and Ipeirotis (2006) used the cognitive load theory to understand their findings, concluding that some kinds of online reviews decrease the reader's cognitive load, and therefore improve the sales

2.2.2. Firm-Created Content and Product Reviews

Mangold & Faulds (2009) claim that firm-created content (FCC) in social media should be included as an important part of a company's promotional mix as it enables companies to let

their customers know about their innovations and activities. It helps to create a favourable attitude towards a brand name and cultivate a relationship with the brand aficionados (Kumar et al., 2016). Thus, social media communication is expected to accomplish several goals, such as creating engagement with existing consumers, influencing the way consumers perceive certain products, driving purchase intention, brand awareness, sharing information, and finally understanding their target audience (Brodie et al., 2013; Poulis et al. 2019). According to Wei et al. (2022), FCC is carefully planned to demonstrate the product uniqueness to potential customers. Also, from Wei et al. (2022) conclusions of their studies, it stated that FCC provides a more structured and reliable source of information to the customer than UGC.

2.3. The importance of Social Presence in Social Media

According to Kaplan and Haemlein (2010), the two core aspects of social media consist of media research (i.e., social presence, media richness) and social processes (i.e., self-presentation, self-disclosure). In order to classify social media systematically, we rely on a set of theories in these two fields.

With regard to media-related element of social media, Short et al. (1976) developed the social presence theory, which claims that the degree of social presence emerging from the communication between two parties may differ according to the media.

According to Chang and Hsu (2016), social presence in social media will have a direct influence in the recipients' understanding of the messages that are transmitted from senders. This social presence is characterised as the acoustic, visual, and physical contact achieved from a communication. Those stimuli allow users to evaluate content and to promote a better engagement, as a consequence of those social interactions (Osei-Frimpong & McLean, 2018).

Social presence is impacted by two factors, the intimacy and the immediacy of a certain medium. Regarding the intimacy (interpersonal vs mediated), it is predicted that there is a higher social presence for interpersonal (for instance, face-to-face conversation) than for mediated (e.g., a conversation over the phone). Similarly, when it comes to immediacy, social presence is higher for synchronous (for example, a live chat) than for asynchronous (e.g., e-mail). Besides, as social presence increases, so does the social influence that each communication party has on the other's behaviour. According to Kaplan & Haemlein (2010), the concept of media richness is closely linked to the notion of social presence.

Kim et al. (2011) have suggested that, in certain environments, the sense of social presence of the computer-mediated environment, despite its limited cues and signals, can be higher than in face-to-face environments.

According to literature, Social Presence of the communicator is increased in Social Media when self-disclosed information is used, resulting also in higher credibility of the reviewer and of the review (Munzel, 2016; Olson & Ro, 2020).

Olson & Ro (2020) suggest that trust from potential customers in online context can be enhanced, when including social presence cues in the reviews.

2.4. Influencing factors on the effects of online reviews

According to Zhou & Duan (2010), researchers studying the effects of UGC have primarily pinned down their research on valence and volume-. However, the relation between valence of reviews and purchase intent is not consensual (Liu, 2006; Chevalier & Mayzlin, 2006; Zhou & Duan, 2009), with predispositional and situational variables needed to be considered (Zhu & Zhang , 2010). The contextual settings where online reviews take place, variety of alterntatives and product popularity entail different situational variables (Zhou & Duan, 2010).

Hansen (1976) put forward psychological choice models which apparently reconcile differing findings stemming from empirical research. This researcher claims that predispositional variables are interacted with by situational variables, thus eventually leading to external responses (i.e., user choices). According to Hansen (1976), predispositional variables can be personality traits and basic needs, which can influence the salient cognitive structure in a wide range of situations. There are four major predispositional variables: Personality; General attitudes, values and interests; Specific attitudes and beliefs and Choice-specific predispositions, such as intentions and purchasing probabilities (Hansen, 1976). According to Zhou and Duan (2010), from an e-commerce point of view, online reviews can be included under the umbrella concept of predispositional variables. Therefore, the effect of situational variables as moderations cannot be ignored when assessing the effect of user reviews on user choices.

Else than characteristics related to volume and value, also content of recommendations play an important role in online reviews.

When EVs are considered, different types of content may influence the effects of reviews. According to Mandys (2021), negative EVs´evaluations in reviews are associated to limited vehicle range, low performance and long refuelling period, while operating costs do not play a

major role in the decision (Mandys, 2021). On the other hand, positive motivations for adoption are associated to rising and volatile gasoline prices, greenhouse gas emissions, increased dependence on imported petroleum, and the very high fuel economy of EV (Egbue and Long, 2012).

Other studies have expanded the findings concerning motivations and barriers of adoption. Rezvani et al. (2015) for instance, identified four factors impacting the behavioural intention to adopt EVs were identified: 1) technical factors (for example, overall technical performance); 2) contextual factors (e.g., charging infrastructure); 3) cost factors (for instance, purchase and fuel costs); and 4) individual and social factors (e.g., concern for the environment and previous experience with PHEVs).

On the other hand, Krupa et al. (2014) reached a different result using a modified agent-based model of Eppstein et al. (2011). They found that potential fuel savings were regarded as a one of most relevant EV´s advantage. Similarly, a recent study by Li et al. (2020) found that adoption rates should increase with any incentives that reduce operation costs. Nonetheless, their study also showed the unwillingness of consumers to pay a significant premium for EVs, which is in line with Larson et al. (2014). Larson et al. (2014) also concluded that if consumers were previously in contact with EVs, they are less sensitive to critical attributes, for example range. Finally, Liao et al. (2019) also found that the attractiveness of adopting an EV was affected by the kind of EV business model, and that the most attractive kind was vehicle leasing.

2.5. The influence of trustworthiness in reviews

In literature, trustworthiness is defined as a subjective measurement of belief from one entity regarding the behaviour of another entity focused on a certain trust aspect (Neisse & Wegdam, 2008).

According to Shan (2016), taking in consideration the context of online product reviews, the characteristics of a source have a great impact on the evaluation of source trustworthiness.

Trustworthiness of the information source has a direct impact in the credibility of the online reviews (Thakur, 2018). According to Bickart & Schindler (2001) study, user-generated content review from a trustworthy source is more credible than firm-created content review.

From Huang & Liang (2021) study, the reviews are considered trustworthy and truthful, when the review readers verify that the review contributor is a real customer of the product, with no connection to the firm.

2.6. Proposition of hypotheses

The key problem that is intended to be addressed in this dissertation is the importance of online reviews on the decision process of buying an EV (Mandys, 2021). Based on Gavilan et al. (2018), it was anticipated that the trustworthiness of positive ratings and impact on consumers' future intentions tend to be influenced by the content of the review. This effect was not yet validated in the context of EV where the purchase decision accounts for high involvement and familiarity towards the category is still limited.

An empirical research model was built, with two research questions (RQ):

RQ1: What is the impact of different types of sources of reviews (FCC and UGC) on consumers' consideration regarding the purchase of an EV and willingness to buy? Do the effects differ when different types of content are considered?

Considering that consumer choice is a process of several stages in which smaller and smaller mental sets of choices are built by consumers, the task of each consumer in the initial stages is to pinpoint the universal set to high salience options, in accordance with the consideration set model of consumer decision making developed by Roberts & Lattin (1991). Van Schaik & Ling (2009) point out that an easy approach to processing information is favoured when the consumer is goal-driven. In this situation, it is easier to process reviews and employ them in order to handle a bigger amount of information, as well as to assist when developing criteria of selection.

In order to sustain the RQ1, we should take in consideration the main differences between FCC and UGC. According to Schivinski and Dabrowski (2016), firm-created social media content is understood as a form of advertising fully controlled by the company and guided by a marketing strategy agenda. It should also be taken into consideration the fact that, despite FCC through social media being on the rise, it still consists of a rather recent practice when it comes to marketeers.

On one hand, user-generated content (UGC) is the public who creates (Daugherty et. al. ,2008), the company has no control over it, but may try to foster and influence its volume and valence, representing a means of communication with costs that are relatively low in comparison to traditional channels (Krishnamurthy & Dou, 2008). The positive effect of UGC are associated to its perceived credibility, than traditional advertising (Christodoulides, 2012).

Predicting the customers' purchase intention is the holy grail of marketing (Chaudhuri et al., 2021), with two different concepts beings explored, namely: willingness to buy and product

consideration. Ajzen (1985), responsible for developing the theory of planned behaviour, claims that willingness to buy captures how much is a person willing to show a specific behaviour in a certain context, consisting on a more specific measure within purchase intention. Product consideration (consideration of buying) on the other hand, includes consumers´ intent to include the product among the consideration list. It is affected by the product characteristics, which can guide the way that a potential consumer processes information and takes his decision, affecting his consideration set (Suh, 2009). So, in this study the difference between the two variables is assessed, regarding the two different source types of reviews.

According to Mayrhofer et al. (2019), it has been emphasised by media outlets that UGC can be of great value. Nonetheless, it is still to be ascertained if the users' reaction to UGC will be similar to the reaction towards FCC created by commercial sources. There is a shortage of research when it comes to the value of user-generated brand related content.

However, there have been some researchers investigating the effect of users being the creators of persuasive content. These researchers considered three core ideas: likeability, credibility, and perceived quality of user-generated advertisements (Ertimur & Gilly, 2012).

Mayrhofer et al. (2019) identify the most significant advantage for firms of centering their marketing efforts on UGC, as well as a field that has been lacking research: the fact that social media users are allegedly incapable of identifying UGC as persuasive content and of coping with it.

In view of UGC´s characteristics as above described; it is proposed that it performs better in triggering the EV´s product consideration than FCC as captured in H1.

H1a: User-generated reviews towards EV will have a higher impact on product consideration (consideration of buying) than EV firm-created reviews.

The type of content can produce a direct influence on the consideration of a specific product. Acording to Pan & Zhang (2011), in order to make a better buying decision, for consideration of a product, readers search for the more helpful reviews, regarding content, in online platforms.

Chevalier & Mayzlin (2006) state that the willingness of buying a product is influenced by the reliance of the potential customer on the content of the review.

So, in the specific case of EV, the influence of type of content influence on product consideration and on willingness to buy will be assessed in this thesis.

H1b: The type of content will influence the effects of reviews on product consideration.

H2a: User-generated reviews towards EV will have a higher impact on willingness to buy EV than firm-created reviews.

H2b: The type of content will influence the effects of reviews on willingness to buy.

RQ2: How does the trustworthiness of the review influence the relationship between the review content type and source and product consideration and willingness to buy?

In literature, there are studies done with TripAdvisor online reviews, that sustain that the types of review content and the source significantly influence consumers' perceptions of trustworthiness towards the review (Filieri,2016).

According to Gavilan et al. (2018), when focusing on the first stage of the decision-making process, consumers narrow down the universal set of alternatives to a smaller set of high salience choices.

According to Hallikainen and Laukkanen (2021), perceived trustworthiness became one of the approaches to in the antecedents of consumers' purchase intentions.

Regarding EVs, there are no studies with this analysis performed. So, it was intended to confirm it the relationship confirmed by Filieri (2016) is also verified, with a different type of content.

H3a: Trustworthiness towards reviews of EV is significantly influenced by the types of review content.

H3b: Trustworthiness towards the review of EV is higher for UGC than FCC.

H4: Trustworthiness towards the review of EV positively influences the product consideration.

H5: Trustworthiness towards the review of EV positively influences the willingness to buy an EV.

The proposed hypotheses are presented in Figure 1.

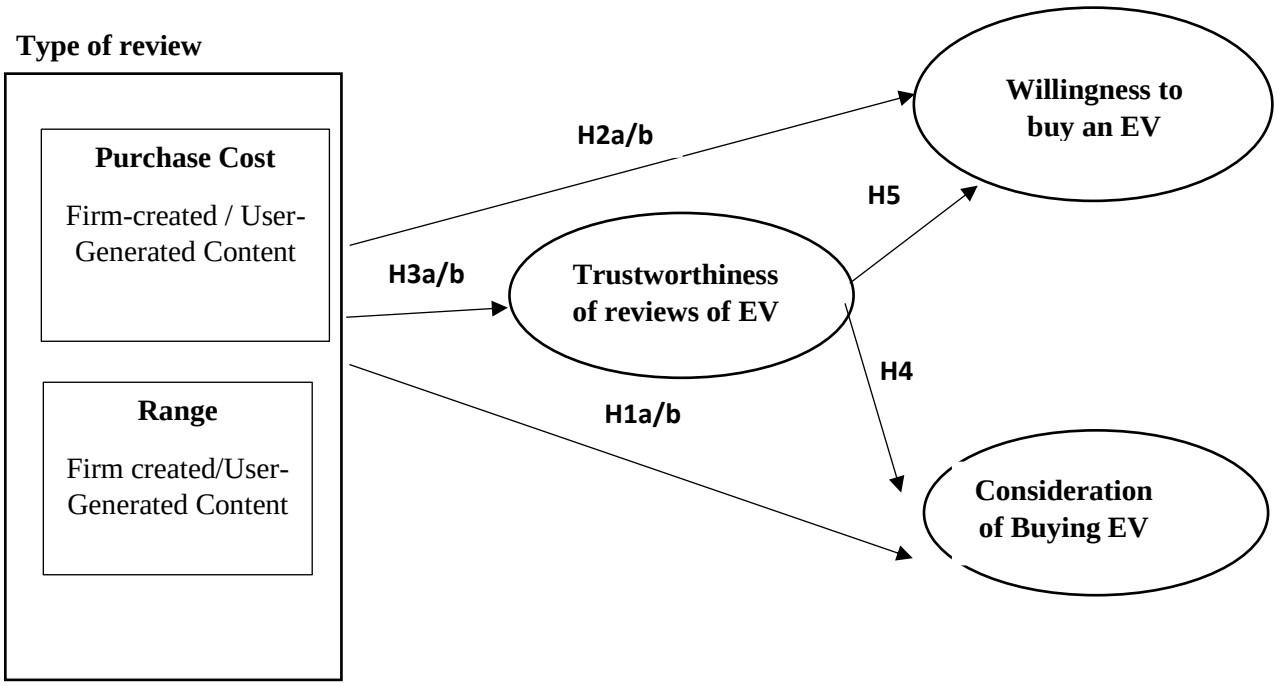

Figure 1: Proposed research model for EV.

As a consequence of the suggested literature, the final model was closed with 2 major attributes: Purchase Cost and Range, which are going to be evaluated with positive reviews, from UGC and FCC.

3. Methodology

3.1. Research Approach

The current study aims to comprehend the impact of online reviews on the EV adoption by potential consumers. In addition, it is important to understand how this type of EV consumers perceive online reviews, as well as which source characteristics have an impact on willingness to adopt and also in considering an EV.

Based on Abu-Alkeir (2020), this dissertation will use a quantitative technique, which is related to the data that will be analysed by using statistical techniques.

Regarding the descriptive research, the concepts of social media, UGC and FCC Reviews were examined in depth in order to gather the foundations for the next phase of the study. Concerning the Exploratory Research, primary data was collected through an online questionnaire, where participants were subjected to two possible conditions.

3.2. Main study: Online Questionnaire

The questionnaire was developed using Qualtrics, and the SPSS software was used to analyse the results. The survey was distributed on Facebook Electric Mobility groups, WhatsApp and Messenger, mainly to potential consumers and actual consumers of EVs.

A full factorial between subjects' design 2 (FCC vs. UGC) for 2 variables was conducted. In a decision-controlled setting, participants were shown a review and based on that, to evaluate it for trustworthiness, wiliness to buy and product consideration.

There were 2 sources considered, FCC and UGC and 2 different types of content (range and price). The selection of content was based on literature considerations from authors such as Mandys (2021), Orlov & Kalbekken (2019) and Langbroek et al. (2018).

Orlov & Kalbekken (2019) found that the better people understand how much money they would save when buying a more energy efficient car, the more likely they are to own an EV.

According to Langbroek et al. (2018), car drivers adopting an electric vehicle are likely to make additional car trips if they have excess range. So, it was concluded that range can have a positive effect in the decision process, while choosing an EV.

Participants were randomly allocated to one of the groups and were submitted to the same questions.

3.2.1. Measurements

The willingness to adopt and the Source Credibility model measures that were used in the questionnaire were withdrawn and adapted from previous literature featured in Top Journals, as presented in Tables 1, 2 and 3. All items were accessed in a seven-point Likert scale

With the intent of measuring the willingness to adopt EV vehicles, respondents were asked to rate several statements on a seven-point Likert scale ranging from "Completely disagree" to "Completely agree". The seven-point scale is adapted from the Dodds et al. (1991) study on Purchase intentions. Therefore, the following statements were created: "I intend to adopt the EV present in the review", "It is likely that I would consider buying the EV present in the review", and "I am willing to buy the EV present in the review".

Lastly, respondents were asked about their age, gender, occupation and school degree, in order to assess their socio-demographic profile. Neither nationality nor country of residency were mentioned because the study was restricted to the Portuguese context.

To measure age, an interval question was created, in which the respondent will be provided age intervals starting at 18 years old and the last being ages above 65 years old.

To measure gender, respondents were presented with a multiple-choice question with three options: Male, Female or Other. Moreover, to assess occupation, respondents had six options: Full-time student, Student and Part-time worker, Full-time worker, Unemployed, Retired and Other. Last but not least, to evaluate education degree, participants had to answer a multiple-choice question with four options: Elementary School degree, High School Degree, Bachelor's degree and Master's degree.

3.2.2. Participants

The participants of this study were both men and women, with ages starting at 18 years old. It was considered 18 years old to be the minimum age of participants, since it is the age of majority in Portugal and, simultaneously, the minimum age to have a driver's license to drive an EV. Moreover, the target population was limited to Portuguese people, excluding other nationalities with the intent of avoiding cultural biases in the analysis.

A non-probabilistic convenience sampling was used. This technique relies on the researcher randomly selecting respondents that are either easily accessible or believed to be representative of the population (Kitchenham & Pfleeger, 2002). Thus, this technique is less expensive and less time-consuming.

3.2.3. Procedure

The link to enter the questionnaire was provided through online and messaging apps. The respondents were then randomly assigned to one of the eight possible endorsement type and review type combinations.

It was carried out with one online link, with eight groups, in which each participant was addressed to, whether it is an FCC or a UGC review, or also, according to the variable that the study wants to address.

The reviews needed to have the same number of words, even if they are done by a car brand or by a user. Moreover, so as to create an order of comparison, the same number of adjectives and characteristics was needed. Those two characteristics are important, in order to create an equilibrium in the stimuli that are given to the respondents, independently of the review type. The final posts are presented in the Appendix, with the two scenarios generated for UGC (scenario 2b) and scenario 2d)) , regarding range and purchase cost, and with the two scenarios of firm-created brand (scenario 2a) and scenario 2c)), by using Volkswagen ID4 model as a reference.

Volkswagen ID4 model was chosen to be part of the firm-created post, regarding the fact of the brand being a trustworthy and reliable brand in the automotive industry. Moreover, the ID4 model is one of the best products of Volkswagen, regarding electric mobility, being one of the major references in the market. So, it was intended to reinforce the trustworthiness stimulus, by drawing the post of a trustworthy firm and of a reliable vehicle, like it was a real post published on Facebook, which can drive potential EV drivers to read the content and to influence them in their process of buying a new car.

The items were generated keeping in mind the definitions of attractive and facilitating stimuli given by Ballantine et al. (2010) which state that attractive stimuli create excitement among customers and respondents, and facilitating stimuli induce customer and respondent engagement.

According to Grimm (2010), pretesting is a very important step in survey research. It is an absolutely necessary step to ensure all kinds of errors that are associated with survey research are reduced. It helps to improve the quality of data significantly. Moreover, it can help detect any problem with the questionnaire design leading to ambiguity of words, misinterpretation of

questions, inability to answer an item and many other problems associated with the items of the questionnaire (Grimm, 2010).

As suggested in literature, control questions were created, in which the respondents answered regarding direct aspects addressed in the review. The main objective of these questions is to avoid the issue of data errors. As suggested by Boyd and Crawford (2012), those control questions are important, regardless of the size of the data, because data are subject to limitation and bias. Without those biases and limitations being understood and outlined, misinterpretation is the result. After that, the items based on literature were used (Dodds et al., 1991), in order to confirm aspects related to trustworthiness (Table 1), willingness to adopt (Table 2) and also for consideration of buying an EV (Table 3).

Table 1: Willingness to consider an EV

Source	**Construct**	**Measurement Items**	**Scale**
Adapted from Dodds et al. (1991)	Willingness to Consider	I intend to consider an EV as a mobility type. I am willing to consider the present EV as an alternative. It is likely that I would consider the EV as an alternative.	(1) Completely Disagree to (7) Completely Agree

Table 2: Consideration of buying an EV

Source	**Construct**	**Measurement Items**	**Scale**
Adapted from Hallikainen and Laukkanen (2021) and Cheung (2014).	Consideration of buying an EV	I intend to purchase this EV, regarding its presented price. It is likely that I will purchase an EV in the near future. I predict that I will purchase the EV presented in the review in the future. After reading the online review, I intend to purchase this EV.	(1) Completely Disagree to (7) Completely Agree

Table 3: Trustworthiness of EV reviews

Source	Construct	Measurement Items	Scale
Adapted from Tanakinjal et al. (2010) and Cheung (2014)	Trustworthiness	I consider this EV review as a reliable way to receive relevant information. I have confidence on the believability of the message source. Online EV reviews are a trustworthy source of information. EV reviews are a trustworthy source of direct information about the car to potential customers.	(1) Completely Disagree to (7) Completely Agree

The last section of the questionnaire gathered respondents' socio-demographic information, which included age, gender, occupation and highest educational attainment.

3.2.4. Design

The questionnaire was developed following an experimental between-subjects design with 4 reviews being produced and one being randomly presented to interviewees. In total, four different scenarios were created and participants were randomly assigned to one endorser type and message type combination.

4. Results and Findings

4.1. Data collection and Data Cleaning

Before analysing the results gathered from this questionnaire, the data collected was subject to data cleaning. From a total of 392 participants who initiated the survey, only 243 were considered valid answers and therefore were appropriate for further analysis. First, respondents who had incomplete surveys were excluded from the study. Second, there were five filter questions, depending on the condition each participant was randomly assigned to.

As the main target sample was only car travellers/users, the question "When I travel, I use a car." served as filter. Furthermore, another filter was applied to the car travellers/users, with the question "I have a driver's license", in order to justify the wanted perspective of the users also as potential car drivers. The third question "When I want to buy a car, I search through the Internet" selected the car travellers/users who use Internet to search cars, as a consequence of the online review that was going to be presented. The fourth question ("I read online reviews from products, such as cars") was important to understand the habits of the respondents, as potential online review readers. In the fifth filter question, the consideration of using an EV was ascertained with the question "I will consider using an electric vehicle (EV)."

The option "evenly present elements" was selected in Qualtrics, in order to ensure an approximately similar number of responses for each condition. From the ultimate target sample (243 participants), 67 were assigned to the UGC review with positive influence on range, 53 to the UGC online review with positive influence on Purchase Cost, 61 were allocated to the Volkswagen Portugal online review with positive influence on Purchase Cost, and finally, 62 were allocated to the Volkswagen Portugal online review with positive influence on range.

4.2. Sample Description

A descriptive statistic was conducted in order to study the socio-demographic profile of our sample. From the total of 243 respondents, 50% were male, 48.8% were female and 1,2% chose "Other". Regarding their age, 31% were aged between 26-34 years old, 23,6% were aged between 35-44 years old, 21% were aged between 45-54 years old, 11,2% were aged between

55-64 years old, 9,9% were aged between 18-25 years old and the least represented group was aged above 65 years old, with 3,3%.

Regarding the occupation, full-time workers accounted for 74,3% of the respondents. Moreover, concerning highest educational attainment, 2% reported "Elementary School", 17,2% reported "High School", 42,4% reported "Bachelor's degree" and 38,4% reported "Master's Degree or above".

Table 4 presents the distribution of participants per each condition.

Table 4: Number of participants in each condition

Conditions	Number of Participants
UGC online review with positive influence on range	**67**
UGC online review with positive influence on Purchase Cost	**52**
Volkswagen Portugal online review with positive influence on Purchase Cost	**63**
Volkswagen Portugal online review with positive influence on range	**61**
Total	**243**

4.3. Reliability Analysis

As previously mentioned in the Chapter 3 of this dissertation, the scales used in this study were adapted from previous literature. Thus, it is important to ensure their reliability, which is why further analysis was conducted using the Cronbach's Alpha test.

Cronbach's alpha tests are used to assess if multiple-question Likert scale surveys are reliable. These questions measure latent variables — hidden or unobservable variables, such as a person's conscientiousness, neurosis or openness. Cronbach's alpha will tell you if the test you have designed is accurately measuring the variable of interest. The higher the α coefficient and closer to 1 it is, the more the items have shared covariance and probably measure the same underlying concept (Mohsen et al., 2011).

Although the standards for what makes a "good" α coefficient are entirely arbitrary and depend on your theoretical knowledge of the scale in question, many methodologists recommend a minimum α coefficient of 0.6 (Malhotra, 1997).

In the specific case of this thesis, all the scales have Cronbach's Alpha above 0.6, as is shown in Table 5.

Table 5: Reliability analysis – Cronbach's Alpha Test

Scales	Number of Items	Cronbach's Alpha
Willingness to Consider an EV	4	0.909
Consideration of Buying an EV	3	0.823
Trustworthiness of EV reviews	4	0.810

4.4. Principal Component Analysis

A Principal Component Analysis (PCA) was performed in order to validate the constructs for unidimensionality. When conducting the Factor Analysis, the rotation method utilised was the *Varimax Rotation*, which enables a better interpretation of the factor by minimising the number of variables with high loadings on that same factor.

So as to determine the numerical amount of factors, the Eigenvalues Criteria were employed. Thus, only factors that have eigenvalues higher than 1.0 are retained. The Principal Component Analysis method extracted 3 factors, which explain 76.3% of the total variance. The first factor explained 29.3% of the variable, the second factor explained 23.9%, the third 23.1%.

In Table 6, the rotated component matrix performed for this study is presented.

Table 6: Rotated component matrix

Variables	Component		
	1	2	3
Online EV reviews are a trustworthy source of information.	0.903		
EV reviews are a trustworthy source of direct information about the car to potential customers.	0.892		
I have confidence on the believability of the message source.	0.881		0.160
I consider this EV review is a reliable way to receive relevant information.	0.816		0.252
I intend to adopt an EV as a mobility form.	0.106	0.895	
It is likely that I will purchase an EV in the near future.		0.816	0.192
I am willing to consider the present EV as an alternative.		0.794	0.313
It is likely that I would consider the EV present in the review as an alternative.	0.198	0.634	0.464
I predict that I will purchase the EV presented in the review in the future.	0.241	0.258	0.857
After reading the online review, I intend to purchase this EV.	0.347	0.219	0.818
I intend to purchase this EV, regarding its presented price.	0.162	0.374	0.684

Regarding the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) test, it can take values between 0 and 1. KMO values higher or equal to 0.6 are considered good. Moreover, the Bartlett's Test of Sphericity should be statistically significant. In fact, at least one of these two measures needs to be met in order to conduct factorial analysis. From Table 7, we can observe that the KMO has a value of 0.805 and the Bartlett's test is statistically significant at a 90% confidence level (p-value < 0.1). These results revealed that the variables are related and the factorial analysis is appropriate.

Table 7: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.805
Bartlett's Test of Sphericity	X^2	1807.47
	df	55
	p-value	0.000

4.5. Normality Tests

Before analysing the research hypothesis, it is important to test whether or not our target population follows a normal distribution. The normality test will help us decide what the appropriate hypothesis tests to follow are, which can be either parametric or non-parametric. The normality tests used were the Kolmogorov-Smirnov test (KS) and the Shapiro-Wilk test (SW), as shown in Table 8. The null hypothesis was that the data is normally distributed. Thus, the data is not normally distributed and non-parametric tests could be used for the hypothesis analysis. Also, in order to confirm the values of the normality tests, kurtosis was also assessed (Table 9). The correspondent values were negative ($K<0$).

However, as the sample is large ($N>200$), parametric tests were used under the assumption of a normal distribution.

Table 8: Normality Tests - Kolmogorov-Smirnov and Shapiro-Wilk

Normality Tests						
Constructs	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
I consider this EV review is a reliable way to receive relevant information.	0.158	243	0.000	0.929	243	0.000
I have confidence on the believability of the message source.	0.180	243	0.000	0.921	243	0.000
Online EV reviews are a trustworthy source of information.	0.193	243	0.000	0.932	243	0.000
EV reviews are a trustworthy source of direct information about the car for potential customers.	0.192	243	0.000	0.925	243	0.000
I intend to adopt an EV as a mobility form.	0.187	243	0.000	0.919	243	0.000
I am willing to consider the present EV as an alternative.	0.184	243	0.000	0.931	243	0.000
It is likely that I would consider the EV present in the review as an alternative.	0.178	243	0.000	0.920	243	0.000
I intend to purchase this EV, regarding its presented price.	0.167	243	0.000	0.941	243	0.000
It is likely that I will purchase an EV in the near future.	0.195	243	0.000	0.909	243	0.000
I predict that I will purchase the EV presented in the review in the future.	0.207	243	0.000	0.903	243	0.000
After reading the online review, I intend to purchase this EV.	0.205	243	0.000	0.885	243	0.000

Table 9: Kurtosis of the items

Descriptive Statistics			
	N	Kurtosis	
	Statistic	Statistic	Std. Error
I consider this EV review is a reliable way to receive relevant information.	243	-1.126	0.311
I have confidence on the believability of the message source.	243	- 1.183	0.311
Online EV reviews are a trustworthy source of information.	243	-0.818	0.311
EV reviews are a trustworthy source of direct information about the car to potential customers.	243	-0.661	0.311
I intend to adopt an EV as a mobility form.	243	-0.281	0.311
I am willing to consider the present EV as an alternative.	243	-0.497	0.311
It is likely that I would consider the EV present in the review as an alternative.	243	-0.607	0.311
I intend to purchase this EV, regarding its presented price.	243	-0.803	0.311
It is likely that I will purchase an EV in the near future.	243	-0.782	0.311
I predict that I will purchase the EV presented in the review in the future.	243	-0.743	0.311
After reading the online review, I intend to purchase this EV.	243	-0.201	0.311

4.6. Hypothesis Analysis

4.6.1. Hypothesis 1

H1a: User-generated reviews will have a higher impact on product consideration (consideration of buying) than firm-created reviews.

To compare the product consideration between groups, a One-way ANOVA was performed. The summed average of product consideration, as dependent variable, was considered. .

In Table 10, the result, per scenario, for the one-way ANOVA are shown.

Table 10: One-way ANOVA – Product consideration

Descriptives		
Conditions	**N**	**Mean**
UGC online review with positive influence on range	67	4.4826
UGC online review with positive influence on Purchase Cost	52	4.1859
Volkswagen Portugal online review with positive influence on Purchase Cost	63	4.2804
Volkswagen Portugal online review with positive influence on range	61	4.6284
Total	**243**	**4.4033**

Moreover, from ANOVA table (Table 11), we observe that p-value = 0.252, which is higher than 0.1 and therefore the null hypothesis that the means of all conditions are equal cannot be rejected. In summary, UGC will not have a higher impact on product consideration (consideration of buying) than car brand reviews. Thus, **H1a** is **rejected.**

Table 11: ANOVA Table

	ANOVA				
	Square Sum	Df	Average Square	Z	Sig.
Between groups	6.921	3	2.307	1.372	0.252
In the groups	402.000	240	1.682		
Total	408.921	243			

H1b: The type of content will influence the effects of reviews on product consideration.

The results shown on Table 11 show that **H1b is also rejected**. Despite that, on Table 12, means between groups are presented.

Table 12: Multiple Comparisons Table

Scenario (I)	Scenario (J)	Avg. difference	Std. Deviation	Sig.
UGC online review with positive influence on range	UGC online review with positive influence on Purchase Cost	0.2967	0.2397	0.217
	Volkswagen Portugal online review with positive influence on purchase cost	0.2022	0.2276	0.375
	Volkswagen Portugal online review with positive influence on range.	-0.1458	0.2295	0.526
UGC online review with positive influence on Purchase Cost	UGC online review with positive influence on range	-0.2967	0.2397	0.217
	Volkswagen Portugal online review with positive influence on purchase cost	-0.0945	0.2430	0.698
	Volkswagen Portugal online review with positive influence on range.	-0.4425	0.2448	0.072
Volkswagen Portugal online review with positive influence on Purchase Cost	UGC online review with positive influence on range	-0.2022	0.2276	0.375
	UGC online review with positive influence on Purchase Cost	0.0945	0.2430	0.698
	Volkswagen Portugal online review with positive influence on range	-0.3480	0.2330	0.137
Volkswagen Portugal online review with positive influence on range	UGC online review with positive influence on range	0.1458	0.2295	0.526
	UGC online review with positive influence on Purchase Cost	0.4425	0.2448	0.072
	Volkswagen Portugal online review with positive influence on Purchase Cost	0.3480	0.2330	0.137

4.6.2. Hypothesis 2

H2a: User-generated reviews towards EV will have a higher impact on willingness to buy EV than firm-created reviews.

To extract the best conclusions regarding the impact of the willingness to buy an EV of the two different review types, an ANOVA was applied, in order to extract conclusions about the validity of the hypothesis.

Firstly, the group statistics will be shown, in which we can verify the correspondent descriptive statistic values to each group of reviews (Table 13). In Table 14, the descriptives table for each scenario is shown, regarding willingness to buy as a variable.

Table 13: ANOVA Table for impact in willingness to buy an EV (UGC vs FCC)

	Square Sum	Df	Average Square	Z	Sig.
Between groups	7.414	3	2.471	1.277	0.283
In the groups	462.408	240	1.935		
Total	469.822	243			

Table 14: ANOVA Descriptives Table

		N	Mean	Std. Deviation
Willingness to buy	UGC online review with positive influence on range	67	3.5448	1.2613
	UGC online review with positive influence on Purchase Cost	52	3.8317	1.1744
	Volkswagen Portugal online review with positive influence on Purchase Cost	63	3.9762	1.3954
	Volkswagen Portugal online review with positive influence on range	61	3.8158	1.6652

Moreover, from Table 13, we observe that p-value = 0.283, which is higher than 0.1 and therefore the null hypothesis that the means of all conditions are equal cannot be rejected. In summary, UGC will not have a higher impact on willingness to buy than firm-created reviews. Thus, **H2a** is **rejected.**

H2b: **The type of content will influence the effects of reviews on willingness to buy.**

The results shown on Table 13 show that **H2b is also rejected**. Despite that, on Table 15, means between groups are presented.

Table 15: Multiple Comparisons Table

Scenario (I)	Scenario (J)	Avg. Difference	Std. Deviation	Sig.
UGC online review with positive influence on range	UGC online review with positive influence on Purchase Cost	-0.2869	0.2571	0.265
	Volkswagen Portugal online review with positive influence on purchase cost	-0.4314	0.2441	0.078
	Volkswagen Portugal online review with positive influence on range.	-0.3897	0.2461	0.115
UGC online review with positive influence on Purchase Cost	UGC online review with positive influence on range	0.2869	0.2571	0.265
	Volkswagen Portugal online review with positive influence on purchase cost	-0.1447	0.2606	0.580
	Volkswagen Portugal online review with positive influence on range.	-0.1027	0.2625	0.696
Volkswagen Portugal online review with positive influence on Purchase Cost	UGC online review with positive influence on range	0.4314	0.2441	0.078
	UGC online review with positive influence on Purchase Cost	0.1446	0.2368	0.650
	Volkswagen Portugal online review with positive influence on range	0.0418	0.2499	0.867
Volkswagen Portugal online review with positive influence on range	UGC online review with positive influence on range	0.3897	0.2461	0.115
	UGC online review with positive influence on Purchase Cost	0.1027	0.2625	0.696
	Volkswagen Portugal online review with positive influence on Purchase Cost	-0.0418	0.2499	0.867

4.6.3. Hypothesis 3

H3a: Trustworthiness towards reviews of EV is positively influenced by the types of review content.

To assess the relationship between trustworthiness and the types of review, it was decided to apply linear regression model. Before showing and defining variables, it was presented the descriptives table, per scenario, regarding trustworthiness as a variable (Table 16). The independent variable used was the dummy variable "Type of Review" (0= purchase cost, 1= range) and the dependent variable was the average trustworthiness.

Table 16: Descriptives Table

		N	Mean	Std. Deviation
Trustworthiness	UGC online review with positive influence on range	67	3.5933	1.2223
	UGC online review with positive influence on Purchase Cost	52	3.3894	1.1834
	Volkswagen Portugal online review with positive influence on Purchase Cost	63	3.2817	1.3141
	Volkswagen Portugal online review with positive influence on range	61	3.5697	1.3206

According to the model summary table (Table 17), this model explains 1,0% of the extracted data ($R^2 = 0.01$).

Table 17: Model Summary

Model Summary				
Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.100	0.010	0.006	1.2591

The linear regression model verified that the p-value = 0.121 (Table 18). As p-value is above 0.1, it is not statistically significant, so this linear regression was rejected. In Table 19, the coefficients table for linear regression were presented, even if the p-value was above 0.1. In summary, the trustworthiness will not be influenced by the types of review content. Thus, **H3a** is **rejected.**

Table 18: ANOVA applied to the Linear Regression Model

Model		Sum of Squares	Df	Mean Square	F	p-value
1	Regression	3.835	1	3.835	2.419	0.121
	Residual	382.082	242	1.585		
	Total	385.917	243			

Table 19: Coefficients Table for the Linear Regression

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	p-value
1	Constants	3.330	0.117		28.365	0.000
	Type of Review	**0.252**	0.162	0.100	1.555	0.121

H3b: Trustworthiness towards reviews of EV is higher for UGC than FCC.

From Table 20, we observe that p-value = 0.456, which is higher than 0.1 and therefore the null hypothesis that the means of all conditions are equal cannot be rejected.

Table 20: ANOVA Table

	Square Sum	Df	Average Square	Z	Sig.
Between groups	4.183	3	1.394	0.873	0.456
In the groups	381.734	240	1.597		
Total	385.917	243			

The results shown on Table 20 show that **H3b is also rejected**. Despite that, on Table 21, means between groups are presented.

Table 21: Multiple Comparisons Table

Scenario (I)	Scenario (J)	Avg. difference	Std. Deviation	Sig.
UGC online review with positive influence on range	UGC online review with positive influence on Purchase Cost	0.2038	0.2336	0.384
	Volkswagen Portugal online review with positive influence on Purchase Cost	0.3115	0.2218	0.161
	Volkswagen Portugal online review with positive influence on range	0.0236	0.2237	0.916
UGC online review with positive influence on Purchase Cost	UGC online review with positive influence on range	-0.2038	0.2336	0.384
	Volkswagen Portugal online review with positive influence on Purchase Cost	0.1077	0.2368	0.650
	Volkswagen Portugal online review with positive influence on range	-0.1803	0.2385	0.451
Volkswagen Portugal online review with positive influence on Purchase Cost	UGC online review with positive influence on range	-0.3115	0.2218	0.161
	UGC online review with positive influence on Purchase Cost	-0.1077	0.2368	0.650
	Volkswagen Portugal online review with positive influence on range	-0.2879	0.2270	0.206
Volkswagen Portugal online review with positive influence on range	UGC online review with positive influence on range	-0.0236	0.2237	0.916
	UGC online review with positive influence on Purchase Cost	0.1803	0.2385	0.451
	Volkswagen Portugal online review with positive influence on Purchase Cost	0.0236	0.2237	0.916

4.6.4. Hypothesis 4

H4: Trustworthiness towards the review of EV positively influences the product consideration (consideration of buying an EV).

To assess the relationship between trustworthiness and product consideration, a linear regression model was applied. This linear regression model uses trustworthiness as a dependent variable, and consideration of buying an EV as an independent variable. According to the model summary table (Table 22), this model explains 45,8% of the extracted data ($R^2 = 0.458$). According to the linear regression model, the p-value = 0.000 (Table 23). As p-value is below 0.1, it is statistically significant, so this linear regression is accepted. In Table 24, the coefficients table for linear regression were presented. Thus, product consideration (consideration of buying an EV) is positively influenced by the trustworthiness. So, **H4** is **accepted.**

Table 22: Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.677	0.458	0.456	0.9586

Table 23: ANOVA applied to the Linear Regression Model

Model		Sum of Squares	Df	Mean Square	F	p-value
1	Regression	187.453	1	187.453	203.984	0.000
	Residual	221.469	242	0.919		
	Total	408.922	243			

Table 24: Coefficients Table for the Linear Regression

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	p-value
1	Constants	1.990	0.180		11.065	0.00
	Trustworthiness	**0.697**	0.049	0.677	14.282	**0.000**

4.6.5. Hypothesis 5

H5: Willingness to buy an EV is positively influenced by trustworthiness.

To assess the relationship between trustworthiness and willingness to buy an EV (product consideration), a linear regression model was applied. This linear regression model uses trustworthiness as an independent, and willingness to buy an EV as a dependent variable. According to the model summary table (Table 25), this model explains 15,1% of the extracted data ($R^2 = 0.151$).

After applying this linear regression model, it is verified that the p-value = 0.000 (Table 26). So, the null hypothesis was rejected, because p-value < 0.1 (Table 27). So, the effects of trustworthiness on willingness to buy are statistically significant, and thus willingness to buy an EV is positively influenced by the trustworthiness. So, **H5** is **accepted.**

Table 25: Model Summary

Model Summary				
Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.388	0.151	0.147	1.1661

Table 26: ANOVA applied to the Linear Regression Model

Model		Sum of Squares	df	Mean Square	F	p-value
1	Regression	58.232	1	58.232	42.828	0.000
	Residual	327.684	242	1.360		
	Total	385.917	243			

Table 27: Coefficients Table for the Linear Regression

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	p-value
1	Constants	2.120	0.218		9.701	0.000
	Willingness to buy an EV	**0.352**	0.054	0.388	6.544	**0.000**

Table 28: Summary of the Findings

Hypothesis	Results
H1a: User-generated reviews towards EV will have a higher impact on product consideration (consideration of buying) than EV firm-created reviews.	Rejected
H1b: The type of content will influence the effects of reviews on product consideration.	Rejected
H2a: User-generated reviews towards EV will have a higher impact on willingness to buy EV then firm-created reviews.	Rejected
H2b: The type of content will influence the effects of reviews on willingness to buy.	Rejected
H3a: Trustworthiness towards reviews of EV is positively influenced by the types of review content.	Rejected
H3b: Trustworthiness towards reviews of EV is higher for UGC than FCC.	Rejected
H4: Trustworthiness towards the review of EV positively influences the product consideration.	Accepted
H5: Willingness to buy an EV is positively influenced by trustworthiness.	Accepted

In Table 28, the summary of the findings for each tested hypothesis is presented, showing that H4 and H5 were accepted, and that the other hypotheses were rejected.

5. Discussion and Conclusions

The main objective of this research was to understand the effectiveness of social media UGC and FCC reviews on the adoption of EV, taking into account two different message contents and sources. Moreover, trustworthiness was proposed as a construct that influence the effects. With this objective in mind, two major research questions were developed and a quantitative research method was utilised. This method adopted both descriptive (through literature) and exploratory (use of an online questionnaire) research approaches.

The first question was developed with the goal of understanding if UGC was more effective than firm-created reviews on the consideration of an EV as a mobility product and if the effects would change depending on the type of content. However, the results show that the difference between UGC and FCC is not statistically significant. So, the output concludes that there is no difference between the source and the type of review, making the 4 different posts have similar effects on willingness to buy and product consideration in the same form. In the literature, the obtained results are contradictory and, thus, not giving a stable conclusion regarding this topic. According to Ibrahim et al. (2022), UGC has a stronger, more significant and effective influence on users' behaviours, notably liking and sharing on Facebook, than FCC. But, at the same time, this result presents a clear contradiction to what Kim & Yang (2017) found. They concluded that Facebook users might share a company-created post more often, by being more effective and to comment on it or click on the Like button, than when faced with UGC.

The second question was developed with the goal of understanding how trustworthiness can influence the relationship between the review type, whether it is a UGC, or it is a firm-created review, with the moment of making the consideration of buying that product. It was possible to conclude the 4 types of review have the same impact on trustworthiness. Hence, the hypotheses were rejected with all scenarios having comparable effect on trustworthiness. The obtained conclusion is aligned with the research of Filieri et al. (2018), that state that there is no support for the relationship caused by influence of trustworthiness, regarding the review type and the consideration of buying a product. Regarding Wu & Lee (2012), blog content reviews (UGC) trustworthiness, created by consumers, will not affect and influence consideration of buying medical and beauty products. That fact is sustained by the content creation, that can be done any blogger, regardless the level of trust.

Finally, when the effects of trustworthiness on willingness to buy and product consideration are inspected, results indicate significant effects.

5.1. Theoretical and Managerial Implications

The findings from this dissertation provide managers from car brands, such as Volkswagen Portugal, with important insights into endorsement marketing.

Firstly, this thesis showed that the source of the review does not differently influence product consideration for the EV market. So, regarding the Portuguese market, there is no significant difference on product consideration between UGC reviews and car brand (FCC) reviews. Also, it was shown that willingness to buy does not differ, regarding the source of the review content, making the two different review sources work in a similar form. This conclusion can be related with the source credibility, regarding the UGC, as it was an anonymous one, which when compared with the brand itself (Volkswagen) did not come across as more influent. This implies that car brands may use UGC from anonymous sources and FCC interchangeably and may expect similar results. Concerning the type of content, effects were not different between content range and content price even considering the same type of source. This means that both contents are equally relevant to respondents and car brands can combine them in their posting calendar with similar results being expected.

Secondly, it was possible to extract a valid positive influence relationship of trustworthiness on the consideration of buying an EV and on the willingness to buy an EV.

According to Tran et al. (2022), in today's evolving digital landscape, online reviews become a reliable source of information before buyers are willing to buy anything. In the study, it is claimed that online reviews generate an image of the brand in the consumer's mind that obviously positively impacts intention and willingness to buy (Tran et al., 2022).

The findings of this dissertation add to the emerging literature, by investigating the impact of online reviews in the process of decision for an EV, taking into account two different types of messages content (price and range), coming from two different sources: UGC and car brand (FCC) review.

First, it was found that the difference between UGC and FCC reviews is not statistically significant in the moment of influencing the decision of considering an EV as a mobility product, showing that in this dissertation they worked in a similar form. Secondly, a valid positive influence relationship of trustworthiness can be observed in the relationship between

the types of review and the consideration of buying an EV, even if the source of the review does not have a statistically significant influence in this process.

Lastly, with this model and this research, it was possible to confirm that, for online EV reviews, there is a positive influence of trustworthiness in the willingness to buy, confirming the findings of Lim et al. (2017).

Therefore, independently of source and content, in order to be effective, managers should promote online reviews that appeal to trustworthiness and direct them to the specific target, who are the potential EV consumers and drivers that are willing to buy this new product.

From an academic point of view, this dissertation adds to the Source Credibility Model literature. Even though there is existing literature dedicated to the perceived credibility of influencers and to social marketing, there have been no studies up to this moment that focus specifically on EV potential buyers and the influence of social media content in their decision making. Moreover, at this moment, no studies so far have explored the difference between different message sources, directly related with the willingness to buy a product, such as an EV and also relating with the trustworthiness of the message.

5.2. Limitations and future research

This academic dissertation main objective was to understand the effectiveness of social media UGC reviews on the adoption of EV, taking into consideration two different message types, a UGC message and a message originated by a car brand (FCC), by using an online post on Facebook. Concerning the method and model some limitations might be considered and future studies suggested.

Firstly, this study has geographic limitations. In order to avoid cultural biases, the study sample was restricted to Portugal, which means that the findings may not be generalised outside of the Portuguese context. Therefore, future research should go beyond the Portuguese population.

Secondly, the study was conducted assuming only one chosen social media platform, which was Facebook. The findings could have been different for other platforms, which share a different type of content, such as YouTube or Instagram. As a consequence, future studies could benefit from focusing on a broader scope of social media platforms or by giving a specific focus on the YouTube context, since video content could be used as stimulus, instead of images.

Thirdly, a separation of the sample could have been carried out, regarding age factor, dividing the sample between older and younger people and, afterwards, ascertain if age also has influence on the results. For example, specific groups for respondents below 30 years old could have been created, regarding the different sources: UGC and FCC.

Lastly, some authors have proposed other constructs of the Source-Attractiveness model, which were not incorporated in this study due to time constraints. According to Wang et al. (2017), this model takes into account trustworthiness, purchase intention, brand credibility and endorser's expertise. Neither brand credibility, which is defined as the believability of the information conveyed by a brand (Erdem & Swait, 2004; Erdem et al., 2006), which has a great impact during a brand consideration process, nor endorser's expertise, which is the source's qualification which directly influences the level of conviction in order to persuade consumers to purchase the product were studied. For future studies, it is proposed to incorporate new constructs, especially brand credibility and endorser's expertise.

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7. Appendices

Appendix 1: Questionnaire Transcript (English version)

Dear Participant,

My name is Emanuel Sousa and the survey you will respond to was developed within the scope of the final Dissertation of the Master in Applied Management, at Católica-Lisbon School of Business and Economics. This questionnaire is expected to take about 5 minutes to complete.
It is important to mention that the survey is anonymous and all gathered data will be kept strictly confidential. Please answer with honesty and know that there are no right or wrong answers.

Thank you for your attention and participation in this study!

Section 1: Screening Questions:

1) When I travel, I use a car.

☐	Never
☐	Very Rarely
☐	Rarely
☐	Neutral
☐	Occasionally
☐	Very Frequently
☐	Always

(*If the respondent says Never, he/she will be directed to the end of the survey. Otherwise, he/she will continue to the next question.)*

2) I have a drivers' license.

☐	Yes
☐	No

(If the respondent says No, he/she will be directed to the end of the survey. Otherwise, he/she will continue to the next question.)

3) When I want to buy a car I search through the Internet…

	Never
	Very Rarely
	Rarely
	Neutral
	Occasionally
	Very Frequently
	Always

(*If the respondent says Never, he/she will be directed to the end of the survey. Otherwise, he/she will continue the survey.)*

4) I read online reviews regarding products, such as cars.

	Never
	Very Rarely
	Rarely
	Neutral
	Occasionally
	Very Frequently
	Always

(*If the respondent says Never, he/she will be directed to the end of the survey. Otherwise, he/she will continue to the next question.)*

5) I will consider using an electric car (EV).

	Never
	Very Rarely
	Rarely
	Neutral
	Occasionally
	Very Frequently
	Always

(*If the respondent says Never, he/she will be directed to the end of the survey. Otherwise, he/she will continue to the next question.)*

Section 2:

Imagine you are planning to buy a new car. You are looking for the best option for you.

In this part of the questionnaire, we present an online review of an electric vehicle. Please read it carefully.

Section 2a): Review done by car brand with positive influence on EV purchase cost.

1) Please, read carefully the following sentences regarding this EV review and **rate your level of agreement/disagreemen**t with the statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I consider this EV review is a reliable way to receive relevant information.							
I have confidence on the believability of the message source.							
Online EV reviews are a trustworthy source of information.							
EV reviews are a trustworthy source of direct information about the car to potential customers.							

2) Please, read carefully the following sentences regarding the willingness to adopt an EV and **rate your level of agreement/disagreemen**t with the statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I intend to adopt an EV as a mobility form.							
I am willing to consider the present EV as an alternative.							
It is likely that I would consider the EV present in the review as an alternative.							

3) Regarding your consideration of buying an EV, please rate the following statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I intend to purchase this EV, regarding its presented price.							
It is likely that I will purchase an EV in the near future.							
I predict that I will purchase the EV presented in the review in the future.							
After reading the online review, I intend to purchase this EV.							

Section 2b): Review done by online User with positive influence on EV purchase cost.

Imagine you are planning to buy a new car. You are looking for the best option for you.

In this part of the questionnaire, we present an online review of an electric vehicle. Please read it carefully.

1) Please, read carefully the following sentences regarding this EV review and **rate your level of agreement/disagreemen**t with the statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I consider this EV review is a reliable way to receive relevant information.							
I have confidence on the believability of the message source.							
Online EV reviews are a trustworthy source of information.							
EV reviews are a trustworthy source of direct information about the car to potential customers.							

2) Please, read carefully the following sentences regarding the willingness to adopt an EV and **rate your level of agreement/disagreemen**t with the statements from 1 (*completely disagree*) to 7 (*completely agree*) .

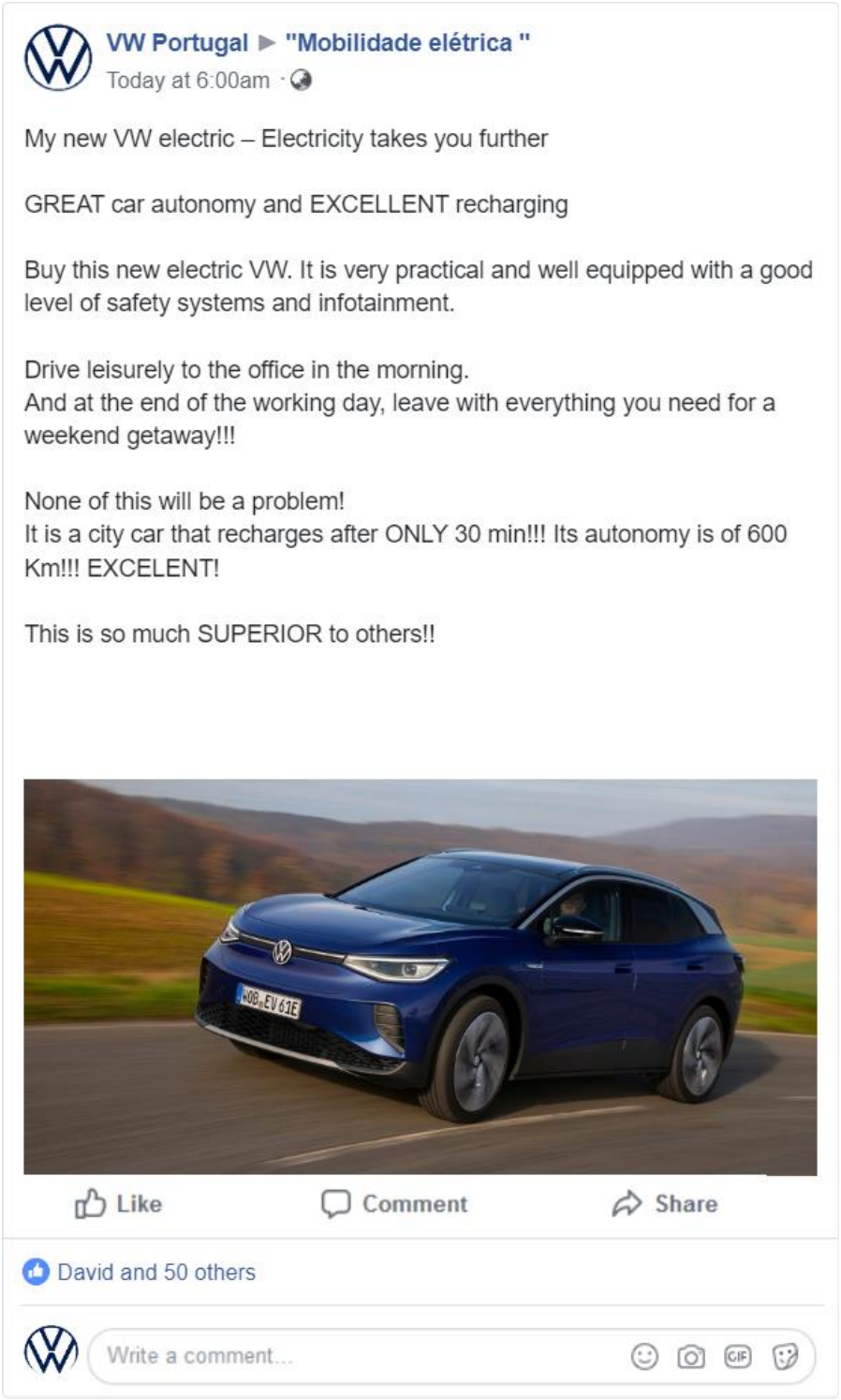
	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I intend to adopt an EV as a mobility form.							
I am willing to consider the present EV as an alternative.							
It is likely that I would consider the EV present in the review as an alternative.							

3) Regarding your consideration of buying an EV, please rate the following statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I intend to purchase this EV, regarding its presented price.							
It is likely that I will purchase an EV in the near future.							
I predict that I will purchase the EV presented in the review in the future.							
After reading the online review, I intend to purchase this EV.							

Section 2c): Review done by a car brand with positive influence on EV range.

Imagine you are planning to buy a new car. You are looking for the best option for you.
In this part of the questionnaire, we present an online review of an electric vehicle. Please read it carefully.



1) Please, read carefully the following sentences regarding this EV review and **rate your level of agreement/disagreemen**t with the statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I consider this EV review is a reliable way to receive relevant information.							
I have confidence on the believability of the message source.							
Online EV reviews are a trustworthy source of information.							
EV reviews are a trustworthy source of direct information about the car to potential customers.							

2) Please, read carefully the following sentences regarding the willingness to adopt an EV and **rate your level of agreement/disagreemen**t with the statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I intend to adopt an EV as a mobility form.							
I am willing to consider the present EV as an alternative.							
It is likely that I would consider the EV present in the review as an alternative.							

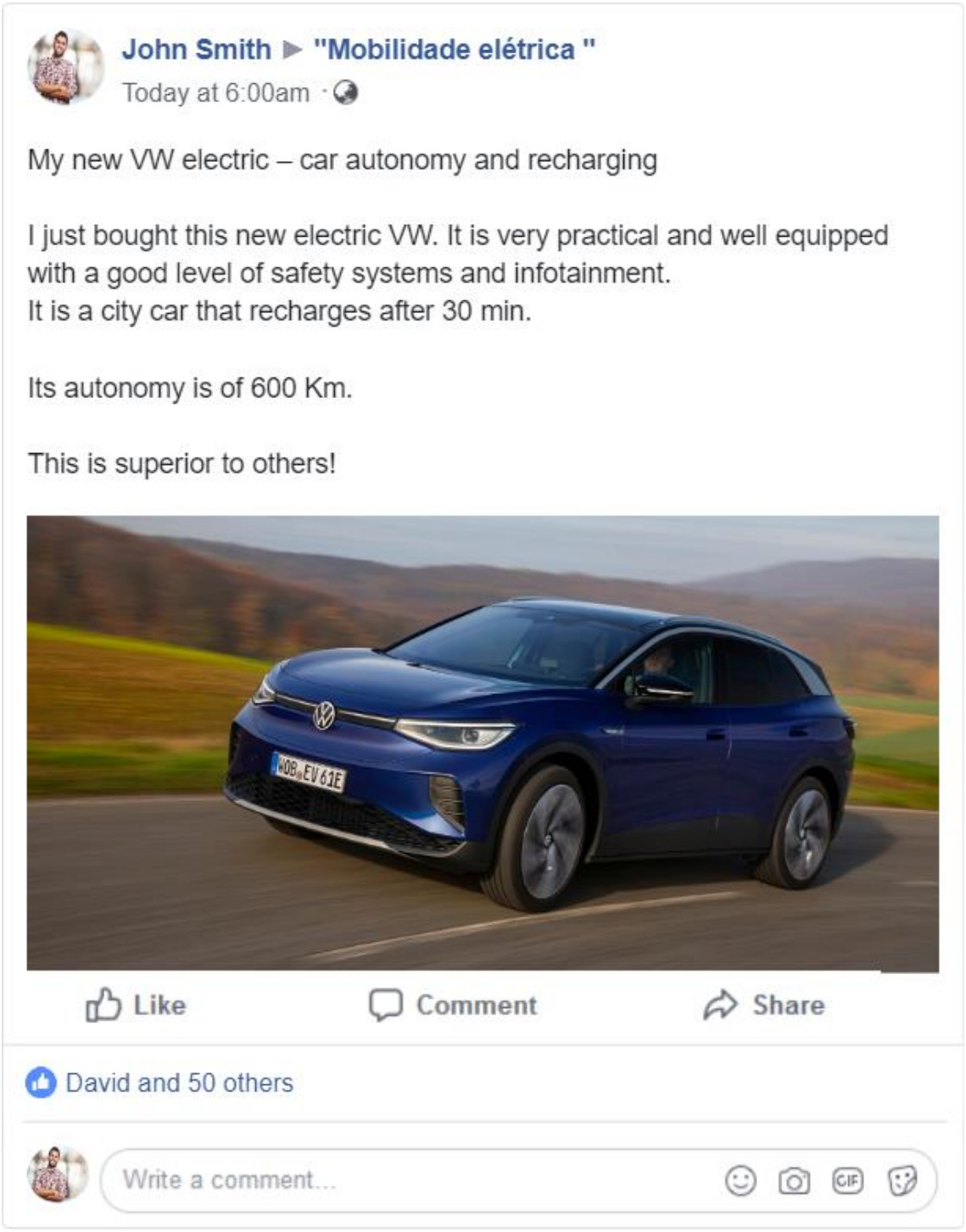
3) Regarding your consideration of buying an EV, please rate the following statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I intend to purchase this EV, regarding its presented price.							
It is likely that I will purchase an EV in the near future.							
I predict that I will purchase the EV presented in the review in the future.							
After reading the online review, I intend to purchase this EV.							

Section 2d): Review done by online user with positive influence on EV range.

Imagine you are planning to buy a new car. You are looking for the best option for you.

In this part of the questionnaire, we present an online review of an electric vehicle. Please read it carefully.



1) Please, read carefully the following sentences regarding this EV review and **rate your level of agreement/disagreemen**t with the statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I consider this EV review is a reliable way to receive relevant information.							
I have confidence on the believability of the message source.							
Online EV reviews are a trustworthy source of information.							
EV reviews are a trustworthy source of direct information about the car to potential customers.							
Online EV reviews are reliable because messages are up-to-date.							

2) Please, read carefully the following sentences regarding the willingness to adopt an EV and **rate your level of agreement/disagreemen**t with the statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I intend to adopt an EV as a mobility form.							
I am willing to consider the present EV as an alternative.							
It is likely that I would consider the EV present in the review as an alternative.							

3) Regarding your consideration of buying an EV, please rate the following statements from 1 (*completely disagree*) to 7 (*completely agree*) .

	Completely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Completely Agree
I intend to purchase this EV, regarding its presented price.							
It is likely that I will purchase an EV in the near future.							
I predict that I will purchase the EV presented in the review in the future.							
After reading the online review, I intend to purchase this EV.							

Section 3: Socio-Demographic Questions

This is the last section of the questionnaire. Please, answer these questions about yourself before finishing.

7) Please indicate your Gender**:**

	Male
	Female
	Other

8) What is your age?

	18-25 years old
	25-34 years old
	35-44 years old
	45-54 years old
	55-64 years old
	Above 65 years old

9) Employment Status: Are you currently…?

	Full-time student
	Student and Part-time worker
	Full-time worker
	Unemployed
	Retired
	Other

10) What is your highest level of studies completed? *If currently enrolled, highest degree received***:**

	Elementary School
	High School
	Bachelor's Degree
	Masters' Degree or above

Thank you for your participation in this study!

Appendix 2: Questionário (versão portuguesa)

Caro Participante,

O meu nome é Emanuel Sousa e o inquérito a que responderá foi desenvolvido no âmbito da Dissertação final do Mestrado em Gestão Aplicada, na Católica-Lisbon School of Business and Economics. Espera-se que este questionário demore entre 5 a 10 minutos a preencher. É essencialmente dirigido a respondentes com idade igual ou superior a 18 anos.

É importante mencionar que o inquérito é anónimo e que todos os dados recolhidos serão mantidos estritamente confidenciais. Por favor, responda com honestidade e saiba que não há respostas certas ou erradas.

Obrigado pela vossa atenção e participação neste estudo!

Section 1: Perguntas de controlo:

1) Quando viajo, uso o carro.

☐	Nunca
☐	Muito raramente
☐	Raramente
☐	Neutro
☐	Ocasionalmente
☐	Muito frequentemente
☐	Sempre

(*Se o respondente disser Nunca, ele/ela vai ser redireccionado para o final do questionário. Caso contrário, ele/ela vai continuar para a próxima questão.)*

2) Tenho carta de condução.

☐	Sim
☐	Não

(*Se o respondente disser Nunca, ele/ela vai ser redireccionado para o final do questionário. Caso contrário, ele/ela vai continuar para a próxima questão.)*

3) Quando pretend comprar um carro, pesquiso na Internet…

	Nunca
	Muito raramente
	Raramente
	Neutro
	Ocasionalmente
	Muito frequentemente
	Sempre

(*Se o respondente disser Nunca, ele/ela vai ser redireccionado para o final do questionário. Caso contrário, ele/ela vai continuar para a próxima questão.)*

4) Leio críticas online sobre produtos, como por exemplo, carros.

	Nunca
	Muito raramente
	Raramente
	Neutro
	Ocasionalmente
	Muito frequentemente
	Sempre

(*Se o respondente disser Nunca, ele/ela vai ser redireccionado para o final do questionário. Caso contrário, ele/ela vai continuar para a próxima questão.)*

5) Consideraria a hipótese de usar um veículo elétrico (EV).

	Nunca
	Muito raramente
	Raramente
	Neutro
	Ocasionalmente
	Muito frequentemente
	Sempre

(*Se o respondente disser Nunca, ele/ela vai ser redireccionado para o final do questionário. Caso contrário, ele/ela vai continuar para a próxima questão.)*

Section 2:

Imagine que está a planear comprar um carro novo, e que optou por um veículo eléctrico (EV).

Está à procura da melhor opção para si. Nesta parte do questionário, apresentamos uma alternativa possível (crítica on-line), dentro da pesquisa que efectuou; diga-nos a sua opinião.

Section 2a): Crítica on-line feita por marca automóvel com influência positiva no custo de aquisição do veículo elétrico.

1) Por favor, leia cuidadosamente as seguintes frases relativas a esta crítica do veículo elétrico e classifique o seu nível de concordância/discordância com as declarações de 1 (discordo totalmente) a 7 (concordo totalmente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Considero esta crítica de veículo elétrico uma forma fiável de receber informação relevante sobre o veículo.							
Tenho confiança na credibilidade da fonte da mensagem.							
As críticas online sobre veículos elétricos são uma fonte de informação de confiança.							
As críticas online sobre veículos elétricos são uma fonte fiável de informação direta sobre							

o carro para potenciais clientes.							

2) Por favor, leia cuidadosamente as seguintes frases relativas à vontade de adotar um veículo elétrico e classifique o seu nível de acordo/desacordo com as declarações de 1 (discordo totalmente) a 7 (concordo totalmente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Pretendo adoptar um EV como forma de mobilidade.							
Estou disposto a considerar o presente veículo elétrico como uma alternativa.							
É provável que eu considere o veículo elétrico presente na crítica como uma alternativa.							

3) Relativamente à sua consideração de comprar um veículo elétrico, classifique as seguintes declarações de 1 (discordo completamente) a 7 (concordo completamente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Pretendo adquirir este veículo elétrico, tendo em conta o preço apresentado							
É provável que eu compre um EV num futuro próximo.							
Prevejo que irei adquirir o veículo elétrico apresentado no post online da marca no futuro.							
Depois de ler o post online da marca pretendo adquirir este veículo elétrico.							

Section 2b): Crítica on-line feita por utilizador do forum online com influência positiva no custo de aquisição do veículo elétrico.

Imagine que está a planear comprar um carro novo, e que optou por um veículo eléctrico (EV).

Está à procura da melhor opção para si. Nesta parte do questionário, apresentamos uma alternativa possível (crítica on-line), dentro da pesquisa que efectuou; diga-nos a sua opinião.

1) Por favor, leia cuidadosamente as seguintes frases relativas a esta crítica do veículo elétrico e classifique o seu nível de concordância/discordância com as declarações de 1 (discordo totalmente) a 7 (concordo totalmente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Considero esta crítica de veículo elétrico uma forma fiável de receber informação relevante sobre o veículo.							
Tenho confiança na credibilidade da fonte da mensagem.							
As críticas online sobre veículos elétricos são uma fonte de informação de confiança.							
As críticas online sobre veículos elétricos são uma fonte fiável de informação direta sobre							

o carro para potenciais clientes.							

2) Por favor, leia cuidadosamente as seguintes frases relativas à vontade de adotar um veículo elétrico e classifique o seu nível de acordo/desacordo com as declarações de 1 (discordo totalmente) a 7 (concordo totalmente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Pretendo adoptar um EV como forma de mobilidade.							
Estou disposto a considerar o presente veículo elétrico como uma alternativa.							
É provável que eu considere o veículo elétrico presente na crítica como uma alternativa.							

3) Relativamente à sua consideração de comprar um veículo elétrico, classifique as seguintes declarações de 1 (discordo completamente) a 7 (concordo completamente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Pretendo adquirir este veículo elétrico, tendo em conta o preço apresentado							
É provável que eu compre um EV num futuro próximo.							
Prevejo que irei adquirir o veículo elétrico apresentado no post online da marca no futuro.							
Depois de ler o post online da marca pretendo adquirir este veículo elétrico.							

Section 2c): Crítica on-line feita por marca automóvel com influência positiva na autonomia do EV.

Imagine que está a planear comprar um carro novo, e que optou por um veículo eléctrico (EV).
Está à procura da melhor opção para si. Nesta parte do questionário, apresentamos uma alternativa possível (crítica on-line), dentro da pesquisa que efectuou; diga-nos a sua opinião.

1) Por favor, leia cuidadosamente as seguintes frases relativas a esta crítica do veículo elétrico e classifique o seu nível de concordância/discordância com as declarações de 1 (discordo totalmente) a 7 (concordo totalmente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Considero esta crítica de veículo elétrico uma forma fiável de receber informação relevante sobre o veículo.							
Tenho confiança na credibilidade da fonte da mensagem.							
As críticas online sobre veículos elétricos são uma fonte de informação de confiança.							
As críticas online sobre veículos elétricos são uma fonte fiável de informação direta sobre							

o carro para potenciais clientes.							

2) Por favor, leia cuidadosamente as seguintes frases relativas à vontade de adotar um veículo elétrico e classifique o seu nível de acordo/desacordo com as declarações de 1 (discordo totalmente) a 7 (concordo totalmente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Pretendo adoptar um EV como forma de mobilidade.							
Estou disposto a considerar o presente veículo elétrico como uma alternativa.							
É provável que eu considere o veículo elétrico presente na crítica como uma alternativa.							

3) Relativamente à sua consideração de comprar um veículo elétrico, classifique as seguintes declarações de 1 (discordo completamente) a 7 (concordo completamente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Pretendo adquirir este veículo elétrico, tendo em conta o preço apresentado							
É provável que eu compre um EV num futuro próximo.							
Prevejo que irei adquirir o veículo elétrico apresentado no post online da marca no futuro.							
Depois de ler o post online da marca pretendo adquirir este veículo elétrico.							

Section 2d): Crítica on-line feita por utilizador online com influência positiva na autonomia do EV.

Imagine que está a planear comprar um carro novo, e que optou por um veículo eléctrico (EV).
Está à procura da melhor opção para si. Nesta parte do questionário, apresentamos uma alternativa possível (crítica on-line), dentro da pesquisa que efectuou; diga-nos a sua opinião.

1) Por favor, leia cuidadosamente as seguintes frases relativas a esta crítica do veículo elétrico e classifique o seu nível de concordância/discordância com as declarações de 1 (discordo totalmente) a 7 (concordo totalmente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Considero esta crítica de veículo elétrico uma forma fiável de receber informação relevante sobre o veículo.							
Tenho confiança na credibilidade da fonte da mensagem.							
As críticas online sobre veículos elétricos são uma fonte de informação de confiança.							
As críticas online sobre veículos elétricos são uma fonte fiável de informação direta sobre							

o carro para potenciais clientes.							

2) Por favor, leia cuidadosamente as seguintes frases relativas à vontade de adotar um veículo elétrico e classifique o seu nível de acordo/desacordo com as declarações de 1 (discordo totalmente) a 7 (concordo totalmente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Pretendo adoptar um EV como forma de mobilidade.							
Estou disposto a considerar o presente veículo elétrico como uma alternativa.							
É provável que eu considere o veículo elétrico presente na crítica como uma alternativa.							

3) Relativamente à sua consideração de comprar um veículo elétrico, classifique as seguintes declarações de 1 (discordo completamente) a 7 (concordo completamente) .

	Discordo Completamente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo completamente
Pretendo adquirir este veículo elétrico, tendo em conta o preço apresentado							
É provável que eu compre um EV num futuro próximo.							
Prevejo que irei adquirir o veículo elétrico apresentado no post online da marca no futuro.							
Depois de ler o post online da marca pretendo adquirir este veículo elétrico.							

Secção 3: Questões Socio-Demográficas

Esta é a última secção do questionário. É favor responder às questões seguintes sobre si, antes de terminar o questionário.

7) Qual é o seu género?

☐	Masculino
☐	Feminino
☐	Outro

8) Qual é a sua idade?

☐	18-25 anos
☐	25-34 anos
☐	35-44 anos
☐	45-54 anos
☐	55-64 anos
☐	Mais de 65 anos

9) Situação laboral: Está atualmente…?

☐	Estudante
☐	Trabalhador-estudante
☐	Trabalhador a full-time
☐	Desempregado
☐	Reformado
☐	Outro

10) Qual é o maior nível educacional completado? *Se estiver atualmente inscrito, o grau mais elevado que recebeu.*

☐	Ensino Básico
☐	Ensino Secundário
☐	Licenciatura
☐	Mestrado ou superior

Muito obrigado por ter participado neste estudo!