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The Influence of Corporate Social Responsibility and Innovation Initiatives on Consumer Satisfaction: the mediating role of Corporate Reputation

Carla Sofia Santos Campos

Dissertation Thesis presented as partial requirement for obtaining the Master's degree in Statistics and Information Management

NOVA Information Management School Instituto Superior de Estatística e Gestão de Informação

Universidade Nova de Lisboa

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Advisor: Prof. Doutor Rui Gonçalves

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#### **RESUMO**

A atual exigência feita às empresas pela adoção de medidas inovadoras e atividades relacionadas com a sua responsabilidade social deve-se ao crescente número de problemas associados à instabilidade económica e destruição do meio ambiente, mas também, pelo aumento de *stakeholders* conscientes e atentos aos comportamentos diários das empresas. Este estudo tem como objetivo analisar a influência que as atividades de responsabilidade social empresarial e inovações adotadas pelas empresas têm sobre a sua própria reputação e a satisfação do consumidor. Para medir esta influência, recorreu-se a um método de pesquisa quantitativa, um questionário, para recolher a informação necessária para testar o modelo conceptual desenvolvido neste estudo através da técnica PLS-SEM.

Os resultados desta pesquisa comprovam a influência positiva e direta que tanto as atividades de responsabilidade social empresarial como as iniciativas de inovação têm sobre a satisfação do consumidor e a reputação empresarial. Esta investigação pode ajudar as empresas através da recomendação de quais ações estas devem adotar para cativar mais consumidores, uma vez que, para os inquiridos deste estudo em específico, práticas relacionadas com a responsabilidade social das empresas aparentam ser uma boa tática para melhorar as perceções do público que em consequência, melhora a reputação da empresa e leva à satisfação do consumidor.

#### **PALAVRAS-CHAVE**

**Palavras-Chave:** Reputação Empresarial; Satisfação do Consumidor; Inovação; Responsabilidade Social das Empresas

#### **ABSTRACT**

The current demand made to companies for the adoption of innovative measures and corporate social responsibility activities is due to the growing number of problems related to the economic instability and destruction of the environment but also, because of the increasing amount of sentient and attentive stakeholders towards businesses daily behaviours. This study aims to analyse the influence that corporate social responsibility activities and innovations adopted by companies have over their own reputation and consumer satisfaction. To measure this influence, a quantitative research method, a questionnaire, was used to collect the information needed to test the conceptual model developed in this research using the PLS-SEM technique.

This study results prove the direct and positive influence that both corporate social responsibility activities and innovation initiatives have over consumer satisfaction and businesses reputation. This investigation can help companies through its recommendations of which actions firms should adopt to allure more consumers given that, for the respondents of this specific study, corporate social responsibility activities are considered a successful tactic to boost public perceptions which, consequently, improves companies' reputation and leads to consumer satisfaction.

#### **KEYWORDS**

**Keywords:** Corporate Reputation; Consumer Satisfaction; Innovation; Corporate Social Responsibility

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#### LIST OF ABBREVIATIONS AND ACRONYMS

- **AVE** Average Variance Extracted
- **CR** Corporate Reputation
- **CS** Consumer Satisfaction
- **CSR** Corporate Social Responsibility
- **GDP** Gross Domestic Product
- **HTMT** Heterotrait-Monotrait Ratio
- I Innovation Initiatives
- IT Information Technology
- **PLS** Partial Least Square
- **RBV** Resource-Based Value
- **RQ** Reputation Quotient
- **R&D** Research & Development
- **SEM** Structural Equation Modelling
- **UK –** United Kingdom
- VIF Variance Inflation Factor

#### 1. INTRODUCTION

In this section it is presented this research theme as well as its relevance. In addition, the research questions, and the main research objectives to be answered at the end of the study are defined. Lastly, this investigation structure is presented.

#### 1.1. STUDY RELEVANCE AND RESEARCH PROBLEM IDENTIFICATION

Over the last few decades, globalization has grown non-stop and with it, countless issues inherent from its development have also increased. On top of that, in the beginning of the year of 2020, the covid-19 pandemic erupted and affected the functionality of businesses and society around the world. According to Papadopoulos et al. (2020) study, a recent Eurostat research has discovered that, since the beginning of the covid-19 pandemic, the Eurozone GDP (gross domestic product) has declined roughly 4% just in the first three months of the year of 2020, representing the biggest collapse since 1995.

The most recent uprising issues connected to the increased attacks on civil rights, economic instability growth, multiplication of environmental problems and labour standards decrease, have been society and stakeholders' biggest concern (García-Madariaga & Rodríguez-Rivera, 2017; Jacob, 2012). For this motive, society has become more aware of firms' actions and consumers have evolved to be more conscientious and in favour of society welfare (He & Harris, 2020; Naveed et al., 2012). Given that firm image and reputation play an important part during stakeholders' company selection decision making process (Abd-El-Salam et al., 2013), companies feel the pressure to adopt more socially responsible behaviours and create innovations in their businesses so that they can maintain their status, gain stakeholders trust and consequently, develop a competitive advantage (Datta et al., 2011; Islam et al., 2021).

In what manner companies react to a crisis event has permanent consequences on their financial results and ability to recover (OECD, 2020). Besides, it certainly dictates the magnitude of its effect on their future reputation (Business Gateway, 2020). Thus, it is imperative that companies evaluate the desires and needs of their surrounding environment so that, when necessary, they can adapt its business in a way to mitigate possible economic damages (OECD, 2020) and transition to more sustainable and wide-ranging business models, renewing this way the relationships with their stakeholders (Coulson-Thomas, 2020). If consumers recognize that a certain firm is trying to improve, they will presume that the company itself cares about their well-being and as a result, they end up more satisfied (Naveed et al., 2012).

Preceding studies have pointed out the growing use, demand, and importance given to socially responsible activities over the years (Bae et al., 2021; Luo & Bhattacharya, 2006; Manuel & Herron, 2020; Saeidi et al., 2015). However, the attention towards these activities has increased even more during the covid-19 pandemic since, in the

present competitive market, being considered a socially responsible company is a very efficient business strategy (El-Garaihy et al., 2014; Luo & Bhattacharya, 2006). In other words, companies which employ social and environmentally motivated activities in their business are more likely to obtain positive rewards. Therefore, corporate social responsibility (CSR) activities have become a viable mean for companies to make use of to respond to stakeholders needs, grow consumer loyalty and satisfaction, boost company reputation and achieve a competitive advantage (El-Garaihy et al., 2014; Islam et al., 2021; Magrizos et al., 2021; Mahmud et al., 2021).

The escalating importance also given to innovation throughout the years has been due to the brief life span of modern gadgets and the constant growing demand by consumers for new and creative goods (Daragahi, 2017). Several studies that have explored the concept of innovation, have considered it to be a crucial factor for the endurance and success of a company inserted in an intense competitive market (Daragahi, 2017; Datta et al., 2011; Kunz et al., 2011). Literature on innovation has also shown that companies which invest in innovations on their business portray themselves has more efficient, more capable of meeting stakeholders' requirements and, more able to grow over time (Datta et al., 2011; Naveed et al., 2012; Rubera & Kirca, 2017). Thus, it is possible to understand that firm innovation can result in numerous benefits: growth of companies' worth and reputation, more loyal and satisfied clients, higher preservation of customers and gain of new ones, and a competitive advantage over its rivals (Kunz et al., 2011; Naveed et al., 2012; Rubera & Kirca, 2017; Seng & Ping, 2016).

From literature research it was possible to observe that there already exists a broad knowledge about the concepts being studied in this investigation. Throughout this investigation it was possible to discover that several authors have previously found proof of positive relationships between CSR and consumer satisfaction (El-Garaihy et al., 2014; García-Madariaga & Rodríguez-Rivera, 2017; Islam et al., 2021; Luo & Bhattacharya, 2006), innovation and consumer satisfaction (Daragahi, 2017; Michna, 2018; Naveed et al., 2012; Rubera & Kirca, 2017), CSR and corporate reputation (Arikan et al., 2016; El-Garaihy et al., 2014; Fatma et al., 2015; García-Madariaga & Rodríguez-Rivera, 2017; Islam et al., 2021), and innovation and corporate reputation (Padgett & Moura-Leite, 2012). Besides all these connections, Arikan et al. (2016) have also found evidence that corporate reputation has a positive mediating role in the relationship between CSR and consumer satisfaction. Nevertheless, from the series of articles reviewed, I could observe that so far there isn't any study that explores the possibility of corporate reputation having as well mediating role in the relationship between innovation and consumer satisfaction (as shown in annex 1). Thus, it is pertinent to study this topic.

To make progress on this subject, the intention of this study is to investigate the influence that companies CSR activities and innovation initiatives have over consumer satisfaction and corporate reputation and, try to discover if corporate reputation can mediate the impact of those practices on consumer satisfaction. Thus, the research questions that this study intends to answer are: What is the impact of CSR activities and corporate innovation initiatives on consumer satisfaction? Does corporate reputation have a mediating role in those relationships?

#### 1.2. RESEARCH OBJECTIVES

To be able to fulfil this research purpose, it is essential to focus this investigation on several objectives.

First, this study attempts to extend previous literature that has studied the relationships between CSR, innovation, and consumer satisfaction (Daragahi, 2017; El-Garaihy et al., 2014; García-Madariaga & Rodríguez-Rivera, 2017; Islam et al., 2021; Luo & Bhattacharya, 2006; Michna, 2018; Naveed et al., 2012; Rubera & Kirca, 2017). To do so, it is intended to explore in this study the impact of companies CSR activities on consumer satisfaction and analyse the influence of companies' innovation initiatives on consumer satisfaction.

Besides, this investigation strives to deepen the knowledge of preceding literature about the relationships among CSR, innovation, and corporate reputation (Arikan et al., 2016; El-Garaihy et al., 2014; Fatma et al., 2015; García-Madariaga & Rodríguez-Rivera, 2017; Islam et al., 2021; Padgett & Moura-Leite, 2012). Therefore, it is attempted to investigate the effects of CSR activities on corporate reputation and examine the impact of companies' innovation initiatives on corporate reputation.

Moreover, this study also aims to reinforce prior literature, more specifically Arikan et al. (2016) research, and make new contributions to the literature world by investigating new theoretical perspectives concerning the possible mediating role of corporate reputation on the abovementioned relationships. More particularly, this study aspires to contribute to literature development by assessing the mediating role of corporate reputation in the relationship between innovation initiatives and consumer satisfaction. Hence, this investigation seeks to examine the mediating role of corporate reputation on the relationship between CSR activities and consumer satisfaction and evaluate the mediating role of corporate reputation on the relationship between companies' innovation initiatives and consumer satisfaction.

#### 1.3. RESEARCH STRUCTURE

This investigation is composed of the following sections: in the first section, it is made the introduction of this study, where it is explained its importance and it is defined the investigation research questions and main objectives. In the second section, a literature review process about the four relevant concepts of this study is made (corporate reputation, consumer satisfaction, corporate social responsibility, and innovation) and each concept is analysed in separate subchapters. In each of these subchapters, the concept in question is defined and its main characteristics are explained. It is also discussed the connection that the concept has with companies and stakeholders.

In section three, using the relevant literature review previously done, it is elaborated the conceptual model to be tested ahead and it is developed and discussed the theoretical hypotheses of this investigation. Furthermore, it is identified the literature-based constructs and measurements items of the questionnaire created to perform the data collection on this study. Section four is divided into four subtitles: 1) it is explained this investigation structure; 2) it is presented the type of methodology applied on this study; 3) the data collection process is explained; and 4) the data analysis process and technique used to perform the quantitative analysis of the data are described and justified.

In the fifth section, the characterization of this study sample is made. In section six, the proposed conceptual model is tested, and the results are presented and discussed in detail. Lastly, in section seven, it is provided the conclusions of this research, followed by some study limitations and recommendations for future investigation.

#### 2. LITERATURE REVIEW

This section is divided into 4 subchapters and in each one of these, it is performed the analysis of several studies about the main concepts of this investigation.

#### 2.1. CORPORATE REPUTATION

Corporate reputation is considered one of the most important intangible features a company can detain (Chun, 2005; Comyns & Franklin-Johnson, 2018) and according to Singh & Misra (2021) study, this concept is the result of a firm characteristics, past behaviours, and ability to improve over time. From the research performed, it was possible to see that many studies consider corporate reputation to be a multi-stakeholder concept (Baldarelli & Gigli, 2014; Arikan et al., 2016) and strongly connected to stakeholder theory (Feldman et al., 2014), since this construct is influenced by so many distinct types of stakeholders.

Nonetheless, corporate reputation can be defined very differently among researchers. In Islam et al. (2021) and Fatma et al. (2015) studies, corporate reputation is regarded as the image of a business that is associated to its socially responsible practices, product/service quality, consistency, and customer-oriented strategies. Meanwhile, in Pool et al. (2016) and Abd-El-Salam et al. (2013) studies, corporate reputation is connected to stakeholders' perceptions, opinion, and emotions. Nevertheless, all these studies equally consider that having a good reputation can lead to countless advantages.

Alongside with the multiple diverse ways to define corporate reputation, numerous theories around it have surfaced over the years. Feldman et al. (2014) mentioned in their study the existence of three corporate reputation theories: signalling, strategic and resource-based value. The authors' explained that signalling theory consists of signs that companies externalize, which informs stakeholders of their worth and performance (Feldman et al., 2014). Similarly, Gatzert (2015) mentioned that corporate reputation functions as a signal for stakeholders in relation to a company products/services quality. Regarding the strategic theory, Feldman et al. (2014) stated that this theory deems that corporate reputation is simply a strategic asset for companies, which can be used to differentiate themselves from their rivals. The third theory, resource-based value (RBV), is a more widely known and used theory among the studies analysed throughout this investigation. This theory considers that companies who detain valuable intangible assets difficult to imitate, such as, corporate reputation, corporate social responsibility (CSR) or research and development (R&D) abilities, have a competitive advantage over its rivals (Fatma et al., 2015; Feldman et al., 2014; Islam et al., 2021; Padgett & Moura-Leite, 2012). And as per El-Garaihy et al. (2014) study, having a competitive advantage is considered essential for a business to maintain its prosperity. In addition to all the theories mentioned above, a different one

was mentioned in Padgett & Moura-Leite (2012) research, institutional theory, where the idea of compliance is considered the key to companies' prosperity.

Baldarelli & Gigli (2014) consider that it is vital for a company to have an excellent reputation because by having it, it becomes more difficult for its competitors to replicate their unique business features. Additionally, a firm with a powerful reputation can be considered as more principled (Baldarelli & Gigli, 2014) and reflects a higher capacity to provide to its consumers a superior product/service quality (Raithel & Schwaiger, 2015). Raithel & Schwaiger (2015) mentioned in their study that consumer perception or opinion about companies' non-economic characteristics (such as, product/service quality, working conditions and corporate accountability) contributes significantly more to shareholder value and to firms' reputation. Similarly, Gatzert (2015) also mentioned that the non-financial features of a firm are more important to its respective staff and clients whilst the financial characteristics are more significant to investors. Thus, it is possible to deduce that from the stakeholders' scope of a firm, consumers and employees are the ones which pay more attention and worry about companies' social and environmental behaviours. Besides, García-Madariaga & Rodríguez-Rivera (2017) also stated in their study that firm reputation influences consumers' expectations. Consequently, it is possible to recognize that the more positive emotions stakeholders hold for a company, the higher is companies' chance to develop consistent relationships with its stakeholders (Raithel & Schwaiger, 2015).

From the Ross & McGrath (2020) article, it was possible to understand that the covid-19 crisis has been the occasion, over the last years, that has impacted the most community perceptions about society itself and businesses. A Dias & Retori (2020) article considered that corporate reputation, apart from being the result of a company's overall behaviour, is also affected by the financial and social aspects of the environment in which it functions. Hence, during times of uncertainty, reputation gains its relevance and carries out a significant role in assuring stakeholders the underlying quality that a company can offer (Baldarelli & Gigli, 2014; Pfister et al., 2020). In addition, a formidable reputation offers companies the benefit of the doubt (Dias & Retori, 2020; Gatzert, 2015). According to Baldarelli & Gigli (2014) study, stakeholders prefer to consume, work and supply for companies that have a superior reputation.

When a crisis strikes upon a company, the consequent effects on its reputation really depend on several elements, such as, the type of the event, and in what manner the company itself deals with the new circumstances (Comyns & Franklin-Johnson, 2018). According to Gatzert (2015) study, the effect of a reputation risk deriving from a crisis event can have many different impacts among the existing distinct groups of stakeholders within a firm. In terms of the consumers, it can negatively impact their perception of the company and therefore, clients could prefer to consume from other companies causing a decrease in revenues and profits (Gatzert, 2015). In the case of

employees, their work eagerness could diminish and eventually they could join other companies offering better work conditions (Gatzert, 2015). Meanwhile, in the case of investors, their company assessments could show a decrease of their future liquidity causing business withdrawal (Gatzert, 2015).

To keep a good corporate reputation can be an exceedingly challenging task especially nowadays that the growing eminence of social media and the internet creates a higher potential to the occurrence of reputational risks (Comyns & Franklin-Johnson, 2018). And as Warren Buffet once said, "It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you'll do things differently" (Connors, 2010). According to the range of authors analysed in this study, a good reputation can: allure and preserve the most qualified individuals from the job market; help companies become more attractive to national and international investors; improve consumers perceptions about product/service quality; prompt company ability to create market barriers; allow companies to differentiate themselves from its competitors; and cause consumer satisfaction (Comyns & Franklin-Johnson, 2018; Feldman et al., 2014; Islam et al., 2021; Pool et al., 2016; Raithel & Schwaiger, 2015). Besides, a favourable reputation can positively influence stakeholders' affluence, shareholder value, consumer satisfaction and, consumers' consent to pay extra (Raithel & Schwaiger, 2015). Furthermore, it can also impact suppliers and business partners relationships because a good reputation reduces the transaction costs that arise from negotiations (Gatzert, 2015; Raithel & Schwaiger, 2015).

Chun (2005) identified and explained in its study that corporate reputation could be explained through three different perspectives: evaluative, impressional or relational. The author indicated that the evaluative perspective assesses companies' reputation through their financial value while the relational, assesses it through the opinions of the company's internal and external stakeholders (Chun, 2005). Regarding the third perspective, the impressional, Chun (2005) stated that corporate reputation is evaluated through the assessment of stakeholders' perceptions and emotional connection with the image and identity of the firm. And according to Chun (2005), this last school of thought has been the target of public attention since the 90's.

According to Baldarelli & Gigli (2014) and Feldman et al. (2014) studies, corporate reputation is mostly influenced by stakeholders' perceptions, but these insights can differ due to their different interpretation of the information (daily behaviour and ability to meet stakeholder's expectations) conveyed by a company. Since reputation can be dependent on stakeholders' opinion and discernment (Chun, 2005; Feldman et al., 2014), it is important to maintain or improve the following two concepts, related to corporate reputation, that play an especially key role on the consumer decision making process: corporate image and corporate identity (Chun, 2005; Feldman et al., 2014; Gray & Balmer, 1998). Company image consists of the public mental depiction about a

company, in other words, what they imagine when they think, see, or hear about a certain organization (Chun, 2005; Gray & Balmer, 1998). This image is the result of consistent publicity and campaigns (Chun, 2005; Gray & Balmer, 1998). Whereas company identity is the identity that organizations wish to achieve or try to convey to the public (Chun, 2005; Gray & Balmer, 1998). In this case, companies express their corporate identity to their stakeholders through campaigns and frequent communications (Gray & Balmer, 1998).

Firms want to achieve a good reputation because it allows them to increase their performance and consequently, their profitability (Baldarelli & Gigli, 2014). Since firms' past and present actions influence stakeholders' perceptions (Raithel & Schwaiger, 2015), companies must act in the most favourable way to their eyes (Fatma et al., 2015). If stakeholders perceive a company negatively, the organization itself will be the target of disapproval which inevitably, leads to a decrease in reputation and profits (Gray & Balmer, 1998). Hence, in post crisis moments, it is important that companies take efforts to control and limit its impacts, to mitigate any negative feelings or even bad word of mouth among stakeholders (Comyns & Franklin-Johnson, 2018). Comyns & Franklin-Johnson (2018) suggested in their study that companies could deal with crisis consequences by providing financial compensation, giving their employees training or even by implementing better policies. But one effort that always helps to maintain and increase the reputation of a firm is investing in stakeholder satisfaction. This inevitably increases client loyalty and their will to purchase more on a regular basis, offering to the firm a competitive advantage (Saeidi et al., 2015).

Nonetheless, whatever strategy a company chooses to adopt, it must be implemented with the intention of enhancing stakeholder well-being (Manuel & Herron, 2020). Many studies have pointed out that to build a good reputation, a company must have consistent behaviour but more importantly, it should have transparent communication habits with its stakeholders (Baldarelli & Gigli, 2014). In addition, the Ross & McGrath (2020) article stated that during crisis periods, to minimize/overcome any negative outcomes, companies should be more digitally active, transparent, and communicative with their clientele, so that they can maintain their loyalty and satisfaction. Healthy communication enables companies to be more alert to identify any uprising issues and as a result, be able to develop and implement more rapidly efficient strategies to meet stakeholders' expectations (Baldarelli & Gigli, 2014). Companies should always guarantee to its stakeholders' full transparency, accountability, and genuineness the whole time (Jacob, 2012). The resulting trust of stakeholders (Manuel & Herron, 2020) and high reputation, will protect the company from the uncertainty and underlying risks of any event.

#### 2.2. CONSUMER SATISFACTION

Consumer satisfaction can be characterized as being cyclical (Gorst et al., 1998) and it can be defined as the measure of how much the products/services offered by a company are able to meet and please consumers' expectations and needs (Lie et al., 2019; Naveed et al., 2012; Saeidi et al., 2015). According to Daragahi (2017), it is more expensive to gain a new customer than to maintain the relationship with a current one, precisely five times more expensive. Thus, in a competitive environment, consumer satisfaction is considered an essential factor for the continuity and success of a company (Daragahi, 2017; Naveed et al., 2012). In fact, consumer satisfaction can be considered as a firm indicator of their quality and efficiency (Saeidi et al., 2015). For this reason, consumer satisfaction has become one of the most crucial factors a company must try to preserve and improve to maintain their clients, achieve prosperity and a competitive advantage over its competitors (Abd-El-Salam et al., 2013; Daragahi, 2017).

Brandtner et al. (2021) consider in their study that consumer satisfaction is the result of a customer assessment about their own experience with a firm at a certain moment. Meanwhile, Daragahi (2017) considers in his study that the satisfaction of a consumer results from its judgment about how a certain company behaves and how much its products/services can meet their expectations and needs. When a company lives up to consumer expectations, consumers expect that the company will do its best in trying to maintain their relationship (Gorst et al., 1998). Hence, it is possible to say that the willingness of a client to maintain a connection with a company depends on how safe they feel interacting with it (Naveed et al., 2012), their perception of the service quality of that company (Abd-El-Salam et al., 2013) and of the consequential value that they can obtain from engaging with it (Chun, 2005).

According to El-Garaihy et al. (2014) and García-Madariaga & Rodríguez-Rivera (2017) studies, consumer satisfaction is positively connected to corporate reputation. El-Garaihy et al. (2014) also mentioned that the higher the level of satisfaction of a consumer, the higher would be the reputation of a firm in the long-term. From the previous research made about corporate reputation, it was possible to understand that the reputation of a company is the result of its daily behaviour and capacity to meet stakeholders changing needs (Baldarelli & Gigli, 2014). To grow, a business must be trusted (Lie et al., 2019) and since consumers' mental image about a company can affect its evolution in the future, periods of crisis can represent an especially valuable time for stakeholders to assess companies' reliability and integrity (Baldarelli & Gigli, 2014). It is extremely important that companies try to maintain or improve stakeholders' perceptions so that they can distinguish themselves from the competition (Arikan et al., 2016; García-Madariaga & Rodríguez-Rivera, 2017) and in the end, build a positive reputation.

El-Garaihy et al. (2014) suggested in their study that consumer satisfaction is the booster for consumer behaviours and attitudes. Similarly, Daragahi (2017) mentioned that consumer satisfaction is one of the most significant aspects influencing consumer future purchases intentions. According to Seng & Ping (2016) study, consumers have the need to buy and use products/services which helps them to develop or intensify their individuality and social personality. Hence, customers only build a regular purchasing behaviour if they feel satisfied with the company they buy from and if that act helps them build the lifestyle they desire to have (Nam et al., 2011).

Many studies have also found that service and purchase quality experience have a significant impact on consumer satisfaction (Abd-El-Salam et al., 2013; Daragahi, 2017; Lie et al., 2019) due to consumer necessity of experiencing a trustworthy consumption episode (Gorst et al., 1998). In this sense, the more a company serves its consumers well, the more satisfied they will be and, consequently, the more loyal too and for a long time (Daragahi, 2017; Lie et al., 2019; Nam et al., 2011). This is particularly important to achieve since the stability of a company relies on the loyalty of its consumers (Naveed et al., 2012).

According to Lie et al. (2019) study, when a consumer feels that their experience with a certain firm went according to their own expectations, the consumer will spread satisfaction to other potential consumers. Similarly, Chun (2005) suggested that having a reputation for offering excellent quality services/products leads to more consumers, higher probability of purchases and profit increases. For this reason, companies should invest in ways to upgrade their business to provide better quality products/services and a better brand experience that can meet consumer expectations (Daragahi, 2017; Nam et al., 2011). In the end, this investment leads to higher consumer trust levels (Lie et al., 2019) and higher probability of provider recommendation (Abd-El-Salam et al., 2013).

In a digital information era, when making their consumption decisions, consumers use all the information accessible about companies and their respective products and services characteristics, thus it is imperative that companies invest in proper communications about their measures and actions (García-Madariaga & Rodríguez-Rivera, 2017). Additionally, providing a positive consumption experience positively influences the consumer general assessment of a company (Baldarelli & Gigli, 2014) and behaviour, in terms of preferring a certain company (Brandtner et al., 2021). Therefore, by providing good consumption experiences and satisfying its consumers, firms can create durable relationships with its stakeholders (Abd-El-Salam et al., 2013; Baldarelli & Gigli, 2014; Lie et al., 2019) and achieve hopeful growth scenarios.

#### 2.3. CORPORATE SOCIAL RESPONSIBILITY

Corporate social responsibility can be defined as being a series of diverse compromises that companies carry out to its stakeholders (García-Madariaga & Rodríguez-Rivera, 2017). According to Singh & Misra (2021) and Wu & Lin (2014) studies, CSR plays a particularly significant role in the relationships between consumers and organizations. This is because CSR allows stakeholders to see if their values are in tune or not with the values of the company they are interacting with (Singh & Misra, 2021). In addition, companies who engage with CSR activities are more positively perceived by stakeholders and as a result, their evaluation about the company itself improves (El-Garaihy et al., 2014). Therefore, CSR activities can be an extraordinarily strong tactic for companies to adopt (El-Garaihy et al., 2014).

Over the years, the increased attention towards CSR activities is the result of a growth of mindful consumers who look for long-lasting products/services, corporate transparency, and accountability (Saeidi et al., 2015). Jacob (2012) study shows that with the monetary crisis of 2008, CSR activities have gained more power, more precisely, the organizational governance and environmental type of measures. During the covid-19 pandemic, this has not changed, and businesses have been even more demanded for CSR implementation (Manuel & Herron, 2020). As a result, the covid-19 period has become an exciting time for companies to experiment how and which CSR measures can in fact help them most during times of crisis (Bae et al., 2021). In the end, those who implement genuine CSR actions will consequently have a greater reputation (García-Sánchez & García-Sánchez, 2020; He & Harris, 2020; Qiu et al., 2021). In fact, engaging in CSR activities during the covid-19 pandemic can be an extremely useful and efficient tactic to adopt since companies that do so, can boost their corporate image and are capable of persuading stakeholder investments (Qiu et al., 2021). Eventually, the resulting CSR adoption benefits will contradict any negative effects deriving from uncertain periods (Rjiba et al., 2020).

El-Garaihy et al. (2014) mentioned in their study that CSR initiatives are based on four diverse types of activities: economic, legal, ethical, and discretionary. Meanwhile, García-Sánchez & García-Sánchez (2020) study pointed out five distinct types of CSR activities: economic and legal, commercial, ethical, altruistic, and strategic. Economic and legal practices are described by García-Sánchez & García-Sánchez (2020) and El-Garaihy et al. (2014) as being actions companies adopt that ensure the security/satisfaction of stakeholders and the quality of products/services offered while, at the same time, being compliant with the laws. García-Sánchez & García-Sánchez (2020) proposed that ethical CSR activities usually consist of moral responsibilities that companies must carry out to compensate individuals that have been harmed from their business activity. Similarly, El-Garaihy et al. (2014) mentioned that ethical initiatives implementation helps companies to distinguish what is right from wrong and adapt their business towards a more principled performance.

Regarding commercial CSR initiatives, these are applied with the aim of achieving economic benefits by drawing in potential new consumers and maintaining the existing ones (García-Sánchez & García-Sánchez, 2020). In terms of altruistic activities, García-Sánchez & García-Sánchez (2020) described them as being selfless, which means, these practices are adopted without economically benefiting the company. Similarly, El-Garaihy et al. (2014) characterizes discretionary activities as being practices that positively influence the well-being of the population, such as, volunteer work, for example. Lastly, García-Sánchez & García-Sánchez (2020) explains that strategic CSR actions are a mixture of ethical and altruistic activities that companies choose to put in practice to ensure shareholder value and benefit company reputation.

Alongside with the different based CSR activity types, CSR responses can also have multiple different forms among researchers. Manuel & Herron (2020) identified in their study two distinct types of CSR responses: transformed business models, and philanthropy practices. In the case of transformed business, Manuel & Herron (2020) mentioned that the activities implemented are focused on remodelling the business in a way to answer social and environmental issues, which can be done through, for example, changing the product/service to secure stakeholders needs during a crisis (Manuel & Herron, 2020), offer higher and better benefits to the company staff or adopting measures that help to protect the environment (Qiu et al., 2021). As regards to philanthropy CSR responses, these are more commonly used, and they are adopted without the intention of benefiting the company implementing them (García-Sánchez & García-Sánchez, 2020; Manuel & Herron, 2020). These usually consist of donations, voluntary service, and initiatives to support local communities (Manuel & Herron, 2020; Qiu et al., 2021). Some good examples of recent philanthropic actions given on Manuel & Herron (2020) study is, for example, the Walmart financial/product donations to food banks and the free/reduced cost service that telecommunication providers have offered to the school communities.

In Mahmud et al. (2021) study, it was also possible to see that 80% of their sampled companies have collaborated with non-profit organizations during the covid-19 pandemic and around 68% have made cash donations. According to Currás-Pérez et al. (2018) study, in terms of CSR responses, the social CSR initiatives have higher success and superior impact on consumer perceived value. Firms who engage in CSR actions that positively impact the community shape the perceptions of current and potential stakeholders (Arikan et al., 2016). Additionally, companies who behave ethically and socially responsible are perceived as more dependable and honest by consumers (Fatma et al., 2015; Wu & Lin, 2014). Therefore, it is recommended to firms to participate in socially beneficial CSR initiatives (Currás-Pérez et al., 2018) since these can improve brand loyalty and offer a competitive advantage (Öberseder et al., 2013).

Nonetheless, whatever type of CSR response a company may choose to adopt, a company should always advertise it properly with integrity (Manuel & Herron, 2020). Palihawadana et al. (2016) suggested in their study that companies should integrate more CSR activities into their campaigns and communications so that stakeholders would perceive more easily their authentic intentions and actions towards society and its troubles. By communicating their CSR initiatives, stakeholders become aware of companies' actions and as a result, their attitudes and behaviours are influenced (Öberseder et al., 2013). Thus, we could say that during a crisis event, the spreading of information about such activities would consequently foster firms' corporate reputation (García-Sánchez & García-Sánchez, 2020) and help to maintain stakeholders' loyalty to the brand itself (He & Harris, 2020; Manuel & Herron, 2020).

As previously explained, stakeholders' perceptions are particularly important for a firm to manage because these perceptions influence their product/service assessment (Palihawadana et al., 2016), re-purchase intention and the spread of positive or negative word mouth to mouth (Arikan et al., 2016). According to Arikan et al. (2016), Pham & Tran (2020) and Fatma et al. (2015) studies, a company by employing CSR activities improves consumer perceptions because it demonstrates to the stakeholders that it is principled and cares about society well-being, which as a result, influences positively consumers company evaluation and purchase intentions. In addition, consumers feel safer and more satisfied with companies who engage in socially responsible behaviour (El-Garaihy et al., 2014). If a consumer has a good image about a company, the consumer will have positive feelings towards it and will be more willing to spread positive information about it to other people (Arikan et al., 2016; Wu & Lin, 2014). Thus, if a company employs CSR activities that considers the community welfare, it positively influences stakeholders' perceptions, trust, and behaviour (García-Madariaga & Rodríguez-Rivera, 2017; Pham & Tran, 2020; Singh & Misra, 2021), while improving its reputation (Singh & Misra, 2021).

Öberseder et al. (2013) performed on their study an analysis of companies and consumers perspectives about CSR practices in diverse areas and, on what CSR activity each one believes the other should be responsible for. After the analysis, it was possible to see that both, corporations and consumers, have similar ideas of what CSR activities should be employed in the different areas analysed. In the shareholder area, Öberseder et al. (2013) found that firms feel responsible for making profits while trying to achieve sustainable growth. Meanwhile, on the supplier area, corporations feel responsible for making a thorough assessment of their suppliers to see if they act respectfully towards the environment and their respective staff. In the consumer area, Öberseder et al. (2013) observed that both corporate and consumers perceive that it is the company responsibility to treat its consumers fairly and to communicate openly and sincerely about the products/services they offer. Regarding the employee area, the authors discovered that both corporate and consumers also believe that it is the

company job to offer a decent work environment for its employees where the employee feels motivated, included, listened to, and respected. Additionally, Öberseder et al. (2013) found that consumers believe that it is also the company's responsibility to offer their employees' work growth prospects as well as education. Concerning the environmental area, the authors discovered that both corporations and consumers think that corporations have the responsibility to be more environmentally responsible (Öberseder et al., 2013). Lastly, Öberseder et al. (2013) observed that corporations feel responsible for the well-being of the society and that is the reason they engage in financial/product donations and corporate volunteering.

Following Arikan et al. (2016) and El-Garaihy et al. (2014) studies, it was possible to recognize that CSR activities are an extremely useful tool for companies to use to manage the relationships with their multiple different stakeholders. Manuel & Herron (2020) mentioned in their study that with the coronavirus crisis, stakeholders have changed how they view and value products/services that companies have to offer and therefore, their CSR needs have also changed. Therefore, companies must adjust their business accordingly so that their trust is maintained. Regarding the external stakeholders (suppliers, investors, and consumers), Manuel & Herron (2020) stated that these stakeholders expect more CSR activities that ensure shareholder wealth and the business survival. Meanwhile, in the case of the internal stakeholders (employees), the authors explain that they look for CSR measures that treat the external stakeholders fairly, provide higher benefits to its staff and assures the preservation of jobs (Manuel & Herron, 2020).

Palihawadana et al. (2016) study has proven that consumers' opinions about the type of the CSR activities a company implements can influence consumers' evaluation of the company products/service. This means that consumers will have positive evaluations if a company employs good CSR initiatives, and the opposite occurs if the CSR activities do more damage rather than good (Palihawadana et al., 2016). Wu & Lin (2014) study also has proven that a CSR activity influences consumers from diverse generational groups (Gen-X and Gen-Y) differently. According to Wu & Lin (2014) study, consumers belonging to Gen-Y do not associate CSR philanthropic actions to brand satisfaction. Meanwhile, Gen-X makes a connection between companies' philanthropic actions and their own consumer satisfaction with the brand. The authors also concluded that Gen-Y, younger consumers, have more prevailing brand connections as opposed to Gen-X. This means that Gen-Y is more attached to the brands they trust and therefore, it ends up influencing their satisfaction and purchase behaviours (Wu & Lin, 2014). Wu & Lin (2014) also mentioned that the more a consumer is fond of a brand, the more loyal it will be, which means, the more frequent will be his purchase behaviour. Therefore, from the research performed, it is possible to recognize that companies should pay attention to the different stakeholders' needs and try to adapt their business

accordingly, to establish durable relationships with them based on trust (Fatma et al., 2015; Rjiba et al., 2020).

The covid-19 pandemic has brought for companies the opportunity to develop their corporate social responsibility strategy for the long run since their existence and prosperity depends on their returns and on the good terms of the relationships with their stakeholders (He & Harris, 2020). CSR activities require company investment but if they are implemented with the aim to enhance the well-being of the community (Magrizos et al., 2021; Qiu et al., 2021), assure stakeholder expectations and improve or maintain consumer satisfaction (Bae et al., 2021; El-Garaihy et al., 2014), they will return in the end many rewards to the companies, such as: creation of a competitive advantage and great financial performance (García-Madariaga & Rodríguez-Rivera, 2017; Rjiba et al., 2020; Saeidi et al., 2015), good reputation (Baldarelli & Gigli, 2014; El-Garaihy et al., 2014), and a positive influence on companies' revenue and shareholder value (Raithel & Schwaiger, 2015). Thus, it is recommended to companies to follow Magrizos et al. (2021) suggestion of implementing stakeholder focused CSR activities because, these activities will help to increase firm monetary performance, especially for small businesses since by being small, it enables them to engage more effectively and choose the appropriate activities that are more relevant to their stakeholders.

#### 2.4. INNOVATION

In an environment of intense market competition, every company tries to differentiate itself from its competitors and improve the efficiency of its business while attempting to maintain its reputation and consumer satisfaction since the more satisfied stakeholders are with a firm, the more loyal they are (Daragahi, 2017; Kunz et al., 2011; Naveed et al., 2012; Raithel & Schwaiger, 2015). For this motive, companies choose to implement some innovations in their business. An innovation can be described as the process consisting of the conversion of a thought into the creation of a new final product/service/process/system (Daragahi, 2017; Naveed et al., 2012). Nevertheless, the innovation implemented always must fulfil consumers' requirements and expectations so that their satisfaction and purchases increase, and the company economic outcomes rise (Naveed et al., 2012).

From the research made it was possible to observe that the durability of a firm depends mostly on the satisfaction and loyalty of its stakeholders (Naveed et al., 2012), and for this reason, companies should make the most of their shared relationships with their stakeholders to extract original ideas to please their needs (Daragahi, 2017). Stakeholder satisfaction and innovation can both be considered vital for a company inserted in a competitive environment (Daragahi, 2017; Kunz et al., 2011). Besides, every company that considers itself prosperous, likes to be recognized as being pioneering and socially responsible (Padgett & Moura-Leite, 2012). To recover

from the negative consequences of a crisis event, just like the coronavirus pandemic, Coulson-thomas (2020) suggested in his study that firms should dispose their detrimental business models and create better ones or adopt innovative production processes. Through these innovations, companies will consequently improve their efficiency since they are trying to make their business function better (Datta et al., 2011). Furthermore, the more innovations are implemented, the more enhanced is stakeholder satisfaction (Daragahi, 2017).

According to Cucculelli & Peruzzi (2020) research, businesses' endurance and stability following a crisis event depends on their aptitude to deal with the circumstances and overcome the situation by using them the best way possible. Following this line of thought, the authors mentioned that tricky periods of time can help firms to reconstruct their business and reputation because companies can be influenced to dispose all the non-lucrative tactics and products/services that they previously had (Cucculelli & Peruzzi, 2020). In this sense, it is possible to affirm that firms' initiative and dynamism is crucial to keep a business alive during a crisis and to mitigate any negative repercussions for the short and long-term (Al-Omoush et al., 2020; OECD, 2020).

The coronavirus crisis, although has become a good initiative to organizations to start growing in the field of technology, it has also given firms a chance to rethink their responsibilities and business approach (Karabag, 2020). The Lecossier & Pallot (2020) study analysed several innovation strategies which companies have adopted during the covid-19 crisis. According to Lecossier & Pallot (2020) study, to keep active in the economy firms should increase their resilience and develop their capacity of creating radical or incremental innovations in their business. A radical innovation consists of the development of completely new products/services while an incremental innovation consists of the optimization and minor changes on already existent products/services (Lecossier & Pallot, 2020). According to Lecossier & Pallot (2020), during crisis companies mostly focus their efforts on incremental innovations, such as: administrative, management and human resources innovations; innovations in information and communication systems; product, service, and business process innovations; changes in marketing, sales, or pricing methods; and distribution innovations. If not managed properly, the covid-19 pandemic can lead to the eventual end of a firm but, if a company performs well and adapts its business in a way that fits in appropriately to the changing market, it will allow them to assure their stakeholders relationships. Therefore, the way companies take action to overcome a crisis dictates either if they will thrive and survive or if they will be destined to fail (Coulson-Thomas, 2020; Pedersen et al., 2020).

In the face of the circumstances brought by the covid-19 pandemic, Coulson-Thomas (2020) suggested that companies should take advantage of the moment and invest in

fulfilling the new rising needs of its stakeholders, several types supply/operation/delivery, and diverse ways to boost production. On Sheth (2020) study, it is mentioned that to endure challenging times, companies should focus their efforts on several points, such as: investing in stakeholder oriented strategies, perform a digital transformation of their business, use social media more often to communicate the movements that they are making, and offer stakeholders advice and assistance so that they can create honest relationships. Nevertheless, whatever the move a company chooses to make, it is imperative that the innovation companies choose to implement causes the retention of its consumers or even helps to gain new ones (Kunz et al., 2011). Fulfilling consumers needs only brings positive results and helps to influence their purchase behaviour (Seng & Ping, 2016). Therefore, from the research made it's possible to observe that company innovations must be done centred on consumer well-being (Kunz et al., 2011). This means that changes are adopted in a way to increase business resilience while benefiting stakeholders (Coulson-Thomas, 2020), since it is the consumer that considers it to be successful or not in the end (Kunz et al., 2011).

As stated in Lecossier & Pallot (2020) study, because of the coronavirus pandemic, many businesses have been obliged to decrease their activity or stop completely their production due to sanitary motives, the absence of work force or even due to short demand. The consequent financial vulnerability from the crisis has impacted every type of activity sector and it has become one of the reasons why most firms have recurred to layoffs or even closing the business during this complicated period (Bartik, Bertrand, et al., 2020). However, many companies during the crisis have tried to adapt their own business and employ socially responsible behaviours (He & Harris, 2020) to have a positive role in society. One good example given by He & Harris (2020) in their study is the initiative from several UK (United Kingdom) companies that have altered their establishments to fabricate products that help to protect the population, such as, ventilators, protective equipment, and hand sanitizer. Another good example given in Manuel & Herron (2020) study is the initiative from United Airlines that transformed their shipment amenities into food distribution compounds. This type of humane attitude makes consumers proud of the brands they support (He & Harris, 2020) and consequently, it helps to enhance the future reputation of the firm (Khurana et al., 2021).

Companies that think about the future after the coronavirus crisis have changed their business goals and purpose in the hopes of achieving long term endurance, marketing cleverness and social/environmental responsibility (He & Harris, 2020). According to Daragahi (2017) study, the growing significance of innovation from the past few years is due to the increasing requirements of different products/services by consumers. Hence, to turn around difficult periods, firms should adopt a new tactical performance (Cucculelli & Peruzzi, 2020), which can be through, for example, a product or a

business model makeover (Manuel & Herron, 2020), creation of new products/services or investing in R&D (Datta et al., 2011). By investing in innovations, a company makes it appear that it can transform itself and perform innovative changes in its products/services in a way that can potentially fulfil its consumer's needs, which consequently, helps to build for the company its own loyal and satisfied clientele, and a competitive advantage (Naveed et al., 2012; Rubera & Kirca, 2017).

In the case of product/service innovation, both Lecossier & Pallot (2020) and Seng & Ping (2016) studies consider this process to be characterized by the improvement of the quality of a product/service that was previously being produced or the creation of a new product/service that will differ from all the other already existent. Regarding business model innovations, it can be a more complex process. However, Cucculelli & Peruzzi (2020) mentioned that this type of innovation can significantly help to increase firm endurance in an after crisis scenario. The authors identified in their study some examples of changes, which they characterized as crisis-resistant, that companies can implement in their business, such as: changes in the intricacy of the business models, reducing the degree of vertical integration and increase investments in the creation/maintenance of intangible assets (Cucculelli & Peruzzi, 2020).

Rubera & Kirca (2017) consider in their study that firm innovation has a direct connection to companies' worth and reputation because by implementing innovations, firms increase their possibility of growth and their ability to keep up with the everchanging consumer preferences. Bhattacharyya & Thakre (2021) consider that a proper administration of the innovations employed, helps companies to repay debts and build firmness, which can help companies to endure potential future crisis events. From the research performed, it was possible to understand that a firm's products and business models can be innovated in many ways. In their study, Lecossier & Pallot (2020) mentioned that changes related to the production can include innovations on the transformation of products and services through, for example, engineering innovations. On the case of distribution and organization, Heinonen & Strandvik (2020) and Lecossier & Pallot (2020) gave in their studies some examples of changes on the area of transportation and delivery, such as, remote delivery through robots, drivethrough or even warehousing and order preparation improvements. One illustration of a real delivery innovation is the example given in Heinonen & Strandvik (2020) study about the affiliation between the supermarket Carrefour and the transporter Uber Eats with the purpose of offering home delivery of their store goods. Regarding the marketing and sales sector, Lecossier & Pallot (2020) identified in their study some examples of modernizations that companies can employ, such as, developing a new image for their products and the creation of help desks to offer better assistance to customers. According to Seng & Ping (2016), improvements or changes on the packaging of the products is a highly effective tactic to catch the attention of consumers and alter their insight of the product in question.

One consequence of the coronavirus pandemic onto firms' production and sales sector is the damage on supply chains and according to an OECD (2020) article, a study performed by the Institute for Supply Management has found that over 80% of companies believe that their business will suffer consequences due to pandemic disruptions. Similarly, Kumar et al. (2020) mentioned in their study that around 35% of the manufacturer sector has reported supply chain malfunctions. Donthu & Gustafsson (2020) study corroborates this idea and demonstrates that it is expected that the covid-19 crisis will cause the need in firms to redesign their supply chains and move them nearer. Likewise, Khurana et al. (2021) predicted this trend in their study, where it was said that firms' manufacturing process would shift to be a more domestic process in the future. A good example of these statements is the Samsung case, which over the years, have established manufacturing institutions in multiple locations to control the threat of single sourcing and with the aspiration of reducing its dependence on China (Donthu & Gustafsson, 2020).

According to Agrawal et al. (2020), a McKinsey & Company study developed in 2017, estimated that around 14% of the global working population would have switched their jobs or acquired new skills by 2030 due to the growing presence of mechanization, machine learning and evolving markets. However, the covid-19 pandemic occurrence made this matter more urgent, and the role of employees has also changed dramatically. Following an EY (2020) article, it was possible to observe that during the pandemic, companies should be especially concerned with their workforce well-being and protection because without these ensured, employees are not able to perform their functions well. Hence, to adapt to these recent times, companies must make innovations on the training of their employees to guarantee that their representatives are the best. Agrawal et al. (2020) suggested in their article that companies should upgrade their workforce skills in a way that reinforces their adaptability aptitudes and Lecossier & Pallot (2020) mentioned that investments in a decent work environment and health support to employees are also important. Following the same line of thought, Khurana et al. (2021) suggested in their research that courses on Industry 4.0 technologies should also be provided to employees so that these workers would become prepared, given that these technologies are the future.

These changes in the training of employees are essential to boost customer relationships and satisfaction (Pedersen et al., 2020). To maintain transparency and keep employees informed, companies should also do meetings, surveys, and other diverse types of reports to preserve the workers trust and motivation (Jacob, 2012). Furthermore, Michna (2018) believes that if companies share the vital information with their employees, it will eventually lead to efficient customer service and increased consumer satisfaction, since employees are the ones that are always in contact with the customers. In short, content employees, pleased consumers (Chun, 2005).

Digitalization has become over the years a focal point of interest to many economic sectors. However, during the coronavirus crisis, the use of digital tools has increased exponentially and consequently, digitalization has turned out to be a worldwide unstoppable phenomenon (Karabag, 2020). Companies have adopted technology as being a long-term tactical practice to deal with the pandemic (Bhattacharyya & Thakre, 2021) and according to Khurana et al. (2021) study, the endurance of businesses significantly depends on their digital transformation. In Sheth (2020) study, it is mentioned that digital upgrades significantly reduce the transaction costs between companies and stakeholders due to the automation of supply chain and product/service delivery. This is an incredibly positive consequence of the digital era for companies because it helps them to decrease their performance costs. Al-Omoush et al. (2020) study mentions that social capital, the worth of digital shared relationships between businesses and society, is a critical factor that can help companies to denote deficiencies in market operations and figure out what proceedings should be adopted to ease the perception of stakeholders needs. The benefits derived from these relationships are essential to build endurance during unstable periods of time, since it helps firms to perceive faster opportunities and obstacles (Al-Omoush et al., 2020). Moreover, the social capital metric can be a crucial factor during tough periods because this metric shows their trustworthiness to the public (Qiu et al., 2021).

As observed during other crisis events, consumers are more compassionate and empathetic towards companies during these times, but they still expect transparent communications from businesses (EY, 2020). So, it is possible to say that during times of instability it is crucial that companies invest in clear communications with their stakeholders to maintain their satisfaction and loyalty but also, to keep them updated of what impacts the firm has suffered and how the products/services that they offer have been affected (EY, 2020). Transparent communications and a powerful sense of teamwork help to prevent any negative outcomes (Jacob, 2012). Therefore, companies must invest in communication strategies in a way to enhance their competencies so that consumers are aware of their capacity to meet their expectations and interests (Baldarelli & Gigli, 2014). According to Lecossier & Pallot (2020) study, improvements on the information and communication systems of businesses are extremely important during a crisis because these innovations are the ones that support the organizational ones (home office, for example). The improvements in IT (Information Technology) can be made through, for example, hardware and software upgrades, data preparation and database innovations or even the creation of web hosting (Lecossier & Pallot, 2020). To overcome the decreasing client affluence to the stores, many retailers have taken advantage of the growing eminence of technology. One good example of this is the initiative that the brand Kiehl's took in digitizing their customer service by transforming their sales staff into digital assistants to offer personalized sessions through video to their clients (Heinonen & Strandvik, 2020).

Lecossier & Pallot (2020) concluded in their research that during a crisis, companies are impelled to review their own organizational operations and for this reason, companies mostly employ information/communication improvements and process innovation strategies due to their increased need. With the latest digital innovations, many companies can transform their business into a work from home situation and according to Mahmud et al. (2021) study, 60% of their sampled companies have adopted this scheme of working remotely. Similarly, in Bartik, Cullen, et al. (2020) study, it is estimated that after working from home for a while, 40% of their sampled large and small enterprises predict that 40% (perhaps more) of their workers will remain doing remote work after the coronavirus pandemic. If this eventually happens soon, it is expected that work standards will suffer an unprecedented change and remote work would become the new normal (Bartik, Cullen, et al., 2020).

Even though many companies can turn around this tricky situation by switching their business to remote work, several firms and complete industries had to dismiss their employees, end production, or bear the risk by carrying on their business (Bartik, Cullen, et al., 2020). The economic activities that have been most impacted by the coronavirus pandemic are the sectors on which it is needed the physical attendance of the client, such as, travelling, entertainment, sports, and individual services like, hairdressers (Donthu & Gustafsson, 2020; Pedersen et al., 2020). This is a very dominant issue because there are sectors from which is easier to transform the business into a remote work situation than others (Bartik, Cullen, et al., 2020), and this is true for many businesses, especially those which are internet-based like entertainment (Donthu & Gustafsson, 2020).

Following the coronavirus shock, other inevitable events have led to the substantial growth of unemployment, for example, the reduction in spending of consumers, which consequently leads to the increase of joblessness among the people working at the firms serving those customers (Chetty et al., 2020). With the intention of helping these workers, Chetty et al. (2020) suggested in their study several actions that could be adopted, such as, providing loans to small and medium firms and make available benefits to the population that sadly have lost their job.

During periods of instability, the vulnerable small and medium firms are the ones most negatively impacted since they are the ones who have more difficulty to cut back, a fragile financial steadiness and therefore, a substantial need to resort to external financing (Cucculelli & Peruzzi, 2020). Meanwhile, big and multinational companies can turn these situations around more easily. Datta et al. (2011) mentioned in their study that these firms can reinvent themselves and obtain innovation by mergers, acquisitions, and joint ventures with firms who have innovative possessions

(products/services/technology). Likewise, Cucculelli & Peruzzi (2020) indicated in their study that large companies can reinvent themselves through efficiency improvements, mergers, and acquisitions. On the other hand, Cucculelli & Peruzzi (2020) stated that small firms cannot do the same and in turn, during times of uncertainty they regularly respond by making innovations in their business model. Nevertheless, in either case, the economic circumstances of each firm also influence their ability to implement innovations in its business (Datta et al., 2011).

Small and medium firms are considered more involved with their communities because their internal and external stakeholders most of the time come from areas near the firms and, because they usually offer their services to extremely specific markets (Magrizos et al., 2021). By being small, a firm can cause doubt to investors and consumers in terms if they have the capacity to grow and endure (Rubera & Kirca, 2017). However, by employing innovations in their business, these small firms show that they have the aptitude to grow positively over time (Rubera & Kirca, 2017). So, it is possible to say that to small firms, innovation has strong positive impacts on their business performance and reputation (Rubera & Kirca, 2017).

To help organizations defeat the negative consequences of a crisis on their businesses, governments must try to provide measures to help recover the nationwide economy. However, the problem of these measures is that many of these, even though they help large companies, are not necessarily friendly to start-ups or small/medium businesses. The Kuckertz et al. (2020) research mentioned some types of governments responses that support small/medium businesses and help them to resist the consequent threats of the coronavirus pandemic. These useful measures are, for example, lower loan interest rates, grant payment delays, tax aid, provide wage subsidies and staff training programs, diminish bureaucracy, and decrease operating costs (Kuckertz et al., 2020). Additionally, Papadopoulos et al. (2020) study suggested in their study that small firms can also put into practice digital innovations into their businesses like the implementation of artificial intelligence into their communication and production or even block chain technology. By adopting these measures, it will be certainly easier for small enterprises to fight back the decreasing revenues and growing costs inherent from a crisis.

#### 3. CONCEPTUAL FRAMEWORK AND HYPOTHESES

Following the literature review performed, it was possible to build the model that would ensure the response of the initially proposed research questions and objectives. The goal is to analyse the conceptual model illustrated below through the evaluation of the hypotheses presented further on this section. On figure 1, it is demonstrated the conceptual model and hypotheses of this study:

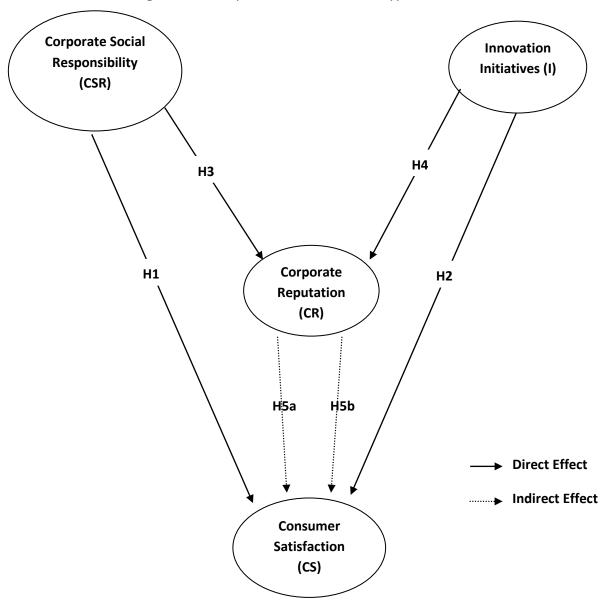


Figure 1. Conceptual Framework and Hypotheses

**Source:** Author elaboration

#### 3.1. HYPOTHESES DEVELOPMENT

#### 3.1.1. CSR and Consumer Satisfaction

As mentioned in Saeidi et al. (2015) and Islam et al. (2021) studies, the significant increase of attention and demand for businesses to adhere to CSR measures is due to the growth of mindful consumers who search for more ecological products/services, honesty and firms who are socially responsible and that act upon society issues. As a result, a company by being more engaged with what is considered ethical, makes its consumers more satisfied (Islam et al., 2021).

He & Harris (2020) suggested in their study that company endurance depends on the achievement of profits and on the good terms of the relationships with their stakeholders. Similarly, on Rjiba et al. (2020), Fatma et al. (2015) and Magrizos et al. (2021) studies, it was also proposed that for companies to establish durable relationships with its stakeholders, they should invest in CSR activities focused on their needs and expectations.

By being involved with CSR activities, companies will have greater consumer support (Dias & Retori, 2020), customer loyalty — which means they will purchase more regularly and in higher proportions (Saeidi et al., 2015) - and consequently, boosted consumer satisfaction (Islam et al., 2021). Therefore, we hypothesize:

**H1.** CSR activities positively influence consumer satisfaction.

#### 3.1.2. Innovation and Consumer Satisfaction

Daragahi (2017) suggested in his study that the growing significance of innovation over the years was caused by consumers' increased requirement for different and original goods/services on the market. According to Coulson-Thomas (2020) study, to overcome difficult periods, innovation can be a great approach for companies by adopting a new strategic behaviour through product or business model innovations.

Similarly, Sheth (2020) also suggested that companies should perform some changes in their business but to be successful, these efforts and strategies must be focused on stakeholders to build reliable relationships with them. Kunz et al. (2011) study corroborates this idea by saying that innovations are only successful if they are made with a customer end goal, since it is the consumer that turns it into lucrative or not.

According to Naveed et al. (2012) study, firm innovation leads to consumer satisfaction since companies who make pioneering changes in their products/services to meet consumer needs, makes them more satisfied. Therefore, it is possible to say that innovative firms can cause lasting positive feelings in its consumers (Kunz et al., 2011). From the research performed, it was also possible to understand that the endurance and success of a company, in a competitive environment, is dependent on innovation

and on the satisfaction and loyalty of its consumers (Daragahi, 2017; Kunz et al., 2011; Naveed et al., 2012). Thus, it is possible to say that companies should implement some innovations in their businesses, either by choosing better business models or new methods of production (Coulson-Thomas, 2020), in a way to portray themselves as being able to satisfy consumers expectations and requirements (Naveed et al., 2012; Rubera & Kirca, 2017). Thus, we hypothesize:

**H2.** Innovation initiatives positively influence consumer satisfaction.

#### 3.1.3. CSR and Corporate Reputation

Corporate reputation has been a key factor for a company to apply its efforts on because a superior reputation fights any negative shock or any negative stakeholder perception (Fatma et al., 2015). Several of the analysed studies in this investigation defend the idea that from employing CSR activities, companies can obtain and enjoy many benefits including a boost in their corporate image, increased stakeholder investments, customer satisfaction and a competitive advantage over its competitors (García-Sánchez & García-Sánchez, 2020; Qiu et al., 2021; Rjiba et al., 2020; Saeidi et al., 2015). Additionally, literature also proposes that a positive reputation derived from CSR, attracts investors (Comyns & Franklin-Johnson, 2018), influences positively stakeholders' decision-making process (Raithel & Schwaiger, 2015) and improves suppliers and companies' relationships (Gatzert, 2015).

Raithel & Schwaiger (2015) established in their study that the non-economic aspects of a company, like customer satisfaction, customer service, product/service quality and social/environmental responsibility, contributes to their reputational report. Similarly, Fatma et al. (2015) mentioned that investing in CSR activities helps companies to build a positive image and contributes to the differentiation of the firm against its rivals. Hence, a key deduction is that investing in CSR activities reinforces the firm's reputation and eventually helps to cancel out any negative impact that could take place (Rjiba et al., 2020). From the research performed it is possible to observe that there is a direct connection between the engagement of CSR initiatives and a company reputation. Therefore, we hypothesize:

**H3.** CSR activities positively influence corporate reputation.

#### 3.1.4. Innovation and Corporate Reputation

With the latest coronavirus outbreak, many studies consider that this period has brought the chance for companies to rethink their purpose in society and to reinvent themselves (He & Harris, 2020; Karabag, 2020). According to Daragahi (2017), innovation is an essential factor for the prosperity of a company in a competitive environment.

Given that firm endurance depends mostly on the way they are perceived and on what attitude they assume to overcome the inherent negative consequences of a crisis (Cucculelli & Peruzzi, 2020), companies should employ stakeholders' ideas in their business to please their expectations and requirements (Daragahi, 2017). As a result, they maintain their reputation and position on the market. According to Coulson-Thomas (2020) and Cucculelli & Peruzzi (2020) studies, to recover from a crisis event and to achieve long term endurance, companies should adapt their tactical performance in accordance and make some innovations. Similarly, Lecossier & Pallot (2020) mentioned in their study that companies may benefit from complicated periods of time to implement radical or incremental innovations on their business.

Since corporate innovation is directly connected to firm worth and being recognized as an innovator improves companies' reputation (Guillerme, 2011; Padgett & Moura-Leite, 2012; Rubera & Kirca, 2017), we hypothesize:

**H4.** Innovation initiatives positively influence corporate reputation.

#### 3.1.5. The Mediating Role of Corporate Reputation

Among the studies analysed, it was possible to see that CSR activities are viewed as one of the most efficient strategies a company can put into practice to build an excellent reputation in the eyes of its stakeholders (Fatma et al., 2015), to grow consumer loyalty and satisfaction, increase profits (Islam et al., 2021), and form a competitive advantage (Saeidi et al., 2015). Magrizos et al. (2021) and Saeidi et al. (2015) studies suggest that to thrive, a company should employ CSR activities with a focus on its consumers so that they feel like their needs and preferences are being considered. Therefore, by being socially responsible, satisfied consumers will recommend and spread positive information about the company (Arikan et al., 2016), making it more likely to gain new customers, increased purchases, and higher reputation and profitability.

Innovation, apart from boosting firm's corporate reputation (Guillerme, 2011; Padgett & Moura-Leite, 2012), is considered a crucial element for company endurance in a competitive market (Daragahi, 2017; Kunz et al., 2011). Several studies propose that to resist a crisis event, companies should adapt their business to the ongoing environment, and this can be achieved through several types of innovations, such as, product innovations (Lecossier & Pallot, 2020), service innovations (Heinonen & Strandvik, 2020) or business model/process innovations (Coulson-Thomas, 2020; Cucculelli & Peruzzi, 2020; Lecossier & Pallot, 2020). However, these can only be successful if they are made with the intention to meet stakeholders' expectations and benefit them in the end (Coulson-Thomas, 2020; Kunz et al., 2011). Innovations can generate consumer satisfaction because consumers perceive that the company is displaying that they care for its stakeholders by trying to be innovative and increase

their capacity of satisfying their ever-changing preferences (Rubera & Kirca, 2017). Since the more innovations a firm implements the higher stakeholder satisfaction is (Daragahi, 2017), companies should employ innovations in order preserve their stakeholders.

Previous studies consider that corporate reputation has a mediating role between the effects of corporate socially responsible measures on stakeholders' and companies' outcomes (Arikan et al., 2016; El-Garaihy et al., 2014; Pham & Tran, 2020). Furthermore, in many studies it is explored the positive and bidirectional relationship between corporate reputation and consumer satisfaction (Abd-El-Salam et al., 2013; Arikan et al., 2016; El-Garaihy et al., 2014; García-Madariaga & Rodríguez-Rivera, 2017; Pool et al., 2016). It appears that both CSR activities and innovation initiatives can influence overall corporate reputation, which directly or indirectly influences consumer satisfaction. Therefore, we may expect that corporate reputation has the potential to serve as the mediator between those relationships. As a result, we hypothesize:

**H5a.** Corporate reputation mediates the influence of CSR activities on consumer satisfaction.

**H5b.** Corporate reputation mediates the influence of innovation initiatives on consumer satisfaction.

#### 3.2. CONSTRUCTS AND MEASUREMENT ITEMS

This investigation conceptual model is composed of 4 variables in total: 2 independent variables, 1 dependent variable and 1 mediating variable. The independent variables (corporate social responsibility and innovation) are the ones being manipulated in this investigation to evaluate the influence that they have on the other variables of the model (Carmo & Ferreira, 2008; Morais, 2005). The dependent variable, consumer satisfaction, is the consequence of the interaction between itself and the independent variables (Carmo & Ferreira, 2008; Pandey & Pandey, 2015). Lastly, the mediating variable, corporate reputation, is located between the independent and dependent variables and it is introduced in the model with the goal to determine if it can influence the relationship between those variables (Carmo & Ferreira, 2008; Morais, 2005).

To test the hypothesized relationships previously presented, it was necessary to develop and conduct a questionnaire with the aim to collect the required data to perform this investigation. The main goal of the questionnaire was to gather as much information as possible about the questionnaire respondents' opinions/perceptions regarding companies CSR activities and innovation initiatives and observe if these practices can impact their preferences, attitudes, and satisfaction as a consumer. To measure the model constructs, 23 quantitative variables were created and included on the survey. Additionally, 4 qualitative variables (age group, gender, country of

residency and educational qualification) were added to the questionnaire for the purpose of data collection regarding the respondents' personal information. On Table 1, it is possible to see this study conceptual model constructs and measurement items, which were all adapted from literature review.

The first construct analysed on the questionnaire was corporate social responsibility (CSR) and it was attempted to comprehend respondents opinion about: I prefer companies who engage in activities that improve the well-being of society; I prefer companies that are ethical and socially responsible; I prefer companies that are involved in practices that are environmentally sustainable and responsible; I prefer companies that provide a good work environment and good career opportunities to its employees; I prefer companies that are concerned for future generations. To measure corporate social responsibility, the five statements under analysis were adapted from the studies of Fatma et al. (2015) and Magrizos et al. (2021).

Innovation Initiatives (I) was the second construct evaluated and it was intended to figure out the opinion of the respondents about the next: I believe that innovation is essential for a company long-term success; I believe that in a competitive environment, innovative companies have more chance of survival; I believe that companies should engage in product or business model innovations to differentiate themselves from its competitors; I believe that companies who implement innovations are more capable of meeting consumers' needs; I believe that companies who implement innovations have higher growth prospects. The five used affirmations to measure innovation were adapted from Daragahi (2017), Michna (2018) and Rubera & Kirca (2017) studies.

The third construct evaluated on the questionnaire was corporate reputation (CR). It was aimed to understand respondents' opinion and attitudes towards: It is more valuable to me if I purchase from companies that have a good reputation; I trust more in high reputation companies to be able to meet my expectations; I would pay extra for products/services from a high reputation company; I believe that high reputation companies have a better product or service quality; I prefer to buy from high reputation companies because I believe they are more reliable; In periods of uncertainty, I prefer to consume from high reputation companies because they make me feel safer. To measure corporate reputation in this investigation, the six statements used were adapted from the studies of Pool et al. (2016), Baldarelli & Gigli (2014) and Raithel & Schwaiger (2015).

Lastly, the fourth construct of our conceptual model, consumer satisfaction (CS), was assessed and the aim was to analyse the opinion of the respondents regarding the next items: I am more satisfied with my purchases if the company I buy from is ethical and socially responsible; I would buy more from companies that take into account consumer expectations when making innovations in their business; I am more satisfied

if a company provides me a good quality consumption experience; I would build a positive relationship with a company if I am satisfied with my experience with the company; I would positively recommend a company if I am satisfied with my experience with the company; I would purchase more often from a company if I have a satisfying relation with the company; I prefer to buy from companies that are transparent and communicative with their consumers. Consumer satisfaction was measured using seven adapted items from Islam et al. (2021), Rubera & Kirca (2017), Abd-El-Salam et al. (2013), Raithel & Schwaiger (2015) and Baldarelli & Gigli (2014) studies.

**Table 1.** Conceptual Model Constructs and Measurement Items

Constructs	Number of Items	Item Code	Measurement Items (questions present on the questionnaire)	Sources
	items	CSR1	I prefer companies who engage in activities that improve the well-being of society.	CSR1 and CSR2 - Fatma et al. (2015)
		CSR2	I prefer companies that are ethical and socially responsible.	Containa containa et al. (2015)
Corporate Social		CSR3	I prefer companies that are involved in practices that are environmentally sustainable and	CSR3, CSR4 and CSR5 - Magrizos et al. (2021)
Responsibility (CSR)	5	CONO	responsible.	Contract Con
(2011)		CSR4	I prefer companies that provide a good work environment and good career opportunities to its	
			employees.	
		CSR5	I prefer companies that are concerned for future generations.	
		I1	I believe that innovation is essential for a company's long-term success.	<b>I1 and I2-</b> Daragahi (2017)
Innovation	5	12	I believe that in a competitive environment, innovative companies have more chances of	
Initiatives			survival.	<b>I3</b> – Michna (2018)
(I)		13	I believe that companies should engage in product or business model innovations to	
			differentiate themselves from their competitors.	<b>I4 and I5</b> - Rubera & Kirca (2017)
		14	I believe that companies who implement innovations are more capable of meeting consumers'	
			needs.	
		15	I believe that companies who implement innovations have higher growth prospects.	
		CR1	It is more valuable to me if I purchase from companies that have a good reputation.	<b>CR1</b> - Pool et al. (2016)
Corporate		CR2	I trust more in high reputation companies to be able to meet my expectations.	
Reputation	6	CR3	I would pay extra for products/services from a high reputation company because I believe that	CR2 and CR6 - Baldarelli & Gigli (2014)
(CR)			they are worthy.	
		CR4	I believe that high reputation companies have a better product or service quality.	CR3, CR4 and CR5 - Raithel & Schwaiger
		CR5	I prefer to buy from high reputation companies because I believe they are more reliable.	(2015)
		CR6	In periods of uncertainty, I prefer to consume from high reputation companies because they	
			make me feel safer.	
		CS1	I am more satisfied with my purchases if the company I buy from is ethical and socially	<b>CS1</b> - Islam et al. (2021)
Consumer	7		responsible.	
Satisfaction		CS2	I would buy more from companies that consider consumer expectations when making	<b>CS2</b> - Rubera & Kirca (2017)
(CS)		CC3	innovations in their business.	CC2 CCF and CCC Abd El Calama at al. (2012)
		CS3 CS4	I am more satisfied if a company provides me a good quality consumption experience.  I would build a positive relationship with a company if I am satisfied with my experience with	CS3, CS5 and CS6 - Abd-El-Salam et al. (2013)
		C34	the company.	CS4 - Raithel & Schwaiger (2015)
		CS5	I would positively recommend a company if I am satisfied with my experience with the	Taither & Schwaiger (2013)
			company.	CS7- Baldarelli & Gigli (2014)
		CS6	I would purchase more often from a company if I have a satisfying relation with the company.	22. 23.3 & 3.8 (232.)
		CS7	I prefer to buy from companies that are transparent and communicative with their consumers.	

Source: Author elaboration

## 4. METHODOLOGY

In this section, it is described the structure that this investigation followed to assure it's execution. Furthermore, it is explained the type of methodology applied, the data collection process and lastly, the data processing and analysis method.

#### 4.1. Investigation Structure

With the purpose of guaranteeing the response of the research questions proposed by the end of this investigation, a structure that this study had to follow was defined. As shown in figure 2, this investigation took place in four distinct stages:

Figure 2. Investigation Structure

1º Research questions definition and literature review process 2º Hypotheses development, questionnaire creation and data collection 3º Data processing and quantitative analysis

4º Results interpretation and final conclusions

Source: Author elaboration

The first stage started with the search of this study theme and the definition of the research questions and objectives. With these details defined, the literature review process began, where an intense search for scientific articles about this investigation topic was performed, based on pertinent keywords. The literature search was done on Scopus, Science Direct, Wiley Online Library, Springer, and SAGE Journals websites.

From the literature review process, it was also possible to see that a big part of the studies analysed focus their research mostly on the effects that the factors under study (corporate reputation, consumer satisfaction, corporate social responsibility, and innovation) have on the relationships between stakeholders (employees, suppliers, investors, and consumers) and companies. To achieve the research objectives settled upon the beginning of this study, it was decided to focus this research on one group: consumers.

In the second stage, the conceptual model and the hypotheses of this investigation were elaborated. With the aim to collect the necessary data to test the hypotheses created, a questionnaire was developed based on the literature review performed. The questionnaire method was the most suitable option for this study due to the benefits of its high reach (Islam et al., 2021). After its creation, the questionnaire was distributed online on social media networks to the public and then, the data collection started.

The third stage of this investigation is characterized by the processing of the information collected on the previous stage and its quantitative analysis. The data processing started on Excel and later, the data was imported to the software SmartPLS where it was properly

analysed. The software SmartPLS consists of a regression-based method to test research models with various constructs and measuring items (Al-Omoush et al., 2020). Since our research model consists of 4 constructs and 23 measurement items, it was decided to perform the quantitative analysis of the data gathered by using the software SmartPLS 3 (Ringle et al., 2015). With this software it was possible to evaluate the existent relationships between the constructs of this study conceptual model.

Lastly, the fourth stage comprehended the analysis and interpretation of the testing results. It is at this point where the validation of the conceptual model and the confirmation or rejection of the hypotheses developed was done and the final conclusions were withdrawn.

#### 4.2. Investigation Methodology

According to Kumar (2011), quantitative analysis has the main goal of confirming or rejecting any assumptions withdrawn by an investigator. Similarly, Carmo & Ferreira (2008) mentioned in their study that quantitative methodology consists of the observation of a certain topic and the consecutive development and evaluation of hypotheses about it. Due to the nature of the subjects which quantitative research methods are used for, this technique presents some limitations, such as, the intricacy of the human being, and the difficulty of measuring certain items like attitudes (Carmo & Ferreira, 2008). Nonetheless, quantitative research methods are a great method to make use of when the end goal of an investigation is to discover new relationships between variables or test original theories (Carmo & Ferreira, 2008). For this reason, the present investigation follows a quantitative research methodology to assure the response of the research questions and objectives initially proposed.

Descriptive research involves the investigation and the eventual clarification of a subject under study (Carmo & Ferreira, 2008). According to Kumar (2011), descriptive studies try to describe a phenomenon or provide information about actions/attitudes in relation to a phenomenon. Therefore, this investigation can be characterized as being a descriptive study since it aims to understand and interpret the relationship between the variables included in the conceptual model (Dalfovo et al., 2008; Kumar, 2011).

Dalfovo et al. (2008) mentioned in their study that quantitative descriptive studies have two different objectives. The first one is to test and verify the hypotheses formed. Secondly, it has the intention to illustrate the relationships between the model variables and to answer research questions. According to Carmo & Ferreira (2008), in descriptive studies, to gather the necessary data to achieve the answers that an investigator is looking for, the data collection process is usually done through questionnaires, interviews, or observation of the topic. This data can be about respondents' attitudes, opinions, or demographics, for example (Carmo & Ferreira, 2008).

According to Reis & Reis (2002) study, descriptive analysis techniques are used to categorize and portray the most crucial features of the information gathered. Similarly, Morais (2005) describes descriptive analytics as being a set of techniques which are used to sum up the information collected during an investigation. The information gathered is usually organized and presented through descriptive analysis tools, such as, graphs, tables, and summary measures (percentages, indices, or averages) (Morais, 2005; Reis & Reis, 2002). Reis & Reis (2002) also mentioned in their study that when the data is being manipulated, loss of some of the information can occur but this loss, compared to the new information gathered about the topic under study is irrelevant.

Morais (2005) stated that the worthiness of the information collected often depends on how it is prepared and presented. In their study, Pandey & Pandey (2015) mentioned several different types of measures that descriptive statistics uses to portray the data collected: measures of central tendency (mean, median, mode, geometric mean and harmonic mean), measures of variability (range, mean deviation, quartile deviation and standard deviation), measures of relative position (standard scores (Z or T scores), percentiles and percentile ranks) and measures of relationship (coefficient of correlation, partial correlation and multiple correlations). Similarly, Morais (2005) mentioned that the most used descriptive measures by researchers are location measures (central tendency - arithmetic mean, median and mode), dispersion measures (absolute deviation, variance, and standard deviation), asymmetry measures, kurtosis measures and concentration measures.

#### 4.3. DATA COLLECTION

To start the data collection process of this investigation, a questionnaire, based on the literature review performed, was developed using the Google application *Google Forms*. The questionnaire developed was later implemented to a non-probabilistic convenience sample composed by individuals which were selected based on specific criteria (Carmo & Ferreira, 2008; Kumar, 2011; Pandey & Pandey, 2015) and that were willing to help by providing responses (Carmo & Ferreira, 2008; Morais, 2005).

Pandey & Pandey (2015) consider in their study that questionnaires are one of the most used data collection methods by investigators due to its easy assembly and distribution. According to Kumar (2011) and Pandey & Pandey (2015), the questionnaire technique has several advantages, such as: it is a low-cost and efficient instrument, it is more convenient, it covers broadly dispersed sources, and it offers to its respondents' confidentiality. However, questionnaires can also have its disadvantages. For example, Kumar (2011) and Pandey & Pandey (2015) mentioned that questionnaire responses gathering can be limited by several reasons: population characteristics (cannot be illiterate, either too young or old), insufficient personal interactions, the responses can be influenced by other respondents or questions present in the survey and there is the possibility of deliverance of unfinished responses.

Questionnaires must follow some rules but most importantly, they must be coherent and logical throughout the whole question scheme (Carmo & Ferreira, 2008). According to Pandey & Pandey (2015), a good questionnaire must contain the following characteristics: studies a significant subject and its importance is explained on the questionnaire, it is as short as possible to not be tiring, instructions about its filling are clear, the questions are objective, the scheme of questions is organized, and it attempts to gather information that is not represented on other resources. Carmo & Ferreira (2008) also mentioned in their study that in relation to the questions, these should be relevant and comprehensible, and lastly, the number of questions should be controlled (this means, not too many and not too few). Regarding the presentation of the questionnaire, Carmo & Ferreira (2008) also stated that it should include a presentation of the investigator itself and of the subject under study, the number of pages should be limited, and it should be provided accurate instructions to the respondents.

In this investigation questionnaire, two types of questions were made to its respondents: identification questions, designed to collect certain information about the respondents (age, gender, country of residency, educational qualification), and informational questions, meant to collect information about respondents' perceptions, opinions, and attitudes regarding the topic under study (Carmo & Ferreira, 2008). To make the gathering of the information more organized, the questionnaire implemented was divided into five modules. In the first one, personal information about the respondents was collected – gender, age, country of residency and educational level. Module two consisted of questions related to respondents' opinion regarding companies CSR activities and similarly, the third comprised questions about respondents' opinion regarding companies' innovation initiatives. The fourth module contained questions to determine respondents' opinion about corporate reputation and lastly, the fifth was dedicated to questions about consumer satisfaction. In addition, to ensure that there is not any missing data at the end of the data collection process, all the questions present in the questionnaire were established as compulsory.

In the section designed for demographic data collection, multiple choice and short openended questions were made to the respondents to gather data about their personal information. The multiple-choice questions were dedicated to the respondents' age, gender and educational qualification and the short open-ended question was created to collect respondents' country of residency. As regards to the remaining questionnaire sections, these were composed of informational questions where the respondents had to specify their level of accordance, from 1 to 7, with the affirmations proposed. On these questions, it was used a 7 levels Likert scale, with the 1 representing strongly disagree and 7 representing strongly agree. The Likert scale allows investigators to gather personal information about the respondents though does not and even it measure perceptions/opinions/attitudes, it helps to differentiate the respondents from each other according to the strength of their attitude towards the subject being studied (Carmo & Ferreira, 2008; Kumar, 2011). To ensure the understanding of the questions present on the

questionnaire, an English and Portuguese version of each question was provided to the respondents.

Regarding the implementation of the questionnaire, it was decided to apply it to a specific group, consumers above the age of 18 residing in Portugal, so that the research questions and objectives initially settled would be achieved. Before being shared with the target audience, the questionnaire was subject to review to see if it was necessary to modify any aspect of it. It was examined by the advisor of this investigation and by a pre-test made to a conveniently selected sample (which is not included in the final sample). After it was reviewed and validated on both situations, the questionnaire was distributed online through social media networks, where it was accessible through a link. The data collection instrument was available online approximately from 6 to 20 of May of 2021, resulting in 188 questionnaire responses.

#### 4.4. DATA PROCESSING AND ANALYSIS

After the data collection was completed, the information gathered was extracted from Google Forms and imported to an Excel so that the data processing could begin. On the Excel, the information collected was arranged so that its scrutiny and interpretation would be easier to perform. The data processing started with the analysis and presentation of the respondents' personal information (age, gender, and educational level). Following the examination of the demographic variables, it was decided to perform the quantitative analysis of the conceptual model developed using the method structural equation modelling (SEM), more precisely by using partial least square (PLS), a variance-based approach of SEM (Hair et al., 2017; Michna, 2018). For this motive, the software SmartPLS 3 was chosen for this investigation (Ringle et al., 2015).

PLS-SEM is a non-parametric technique that aims to examine the coefficients which maximize the R<sup>2</sup> values of the endogenous latent constructs of a model (Hair et al., 2017). SEM allows the estimation of complex models and the evaluation of relationships between multiple constructs and indicators based on statistical data (Hair et al., 2019; Urbach & Ahlemann, 2010). Urbach & Ahlemann (2010) summarized in their study some arguments of why PLS can be a good technique, such as: PLS works with smaller sample sizes, it can be applied to models with a bigger number of constructs, and it is suitable for theory development. Likewise, Hair et al. (2019) stated that PLS use is recommended when the end goal of an investigation is to test a theory or when there is the aim of extending an already existent theory. Hence, the motives behind the decision of using PLS-SEM in this study were the fact that this investigation is based on a hypothetical proposal and because, the conceptual model created is constituted by several constructs and indicators (more precisely, 4 constructs and 23 indicators).

Many studies indicate that a SEM model is composed of a measurement model and a structural model (Hair et al., 2019; Sarstedt et al., 2017; Wong, 2013). The measurement

model consists of the interactions among the constructs and its respective indicators, and the structural model is made up of the relationships between the independent and dependent constructs (Hair et al., 2019; Sarstedt et al., 2017; Wong, 2013). Since a SEM model is divided into two distinct models, it only makes sense to perform the evaluation of this investigation conceptual model in two different steps. First, the measurement model is evaluated for its reliability and validity (Hair et al., 2017; Hair et al., 2019; Sarstedt et al., 2017). Next, it is the turn of the structural model, where the hypotheses created are tested and the relationships between the constructs are analysed (Hair et al., 2017; Wong, 2013).

## 5. INVESTIGATION SAMPLE

In this section, it is displayed the characteristics of this investigation sample. The online data collection process of this study occurred from 6 to 20 of May of 2021, resulting in the deliberate involvement of 188 individuals. During the inspection of the questionnaire responses, it was found that 17 responses were from individuals residing in other European countries instead of Portugal. Therefore, to ensure that the desired characteristics of our proposed target population were being fulfilled, those answers were removed, making this study final sample composed, in total, by 171 valid responses from individuals residing in Portugal.

As shown in figure 3, from the 171 respondents, 90 (53%) were female, 79 (46%) were male and 2 (1%) identified as "Other".

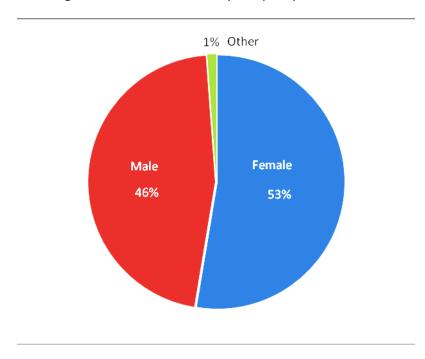


Figure 3. Distribution of Study Sample by Gender

**Source:** Author elaboration

Regarding the respondents age, this study sample is mostly composed of young consumers belonging to Gen-Z, more precisely, 94 (55%) are from the age interval 18-24. The subsequent age group with the highest number of respondents was the interval 25-34 with 27 (16%), followed by the age interval of 45-54 with 24 (14%). Next, it was the interval 35-44 composed by 13 (8%) respondents and the interval 55-64, with 11 (6%). Lastly, only 2 (1%) respondents were from the category "65 or above", as it shows in figure 4.

65 or above
1%
55-64
6%
45-54
14%
35-44
18-24

55%

Figure 4. Distribution of Study Sample by Age

8%

Source: Author elaboration

Lastly, as for the educational background of the respondents, 88 (51%) have a bachelor's degree, 29 (17%) have a master's degree, 48 (28%) have completed high-school, 5 (3%) have less than a high-school diploma and only 1 (1%) has a doctorate degree, as displayed in figure 5.

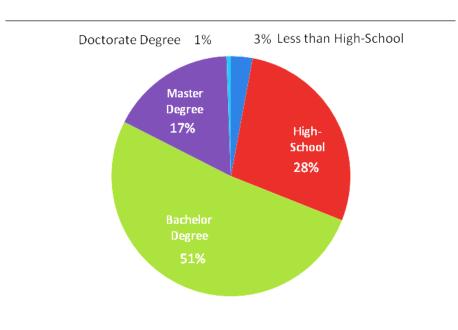


Figure 5. Distribution of Study Sample by Educational Qualification

Source: Author elaboration

## 6. RESEARCH RESULTS AND DISCUSSION

In this section, the analysis of this investigation conceptual model is presented. As previously described, a SEM model is composed of a measurement and a structural model (Urbach & Ahlemann, 2010). The measurement model is characterized by the relationships between the constructs and their indicators while the structural model stands for the interactions between the constructs themselves (Sarstedt et al., 2017).

Since this investigation model is being analysed using the PLS-SEM technique on the software SmartPLS 3 (Ringle et al., 2015), the analysis will be divided into two stages. First, it is evaluated the measurement model and after, it is made the assessment of the structural model.

#### 6.1. MEASUREMENT MODEL

In the measurement model analysis, it is performed the assessment of the reliability and validity of our model (Hair et al., 2017). To do so, it is necessary to determine individual indicator reliability, internal consistency reliability, convergent validity, and discriminant validity (Hair et al., 2017).

Indicator reliability explains to what magnitude a variable can consistently determine what they were created for to determine (Urbach & Ahlemann, 2010). From the results, it was possible to see that every individual indicator included in this study model had a loading above 0.60 (Hair et al., 2017), as shown in table 2. Furthermore, all the indicators turned out to be significant when p<0.001, as summarized in table 2. These results confirm the existence of satisfactory levels of individual indicator reliability (Hair et al., 2019; Sarstedt et al., 2017).

Table 2. Indicators Significance

Indicators	Path Coefficients	Standard Errors	T Statistics	P Values
CR1 <- CR	0.797	0.041	19.217	0.000
CR2 <- CR	0.848	0.023	37.096	0.000
CR3 <- CR	0.838	0.052	16.078	0.000
CR4 <- CR	0.895	0.021	42.997	0.000
CR5 <- CR	0.889	0.024	36.970	0.000
CR6 <- CR	0.814	0.034	23.798	0.000
CS1 <- CS	0.673	0.075	8.974	0.000
CS2 <- CS	0.725	0.044	16.651	0.000
CS3 <- CS	0.813	0.030	26.819	0.000
CS4 <- CS	0.816	0.037	21.829	0.000
CS5 <- CS	0.706	0.057	12.276	0.000
CS6 <- CS	0.764	0.056	13.758	0.000
CS7 <- CS	0.757	0.040	18.725	0.000
CSR1 <- CSR	0.815	0.033	24.510	0.000
CSR2 <- CSR	0.870	0.028	31.155	0.000
CSR3 <- CSR	0.863	0.032	27.270	0.000

CSR4 <- CSR	0.748	0.054	13.951	0.000
CSR5 <- CSR	0.806	0.042	19.294	0.000
1 <-	0.753	0.056	13.353	0.000
12 <- 1	0.829	0.036	23.156	0.000
I3 <- I	0.858	0.027	31.905	0.000
4 <-	0.783	0.040	19.391	0.000
I5 <- I	0.841	0.029	28.556	0.000

The internal consistency reliability of our model was evaluated through two approaches: Composite reliability and Cronbach's alpha. As presented in table 3, the composite reliability of the constructs ranged from 0.901 and 0.938 and the Cronbach's alpha ranged from 0.871 and 0.921. Since both measured values were above their threshold of 0.70, the results confirm the internal consistency reliability of this model constructs (Hair et al., 2019; Sarstedt et al., 2017).

The model convergent validity is the magnitude to which the constructs can reflect its indicators variance (Hair et al., 2019) and it is commonly measured using the average variance extracted (AVE) method (Urbach & Ahlemann, 2010). From the results presented on table 3, it is possible to confirm that the measurement model presents good convergent validity since the values of AVE for every construct is above the minimum threshold of 0.50 (Hair et al., 2019; Sarstedt et al., 2017; Urbach & Ahlemann, 2010).

According to Hair et al. (2019) and Urbach & Ahlemann (2010) studies, discriminant validity measures the degree to which a construct can differentiate itself from the other constructs existent in the model. As recommended by many studies, discriminant validity of the measurement model should be evaluated through three techniques: Fornell-Larcker Criterion, Heterotrait-Monotrait Ratio (HTMT) and cross-loadings evaluation. The Fornell-Larcker criterion advocates that the square root of AVE of a variable (shown in bold in table 4) should be higher than the correlation values with the other variables existent in the model (Fornell & Larcker, 1981; Hair et al., 2019). Meanwhile, HTMT criterion is described by Hair et al. (2019) and Sarstedt et al. (2017) as the mean value of the indicator correlation across the latent variables of a model in proportion to the mean of the average correlations of the indicators computing the same latent variable.

As per table 4, it is possible to see that the Fornell-Larcker criterion was fulfilled in all the constructs, confirming this model discriminant validity. In addition, as it is displayed on table 5, all the constructs HTMT values were below the threshold of 0.850 (Hair et al., 2019; Henseler et al., 2015; Sarstedt et al., 2017), providing extra evidence to the previous affirmation made. To finish the discriminant validity model estimation, the cross-loadings of the indicators were also assessed and as can be observed in table 6, all the indicators present in the model have higher loadings on the construct that they are connected to (Hair et al., 2017; Michna, 2018), sustaining the already confirmed model discriminant validity.

Table 3. Convergent Validity and Internal Consistency Analysis Results

Constructs	Cronbach's Alpha	Composite Reliability	AVE
CR	0.921	0.938	0.718
CS	0.871	0.901	0.566
CSR	0.879	0.912	0.675
1	0.873	0.907	0.662

Note: CR – corporate reputation; CS – consumer satisfaction; CSR – corporate social responsibility; I – innovation initiatives; AVE – average variance extracted.

**Source:** Author elaboration (based on SmartPLS testing results)

Table 4. Fornell-Larcker Examination Results

	CR	CS	CSR	1
CR	0.847			
CS	0.542	0.752		
CSR	0.476	0.722	0.822	
I	0.453	0.537	0.461	0.814

Note: The numbers in bold represent the square root of AVE of each construct

Source: Author elaboration (based on SmartPLS testing results)

Table 5. HTMT Testing Results

	CR	CS	CSR	1
CR				
CS	0.599			
CSR	0.526	0.821		
I	0.491	0.598	0.512	

**Source:** Author elaboration (based on SmartPLS testing results)

**Table 6.** Indicators Cross-loadings

	CR	CS	CSR	1
CR1	0.797	0.496	0.425	0.364
CR2	0.848	0.472	0.412	0.431
CR3	0.838	0.436	0.382	0.317
CR4	0.895	0.465	0.415	0.394
CR5	0.889	0.426	0.338	0.401
CR6	0.814	0.449	0.435	0.386
CS1	0.437	0.673	0.581	0.282
CS2	0.490	0.725	0.532	0.358
CS3	0.502	0.813	0.566	0.506
CS4	0.449	0.816	0.514	0.427
CS5	0.314	0.706	0.437	0.431
CS6	0.311	0.764	0.530	0.517
CS7	0.327	0.757	0.623	0.302
CSR1	0.335	0.575	0.815	0.270
CSR2	0.426	0.654	0.870	0.418
CSR3	0.378	0.643	0.863	0.289
CSR4	0.418	0.558	0.748	0.515
CSR5	0.396	0.526	0.806	0.403
I1	0.373	0.457	0.415	0.753
12	0.225	0.370	0.306	0.829
13	0.417	0.578	0.482	0.858
14	0.384	0.351	0.298	0.783
15	0.399	0.364	0.321	0.841

#### 6.2. STRUCTURAL MODEL

After the assessment of the measurement model was completed and its validity and reliability were confirmed, the evaluation of the structural model can start. During the evaluation of the structural model, it is necessary to verify constructs collinearity, the predictive accuracy of the endogenous constructs through their coefficients of determination ( $R^2$ ) values, the predictive relevance of each endogenous variables through their cross-validated redundancy ( $Q^2$ ) values and the significance of the constructs path coefficients (Hair et al., 2017; Hair et al., 2019; Sarstedt et al., 2017).

According to Hair et al. (2017) and Sarstedt et al. (2017) studies, to investigate collinearity issues within the structural model it is recommended to review the VIF values of all the predictor constructs existent in the conceptual model. The constructs VIF values vary between 1.270 and 1.434, as can be observed below in table 7. Given that all the VIF values are below the critical value of 5 (Sarstedt et al., 2017), we can therefore state that there is not a collinearity issue in the structural model.

**Table 7.** Constructs Variance Inflation Factor (VIF)

	CR	CS	CSR	1
CR		1.420		
CS				
CSR	1.270	1.434		
ı	1.270	1.395		

**Source:** Author elaboration (based on SmartPLS testing results)

The coefficient of determination ( $R^2$ ) measures the structural model predictive accuracy and according to Hair et al. (2017), it determines the "amount of variance in the endogenous constructs explained by all of the exogenous constructs linked to it" (Hair et al., 2017). According to the results presented in table 8, the  $R^2$  of the endogenous constructs CR (corporate reputation) and CS (consumer satisfaction) were of 28,70% and 59,40%, respectively. This means that the conceptual model of this study can explain 28,70% of the variance in corporate reputation and 59,40% of the variance in consumer satisfaction.

Following Hair et al. (2019) and Sarstedt et al. (2017) guidelines, we can consider that the  $R^2$  of CS is moderate and the  $R^2$  of CR is weaker. Nonetheless, both  $R^2$  values are above the critical limit of 10% (Falk & Miller, 1992).

Table 8. Endogenous Constructs R<sup>2</sup> and Q<sup>2</sup> Values

Constructs	R²	R <sup>2</sup> Adjusted	Q²
CR	0.296	0.287	0.206
CS	0.601	0.594	0.329

To determine the predictive relevance of the structural model, it was analysed the endogenous constructs cross-validated redundancy  $(Q^2)$  values. To do so, the blindfolding procedure was used with an omission distance of 7, as suggested by several studies (Hair et al., 2017; Hair et al., 2019; Sarstedt et al., 2017). As stated in table 8, CS has a  $Q^2$  of 0.329 and CR has a  $Q^2$  of 0.206. Since both endogenous constructs  $Q^2$  values are above the minimum value of 0 (Hair et al., 2017; Hair et al., 2019; Sarstedt et al., 2017), it is possible to confirm the predictive relevance of this model.

On table 9 it is presented the path coefficients of the direct relationships between the model constructs. As per the results presented on table 9, it is possible to observe that the relationship between CSR and CS has the highest path coefficient ( $\beta$  = 0.537) of the model and a p value < 0.001. This result demonstrates that CSR activities have a significantly positive effect on consumer satisfaction, supporting in this way the confirmation of **H1**.

H2 proposes that corporate innovation initiatives positively impact consumer satisfaction. The direct relationship between innovation initiatives and consumer satisfaction presented a path coefficient of  $\beta$  = 0.200 and a p value < 0.01, indicating this way to be positively and statistically significant. Hence, **H2** is accepted and confirms the positive influence that innovation initiatives can have on consumer satisfaction. According to the results, the relationship between CSR and CR presents a path coefficient of  $\beta$  = 0.339 and a p value < 0.001, demonstrating that this relationship is statistically significant. Thus, **H3** is also accepted, reinforcing the thought that corporate socially responsible activities have a positive influence on the reputation of companies.

Lastly, it can also be observed on table 9 that the direct relationship between innovation initiatives and corporate reputation was found to be statistically significant, given that the path coefficient of this relationship is  $\beta$  = 0.296 and its p value < 0.001. Therefore, these findings confirm **H4** and indicate that innovation initiatives have a positive influence on companies' reputation.

**Table 9.** Direct Effects Testing Results

	Path Coefficients	Standard Errors	T Statistics	P Values
CSR -> CR	0.339	0.081	4.182	0.000
CSR -> CS	0.537	0.064	8.335	0.000
I -> CR	0.296	0.085	3.505	0.000
I -> CS	0.200	0.066	3.037	0.002

Lastly, with the aim of investigating the proposed mediation hypotheses H5a and H5b, it was followed the suggestion of numerous studies to use the bootstrapping validation procedure (Hair et al., 2017; Michna, 2018; Sarstedt et al., 2017) to test the relevance of the indirect effects between the model constructs. On table 10 it is presented the bootstrapping mediation results.

According to table 10, the results regarding the indirect effects of corporate social responsibility activities on consumer satisfaction via corporate reputation show that this relationship is significant since its path coefficient is of  $\beta$  = 0.066 and its p value < 0.05. Similarly, the table 10 results prove that the indirect effects of innovation initiatives on consumer satisfaction via corporate reputation are significant, given that this relationship presents a path coefficient of  $\beta$  = 0.058 and a p value < 0.05. Therefore, **H5a** and **H5b** are supported by the results, being possible to conclude that corporate reputation serves as a complementary mediator given that both direct and indirect effects between the constructs involved in these relationships are significant (Hair et al., 2017).

**Table 10.** Indirect Effects Testing Results

	Path Coefficients	Standard Errors	T Statistics	P Values
CSR -> CR -> CS	0.066	0.032	2.050	0.040
I -> CR -> CS	0.058	0.023	2.575	0.010

**Source:** Author elaboration (based on SmartPLS testing results)

With the structural model analysis completed, it is possible to re-build this study conceptual model with its path coefficients and endogenous constructs coefficient of determination ( $R^2$ ) correct values. On figure 6, it is represented this study conceptual model with its final assessment results indicated.

**Corporate Social** Innovation Responsibility Initiatives (I) (CSR) Н4 Н3 β=0.296;  $\beta$ =0.339; p < 0.001 p < 0.001 Corporate Reputation (CR) **H1 H2**  $R^2 = 0.287$  $\beta$ =0.537;  $\beta$ =0.200; p < 0.001p < 0.01H5a H5b  $\beta$ =0.066;  $\beta$ =0.058; p < 0.05 p < 0.05 **→** Direct Effect ·····► Indirect Effect Consumer Satisfaction (CS)  $R^2 = 0.594$ 

Figure 6. SEM Model Final Analysis Results

# **6.3. RESULTS DISCUSSION**

After the evaluation of the conceptual model and hypotheses created, we can now discuss our findings and do a comparison between them, and the literature review performed.

As previously shown on the measurement model evaluation, all the indicators designed to measure the 4 constructs of the conceptual model through the questionnaire, were individually tested and all of them have been confirmed to be relevant to the study. Through the questionnaire responses, it was gathered the respondent's degree of agreement (from a scale of 1 to 7) with the 23 affirmations presented on the several sections of the survey. Regarding the indicators presented on the CSR questionnaire section, the respondents strongly agreed with the affirmations proposed but to be more precise, the respondents strongly agreed with the affirmations CSR2, CSR4 and CSR5, and agreed with CSR1 and CSR3. In relation to the indicators of the innovation questionnaire section, it was found that generally the respondents agreed with the items suggested. More exactly, the respondents strongly agreed with I1 and I3, and agreed with the remaining items (I2, I4 and I5). As for the indicators presented on the CR questionnaire section, overall, the respondents agreed with the affirmations proposed. But more specifically, respondents agreed with all the items except CR3, where they somewhat agreed with this affirmation. Lastly, in relation to the indicators on the consumer satisfaction section, in general respondents agreed with the statements proposed. More particularly, they agreed with CS1, CS2 and CS4, and strongly agreed with the rest of the items (CS3, CS5, CS6 and CS7).

From the results of the measurement model analysis, it was also possible to observe which indicator, from the collection of items of each latent variable, had the highest path coefficient. Regarding the corporate social responsibility construct, the indicator which presented the highest path coefficient was CSR2 ("I prefer companies that are ethical and socially responsible.") and in relation to the innovation construct, the highest path coefficient indicator was I3 ("I believe that companies should engage in product or business model innovations to differentiate themselves from its competitors."). As regards to corporate reputation, the indicator which presented the highest path coefficient was CR4 ("I believe that high reputation companies have a better product or service quality.") and lastly, as for consumer satisfaction, the indicator with the highest path coefficient was CS4 ("I would build a positive relationship with a company if I am satisfied with my experience with the company.").

To begin the analysis of the structural model, the hypotheses formulated earlier in this study were tested. During the structural model evaluation, it was possible to observe which construct had the better ability to explain each other. Regarding the direct relationships of the conceptual model, the construct which better explains consumer satisfaction and corporate reputation is corporate social responsibility since the path coefficients of those relationships are 0.537 and 0.339, respectively. As for the indirect relationships, corporate reputation mediating role is more significant in the relationship between corporate social responsibility activities and consumer satisfaction.

With regards to the direct relationships of the conceptual model, the results show that the respondents' opinion/perception about companies CSR activities positively impacts

consumer satisfaction, confirming this way this investigation H1. This outcome goes according with some of the studies analysed which have found that consumer satisfaction is a positive consequence of CSR practices (El-Garaihy et al., 2014; García-Madariaga & Rodríguez-Rivera, 2017; Islam et al., 2021; Luo & Bhattacharya, 2006). According to the authors studied, CSR plays a particularly significant part on the relationships between companies and consumers because the kind of CSR activities which firms employ, directly influences consumers opinion/perceptions/behaviour towards the company itself (Palihawadana et al., 2016; Singh & Misra, 2021; Wu & Lin, 2014). As the authors claim, a company who engages in CSR activities gives positive evidence to consumers that they have integrity and care about society/stakeholders' well-being (Arikan et al., 2016; Islam et al., 2021; Pham & Tran, 2020). Consequently, consumers perceptions about the company improves and their satisfaction increases (El-Garaihy et al., 2014; Islam et al., 2021; Wu & Lin, 2014).

Regarding innovation initiatives, the results show that respondents' opinion/perception about companies' innovation initiatives positively influence consumer satisfaction. Thus, H2 is supported and further proof is given to the previous studies which have deduced that corporate innovation has a direct effect on consumer satisfaction (Daragahi, 2017; Michna, 2018; Naveed et al., 2012; Rubera & Kirca, 2017). As stated by the authors analysed, innovation is vital for the prosperity of a company but given that it is the consumer that considers it to be victorious or not (Daragahi, 2017; Kunz et al., 2011), innovations must be adopted keeping in mind consumer welfare (Kunz et al., 2011; Sheth, 2020). A company by implementing innovations shows its ability to fulfil its consumer's needs, which consequently influences their behaviour and increases their satisfaction (Naveed et al., 2012; Rubera & Kirca, 2017; Seng & Ping, 2016).

Moving on to corporate reputation, our results show that respondents' opinion/perception about companies' CSR activities positively influences corporate reputation, thus confirming hypothesis H3. This result is conforming with the conclusions of preceding authors that have studied and proven the direct positive effects of CSR measures on company reputation (Arikan et al., 2016; El-Garaihy et al., 2014; Fatma et al., 2015; García-Madariaga & Rodríguez-Rivera, 2017; Islam et al., 2021). According to Fatma et al. (2015) study, companies who employ CSR activities positively impact stakeholders' perceptions and behaviours, which helps companies to build their reputation. Therefore, companies who engage in CSR activities, that causes benefits to the society and stakeholders, will enjoy many benefits including better reputation, better image, higher stakeholder investments and a competitive advantage, for example (Fatma et al., 2015; García-Sánchez & García-Sánchez, 2020; He & Harris, 2020; Magrizos et al., 2021; Qiu et al., 2021).

To finish, the results also revealed that respondents' opinion/perception about companies' innovation initiatives positively impacts their corporate reputation, confirming H4. This result aligns with the author's idea that being recognized as an innovator improves

companies' reputation (Guillerme, 2011; Padgett & Moura-Leite, 2012). According to the authors studied, how a company is perceived influences their short and long-term prosperity and for this reason, companies' innovations must satisfy their stakeholders' requirements so that in the end, business survival and reputation is ensured (Coulson-Thomas, 2020; Cucculelli & Peruzzi, 2020; Daragahi, 2017; Lecossier & Pallot, 2020).

In relation to the indirect relationships of the conceptual model, the results of this investigation indicate a positive influence on both occasions hypothesized, confirming this way both mediation hypotheses created (H5a and H5b).

According to the authors analysed, companies engaging in CSR activities are perceived by consumers as being more trustworthy and consequently, their feelings and attitudes towards the company itself positively grow. Due to their positive perceptions, consumers will recommend and spread excellent information about the company to other consumers, affecting positively firm reputation (Arikan et al., 2016; Baldarelli & Gigli, 2014; El-Garaihy et al., 2014; Fatma et al., 2015; Raithel & Schwaiger, 2015). Additionally, research shows that consumers are more satisfied, comfortable, and inclined to consume from companies who employ CSR activities (Arikan et al., 2016; El-Garaihy et al., 2014). Altogether, this study results suggest that corporate reputation mediates the relationship between CSR activities and consumer satisfaction, confirming H5a. This outcome provides extra confirmation to Arikan et al. (2016) research and findings, which have previously found the partial mediation of corporate reputation on the relationship between CSR and consumer satisfaction.

Lastly, the mediation effect of corporate reputation on the relationships between corporate innovation initiatives and consumer satisfaction was proved to be significant in this study, confirming H5b. This proposes that innovation initiatives boost consumer satisfaction directly as well as corporate reputation, which consequently increases consumer satisfaction. Therefore, the greater the reputation of a company, the better will be the relationship between consumers' opinion about companies' innovation initiatives and their satisfaction with the company itself and its product/service offer. According to the authors analysed, companies whose innovations improve their products/services offer according to consumers' wishes and necessities are recognized by customers as being more considerate, since they are being inventive with the goal to increase their satisfaction. In addition, authors also state that stakeholders attribute a better reputation to companies whose innovations bring communal benefits. The consequent consumer satisfaction causes the spread of positive information to other consumers, making a positive impact on the reputation of the company (Daragahi, 2017; Lie et al., 2019; Naveed et al., 2012; Padgett & Moura-Leite, 2012; Rubera & Kirca, 2017).

# 7. CONCLUSION

## 7.1. CLOSING CONSIDERATIONS, THEORETICAL CONTRIBUTIONS, AND IMPLICATIONS

The main ambition of this investigation was to extend the existing literature by studying the impact that the adoption of corporate social responsibility activities and innovation initiatives by companies has over its consumer's satisfaction. Besides, it aspired to contribute to literature development by verifying if corporate reputation could be the mediator of those relationships. To be able to achieve proper results to answer the research questions initially proposed, a vast literature review was performed and as result, a conceptual model composed by direct and indirect relationships among the variables CSR activities, innovation initiatives, consumer satisfaction and corporate reputation was developed. This conceptual model was later tested through the quantitative analysis of the questionnaire responses collected.

The conceptual model testing results allowed the approval of all the hypotheses created, making possible the response of the first research question of this study: "What is the impact of CSR activities and corporate innovation initiatives on consumer satisfaction?". Both direct relationships hypothesized regarding the influence of companies' CSR activities and innovation initiatives over consumer satisfaction were found significant in this investigation, suggesting that consumers' perception/opinion of companies CSR activities and innovation initiatives has a positive impact on their own satisfaction. These findings are in line with the studies reviewed as well adds further evidence to the literature which has already concluded that CSR activities have a direct and positive influence on consumer satisfaction (El-Garaihy et al., 2014; García-Madariaga & Rodríguez-Rivera, 2017; Islam et al., 2021; Luo & Bhattacharya, 2006) and that has found a positive connection between innovation and consumer satisfaction (Daragahi, 2017; Michna, 2018; Naveed et al., 2012).

With regards to the concept of corporate reputation, the quantitative analysis results have shown that consumers' perception/opinion of companies' CSR activities and innovation initiatives has a direct connection with firm reputation. These findings contribute with additional proof for the literature that has proven the positive effect of CSR and innovation initiatives implementation on companies' reputation (Arikan et al., 2016; El-Garaihy et al., 2014; Fatma et al., 2015; García-Madariaga & Rodríguez-Rivera, 2017; Islam et al., 2021; Padgett & Moura-Leite, 2012). Through the investigation results it was also possible to find that corporate reputation plays a complementary mediator role on this study conceptual model, answering this way the second research question of this study: "Does corporate reputation have a mediating role in those relationships?".

Overall, the results indicate that corporate reputation carries out a partial mediation of the influence of companies CSR activities and innovation initiatives over consumer satisfaction. This deduction goes according with statements from preceding studies, more precisely Arikan et al. (2016) research, which has established that corporate reputation is to a degree

responsible for the relationship between CSR activities and consumer satisfaction. Besides, this study results have confirmed as well that corporate reputation mediates the influence of firms' innovation initiatives on consumer satisfaction, proposing that firms' innovation initiatives effect on consumers' satisfaction is in part regulated by the firm reputation. As previously mentioned, little research about this specific type of relationship has been made in the past. Thus, this investigation contributes to the development of literature since it has proven CR to be a crucial element in the relationship between innovation and consumer satisfaction.

Moreover, the findings of this investigation reveal that the variable which most directly and positively impacts consumer satisfaction and corporate reputation is CSR activities. Similarly, in relation to the hypothesized indirect relationships, the one that turned out to be the most significant is the one between the variables CSR, CR and CS. Hence, one of the main conclusions to withdraw from this investigation is that CSR activities and innovation initiatives do in fact influence consumer satisfaction but if companies want good business outcomes, catch the attention of new customers, increase their reputation and client satisfaction, they should without a doubt engage in CSR activities.

Nowadays, social media networks and the media expose more rapidly and easily all types of situations to the public, the good and the bad. Given that our society is also less tolerant towards individual or collective unethical actions, it is important that companies reinforce their image positively. In sum, our results show that although it is necessary to be innovative, it is more important that companies employ socially/environmentally responsible measures. Therefore, this investigation suggests Portuguese companies to focus their efforts and investments on CSR activities adoption given that, for the respondents of this specific situation, CSR is a successful strategy to uplift consumers' perceptions/opinions about companies which inevitably improves business reputation and leads to consumer satisfaction.

#### 7.2. RESEARCH LIMITATIONS

During the execution of this investigation, we were able to detect that this study presents some limitations. First, from the data collection process of this study it arises some limitations especially from the information collected since it depended on the respondents' willingness to cooperate. In addition, there might be the possibility of skewed questionnaire answers since the respondents were aware that this study was being performed under a master thesis motif.

Besides, the resulting sample from the data collection process is relatively small and limited in geographical framework, since all the respondents are consumers residing in Portugal. Additionally, the questionnaire respondents were mainly Gen-Z, belonging to the age interval of 18-24 years old. Therefore, there may arise some restrictions in the interpretation

and generalization of our findings to other studies or countries since these results are the consequence of specific Portuguese population characteristics and opinions.

Lastly, an additional significant limitation is the fact that our data collection process is based on a cross-sectional data technique, a questionnaire. As Abd-El-Salam et al. (2013) mentioned in their study, even though cross-sectional is a good method to collect the necessary data to confirm studies hypotheses, this method does not allow to identify or explain the relationships between variables. In this case, the data of this investigation was collected in a restricted time span and from respondents belonging to a specific background (Portugal). As a result, their answers correspond to their opinions and perceptions of their surrounding environment in a specific time period, making it difficult to generalize our results.

#### 7.3. FUTURE RESEARCH SUGGESTIONS

To overcome the limitations previously stated, we have some suggestions for the future studies to employ. First, we advise future studies to adopt a longitudinal research design instead of cross-sectional to be able to confirm and explain the relationships between the constructs of the conceptual model (CSR, innovation initiatives, corporate reputation, and consumer satisfaction).

This study explores the influence of businesses CSR activities and innovation initiatives on consumer satisfaction, and it examines the mediating role of corporate reputation between those relationships. Given that both practices impacts are only tested on consumers, we believe that it would be interesting to test these relationships on other stakeholders, such as, employees or investors, so that we could have a bigger picture of how these relationships influence the different stakeholders within a company.

Besides, since our results are the outcome of Portuguese residents' opinions and perceptions, we recommend replicating this study in other countries so that it would be possible to explore how the results vary accordingly. In addition, we also consider that it would be interesting to perform this investigation across the multiple activity sectors existent to see how much CSR and innovation practices vary from one business to another.

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# 9. ANNEXES

9.1. LITERATURE REVIEW ABOUT CSR, CONSUMER SATISFACTION, CORPORATE REPUTATION, AND INNOVATION

Relationships among:	CSR and Consumer Satisfaction	CSR and Corporate Reputation	Innovation and Consumer Satisfaction	Innovation and Corporate Reputation	CSR, Consumer Satisfaction and Corporate Reputation	Innovation, Consumer Satisfaction and Corporate Reputation
(Luo & Bhattacharya, 2006)	<b>√</b>					
(Fatma et al., 2015)		✓				
(Daragahi, 2017)			✓			
(Islam et al., 2021)	✓	✓				
(Padgett & Moura-Leite, 2012)				✓		
(Rubera & Kirca, 2017)			✓			
(Michna, 2018)			✓			
(García- Madariaga & Rodríguez- Rivera, 2017)	<b>√</b>	✓				
(Arikan et al., 2016)		✓			✓	
(El-Garaihy et al., 2014)	<b>√</b>	✓				
(Naveed et al., 2012)			✓			

**Source:** Author elaboration