Corporate Social Responsibility and Gamification in influencing communication and engagement for Greek and Small and Medium Enterprises

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Abstract

This dissertation was written as part of the requirements for the Master's degree in Digital Media, Communication, and Journalism. Considering the inability of companies to effectively communicate with their interested parties, as well as the concurrent emergence of mobile media and content options, companies should effectively communicate with all parties. These major themes include the debates about the business's ecological, social, and governance aspects, also known as Corporate Social Responsibility (CSR), sustainability, or stakeholder communication.

To enhance the aforementioned while also increasing employee engagement in Small and Medium Enterprises (SMEs), the dissertation's scope is to scrutinize how gamification-based applications could be used to cultivate sustainable practices and get employees more engaged in sustainability issues. The preceding will be examined in terms of creating an impactful game environment and integrating engaging game elements. This will illustrate the connection between gamification and interaction. A case study of a gamified application that focuses on CSR in SMEs is presented and analysed.

Keywords: Corporate Social Responsibility, Gamification, SMEs, Employee Engagement, Sustainability, High-fidelity Prototype

Application Prototype Link (authoring environment & browsing):
https://www.figma.com/proto/5WbQ09L2j4aIWEFi3EU5ns/CSR-ACADEMY?node-id=1%3A2&scaling=scale-down&page-id=0%3A1
Introduction

More and more companies make use of gamification in their communication, with the aim of attracting different stakeholder groups and providing innovative and persuasive messages to their audiences. Engaging stakeholders in environmental and social responsibility is a rising target, but lack of interest on the part of stakeholders can undermine the success of these efforts.

It is difficult to maintain a direct approach and traditional CSR communication strategies are ineffective in reaching audiences. As a result, costly CSR efforts may not produce concrete results, and powerful messages about these efforts may be lost in a dense mass of information.

In view of this factor, gamification will make business more efficient by capitalizing on the natural human desire to play games. Gamification uses the design elements of games but adapts them to non-game contexts or to empower people in ways that are not fun and generate engaging experiences.

Game design elements also include social and/or creative aspects of the game (e.g., leaderboards, avatars, difficulty levels, etc.). Gamification exploits the reinforcement of positive emotional states and experiences, and these are particularly profound effects on people's behavior.

Gamification is used for a variety of purposes, including advertising, marketing, human resources, public relations, and communications specialists. For example, increase awareness of environmental issues, provide sustainable behavior, improve work efficiency, increase learning motivation. Furthermore, is a unique way to engage stakeholders in issues of corporate social responsibility and sustainability. Engaging in fun and games can enhance stakeholders' knowledge of environmental issues and increase their involvement in environmental actions, resulting in a competitive advantage for the company.

Considering the above and focusing on the importance of small and medium-sized enterprises for the national and European economy and progress, this thesis will theoretically provide an in-depth understanding of the connection among the framework of gamification, CSR, and SMEs, as well as demonstrate how a reliable connection between these components can be formed. The proposed application will then assess the processes that lead the user to a more responsible solution via the implementation of CSR via the design of a User Experience (UX) environment, as well as determine whether the presence of an interactive application will
benefit in the implementation of CSR while also increasing work engagement and enhancing the workplace environment. The evaluation of the proposed project will help to expand audience's desire to adopt sustainable cognitive and behavioral practices, resulting in the implementation of a CSR agenda. This will be accomplished using a prototype application with gamification characteristics to facilitate corporate communication and engagement.

**Thesis Structure**

This paper describes the design and implementation of the application "CSR Academy" through the phases of Analysis, Design, Development, and Evaluation. It aims to demonstrate the existing causative link between gamification, Corporate Social Responsibility, and employee engagement, particularly in Small and Medium Enterprises, by addressing basic research questions related to the impact on the target audience (SMEs).

The first chapter focuses on the theoretical foundation for supporting the major topics, objectives, and characteristics of Corporate Social Responsibility. Furthermore, it examines the fundamental concepts of Gamification, including its definition and key benefits and drawbacks. Finally, it depicts the fundamental structural characteristics of Small and Medium Enterprises (SMEs), as well as the presence of Corporate Social Responsibility agendas and methodologies in them.

The second chapter identifies the major project development models as well as the methodological underpinnings of these principles. Furthermore, the chapter will reflect on the major theories and methods used to carry out this project. Finally, it outlines the research questions on which the project is based as well as the application project's progress report.

The third chapter explains the existing landscape in this field before highlighting the project's key priorities. Furthermore, the target audience is defined, as are the key features of competing applications that underpin the benefits and drawbacks of each. Ultimately, the qualitative and quantitative findings are examined.

The fourth chapter discusses the theory that is significant to the application's design. Following the definition of all theories, the first screens of the low-fidelity prototype are addressed. The application's name and logo are also incorporated.

The fifth chapter describes the high-fidelity prototype development process in detail. The chapter is divided into several subchapters that assess and depict the application's production
phase, aesthetic elements, and the project's major themes. Finally, the project development phase in Figma is also addressed.

The sixth chapter includes the project's overall formative and summative evaluation, and the results drawn by these processes.

Finally, the seventh chapter illustrates the research findings as they emerge from the evaluations, while also presenting the project's novelty and impact. The application's research recommendations must also be mentioned.
Chapter 1

Theoretical Background

This chapter provides the project's theoretical foundation. An overview of the key theories and literature on Corporate Social Responsibility, Gamification, and Small and Medium Enterprises will be presented.

1.1 Corporate Social Responsibility: Notion and Theories

The concept of Corporate Social Responsibility (CSR) or in general the social role of business in a society tends to be a topic of increased attention not only in academia but also in the business industry. The volatile financial and social environment of our days which is intricately connected to the environmental crisis, globally financial meltdowns, and numerous corporate scandals ignited the curiosity and the need of the consumers and society whether the business has an ethical compass and socially responsible character (Carroll & Buchholtz, 2008, p. 4). That encouraged businesses to implement a socially responsible agenda thus they have increasingly become more sensitive regarding the promotion of social causes (Engle, 2007). Over the last few years, businesses have become increasingly socially conscious and have therefore become more involved in community outreach by donating money to philanthropic causes as well as providing their marketing and management expertise to non-profit organizations (Andreasen, Goodstein, & Wilson, 2005). The term CSR encompasses businesses that are distinct from businesses whose primary purpose is to make revenue. Due to a plethora of CSR campaigns, a considerable amount of research has been conducted, however, no agreement has been reached on what constitutes CSR (Dahlsrud, 2008). The following literature review identified 37 CSR definitions and categorized them in five sub-components: environmental, social, economic, stakeholder, and voluntary. Environmental dimensions encompass the agreed upon definition of corporate social responsibility (CSR) (e.g. "environmental concerns in business operations", "a cleaner environment"). The social dimension of business encompasses business and society (e.g., "contribute to a better society", "integrate social concerns in their business operations"). The economic dimension includes the socio-economic or financial aspects of a business operation and the stakeholder dimension involves the interests of stakeholders or the groups that are affected by an action
taken (e.g., "Interaction with stakeholders," "Business Stakeholders"). The final dimension, voluntariness, refers to the notion of actions that are not established by law (e.g., "beyond legal obligations," "voluntary obligations"). The businesses have been encouraged to be more socially responsible and, therefore, have increasingly become more involved in the promotion of social causes (Engle, 2007; Welford & Frost, 2006) via donating money to philanthropic causes as well as volunteering and/or providing their marketing and management expertise to non-profit organizations (Andreasen, Goodstein, & Wilson, 2005). Companies' social responsibility activities should be distinguished from business initiatives that are intended solely for profit-making purposes. Due to the diversity among different CSR approaches, a lot of research has been conducted, and yet little agreement has been reached (Dahlsrud, 2008; Lii, Wu, & Ding, 2013).

After reviewing a variety of literature, Dahlsrud (2008) identified 37 definitions of CSR and categorized them along five dimensions. The environmental dimension involves considering the social, cultural, economic, and natural aspects of the environment. The social dimension focuses on the relationship between business and society (e.g., give back to the community, encourage societal cleanliness, etc.). The economic dimension pertains to economic aspects of a business operation (e.g., “preserving profitability”), whereas the stakeholder dimension pertains to stakeholders or stakeholder groups (e.g., “interaction with their stakeholders”). The final dimension of voluntariness refers to actions that are not required or mandated by law.

CSR is defined as a concept in which companies integrate social and environmental concerns in their business operations and interactions among their stakeholders voluntarily. This definition encompasses all five CSR elements. Carroll suggests an organizational pyramid, including economic, legal, ethical, and philanthropic responsibility. (bottom to top). Carroll (1979) depicted the four aspects of the business as being ordered, rather than cumulative. Emphasis begins with the economic aspects, then moves to the legal, ethical, and philanthropic aspects. Sen and Bhattacharya (2001) also noted that the conceptualization of CSR ranges from an economic aspect (e.g., maximizing shareholder's value), to a comprehensively social and proactive aspect (e.g., corporations' long-term role in a social system). (McGee, 1998). Scholars have suggested that multiple CSR components should be addressed simultaneously (Carroll, 1991; Dyllick & Hockerts, 2002; Van Marrewijk, 2003), and indeed, broader societal issues have recently risen to prominence as CSR initiatives. Considering this, the taking of CSR should be approached from a broad perspective (Alniacik, Alniacik, & Genc, 2011; Sen & Bhattacharya, 2001). Davis and Blomstrom (1975) define CSR as “the managerial obligation
to protect society and their interests as a whole and the interest of the organizations” (p. 6). Carroll looked at the role of CSR as “to encompasses the economic, legal, ethical, and discretionary expectations of society at a given point of time.” (Alniacik et al., 2011, p. 235). Brown and Dacin (1997) said CSR is the “perceived social responsibility of a business”. (p. 68). CSR is viewed by McWilliams and Siegel as actions that take place to advance some social good, above the interests of the firm and those which are statutorily demanded (p. 117). Though there are numerous definitions, the majority of CSR encompasses projects whereby corporations support a cause beyond their interests. Corporate social responsibility initiatives are intended to meet the expectations of the surrounding communities such as meeting societal and consumer expectations to further create some social good, beyond the interests of the firm and that which is required by law” (p. 117). Despite various and broad definitions, CSR is generally agreed to encompass projects whereby corporations aim to provide support to a social cause beyond their interests. Although not defined explicitly, the primary purpose of CSR initiatives is for corporations to meet societal and consumer expectations for the communities to which the businesses belong.

1.1.1 CSR and Corporate Strategy

A generally recognized assertion in CSR literature would be that enterprises possess environmental and social commitments that extend further than profit maximization and regulatory requirements. Besides this proposition, viewpoints on CSR differ significantly (e.g., Basu and Palazzo 2008; Lantos 2001), such as the definition of CSR and its differentiation from central ideas such as corporate sustainability (Montiel 2008). In this regard, we concur with Carroll's (1979) definition of CSR as embracing a firm’s economic, lawful, moral, and discretionary responsibility to society. Carroll (1979) provides a theoretical framework for developing the differences among corporations in terms of societal challenges they resolve, as well as their ability to respond to all these social and economic issues, in addition to examining CSR as heading further than legal requirements. That is also substantial because the effectiveness of CSR initiatives is reliant on their implementation (Halme and Laurila 2009).

Integrating CSR into company culture is a chance provided by the implementation of strategic planning that is associated with the company objectives and is firmly embedded in the beliefs and ideals of corporate responsibility (Ganescu, 2012).

If an organization creates a business plan to coincide financial, social, and environmental performance to deep company values, corporate social responsibility has become an asset to
the organization and provides long-term importance to both the organization and consumers (Rochlin, Witter, Monaghan & Murray, 2005).

When customers, especially in prosperous industrialized nations, have negative attitudes toward institutions, brand embargoes are common as a way of punishing parent institutions. However, this presents an opportunity for a better framework to marketing advantage centred on social resources (Meehan, Meehan & Richards, 2006).

Social responsibility cannot be merely a reaction to issues as they emerge. The only exception is If a business incorporates social responsibility as a foundational component of its strategic planning, social responsibility as a notion is incorporated into daily strategy formulation.

To maximize effectiveness, CSR should ideally be associated with the company's particular corporate objectives and organizational capabilities. Companies that integrate CSR into their strategic plan boost the efficiency of their corporate responsibility obligations. Identification of key stakeholders, interpretation of goals to gratify those, and use of a reporting tool all are crucial components in integrating CSR into strategy.

Companies of analogous power and size which are impacted by the very same external factors select various CSR programs and initiatives or social responsibility methods. This decision may be affected by multiple stressors and incentive schemes that produce innovation pressure as the first phase in setting goals and objectives (Van Bommer, 2011, p.900), as well as national or international perceptions of the effect of these methodologies. Then, the CSR drives have a different impact on the companies.

Specific steps of CSR integration into the strategic plan can be identified. The above steps trace the evolution of CSR and are related to company culture, with the shift from one stage to the next defined by altering the leadership style (Greiner, 1998).

The five stages of development are discussed (Gazzola & Colombo, 2014):

1. CSR is informal and defensive. The intricacy of integrating CSR into strategy is determined by factors like the enterprise's size and nature of its operational activities. The CSR procedure is likely to stay informal and straightforward for most small and midsize enterprises, particularly micro-enterprises. Certain firms' CSR practices, which are usually restricted, are implemented only when it could be demonstrated that company profits will be safeguarded consequently (Visser, 2010).
2. CSR for charitable purposes. A company contributes to social and environmental causes by fundraising and sponsoring civic groups or non-governmental organizations. The business starts to employ methods of communication including the sustainability report.

3. CSR at the systemic level. CSR is concentrated on the micro-scale, continuing to support environmental and social issues that coincide with its strategic plan, however without altering that plan.

4. Innovative CSR. CSR focuses its actions on pinpointing and understanding the causes of our current unsustainable and irresponsible behaviour, usually via the development of new business models, the revolutionization of procedures, brands, and facilities, and advocating for domestic or international reforms. The process of integrating CSR into the strategic plan is finalized at this point.

5. Dominant CSR relates socially responsible initiatives to the corporation's business strategy, mostly through conformity to CSR guidelines and the application of environmental and social monitoring solutions, which usually involve phases of CSR policymaking, goal and performance evaluation, configured execution, auditing, and reporting.

Taking the above-mentioned into account and at a time when climate change is accelerating and globalization is making rapid progress, the concept of sustainability and Corporate Social Responsibility are now receiving increased attention both at the individual level and in the organizational context. There is a lot of misunderstanding about what sustainability means, but they all agree that the focus should be on meeting the needs of the current generation without compromising the ability of future generations to meet their needs.

Sustainable development is described as a triple bottom line that includes concerns about the environment, society, and the economy. All areas should be considered in the decision-making and action of the organization. This means that organizations must also think about the impact they will have on the environment and concern about social and environmental issues, implementing the example of trying to do good (Elkington, 1998). Today's society is linked to organizations (Barley, 2010). Today, organizations are increasingly aware of the power they have and are becoming more accountable for the damage they cause on the planet (Tolbert & Hall, 2015). These organizations recognize the need for change in their way of doing business and have developed sustainable strategies to address this challenge. (Baumgartner, 2009).
However, it is argued that, for companies to implement sustainability measures effectively, these measures must be integrated into the corporate culture as a whole (Baumgartner, 2009). Sustainability is an extremely complex matter that requires major changes in organizations. Organizational change cannot be approached in the same way as any other type of organizational change. It depends on the industry, stakeholders, spatial complexity, and the size of the organization.

By using top-down approaches, such as changes in structures, goals, and strategies, managers often fail to engage employees and middle-level managers in the process (Baumgartner, 2009; Lozano, 2015). These people have the furthest to go for their company to become sustainable. However, they are unable to communicate effectively about the subject matter. As a result, these organizational reforms fail to alter the composition of the organization: i.e., the culture of the organization (Baumgartner, 2009; Lozano, 2015).

A sustainability culture, closely related to CSR values and regulations, emphasizes maintaining both physical and social environments, which can guide their members' decisions and behaviours in a sustainable way (Bonn & Fisher, 2011). The firms with the greatest success allowing sustainability to permeate throughout their enterprises are those that foster a sustainability culture. While change is always a challenge, the real problem lies in shifting the existing organizational culture to one that values sustainability. As a result, changes to employee behaviour should be incorporated into an organization's efforts to become more sustainable (Haugh & Talwar, 2010). When employees and organizations hold different views regarding sustainability, there is likely to be conflict, and this is detrimental to the process of change. To overcome this challenge, it is important to align employees' perceptions and values about the organization's sustainability goals with the values and mission of the organization. To gain sustainability embedded into the core of their business operations, companies need to promote a common understanding and shared understanding of sustainability within their organization (Bertels et al., 2010).

1.1.2 CSR Challenges

In maintaining with the prominence of CSR, as previously discussed, a plethora of study has been carried on factors which affect directly and indirectly the implementation of CSR policies such as consumer intentions, stakeholders’ thoughts, and general organization environment. Notwithstanding, four crucial challenges must be thoroughly examined to fully understand CSR in today's reality. These include increasing customer scepticism against CSR and consumer
CSR fatigue, as well as a lack of long-term results from CSR practices and new media platforms for CSR reporting.

Consumers' scepticism of businesses that practice CSR is not a recent phenomenon. Scepticism has increased as CSR has increased in complexity (Bida, 2013). Scepticism is best described as “customer distrust or disbelief in marketer actions” (Forehand & Grier, 2003, p. 350). Matter of fact, prior studies have shown that customer scepticism has a detrimental effect on CSR outcomes (Kim & Lee, 2009; Menon & Kahn, 2003; Ross, Stutts, & Patterson, 2011). The latest Nielson survey indicates growing consumer scepticism toward CSR initiatives (McAllister, 2016).

Greenwashing concerns, which have arisen in past years, may be considered as a prerequisite contributing to customer scepticism against CSR. Greenwashing is defined as “the use of branding or public relations procedures to create a false impression of a company's environmental performance” (Elving & van Vuuren, 2011, p. 50). Numerous car manufacturers, for example, attempt to place their hybrid-electric vehicles as clean and green.

Conversely, according to a study conducted, these automobiles may emit as many harmful emissions as traditional cars (Wald, 2013). As just another illustration of greenwashing, oil producers frequently represent natural gas as sustainable energy when compared to the actual clean energy renewable sources such as wind and solar, even though natural gas plants emit half as much CO2 as fossil fuel plants (Wald, 2013). Moreover, a sequence of these instances of greenwashing could lead to customers' unfavourable preconceptions of CSR practices in general.

Following that, customers' constant exposure to CSR initiatives, as well as a saturated market for CSR practices, may result in CSR fatigue. CSR activities have been used by companies to illustrate their contributions to sustainable challenges and societies. Lim, Sung, and Lee (2015) conducted a content analysis of the websites of Global Fortune 500 companies and discovered that 90% of those international companies included data regarding their CSR initiatives on their web pages.

Third, prior studies could not provide research results that clarify the long-term outputs of CSR overall. An effective CSR plan is supposed to develop and/or maintain the company's excellent reputation over the years (Brønn & Vrioni, 2001), incubate dedication among employees and customers (Mandhachitara & Poolthong, 2011), and foster positive work relationships and community groups (Du, Bhattacharya, & Sen, 2010). Most empirical existing studies only have
evaluated the short-term impact of CSR, like perceptions toward the effort and purchasing intention.

Nevertheless, customers' long-term devotion to businesses that practice CSR is not guaranteed by a positive outlook toward CSR and a greater purchase intention (Andreasen, 1996). As a result, there's any need to explore how CSR initiatives impact customers’ loyalty to determine the sustainability of consumer relationships, which would be the true aim of CSR. Ultimately, the presence of ever-evolving digital media as prospective channels for communication and CSR active participation must be recognized. New digital media platforms can bring additional and more adaptable possibilities for CSR initiatives and interaction (Capriotti, 2011). Further than the conventional one-way communication for the dispersal of CSR-related data, novel media channels may enable interactions among corporate entities and customers, thereby increasing consumer participation in CSR activities. Consequently, the use of engaging CSR via new media may boost customers’ loyalty to companies, resulting in far more active customer engagement in CSR initiatives. Even so, there were few research papers on CSR from the standpoint of new media usefulness.

All four issues raised above – growing consumer scepticism toward CSR, CSR fatigue, an absence of long-term results from CSR initiatives, and new media channels for CSR communication – clearly necessitate further investigation. An analysis of novelty and industry trends could provide direction in approaching such concerns. According to La Ferle, Kuber & Edwards (2013), novelty may impact CSR analyses. Indian consumers who perceived a Customer Relationship Management (CRM) campaign as more novel, rated it as more altruistic than American consumers who were more familiar with CRM marketing. Prior research has also found that message novelty is one of the factors that contribute to ad wear-out (Berlyne, 1970). These studies suggest that a new and diverse approach to CSR, distinguishable from that of competitors, may reduce CSR skepticism and fatigue. Furthermore, consumer participation in CSR activities enabled by new media capacities may help to maintain successful relationships.

Summing up, in terms of business strategy and core integration, CSR implementation and practices have a lot of potentials. The primary objective is to surmount the existing issues by adjusting to the change’s attributes and novelties of recent times, assessing the company's CSR strategy and tactics, and altering the planning.
1.2 Gamification: Theory and Notions

1.2.1 Theoretical Approaches of Gamification

“Gamification” has a relatively short period of life as a term (Deterding, Dixon, Khaled & Nacke, 2011). The first documented use of gamification is dating circa 2008. Nowadays the phenomenon of gamification is already noted to be moving at a skyrocketing pace and as described by Burke (2014) reaching the “peak of the hype”.

The basic objective of gamification as a means of organizing collaboration is to extract the game features that make successful games enjoyable and pleasant to play, adapt them and then use those elements in the given contexts (Domínguez, Saenz-de-Navarrete, De-Marcos, Fernández-Sanz, Pagés & Martínez-Herráiz, 2013, p. 382), with the desired result being game-like sensations of fun and interaction, even though these contexts are typically prone to more banal or repetitive experiences.

Game researchers indicate in this sense that gamification does not end at a mere 'point(s)ification' (Sjöklint, 2014), a recently developed neologism for gamification types that only have the least important elements of games such as the scoring method.

Instead, gamification should be viewed and implemented as a more systematic, comprehensive strategy to coordinate stakeholder interaction in the respective contexts in which those stakeholders need and create interaction for shared interests.

Proposed meanings of gamification tend to be targeted at engaging individuals or users in gam-directed routes for several different targets. Deterding et al. (2011, p.1) describe gamification as 'the use of game contexts' and explores in their studies a variety of principles underlying game, part, design, and non-game contexts.

Games are limited in their ability to link players to dynamic, 3-dimensional virtual environments that resemble reality (Thavikulwat, 2004). We could make a similar case for gamified CSR communications. The issues that corporations often communicate about are complex and uncertain, and it may be difficult to identify specific courses of action to address them. There appear to be no readily available alternatives to global social and environmental challenges, and while businesses may be part of the solution, these major challenges often require collective multilateral efforts (Ferraro, Etzion, & Gehman, 2015).

Reality is uneven and issues are complex compared to what is being communicated. It is necessary to compress the gamified CSR communication into digestible pieces to design playful
CSR interventions. Gamification thus presents oversimplified ways of problematic social issues and risks that oversimplify the impact of social issues. In addition to programmed and conscious gamification interventions, there is no need for the world to follow pre-written rules. Usually, "winners" are not clear, and certainly not "there's always a solution" (Deterding, 2014, p. 5). In the case of CSR, even after years of intensive multilateral efforts, social and environmental challenges remain imminent, for example regarding corruption (Schemmera & Scherer, 2017).

An objection regarding gamified CSR is noted because it creates a misleading illusion among stakeholders that they need to play a game long and hard enough to solve any given social issue (Deterding, 2014). While gaming may not necessarily translate into other potentially more meaningful actions, it may not be the result of gaming. It may therefore be a substitute for these efforts, at least among some stakeholders in the CSR field (Deterding, 2014; for similar arguments regarding the negative effects of other online communication technologies on activism, see Morozov, 2009).

1.2.2 Defining gamification

For long corporations have used rewards and incentives as a means of motivating those in the business (e.g., the leader boards for salespeople or even employee-of-the-month awards). However, the best way to augment the engagement rate has always been a challenge encouraging desired behaviour by offering rewards or incentives (Robson, Plangger, Kietzmann, McCarthy & Pitt, 2015). Furthermore, firms have not attempted to learn from formal principles of game design, nor are they classified as gamification (Robson et al., 2015, p. 412).

With the availability of digital media and social media, companies have turned traditional processes into deeper and more engaging games to influence their employees' and customers' behaviour (Alsawaier, 2018; Robson et al., 2015). The term 'gamification' was coined.

The expression was not widely used in the field until 2010 but has been institutionalized with widespread usage now. Due to its novelty, there is no research on the definition of gamification (Alsawaier, 2018). Gamification is defined as “the use of game design elements in non-game contexts” (Deterding et al., 2011, p. 12). Other authors define the concept as “the application of game elements and mechanics to non-game contexts” (Alswaier, 2017, p. 56) or “using game-based mechanics, aesthetics, and game thinking to engage people, motivate actions, promote learning, and solve problems” (Alswaier, 2017, p. 56). (Kapp, 2012, p. 66). It is
noteworthy, that these definitions include both motivational and engagement effects as possible effects of gamification.

For McGonigal (2011), a good game is “a unique way of structuring experience” as well as “provoking positive emotions.” The essay is about using motivation for participation and hard work (p. 33). Using game design elements, gamification can benefit people by generating positive emotions, such as excitement, pride, and enjoyment.

In addition to social aspects, unexpected elements, meaningful choices, significant progression, and instant feedback, gamification is believed to have the potential to change behaviour. The aim of gamification is described as threefold: external, internal, and combined.

External aims are used for marketing purposes, or to create greater interest in the service or product. Internal aims include the organization's progress towards meeting its goals, such as knowledge transfer or productivity. Lastly, behaviour change is achieved by changing people's behaviour and creating new habits, e.g., towards environmentally friendly consumption. (Werbach, 2020).

To better understand gamification, it is necessary to determine the difference between play and a game. Play also referred to as paida, is an expressive and improvisational form of combining behaviours. It is an energetic state of mind that occurs naturally and is enjoyable. Game or ludus stands for a game that has rules, organized play, and win conditions.

It still includes enjoyable and energetic behaviour, but also requires the participant to achieve a particular objective or outcome (Caillois, 2001). According to this, the most common definitions of games agree that a game is characterized by interconnected rules and challenges that emerge from pursuing a personal goal (Juul, 2005).

All games must have a goal, rules, some form of feedback, and voluntary participation. The goal is the outcome – what the players want to achieve, what motivates their actions. The rules also restrict the obvious ways of attaining the goal by eliminating "obvious" techniques. Rules encourage creative and strategic thinking because they allow players to explore a variety of new and different outcomes. The feedback system shows players' progress towards the goal and how much they need to do to get to the next level. It shows that the goal is possible and thus has a motivating character.

The voluntary participation of players entails that each player understands and accepts the rules, goals, and feedback. By creating a common ground, this activity is more fun and safer (McGonigal, 2011; Suits, 1978). Therefore, Suits (1978) describes playing a game as “the
voluntary attempt to overcome unnecessary obstacles.” (p. 38). To make the distinction clearer between gamification and related concepts, Deterding and colleagues (2011) define and situate gamification on two axes: The first axis focuses on the distinction being made between play and game (the distinction between paida and ludus). The second axis differentiates between whole and part design, either providing a fully-fledged game design or only using components and parts from past designs. Gamification is all about incorporating game design elements in a non-game context. This differentiates gamification from games.

1.2.3 Possibilities and disadvantages of gamification

There has been a surge in interest in gamification in recent years, which has resulted in increased research and practice (Schoech, Boyas, Black, & Elias-Lambert, 2013). This section will discuss the application of gamification: there has been an increase in interest in the concept, but does it work in practice?

The desire to determine whether gamification is an effective strategy for influencing human behaviour is strongly related to the growing trend in gamification engagement. According to Hamari, Koivisto & Sarsa (2014), the number of articles relating to gamification in the Google Scholar database nearly doubled between 2011 and 2013. While most of the publications analysed in their research paper dealt with teaching and learning, one dealt with sustainability. Numerous gamification techniques, or motivational functionalities as the authors refer to them, were used in the studies. Scores, scoreboards, and achievements have historically been the most prevalent game features. When combined with the player-system interaction, these facets appear to provide beneficial effects in application areas such as learning. According to Hamari et al. (2014), the beneficial effects are limited to "some users for a brief period".

It is important to note that "gamification may not be effective in a utilitarian setting, but interaction through gamification may be contingent on a variety of elements, including the users' motivations." (Hamari et al., 2014). As a result, those who are already interested in the subject matter are the best candidates for gamified solutions. However, those who are already environmentally conscious but have not yet taken concrete actions toward a more sustainable system will be the most fruitful target audience for environmentally friendly gamification (Froehlich, 2015). These intenders (Lippke, Schwarzer, Ziegelmann, Scholz & Schüz, 2010) are people who have the desire to change their behaviour but lack the necessary skill sets, expertise, or techniques to do so, making them incapable of becoming actors. Lippke et al.
(2010) tre-partite model of an individual's desire to function on a specific topic includes pre-intenders, intenders, and actors.

Slight criticism has been levelled at gamification due to the difficulty of applying game elements in non-game scenarios (Schoech, Boyas, Black & Elias-Lambert, 2013). Bogost (2011) has also proclaimed the concept to be a hoax. He argues that gamification is often used by specialists to demonstrate the correctness of their customers' viewpoints: that gamification has less to do with games because the core features of games implemented to non-game contexts aren't game-exclusive features. The above asserts all but rattle the basis upon which gamification is assembled (Deterding et al., 2011), isolating the phenomenon from its origin. Bogost (2015) defines gamification as a two-move party trick: the amusing traits of a vague entity, games, and the “-ification” suffix. This implies that the “-ification” suffix is added to the term to make it more comprehensible and likable.

Nonetheless, given that gamification has been classified in a variety of ways since Bogost's (2015) original assertion (Huotari & Hamari, 2012; Kapp, 2012; Werbach, 2014), it is possible to assert that gamification contains some true meaning and possibilities, and thus serves as a counterargument to Bogost's allegations. Significant evidence suggests that gamification is effective. According to Koivisto and Hamari (2019), only 6% of research findings yielded negative or mixed results, while 77% yielded positive or blended results – the remainder becoming equal to zero or equitably positively and negatively. However, in the current gamification environment, this is a minor issue. At the moment, focus in gamification has shifted away from the question of "why?" and toward the questions of "how?" and "when?" (2017). (Nacke & Deterding). Similarly, the way gamification operates and inspires differs based on the design features chosen for each gamification system (Sailer, Hense, Mayr, & Mandl, 2016).

Koivisto (2017) establishes a duality of service use in her thesis, van der Heijden (2004), arguing that hedonistic use of services is gratifying in and of itself, whereas utilitarian use of services frequently conceptualizes use to an end (Koivisto, 2017). The following section will delve deeper into the concepts of intrinsic and extrinsic motivation. Gamification, or gamified systems, appear to be somewhere between hedonic and utilitarian: gamification is frequently a procedure for creating game-like experiences (Huotari & Hamari, 2012), which implies that perhaps the result, the utilitarian purpose, is achieved through satisfying, hedonic means (Koivisto, 2017).
Numerous studies suggest that incorporating game mechanics, or gamification (Deterding et al., 2011), boosts interaction with the subject matter at hand – and that applying interactive features towards other instances results in increased empowerment and cumulative performance. (Alsawaier, 2018)

Nonetheless, there appear to be some drawbacks. It is difficult to sustain positive reinforcement for an extended period, as excitement fades as the service becomes banal or tedious to use (Kawachi, 2017). This is supported by previous research from Hamari et al. (2014), who discovered that positive changes occur for a short period for certain users, which could be viewed as a benefit or a disadvantage, as the positive outcomes are present and not a long-term solution. Furthermore, Farzan, DiMicco, Millen, Dugan, Geyer & Brownholtz (2008) discovered that using a points-based system increases motivation to use a service – but that initial interest may fade. Koivisto and Hamari (2014) observed that the utility of gamification decreases over time, implying that gamification has a possible novelty impact. In contrast to these beliefs, Hanus and Fox (2014) discovered that gamification can effectively demotivate users – in their case, by lowering the exam scores of students enrolled in a gamified class versus those enrolled in a non-gamified class.

1.2.4 How to gamify successfully

According to Webb (2013) Gamification is about more than accumulating points and badges. To successfully gamify an assignment, several critical components are required. Following this approach, there are some key issues that a firm should take into consideration to successfully gamify a business or a marketing application process.

Business Goal

The first step is to grasp the business objective that underpins gamification. When considering how to incorporate gamification into a business process, business owners should first determine what they hope to accomplish. A strategic plan must address a few critical issues. Is gamification capable of increasing the efficiency of a particular product or business process? Will it increase the end user's interest in the tasks associated with that product or flow? Will increase employee interest in that product or process? For instance, if the designer is aware that end users are not completing a task as quickly as he would like, would gamification encourage them to do so? Customer Relationship Management (CRM) techniques are an example of this approach that a business would like to use but face opposition. CRM tools provide an intriguing
illustration of how gamification can be used to increase user engagement in operations that the business values, but the external network does not.

Measurement

After establishing a business objective, the next step is to determine how the organization will assess whether gamification is effective in motivating users to achieve these goals. Which aspect of a business would you like to make more game-like? Not all aspects of a product or service can be gamified. It is critical to concentrate efforts on areas where outputs can be quantified (Werbach & Hunter, 2012). It is critical in this regard to keep each objective as precise and distinct as possible. If the goal is set too high, it will be difficult to determine whether the specific mechanics used are effective at changing the end user's behaviour. The company's gamification goals must be based on criteria that can be met both before and after gamification is implemented.

Understanding Your User

Understanding the system user's motivations is critical to successful gamification. It is vital to consider the users and their intentions before giving points and medals on encounters that may have no significance to them.

In the scenario of software development, the end-user is commonly described through the creation of a profile page or persona to help with the development of the software flow. A persona is a made-up representation of the users of your software or system based on research into that user type. It frequently contains information about their demographic trends, job roles, objectives, and assignments, as well as the workplace culture. Spending time researching the user and their context of use is one aspect of the user entered design (UCD) process that ensures software is developed around the users' needs and work processes. Understanding the system's end-user is critical for gamification, just as it is for the UCD process of software development. Understanding your user's goals, motivations, and what they find rewarding will aid you in choosing suitable gameplay mechanics for an enterprise software flow.

Bringing Together the Business Goal and User Considerations

After determining the business objective and understanding users' motivations, the next step is to determine which game mechanics will help achieve the goal that the business strategy has set. According to the Fogg Behaviour Model (Fogg, 2009), which claims that persuasive designs induce behaviour by combining a behaviour-inducing trigger, motivation to act, and ability to act. If the business goal is to encourage users to enter more sales data into the CRM
system, it is easier to comprehend what might make that behaviour more likely. The first strategy could be to create a trigger that prompts the behaviour based on another motivation they may have and at a time when they are physically capable of performing the behaviour. People are motivated by four factors, according to Gabe Zicherman (2010): status, achievement, power, and stuff.

As a result, considering more social aspects of game mechanics such as points and leader boards may be advantageous. As a behaviour trigger, consider issuing a challenge to sales groups that requires them to enter more complete information into the CRM system during their login session when they could do so. Furthermore, it might be important to remind the user of the challenge while they are performing different tasks and pages.

Avoiding the Unintended Outcome

Recognize the layout's unintentional overall result as a significant issue in gamification. In other words, if there is a way to game the system, people will always find a way to do so. The gamification strategy should consider how the design and the process can ensure that the information they enter meets your exact requirements to win. For instance, if the company's objective is to maximize the number of invoices completed per hour by a user, it is vital to choose to sacrifice accuracy for speed (unintended). In some instances, such as invoicing, it is impossible to determine whether the information is correct immediately, and errors may not be discovered for several days.

When incorporating game mechanics into that procedure, it is essential to rethink a payoff for speed that is offset by a loss of points if accuracy falls below a certain threshold. This way, it is easier to fulfil the business goal of processing invoices as quickly as possible while maintaining an acceptable level of accuracy.

The final step for a successful gamified process is to evaluate and test the application and the whole process precisely. It is essential to test the design concepts with prospective users and set the whole framework willing to modify.
1.3 Small and Medium Enterprises (SMEs)

1.3.1 SMEs Analysis

The sector of Small and Medium Enterprises (SMEs) is regarded as essential for the development of European competitive advantages. It employs a sizable number of Europeans and accounts for the majority of non-farm sales in the financial system. Small and medium-sized businesses (SMEs) play a vital role in these markets. The importance of SMEs in these economic systems stems from factors including the economies' demopolization process and social consistency. The expansion of the middle class, the creation of a surge of new jobs, and so on (Hyz, 2006). Over the last decade, SMEs have gained extensive attention from European decision-makers, government organizations, and analysts who are attempting to help them in retrieving financial suitable funds collaborative partnerships among them to help them stay viable and competitive (Acs & Audretsch, 1990). As a direct consequence, Greek SMEs are an important part of the economy, employing many people and producing a lot of value. As a result of this scarcity, the revenue growth and viability of small and medium-sized businesses have become essential to the Greek economy, as well as to shareholders, bank executives, and their subcontractors. The European Union's (EU) implementation has resulted in fierce competition in Greek manufacturing, which is now facing survival challenges. Firms must first be sustainable to be fiscally viable. Despite their importance to the Greek economy, the existing literature on small and medium-sized businesses is rather limited. In today's economy, the SME sector plays an especially important role. The perception of advanced countries, whose economies are overtaken by a network of small (or almost exceedingly small) and medium-sized enterprises, validates this. Two of the main indicators of the role of small and medium-sized businesses in the financial system are their proportion of total business activity and their ability to generate new jobs. In modern developed countries, the SME sector is practically the only one that creates net employment. New jobs are being created via the formation of new economic units as well as the expansion of existing businesses. It is notable for its high efficiency in the field of innovations, which are launched at a lower cost by large corporations. In developed countries, more emphasis is placed on the importance of the proclivity for innovation in the SME sector. Small innovative businesses, particularly those operating in the field of high technology, contribute significantly to the creation and development of new manufacturing sectors, new industrial branches based on modern technology. Small innovative businesses are frequently fast-growing businesses. Adding new jobs (Mulhern, 1995). The European SME sector possesses some remarkable strengths, including strong business
dynamics (particularly high birth rates); an increasingly higher level of education among entrepreneurs; and increased internationalization of trade. Direct foreign investment and strategic alliances, as well as a high potential for job creation due to high birth rates and lower-than-average wages. Its flaws include a high death rate, albeit one that is lower than the birth rate. Rate; lack of strategic marketing approaches and operating practices in highly segmented markets; low labour productivity resulting in high unit labour costs despite lower-than-average wages; and poor financial situation due to low equity/debt ratios and expensive loans (Dunlop, 1992; Acs, Audretsch, 1993). According to economic theory, small and medium-sized enterprises differ significantly from large enterprises because they have lower productivity and higher production costs due to small-scale production. Furthermore, they face higher supply costs and shorter supply terms, while being forced to offer their customers longer terms of credit to promote sales. Micro businesses typically sell to end-users and offer more specialized products. Major corporations are more likely to export. Smaller businesses are more reliant on their local economies than larger businesses.

As a result of the foregoing, profitability suffers and working capital financing requirements rise (Cosh and Hughes, 1993). The lack of adequate collateral, insufficient information, low legitimacy, and higher financing costs, combined with the reluctance of small and medium-sized enterprises to issue capital, as well as the fear of losing control of the firm, resulted in lower use of long-term debt and a high reliance on short-term financing (Ang, 1992; Chung, 1993).

1.3.2 SMEs and Corporate Social Responsibility

Something that must be noted is that in recent years, people's attention, and public policies to promote CSR have shifted away from large corporations and, for the very first time, have tended to focus on the dominant group of SMEs. In this regard, previous research indicated the need to discover more about the specific business culture and the structure of partnerships that shape the financial and cultural operation of SMEs (Spence, 1999).

Any effort to develop tools for implementing CSR in SMEs, or to implement public policy to encourage CSR in this number of companies, must first become acquainted with the organizational and corporation cultural identity structures of SMEs, as well as the constraints imposed by the economic system. SMEs are a group of organizations with a diverse size and working structure – from most SMEs or Micro-SMEs with nearly no workforce to medium-sized enterprises with over 200 workers.
Any effort to develop tools for implementing CSR in SMEs, or to implement public policy to encourage CSR in this number of companies, must first become acquainted with the organizational and corporation cultural identity structures of SMEs, as well as the constraints imposed by the economic system. SMEs are a group of organizations with a diverse size and working structure – from the majority of Micro-SMEs with nearly no workforce to medium-sized enterprises with over 200 workers – but this study finds that the organizational characteristics of this group may fit those described by Spence (1999) for small companies.

According to Spence, all of those are firms in which there is slight differentiation among managerial and employee positions, with multitasking roles within the company. These businesses are primarily focused on solving day-to-day problems; unstructured interaction and information exchange predominate; social interactions are incredibly significant (Spence and Lozano, 2000); there is indeed a high degree of interrelationship with their ecosystem or societies, in which they frequently act as beneficiaries or activist groups; and, eventually, they are subject to regulation.

Without hesitation, in the face of such a wide range of corporate sizes, as well as the specificities of different sectors of the economy, many researchers have pointed to the need to reveal the attributes of each form of business's organizational subcultures as the defining agent when it comes to determining how to endorse CSR in SMEs (Spence, 1999). In any case, Morillo and Lozano (2006) pointed out that one component needs to be pointed out during any research conducted concerning SMEs: the need to find tools that differ from the more codified and identified ones used by large enterprises – ethical codes, reports, or CSR indicators (Spence and Lozano, 2000; Vyakarnam et al., 1997).

According to the existing literature, another important factor to consider when attempting to know the rationale for a given CSR practice in SMEs is the principles defined by the company's owner/manager (Spence and Rutherfoord). This must be regarded if we are to understand the motivations behind a specific CSR practice.

There is yet another distinction between the aims or outcomes of CSR practices in SMEs and the factors that affect CSR in large corporations.

Because they rely on the subnet of interpersonal relations that ascertain how they function; SMEs should be particularly willing to invest in social capital.

From a social and economic standpoint, Granovetter (2000) emphasizes that financial activity is encoded in social-relational systems.
Under these authors, cultivating close relationships with employees and the commercial or professional ecosystem allows for the establishment of cultural norms and guarantees collective action via growing confidence. These close relationships aid in the development of 'security' or mutual assistance relations with vendors and even rival companies. Ultimately, they make significant company content accessible to SMEs. According to Enderle (2004), it is precisely the daily battle for market survival that necessitates the SME's need to strengthen its networking.

Averaging up the various organizational structure and ethical frameworks associated with SMEs have an indirect and direct impact on their CSR approach and guidelines. The interpersonal role and corporate culture associated with SMEs have an impact on the entire concept of CSR. Specific standards and directives must be followed to effectively execute a CSR agenda in an SME. The unique traits and characteristics of a corporation in the small and medium scale enterprises range may have an impact on the adaptation to a social agenda linked to CSR, both positively and negatively. The upcoming research and development process needs to take advantage of the benefits and drawbacks and formulate an SME-friendly framework. Even though there are various disadvantages, the environment for developing an application with a real effect on the CSR process in an SME is constructive.

1.4 Summary of Chapter 1

The first and most significant chapter of this dissertation focuses on the project's theoretical foundation. First, the concepts of Corporate and Social Responsibility and Gamification were examined, as these are the two primary areas on which the thesis will be centred. As a result, the emphasis was on Small and Medium Enterprises and their relationship with CSR in terms of process and feasibility.

To gain an understanding of major trending affairs and complexities, an overall analysis of CSR and its basic theories and relationship to the business sector was performed. On the other hand, it was time to establish the challenges of CSR and its general perspective on organizational structure and strategy.

Concerning the second serious issue of this project, Gamification, and its various categories, each of which adapts to a specific environment, were examined. To fully grasp the concept of Gamification, it was necessary to consider both the advantages and drawbacks of Gamification. The successful aspects of a Gamified stage were a major topic in this chapter. Finally, the main
characteristics of Small and Medium Enterprises were outlined. It was also vital to present the relationship between SMEs and CSR. To move on to the next chapter, it was paramount to display the definitions and concepts to facilitate the overall project idea.
Chapter 2

Project Development Models and Methodological Approach

This chapter outlines the major project development models as well as the methodological aspects of project implementation. A short outline of core Multimedia and UX design models, as well as the main stages of developing a multimedia project, will be presented. Furthermore, the thesis research questions, as well as the overall project planning, will be addressed.

2.1. Multimedia and UX Design Models

Before starting a multimedia project, it is important to understand some basic multimedia production points.

Multimedia can be defined as "multi-modal presentation of information through the use of many different media, such as text, images, animations, audio, and video, using different user interfaces (UI) and human-machine interaction (HMI) mechanisms" (Dimoulas & Tsarchopoulos, 2020).

According to Vaughan (2011), a multimedia project is nothing but a combination of these content entities and how their composition shapes interaction. Interactivity can be formed through forms, structures, mechanisms, and user interfaces (Dimoulas & Tsarchopoulos, 2020).

This project combines the theoretical framework of multimedia with "multimedia writing nonlinear/appealing storytelling" (Dimoulas & Tsarchopoulos, 2020). This notion of storytelling is a critical component of our project, to achieve active user engagement. Nowadays, mobile devices are indispensable, as they give people the ability to interact with others without being fixed in one place. Mobile Journalism is “a new way of making journalism, using mobile computing terminals, which have become the natural extension of journalists and users in their everyday communication needs” (Dimoulas & Tsarchopoulos, 2020).

According to Vaughan (2011), a multimedia project contains four main phases including content, imaging, programming, and distribution. An initial idea leads to the phases of analysis, design, development, and evaluation. In both the multimedia project and the targeted application, the phases apply. The phases vary slightly based upon which development model is used while analyzing the phases. By creating different teams according to the specific subject...
matter, it will be easier to improve the multimedia project overall. Throughout the analysis, the technical specifications of the application are clarified. After the concept phase is complete, the final prototypes are created. Multimedia app integration, packaging, delivery, and other factors used during development are discussed. Finally, the conclusions from the project and the future updates are discussed.

2.1.1 Analysis

The first phase of multimedia production is Analysis, which involves researching the initial concepts and concepts that inspire it, followed by the realization of the project. This is perceived as being the most essential step because it might necessitate a re-evaluation of the initial concept. At this stage, the main goals are identified in functional and technical terms. Furthermore, a research analysis is carried on the target audience, to understand better their mentality, desires, and perceptions. It is crucial to analyze and examine relevant applications to highlight their strengths and weaknesses to adjust the initial idea in certain and optimized points. In addition, the tools which will be used and implemented during the technological products will be presented in the Analytical phase, which identifies the need in specialized needs. Finally, a timeline has been designed by processes applied with a completion date as an indication of when the work will be completed.

2.1.2 Design of the multimedia content

During this phase, the structure and interactivity of multimedia products are also highlighted. The crucially important aspect of digital tool research and selection is about advising the creator what digital tools utilize. Without this stage, the creator will not have sufficient knowledge to proceed properly to the next steps. Furthermore, in this stage, decisions are being made with regards to basic screens, low-fidelity prototypes, and in general, comparing existing content, as a result, this phase emphasizes the responsive identity and visual quality of the multimedia. At this stage which is considered as a transitional stage from the Analysis phase, some general principles regarding project specifications are drawn up to support the creator in deciding on the details of the layout.

2.1.3 Development and creation of the content
All the theoretical analysis of the actions that should be taken becomes concrete and actionable in this chapter. At the development stage, the content is created, and all content types are evaluated and presented including text, video, graphic design audio, and in general all the assessment practices and aesthetics. This phase is ideal to perform an analysis of the technical and functional features of developing and designing a great multimedia product. In addition, multimedia authoring is completed and the designed prototypes so as the creative elements are linked as high-fidelity interactive prototypes known as Design and Development phase. All the needed steps and resources are addressed in this phase to create and deliver any other additional promotional content like posts.

2.1.4 Evaluation process for the final product

The evaluation of methodological and practical procedures takes place at this final stage of the creation of multimedia content. The purpose of this phase is to familiarize with the basic methodology behind the evaluation procedures to understand the role of the evaluation in a multimedia project. The theory for carrying out the evaluation is presented in this context. As tools of evaluation could be listed for example interviews and questionnaires designed and distributed to the average and targeted audience so that we have a clear perspective on the initial goal set. This final phase is critical because it is a method used to collect feedback on corrective actions and modifications. In conclusion, this may be the part where the initial assumptions will be answered, resulting in practical conclusions.

2.2 Research aims and adopted methodology

Following that, research questions will be developed based on the gamification techniques and framework, as well as the usability of an application intended to boost the level of engagement of SME employees and their awareness of CSR. A quantitative approach will be used to investigate these research questions, along with a questionnaire that will be administered to confirm the findings even further. For the audience to reply to the queries, the questionnaire will be tailored to their particular qualities. The following research questions will be screened during the evaluation process:

Research Question 1: Will users – employees of a corporation, particularly SMEs – apply and incorporate such a tool?

Research Question 2: How feasible is it to implement a gamified application in an SME to boost and strengthen its CSR level?
The abovementioned research questions will be evaluated in the following processes to see if they are endorsed or not.

2.3 Summary of Chapter 2

The second chapter discussed the project's development model and methodology. It began with a brief examination of the main concepts and theories of UX Design and Multimedia and then moved on to the design and multimedia content creation processes. The evaluation procedure for the final product was then portrayed as a basic idea. Finally, the research questions were raised, as were the methods used to answer them.
Chapter 3

Project Analysis

The concept of the Analysis is explained in this chapter. The guidelines for analysis, as well as the steps to be taken, were established in this chapter. It highlights the existing landscape in this field to determine the market's upsides and downsides in a broad sense. In addition, the target audience is identified. Finally, the qualitative and quantitative findings concerning the thesis's core concepts such as CSR, Gamification, and SMEs concerning the sentiment of the intended audience are evaluated.

3.1. Overview Competition

It has already been mentioned that the analysis phase is the initial thinking and thinking on the development of the idea, as well as the inspiration and motivation behind the whole project. The project aims to design and create a mobile application that is easy to use and is suitable for all small and medium-sized enterprises. Taking that into consideration, the concept of the CSR Academy was based on the principle that businesses can do well by doing good. To be more precise, the CSR Academy presents an entertaining and easy-going gamified experience defined by two key elements. The first pillar is the instructional spectrum of the application, while the second pillar is the engaging and interactive spectrum. The CSR Academy can be used by various companies and brands that are regarded as small and medium-sized enterprises. The central philosophy of the project is to design a tool that will provide users with comprehensive knowledge to improve their intra-communication and corporate responsibility agenda via gamification. As a result, the CSR Academy will provide entrepreneurs, employees, CSR professionals with the strategy to build their degree of awareness about CSR and get engaged through simplistic and gamified steps. As noted above, the application provides educational and professional value to all concerned, providing participant businesses with the opportunity to expand their knowledge, start engaging, and share their stories, while also connecting those in the industry. The digital media market has recently seen an accelerating increase in mobile applications (apps), programs designed to perform specific functions on mobile computing devices. According to Kang (2014), a recent survey shows of the mobile app estimates that 185 billion apps will be downloaded by 2014. As a result of this success, media
and financial experts foresee that profits from the mobile app will reach $38 billion by 2015. (Bilton, 2011).

3.1.1 Similar gamified CSR and Sustainability applications

Competition is one of the most unavoidable challenges in today's business environment. No matter whether a company is large or small, it has competitors in the market and the strategies of those competing companies have an impact on the process of establishing a strategic plan for the company. Competitors are a key determinant of corporate excellence, and the failure of a firm to evaluate the strengths, weaknesses, methods, and vulnerabilities of its competitors may lead to under-optimal company performance. Assessing competitors is therefore significant for the planning and implementation of the company's strategy, as well as for competitive preparation (Ho & Lee, 2008; Bloodgood & Bauerschmidt, 2002).

Taking these into consideration, it is crucial to note similar companies and companies that offer digital gamification applications to help businesses boost their business culture, develop lasting communication bonds between various parties, and encourage their employees to participate in corporate social responsibility initiatives. The above occurs through the implementation of the gamification process, which can change corporate environments.

WeSpire

WeSpire is a data-driven platform on behavioral science. The methodology and programs employed by WeSpire have been focused on employee engagement, digital tools, and results. WeSpire provides Engagement programs that can be proven to be highly beneficial to companies, employees, and their technologies making sure value is delivered. For example, WeSpire, via its platform offers users a chance to set up their account, join a team, and select sustainability projects that are ongoing within the corporation. creates a sense of personal accomplishment (WeSpire, n.d.).

Consequently, WeSpire helps reduce the workload and expertise required to ensure internal communications are managed to the most effective and organized efficiency is measured.

WeSpire is at its heart is designed to engage employees. By using playful content, the latest gamification techniques, social networking, and rewards, WeSpire’s platform empower employees to see themselves as integral to their organizations' mission. Below there are some examples that underline the main elements of the platform. Highlighted in yellow are a few of the game mechanics which are often used in gamification tools such as the individual's rating
or point framework, as well as the progress bar demonstrating their progress, the badges they won, which are a graphical representation of their accomplishments, and the leader board displaying the employee's performance compared to their colleagues. These three components are often linked to the PBL Triad (Points, Badges, and Leaderboards) and have proven to cover a range of productivity apps, ranging from customer and employee engagement to behavioural change (Robson et al., 2015).

![Image](image-url)

**Figure 3.1** (a) Leader board depiction in WeSpire (b) profile page in WeSpire

According to WeSpire, with their values-based programs, companies can contribute to the value that their employees provide, as well as help them fulfil their values.

**Workz**

Workz is a Copenhagen-based agency for transformation. We specialize in organizational change, leadership development, learning, and the design of game-based tools for engagement and coaching.

They allow their clients to interact with clear strategic guidance, increase motivation and authority, and increase output by getting the appropriate skills, tools, and structures.

They offer board-game leadership simulation models that could provide a more effective way to facilitate training in which team orientation and productivity can be improved. They offer a variety of generic management simulations both for digital facilitation and face-to-face mentoring. They convey a set of important leadership capabilities – from change leadership and communication performance to stakeholder commitment and strategy utilization.
Figure 3.2 (a) Variety of gamified applications for users (b) animation style in Workz

**Frima Studios - Half the Sky Movement: The Game**

Half the Sky Movement: The Game is an adventure designed to raise awareness and donations to empower women and girls around the world. Although this game is no longer playable, Games for Change identifies its past contributions to sustainable impact and learning.

Half the Sky Movement: The Game is a game-based adventure that aims to reach mainstream audiences to raise awareness and donations to empower women and girls around the world. Developed by Frima Studio, this groundbreaking Facebook game includes clear virtual-to-real-life transcription, by inviting teams to play via a sequence of missions and tales representative of the real difficulties posed by women and girls, with particular results offered by seven non-profit organizations: the Fistula Foundation, GEMS, Heifer International, ONE, Room to Read, United The game is a directed and produced by Games for Change, a non-profit organization that inhibits social impact via digital games, and all its income is directed to
philanthropic organizations. Half the Sky Movement: The Game is the newest addition to the Half the Sky Movement cross-media platform, which includes the #1 best-selling book Half the Sky by the New York Times: Transforming Persecution into Women's Chance Worldwide and a critically acclaimed primetime PBS television series. Influenced by the novel and Television show, the game prompts players on becoming part of the change and to make a significant difference through play. This game was funded by the Ford Foundation and Zynga.org, with additional support from the Intel Corporation, the National Endowment for the Arts, the Rockefeller Foundation, and the United Nations Foundation.

Summary Analysis

After analysing the above–mentioned similar applications, the data provided will construct the fundamental basis of the project. There are several advantages and disadvantages which will be analysed in Table 3.1. By displaying the traits of each application will be easier to evaluate the advantages and disadvantages and create a solid concept.
Table 3.1 Advantages and disadvantages of the gamified related applications which will set the base for the project elaboration

<table>
<thead>
<tr>
<th>Gamified CSR &amp; Sustainability Applications</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>WeSpire</td>
<td>Solid and Effective rewarding system with personalized benefits</td>
<td>It is not free for every individual or team</td>
</tr>
<tr>
<td>Workz</td>
<td>Full-Scale options for different purposes</td>
<td>It is not free for every individual or team</td>
</tr>
<tr>
<td>Frima Studios - Half the Sky Movement: The Game</td>
<td>Interactive and inspiring creatives and storytelling</td>
<td>Focus only on raising awareness for women around the world</td>
</tr>
</tbody>
</table>

3.2. Target audience

All design and implementation decisions in multimedia projects are made based on user requirements. Therefore, it is important to conduct a user analysis because according to Dimoulas (2020) it is self-evident in any multimedia or software project and is considered to be one of the most important phases in the production chain.

CSR Academy is an application that focuses mainly on Greek small and medium-sized enterprises. It is addressed to every stakeholder and involved personnel regarding all the above-listed business with no sectoral constraints. The rationale for choosing this same target audience is because there is a lack of material and technologies to enhance the educational and engagement rate of SMEs. To achieve great performance outcomes concerning the gamified content assigned to this industry, it is vital to building coherent and effective communication links with all the various components to bolster the gamified structure, incentive schemes, and application motivations. Target audience is vitally important because its perspective, concept, and mindset can influence the development process and the structure of the application itself. Because the target audience for the CSR Academy is broad, design and creative elements will be neutral. The application will concentrate on the daily mobile user who has a direct and regular connection to the technology.

3.2.1 Qualitative audience analysis through interviews

In the Analysis phase, it is critical to understand the audience's interests to meet those needs and produce content that users want to return to. To properly recognize the functional properties
that will be convenient for users, qualitative data must be collected via interviews. All the interviews were realized from January 2021 until late March 2021.

The data collected via the interviews were transcribed and analysed by identifying recurring themes and concepts and relaying the relevant and valuable information necessary to answer the research questions.

Semi-structured interviews are the perfect choice for any social science research question and are also adaptable for use in multiple research projects. Their structure allows both practical and theoretical elements into the interviews, providing a greater depth in the data (Galletta, 2013). The respondents taking part in the interviews are regarded as “knowledgeable agents” (Gioia et al., 2012, p. 17), who can tell their activities, thoughts, and intentions. Semi-structured interviews allow for the investigation of a specific aspect of a topic while allowing for the participants to bring in new meanings to it (Galletta, 2013). The purpose of the qualitative analysis will be to produce a series of exploratory studies on the connection between CSR and SMEs with a specific focus on the motives, limitations, and the connection among CSR, employees, and productivity.

The rationale for choosing a qualitative data collective approach and designing a semi-structured interview is because qualitative research creates a deeper understanding of the phenomena and provides a more concentrated approach by avoiding generalization.

Also, it encourages participants to reflect freely and express their personal experiences to collect spontaneous responses. At the same time will enhance the research process by increasing the engagement of the researcher to analyse in-depth the data provided.

The process of interviewing is open-ended, which provides space for interested interviewees to guide the interview. To support validity and reliability in the study, a 12-question interview guide was constructed. All questions related to the research, and all questions leading to the research's conclusion. The interviews were conducted separately and modified to consider the difference in interviewees' roles and backgrounds. All interviews were conducted following the proposed structure (Galletta, 2013, pp. 46-50): opening, middle and conclusion segment. The involvement of both authors in the interviews ensured that nothing was forgotten, provided the possibility to elaborate in the conversation, and gathered as much valuable information as possible. Furthermore, the interviews were led by one author to ensure that the structure was clearly explained. The process of interviewing - when to ask follow-up questions, when to let the interviewee talk, and when to bring them back to the relevant topic - takes time and can
cause confusion during the process. However, following the guidelines and the structure facilitated the process.

The interviews were held with one respondent at a time and had a focus on making a personal connection to develop trust and confidence between the interviewee and interviewers and feel comfortable to lead to more open and honest answers. Due to the current COVID19 pandemic, all interviews were held using Skype video conferencing software. This technology provides an interactive audio-visual environment that imitates an in-person situation (Hanna, 2012). To maintain a pleasant conversation, the face-to-face interview simulation utilized both verbal and non-verbal communication. However, it was noted that verbal communication was somewhat limited due to the digital situation. The interviews were conducted when the interviewees were free and have taken place at a time convenient to each participant. All interviews were held in February and March and lasted between 20 to 3 minutes in length, depending on how the interview was conducted. The results and the process deriving from the interviews were unique because they were semi-structured. This element is the strength of the method and does not minimize the value of one interview from the other. As suggested by Adams (2015) a combination of closed and open-ended questions along with follow-up questions were used to examine the meaning behind certain remarks and pursue deeper exploration into perceptions and the beliefs of individuals.

*Table 3.2* Each interviewee's key suggestions for the application's creation in relation to its job position

<table>
<thead>
<tr>
<th>Job position</th>
<th>Key suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Manager &amp; Digital Marketing Specialist</td>
<td>Creative and fun content</td>
</tr>
<tr>
<td></td>
<td>Easy-to-use aspects</td>
</tr>
<tr>
<td></td>
<td>Motives and incentives for the user</td>
</tr>
<tr>
<td>Account Manager &amp; Events Manager</td>
<td>Easy-to-use aspects</td>
</tr>
<tr>
<td></td>
<td>Incentives and prizes</td>
</tr>
<tr>
<td></td>
<td>Interactivity and fun</td>
</tr>
<tr>
<td>Retail Executive</td>
<td>Cooperation among the teams</td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
</tr>
<tr>
<td></td>
<td>Easy-to-use navigation</td>
</tr>
</tbody>
</table>
The interviewees were three and they were carefully selected to obtain the best results and data. Specialists and executives from different sectors and fields related to small and medium-sized enterprises were more accurate subjects. Subjects need to have expertise in the industry over the last two years and therefore presume that they have a strong understanding of the phenomena and the framework under discussion. Subjects provided in-depth insight into the responses of the organization and believed in CSR, sustainability, communication, and gamification. The experts were determined based on their accumulated experience and contacts, but also to offer a different perspective on the subject. The first interviewee is the manager of the pastry shop as well as the digital marketing specialist. The data collected during the first interview focused on the overall dimensions and themes of corporate social responsibility in small and medium-sized enterprises and on how the gamified process could optimize the level of engagement of employees. The interviewee pointed out that it is important to use interactive and creative elements to enhance the user's level of engagement and to provide motivation to create a competitive edge. The interviewee also emphasized that the existence of an application would improve the level of engagement. The second interviewee is a web portal account manager and an event manager. The data derived from this interview mentioned the importance of levelling during the gamification process in terms of giving the user motivations and incentives to continue playing. As a communication specialist, pointed out the need for an easy-to-use approach because the level of employees in small and medium-sized enterprises concerning CSR is moderate/low. Finally, the third executive interviewee in the retail store shed light on the importance of usability. The application must have simple steps and an easy scaling system that makes it easier for the users to navigate. The buttons and the content should be as clear as possible because the user might end up losing his or her interest during play. As per the third interviewee, ease of navigation is also especially important and, as a sales team leader, the importance of team effort and cooperation through the application has been emphasized. Also, it is important to stress that all interviewees have responded by pointing out that the existence of ethical or material awards is particularly important for users to keep on playing. All the different answers and opinions on the general characteristics and elements of the application have been considered. To create and design an application that is convenient to use and enjoyable for the average user, the insight deriving from the specialists is extremely important.
3.2.2 Quantitative observations

A first questionnaire was developed to better understand the audience's point of view on the major themes that this thesis is trying to focus on. Questionnaires could be used as research instruments and provide an unbiased way of gathering data concerning people's attitudes and beliefs. The questionnaire consisted of 16 different types of questions split into 3 segments. The survey was structured with a mixture of various question types. Most of the questions, however, consisted of remarks against which respondents are required to rate their level of agreement on a five-point Likert Scale (Libert, Rensis, 1932, p. 140: 1–55). This might be the most frequently used approach for scaling responses in survey research and it is also regarded as a psychometric scale. As a cornerstone, the Technology Usage Inventory (TUI) (Kothgassner, Felnhofer, Beutl, Hlavacs, Lehenbauer & Stetina, 2012) was used. It was widened with new items, the majority of which used a five-point-Likert scale ranging from "strongly disagree" to "strongly agree."

Every respondent was briefed about the objectives of this study, the target, and the key goals before the start of the questionnaire. The questionnaire's target group was professionals working in Greek Small and medium enterprises. Each user's contact data was extracted online from the SEVE official site (Association of Exporters of Northern Greece). According to Babbie (2012), it has been recommended that placing demographic data questions at the beginning of a questionnaire can affect how an individual sees himself and how he answers the questions that follow. He will define himself based on his gender, nationality, occupation, and other factors, which may impact his responses. That is why the questionnaire was developed in this direction.

Some scholars have asserted that online surveys conducted via the Web and electronic mail have methodological issues linked to decreased response rates, prejudice, and access (Couper, Traugott, & Lamias, 2001; Schaefer & Dillman, 1998), but the Google Forms used to develop the questionnaire for this study have largely surmounted these concerns.

Moreover, the questionnaire developed also included questions about the participants' depth of understanding regarding CSR and the relationship between CSR and SMEs. Several other questions were posed regarding their level of interactivity with games and mobile devices, as well as how feasible it is for an SME to execute a gamification process – application.

The questionnaire was distributed in the first days of January until the first days of February to people related to SMEs Greek companies located in Greece. The target group was mostly marketing specialists, public relations consultants, sales officers, and executive directors with a level of knowledge regarding CSR. However, the sample was furtherly developed to gather a
wider audience. To be more precise the sample was collected by 70 people who answered the questionnaire, 34,3% of them were male and 65,7% female. As the project focused on the younger generation it was also distributed accordingly and 61,4% were at the age between 26-35. Regarding the highest degree or level of school completed the 60% of the audience owns a Master’s degree and 31,4% a Bachelor’s degree.

The second segment of the questionnaires concentrated on CSR and the level of knowledge of the responders. Also, the second segment tried to extract data regarding the sentiment of the respondents related to companies implementing a CSR agenda and how possible is in Greece for an SME to implement a CSR policy and which are the biggest challenges and limits for a company to implement a sustainability strategy. Finally, in the third segment of the questionnaire, the focus was the relation between users and their mobile devices, and some key points regarding the implementation of a gamified application in an SME. As seen in Table 3.3., the questions focused on the attitude of the audience towards the key themes mentioned above.

**Table 3.3** Questionnaire distributed about CSR implementation and level of understanding in SMEs with all the questions and available answers

<table>
<thead>
<tr>
<th>Questions related to CSR and SMEs</th>
<th>[answers]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 How well do you think you know the term Corporate Social Responsibility?</td>
<td>[Poor  Deficient  Fair  Good  Excellent]</td>
</tr>
<tr>
<td>2 How likely would it be to choose a company that implements a Corporate Social Responsibility agenda?</td>
<td>[Extremely unlikely  Unlikely  Neutral  Likely  Extremely likely]</td>
</tr>
<tr>
<td>3 Do you think that SMEs can implement an organized Corporate Social Responsibility agenda?</td>
<td>[Yes  No]</td>
</tr>
<tr>
<td>4 If you selected &quot;NO&quot; select the reasons that make the above difficult:</td>
<td>[Lack of motive  Lack of funding  Small number of employees  Lack of corporate culture  Lack of knowledge  Other]</td>
</tr>
<tr>
<td>5 Do you think that if a Small and Medium Enterprise implemented a Corporate Social Responsibility program it would improve the relations between the employees?</td>
<td>[Not at all  Not so much  Neutral  Possible  Extremely possible]</td>
</tr>
<tr>
<td>Questions related to Gamification, CSR, and SMEs [answers]</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Do you play games on your mobile? [Yes  No]</td>
</tr>
<tr>
<td>7</td>
<td>How often do you play games on your mobile/tablet? [Everyday 2-3 times per week  4-7 times per week  Never]</td>
</tr>
<tr>
<td>8</td>
<td>Do you play games that improve your cognitive level? [Yes  No]</td>
</tr>
<tr>
<td>9</td>
<td>Do you think that you would use a mobile application which through short games and quizzes would improve the user's level of knowledge regarding Corporate Social Responsibility? [Yes  No]</td>
</tr>
<tr>
<td>10</td>
<td>What characteristics would you like a game related to Corporate Social Responsibility to have? [Vibrant graphics  Rich audiovisual content  Intense gamification elements  Other]</td>
</tr>
<tr>
<td>11</td>
<td>Would you like your employer to provide you with an application that aims to improve your level of Corporate Social Responsibility? [Yes  No]</td>
</tr>
<tr>
<td>12</td>
<td>How do you think such an application would improve the climate among the employees of a company? [Not at all  Not so much  Neutral  Possible  Extremely possible]</td>
</tr>
<tr>
<td>13</td>
<td>How likely is it for you a Small and Medium Enterprise in Greece to make use of such an application? [Not at all  Not so much  Neutral  Possible  Extremely possible]</td>
</tr>
</tbody>
</table>

**3.2.3 Results of the quantitative research**

Interesting conclusions were drawn from the quantitative research findings, which will aid in the process that follows. As previously stated, the questionnaire was divided into segments pertaining to each issue addressed throughout this thesis. Following the demographics segment, participants were required to answer ten questions about Corporate Responsibility, Small and Medium Businesses, and gamification at the end of the survey. The input sought initially focused on respondents' depth of knowledge about Corporate Social Responsibility and their overall perception toward CSR and industry application. As shown in Figure 3.4, a sizable
proportion of respondents claim to have a good (35,7%) or excellent (21,4%) level of understanding about CSR, totalling 51,1%. Furthermore, as shown in Figure 8, respondents are more likely (38,6% likely and 32,9% extremely likely) to choose a business that incorporates a CSR agenda into its strategy.

![Figure 3.4 Level of knowledge regarding CSR](image)

![Figure 3.5 Intention of choosing a company that implements a CSR program](image)
As mentioned earlier, the questionnaire aimed to gather data about SMEs and CSR. Therefore, the following questions focused on the connection between the two terms. The response to the applicability of a coordinated CSR program in an SME's business plan is highly favourable, with 71% of those polled choosing "yes" (Figure 3.6). However, the percentage that chose “no” clarified its decision by identifying the primary reasons that prevent SMEs from implementing a CSR strategy. The reasons are noticeable in Figure 3.7, and they are focused primarily on a lack of funding (58.6%) and a lack of corporate culture (41.4%).
The final question of the first part of the questionnaire cantered on CSR and SMEs, was about the prospect of an SME trying to implement CSR to enhance workplace relationships. Once again, the majority of respondents reacted positively, implying that the application of a CSR program could strengthen employee relations. As shown in Figure 3.8, 34.2% of those surveyed chose that it is possible and 30.2% that it is extremely likely, with a sum of 64.4% of respondents stating that the integration is beneficial to employee relations.

![Figure 3.8 Impact of the implementation of a CSR agenda in an SME](chart.png)

The third section of the questionnaire intended to gather information about the users' utilization of mobile devices or tablets, as well as their playtime. The emphasis was primarily on the likelihood of using a gamified application to optimize their level of knowledge about CSR and their perception of the employer's willingness to include an application cantered on gamification and CSR.
Figure 3.9 shows that 60% of respondents play games on their mobile devices, and 54% play games to enhance their cognitive level (Figure 3.10). In terms of frequency (Figure 3.11), only 18 percent play games each day, with the majority, not playing games at all (33 percent - never) or only occasionally (19 percent - 2-3 times per week).

**Figure 3.9** Results from the sixth question about if the responders play games on their mobiles

**Figure 3.10** Respondents answer if they play games that improve their cognitive level
The following set of questions tended to focus further on the dissertation's themes. To become more precise, participants were asked if an application with quizzes and gamified methodologies would enhance the user's level of CSR insight. As shown in Figure 3.13, the large bulk of them responded positively (71%). In terms of the characteristics of a Corporate Social Responsibility application (Figure 3.12), 61.2% chose rich audio-visual content, 41.8% intense gamification elements, and 35.8% vibrant graphics. This is a crucial issue, the answers to which will be used to design the application.

**Figure 3.11** Frequency of game time

**Figure 3.12** Characteristics of a game related to CSR
The final two questions were formulated to elicit information about the effectiveness of an application such as the one noted above in an SME, the respondents' attitudes toward the integration of an application in their workplace to optimize their level of CSR, and ultimately how this application will impact the workplace environment.

Figure 3.14 shows that 90% of respondents reacted favourably to the prospect of their employer offering an application targeted at improving their level of CSR, whilst also 30% (Figure 3.15) mentioned that the use of such an application will also enhance the working environment.

Figure 3.13 Possibility of gamified application and improvement of user's level regarding CSR

Figure 3.14 Possibility of an employer to provide an application as described above
The quantitative research yielded some interesting observations that could benefit the development of multimedia content. The above findings indicate the audience's mentality toward Corporate Social Responsibility and its relationship with SMEs, as well as their perception toward a gamified application designed to improve employees' level of knowledge. The respondents appear to be using their mobile devices to play games and some of them enhance their academic knowledge, such as by playing mind games. Furthermore, the vast majority of users are favourable about using an application that seeks to improve their understanding of CSR, and they are also favourable of using an application like this based on their employees' preferences. The questionnaire also obtained some data about the application's features, as well as people's attitudes about how an application could strengthen the workplace culture in a business. Finally, the questionnaire segments assisted the research process by providing pertinent data on a variety of subjects. All the information collected will be closely reviewed and taken into consideration over the next stages of the application's design.

3.3 Project Timeline

The typical work breakdown structure of the project (Perdicoulis, 2013, WBS) indicates important pathways, as well as from milestones to tasks. A project timeline is a visual range of steps or tasks placed in chronological order that enables the researcher to view the entire project.
in one place. The project timeline generally consists of a horizontal bar chart, where a title, as well as the associated start and finish date, are provided to each task.

Throughout the process of developing multimedia content, it is vital to establish a timeline and work properly to accomplish it. To enable the achievement of objectives, five milestone points have been established to better coordinate the design of the project. The first phase of the project was the search for relevant literature and methodological approaches associated with the project to acquire data and beneficial compounds for its execution. The next step was to find and evaluate the effects of correlating similar examples of gamified content used by different brands. The most important aspect was the design phase of high-fidelity prototypes, as it is the execution of all the procedures which have been held out thus far. Following the design stage, an evaluation process is underway, which is an essential action to be taken unless the goal set is accomplished. With all the data obtained from the evaluation, it would be necessary to determine the prospective areas for improvement, to portray an even better version of the application.

Taking the above into consideration and to efficiently manage this ambitious project, it was necessary to meticulously plan all significant steps till the completion of the CSR Academy application high-fidelity prototype. Table 3.4 depicts all phases that led to the conclusion of the project:

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Interpretation of design specification, analysis of intended audience, investigations on related research, and project novelty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 2</td>
<td>Create a logo and a low-fidelity prototype; become familiarized with Figma and its functionalities.</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Gathering of production materials and creative elements</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Development of high-fidelity interactive prototype in Figma</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Formative and summative evaluation</td>
</tr>
<tr>
<td>Stage 6</td>
<td>Alterations to the final project are instituted and validated.</td>
</tr>
<tr>
<td>Stage 7</td>
<td>Experimental results and discussion</td>
</tr>
</tbody>
</table>
3.4 Summary of Chapter 3

This chapter examines the Analysis phase of the multimedia content creation process. The most important aspect of the Analysis is to incorporate the project's target audience, which for this instance would be experts working in SMEs, and specialists in the various departments which are strongly involved in the implementation of CSR agendas. Furthermore, the timeline for this project, as well as some core issues for its realization, are covered. This process introduces an overall view of pre-existing applications which use gamified features. The first one was the "WeSpire," a gamified experience that enables users to see themselves as an essential component of their company's objectives. The following set of applications is from “Workz,” a firm that specializes in organizational change, leadership development, learning, as well as the design of game-based tools for participation and mentoring via a variety of other applications. Alongside that, Frima Studios' "Half the Sky Movement: The Game" is an adventure designed to raise awareness and donations to empower women and girls around the world. The next and most essential element for this chapter was also to conduct interviews with top management employed in diverse but critical sectors of SMEs so that the audience's demands could be fully interpreted and the features that would attract them could be provided. The final step was to distribute a questionnaire about Corporate Social Responsibility concerning SMEs, as well as the term Gamification and how it affects the working environment. The chapter concludes with a detailed plan for the overall project.
Chapter 4

Designing phase

This chapter will go over the application's design process. A brief reference to the design concept will be introduced to further explain and justify the majority of the design decisions made. On a second level, this chapter contains the first stages in the design process by presenting the application's aesthetic elements, the colour palette, the inspiration, and the application's logo. In addition, low-fidelity prototypes of the application are shown. The goal is to lay the groundwork for the exact design process by elucidating the factors that should be considered when developing a prototype application.

4.1 Project Planning

Despite their over-a-century-old origins, Gantt charts stay relevant management tools. They are an accurate ability to view critical information in their current primary application to projects (Wilson, 2003). Their prior applications to broader production planning and management problems have been supplanted by practical concerns and technological advancements. While computing now provides more powerful techniques for modelling these problems, Gantt charts continue to play a role in providing a simple interface that enables users to define problems and more easily understand and accept solutions.

Gantt charts are useful for visualizing timetables, whether they are generated manually or via a heuristic or optimization algorithm. The perks in such cases stem from their opportunity to articulate a wealth of information (which jobs are running when on which devices and for how long, and where indolence or congestion occurs). The method is highly versatile and can easily be tailored to address management concerns. Gantt charts are not problem-solving methodologies; rather, they enable interaction among analysts and users and provide a valuable tool for instituting immersive timetabling perspectives (Wilson, 2003).

For the reasons stated previously, implementing a Gantt diagram in the stages and process of CSR Academy development is critical and valuable in multiple ways. The Gantt chart (Figure 4.1) illustrates the project's precise planning:
4.2 Authoring and aesthetical Approach

Vaughan summarizes: "Design is thinking, choosing, making, and doing. It is shaping, smoothing, reworking, polishing, testing, and editing" (2011). The designing phase encapsulates a critical and essential step-by-step procedure demonstrated through each procedure, from thinking to testing and shaping. Among the most major tasks is deciding on a name for the application. The process's name embodies the entire concept and sentiment that is aligned with the entire project. As a result, the creation of a unique and memorable name is fundamental. The provided application had several multiple names. The main goal is to find a word blend that best describes the philosophy and purpose of the application. Furthermore, the presence of words like "Sustainability" and "CSR" assumed that they may be necessary. Having considered the foregoing, four distinct names and logos were developed to effectively meet the application's cause and target audience. All the logos are influenced by the colours and principles of the Sustainable Development Goals (SDGs) to emphasize the application's potential effect and intentions. The names illustrate the influence that the application wishes to have by reinforcing the words "Social," "Responsible," and "Ability."
The final logo of the application is more minimal with only one colour after a comprehensive examination and different domains and speculations. It is vital to underline that all the logos and creative characteristics were designed in Canvas.com. The two terms used in the logo, "CSR" and "Academy," aptly describe the project's purpose and object. In addition, orange is a vibrant colour that attracts the attention of those who see it. It is associated with delight, warmth, and the tropics, and represents enthusiasm, fascination, happiness, creativity, and commitment. Eventually, different colours have varying effects. investigated the relationship between colours and emotions and determined that yellow, orange, and blue were happy colours, while red, black, and brown were sad colours.
4.3 Prototyping and navigation structures

The following step is essential during the design phase. It is vital to arrange initial ideas and perspectives to generate early design concepts, mechanisms, and interactions. The value of the designing process, according to Dimoulas (2015), lies in testing the functional elements to prevent future failures. The main objectives of this phase are to design low-fidelity prototypes, that are like the final setup of the entire application. Since this is the first stage, it is helpful to develop the basic principles of the main application and concept in short-term technological implementations. As a result, the low fidelity prototypes also include storyboarding in a simplistic paper format, but without better graphics. The entire application will be designed and distributed to mobile users as a result. Each page design has some components in common, which will be displayed and repeated in each frame. Each frame will be divided into three distinct designs and sections. The first – header will provide some details, logos, and characteristics in each frame, the second – middle section will include specific concepts and procedures for each frame, and the footer would include some navigational buttons to assist with application navigation. The application's logo will be displayed in each frame, along with an action button that will end up taking users to the first page. Some low-fidelity frames will be placed and analysed below:

*Figure 4.5* Low-fidelity prototype by hand: basic concept of the project
Low fidelity prototypes seem to be more efficient, according to research, because they allow designers to focus on data and interaction architecture while reducing costs by saving time. Figure 4.5 depicts three screens that contain the fundamental concepts of the application's core theme. Following the structural notion mentioned above with the three conceptual parts, it is clear that the application would have some components across each screen, without any various creative elements. The key concepts surrounding CSR Academy are developed and portrayed in Figure 4.5. To become more precise, the initial phase of participation – event design and the educational aspect of the application – is presented. The concept of personalized content is introduced in the second assemblage of frames, Figure 4.6, to illustrate the corporate dimension of the application. Each involved company's data, a unique and personal profile, and business information are addressed. These two frames share the very same structural mentality. Finally, the final frame of Figure 4.6 depicts the low fidelity concept of the quizzes segment. All the information provided in each frame is as accurate as possible, without the use of multiplicity, which can lead to miscommunication and usability issues. The active buttons in the screen's header and footer are there to help with navigation and user experience.

The following step is to convert all the data and low-fidelity prototypes from paper to a precise and creative interface. Figma is the design method of choice for this process. Figma is a digital design and prototyping software. It is a user interface and user experience design software that can be used to create a website, apps, or relatively small user interface element that can be
assimilated into other projects. As Dimoulas (2015) emphasizes, the phase of transferring low-fidelity prototypes to an actual design tool is the final piece of the design stage, which enables the development of finished illustrations on each screen. This procedure is essential as it involves developing insightful mock-ups that verify and analyse the entire basis. The emphasis was on designing the application without any interactions or authoring. Along with the creation of the low fidelity prototypes, it is essential to organize and create an application map (Figure 4.70 that will set the bases for the next processes.

![Application structure map with all the basic screens of CSR Academy](image)

*Figure 4.7 Application structure map with all the basic screens of CSR Academy*

It is important to assess the software tool used to design the application while creating high-fidelity prototypes. Figma is a cloud-based design tool that is functionally and feature-wise like Sketch, but with significant traits that make Figma better for team collaboration. Figma is compatible with any operating system that supports a web browser. Figma can be used on Macs, Windows PCs, Linux machines, or even Chromebooks. This is the only design tool thus far that does this, and in stores where various operating systems are used, anyone can share, open, and edit Figma files. Once the application starts, users are taken to the home page, which displays all the available projects and even some essential drafts, which are extremely useful if you are unfamiliar with the tool. Figma, in the spirit of collaboration, has initiated the “Figma
Community,” which enables designers to illustrate and publish their projects for other groups to access or even modify. The platform encourages remarking on prototypes in this notion, so the team will receive this comment section via email. Also, as a matter of fact, instead of using third-party applications to communicate with colleagues, it is possible to do something with a single application.

When users launch the project, they perceive their canvas in the middle, with a toolbar at the top of the screen. Users can commence their task by selecting the section "Frame" in the toolbar. This way, the templates will appear on the right side of the artboard, with all available features based on mobile operating system and even the mobile device model. In Figure 4.8 a depiction of wireframing is visible in Figma environment.

![Figure 4.8 Figma artboard of CSR Academy – wireframing and interactions](image)

When the form of template is appointed, it can be explicated using the segment on the right side of the page where designers can use the background colour and various effects. Figure 4.9 shows that in the “Design” section on the right, users can choose the font style for the texts included, the size of the letters, and many other features such as text-align. As shown in Figure 4.9, users can access all their project's layers from the other side of the tool, and therefore by simply click on them, developers can regulate all the components added.
To sum up, the above chapter presents a comprehensive review of the Designing phase during the development of multimedia content, with a focus on the CSR Academy design process. First, the chapter sets the time framework based on Gantt chart depiction to facilitate the project’s goals and aims, and general scheduling. Throughout that step, the name and logo were designed to match the project’s motive. As a result, the next stage is to develop low-fidelity prototypes that will display the basic configuration of the application as well as the original concept behind the project. This action will result in the high-fidelity prototypes shown in the following chapter. To move on to the next phase, it is critical to select the appropriate software tool for designing the application. In this case, the project was created using Figma, a cloud-based design tool. Figma and its processing methods have been examined in this chapter to progress to the next phase.
Chapter 5

Project Development

The creation of a high-fidelity prototype is a time-consuming process that necessitates careful planning ahead of time. It was the most difficult aspect of this project because large amounts of data had to be integrated while the actual prototype had to be displayed cohesively and accurately. The development chapter is a complicated subject segregated into phases, such as production and authoring, that necessitates careful research and analysis.

5.1 Development phase

The Development Phase includes the final material selection, processing, and shaping to transform the mockup into a prototype (Dimoulas & Tsarchopoulos, 2020). The functional attributes are fully implemented here, as are the assets, which means that all necessary interactions have been integrated. It is a pivotal time for the overall project because the content and design are finalized as a result. The information gathered and designed will be used to deliver the desired version of the high-fidelity prototype, which will include all interactions and creative components. To become more precise, the entire content is the photos, color schemes, and visuals that are chosen, developed and tailored to fit perfectly with the overall concept and aspect of the project. Another significant topic at this stage is the project's advancement from low fidelity prototypes to high fidelity prototypes. According to Dimoulas (2015), high-fidelity prototypes involve artistic and visual details that are now added to define design details. Moreover, developing prototypes is a valuable step in the process because it allows for the demonstration of the suggested interface as well as the acquisition of insight and feedback on the application's usability. (Carmer et al., 2015) As a result, in terms of functionality and design, these prototypes seem to be the most similar to the final product. Based on the foregoing, it is clear that the prototypes must be formulated consistently in this step to produce quality results.

5.1.1 Creation of high-fidelity prototypes

The primary goal of this phase is to develop and deliver high-fidelity prototypes. The project plans to establish an enjoyable experience for users through gamification so that they feel motivated and empowered to learn and play. Colour is an important variable in a project's effectiveness. CSR Academy's primary colour, as stated earlier, is orange. Several factors
contributed to the selection of that colour. Boyatzis and Varghese (1994) investigated the relationship between colours and emotional responses and discovered that brown, black, and red are sad colours, whereas blue, orange, and yellow are pleasant. Companies use red and orange colours to elicit more enthusiasm than other cold colours such as blue, according to Labrecque and Milne (2012). As a result, selecting a colour scheme is vital for the overall project. Because the designed product is an application that can be used by specialists and professionals, it must evoke emotions and exuberance. The colour scheme used in CSR Academy was blended and formed utilizing Adobe Kuller (https://adobe.ly/3d5NhHy), now known as Adobe Colour, which allows users to create colour palettes that can be extracted and used in a plethora of different programs. The primary colour of the application is #F4E434 which is a soft and pleasant orange that creates a positive environment. Texts, buttons, titles, and subtitles are displayed in a colour scheme similar to that shown in Figure 5.1 above.

![Figure 5.1](image)

**Figure 5.1** (a) Colour Palette in Adobe Colour, (b) basic design colour of the application

In terms of the application's overall creative structure, the initial idea was to find actual pictures related to business and sustainability, like business practices, concepts, and campaigns. Conversely, the implementation and the use of images within this concept led to confusion and had a detrimental effect on the application's usability and convivial environment, which is the application's prime objective. Consequently, the emphasis was on retrieving creative elements including vectors and illustrations from the very same "design family" to achieve effective distribution of creative elements free of miscommunication and irregularities. All the vectors and illustrations have been obtained royalty-free from freepik.com and flaticon.com. It is worth noting that all the creative elements were edited to blend the project's notion. To become more detailed, the colour palette is coherent among all illustrations and vectors.
The first screen of the application displays the application's logo, name, and an inspiring statement to entice the user to embark on the journey. The user enters the application by tapping the bottom screen button. Each screen has action buttons to maintain a smoother structure between different screens and themes. To provide adequate information about the project, objectives, and targets, an “About” screen is addressed on the third screen of the application. Following that, the user becomes a member of the application by following the sign-in/sign-up steps.

The following application screens depict the core of the CSR Academy. First and foremost, it is essential to emphasize the concept underlying the gamification process. There is a ranking system derived from the armed forces which can be used to optimize and execute gamification techniques such as ranking and inner motives. There are six levels of ranking in the hierarchical structure. The user begins as a private and progresses through the ranks of sergeant, lieutenant, captain, major, and general. This ranking system was influenced by numerous video games that have the same leader board framework. The ranks are not entirely accurate to the army's actual ranking system. They do, however, incorporate some important features. Figure 5.4 depicts the CSR Academy's ranking system and the USA Army's insignia to correctly interpret this comparison.
The application, on the other hand, has a unique degree of difficulty and challenge. If the user wants to unlock these levels, he should first coordinate or participate in events that focus on society, the environment, and so on. After collecting a total of 6 Social Rockets, the user can join the CSR Academy Bootcamp, answer the quiz questions, and end up receiving his rank. It is pivotal to demonstrate that each activity involvement earns the user three Social Rockets. That implies that to progress to the next level, each user should first take part in at least two social or environmental cause actions.
Figure 5.4 Ranks in CSR Academy:
(a) Ranking System in actual application, (b) ranking system in the US Army

Figure 5.5 Structure of screens in CSR Academy. Depiction of the “Organize an Action” concept
As demonstrated above, the user can organize or actively engage in an action. Each user is given an easy-to-use Action Plan by the application. Involvement will empower employees to actively participate and interact as a team, boosting communication between various participants and establishing a positive work environment. In addition, after attending the action, the user receives data about the time and location of the action and receives 3 Social Rockets (Figure 5.6), which are added to its profile page screen.

![Figure 5.6 “Social Rockets” icon](image)

The application's navigation and mapping have a clear and convenient structure. Each user has a profile page, as seen in Figure 5.7, with all their updates. The user's growth, level, and accomplishments can all be viewed on his profile page. Each screen also has a menu bar in the top right corner of the screen. The menu, as it is obvious, again, in Figure 5.7 enables the user to easily navigate through the application, challenge himself, participate in events, gain knowledge about his company's goals and objectives (Figure 5.7), and engage in meaningful instructional quizzes and projects. The goal is to provide as much efficient information as possible so that the user feels at ease while navigating and using the application.

![Figure 5.7 Structure of screens in CSR Academy: a) Profile page, b) main menu c) team goals](image)
The educational phase of the application is known as "CSR Academy Bootcamp," (Figure 5.8) as previously stated. Once again, the application's concept is to incorporate military terminology. The rationale for this is to create a solid experience via the course of the game so that the user feels a continual process without separate aspects and concepts. The educational process is divided into three different quizzes with varying levels of difficulty. Its quiz is created to stimulate the user to know and understand more and broaden his awareness of Corporate Social Responsibility and Sustainability.

The application's vital key is to provide educational concepts as well as motives and initiatives that allow the user to implement and engage in a CSR process. After completing each quiz, the user receives a rank, which is displayed on his profile page as a symbol and a percentage of completion. The application intends to be fully updated and to provide new quizzes and challenges regularly so that users will be empowered to play an active role on all occasions. The quizzes follow the same pattern. The only distinction between all the quizzes is a small illustration that illustrates the various levels and signal titles. All the titles seek to be catchy and exciting to encourage users to participate more effectively. The names are as follows: "Quiz Test 1 – The Basics," "Quiz Test 2 – Deeper Knowledge," and "Quiz Test 3 – I am a Pro."
In addition, the application includes a few extra features which were proposed by specialists during the development phase. The point is to give the user the ability to become more engaged and post photos (Figure 5.8) of his favourite initiatives and actions in order to build a stronger community for his own colleagues and company while also giving him the opportunity to be straighter active during the application's use. CSR Academy aims to lay the groundwork for SMEs to develop a long-term strategy and agenda. Users can choose to like the photo or message the uploader.

Figure 5.8 Structure of screens in CSR Academy:
(a), (b) & (c) Depiction of CSR Bootcamp, (d) & (e) upload photo notion
5.2. Summary of Chapter 5

In accordance with the design process, this chapter has discussed the process of creating high fidelity prototypes, which deviate from low fidelity prototypes in that all visual characteristics are included. The explanation for the colour selection and the idea behind are also presented, as well as all the preferences and integrations designed to achieve the initial approach. In addition, the basic elements and characteristics of the application are also presented as well as the different game aspects of the CSR Academy. Furthermore, potential improvements and corrections that will improve the final result are identified. Finally, a detailed explanation of all the steps for the high-fidelity prototypes that will culminate in the creation of the final product is provided.
Chapter 6

Project evaluation

Evaluation is essential for any type of software or multimedia authoring application. Evaluation as a method is an approach that enables to specify the usability of a manufactured product or service. It can be formative or summative. This chapter discusses the fundamental usability heuristics which were used to generate the high-fidelity prototype, as well as the evaluation techniques that were used to garner some useful findings for future project development.

6.1. Usability evaluation

Finally, the evaluation stage is critical to the creation of multimedia content. This phase is critical for both the methodological and practical parts of the assessment. To proceed to the above-mentioned process, the application is evaluated across the creative procedure to reframe and modify the development and design. Specialists and some carefully chosen users are asked to navigate through the application and provide feedback in terms of comments, remarks, and analysis. They are also asked to elaborate on any complexities they may have observed.

Following the conclusion of the basic design as well as the commence of the development phase, the very same group of experts as well as other individuals involved in the evaluation process were expected to carry out "section evaluation" as in cooperating with the prototyping team in the procedure of debugging by locating and thus assisting in the restoration of potential flaws (Dimoulas, Veglis, Kalliris & Tsarchopoulos, 2016).

Several important points must be evaluated during the product evaluation process. There seem to be concepts and procedures associated with the usability field of studies that concentrate on the output of a product concerning the actual targets set. In simple terms, usability refers to the functional aspects of a product when is used by the public at large (Foley, 2011).

Usability is typically defined as the "ability to be used," or the ability of an object to be used (Bevan, Carter, & Harker, 2015). Usability can be established into a product and evaluated through usability audits or tests. Heuristic evaluation is the process of usability inspection that is universally used to identify existing problems. To assess usability, this approach uses "heuristic principles" or "usability heuristics." The ISO 9241-11 standard has been beneficial in delivering a globally agreed meaning of usability and its implementation in a variety of areas.
Usability is defined in this standard as "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use" (Iso, 1998). As also stated by Dimoulas et al (2016), “According to the international ISO-9241 standard, usability is efficiency, effectiveness, and satisfaction provided by a (computational) environment to its predetermined users in the effort to achieve specific goals in-frame of the mode of use for which this environment was created”.

The abovementioned concept was enlarged to include five characteristics that a product should have to be usable: "Effectiveness, Efficiency, Engagingness, Error Tolerance, Ease of Learning." More explicitly, effectiveness refers to the accuracy with which users could accomplish their goals and objectives inside the product. Efficiency is linked to the time it takes an individual to accomplish a goal; in other words, the series of phases required to complete the task is screened. Moving on, the level of interaction associated with a product is referred to as Engagement. Consequently, to maintain users engaged, the material must portray enticing design concepts and unique characteristics. Error tolerance implies that it is acceptable to deliver inaccuracies in a system, but these have to be inconsistencies that users can surmount. This process aims to minimize errors while also guaranteeing that users can rebound from them as well proceed using the system. The final important element reinforces the concept that users ought to be able to successfully understand the product to want to use it on a constant schedule. This is discussed in more detail in the “Ease of Learning” element.

Nevertheless, according to Lewis (2014), a commonly accepted usability concept does not yet prevail, as its sheer complexity is impossible to articulate in a single definition. The ISO 9241-11 standard, which integrates what has already been learned concerning usability since 1998 and what new features have arisen concerning the definition of usability, is being evaluated (Bevan et al., 2015).

There may be numerous testing and evaluation methods available to measure/evaluate usability. Heuristic evaluation is also one of those methodologies; this is an evaluation method of identifying usability issues centred on guidelines or usability heuristics. Nielsen and Molich (1990) proposed heuristic evaluation, which includes usability specialists inspecting a product interface based on heuristics and identifying usability issues. These issues are related to usability heuristics, and the frequency, severity, and criticality of each issue are assessed.

To begin, the "Visibility of system status" feature is introduced, which focuses on informing the user of the status of an action being performed. This element implies that the audience ought
to be conscious of the system's current status. This could be showcased in an application with a progress bar demonstrating how long it takes to accomplish the task requested by the user. Following that is the "Match among system and the real world," which is associated with the very first time using a new platform. In particular, users make assumptions about how a platform might work based on previous cases with similar systems. As a result, it is critical to use language that the audience is acquainted with. “User control and freedom” advocates for users to provide authority over their errors, and when a misclick occurs, they should be able to quickly resolve or undo it. The fourth characteristic is “consistency and standards,” which is based on the idea that a consistent framework must not frustrate the user by displaying complex graphical depictions or performing various activities than regular. Several other basic features, for example, can be kept the same because the audience is already acquainted with them from interactions with other platforms. Following is the “Error prevention” which will assist users when they make an error, such as by adding a message box before actually executing the activity. If the user confirms or a misclick occurs, this might be highlighted with a statement to the user while removing an item. Furthermore, “Recognition rather than recall,” which would be centred on the two kinds of memory retrieval, is an important requirement for a user-friendly interface. These are acknowledgments, which is a simple type of retrieval that does not necessitate much effort, and recall, which is a much more complicated process for people. As a result, outstanding material should not necessitate the user to recall it numerous times. But on the other side, this should provide all the data required to complete the task. The seventh element is “Usability Flexibility and Efficiency,” which sheds light on the different abilities which each user possesses. The interface should also be responsive to the needs of everyone to switch from a novice to an advanced user. Following that, the principle of “Aesthetic and minimalist design” is portrayed, which promotes the notion that an interface must only involve data that is pertinent to the users. The designer might also try to present just the necessary data during this phase. To help users, realize, predict, and regain from inaccuracies that may occur in an application's interface, the component "Help users recognize, diagnose, and recover from errors" was added. In simple terms, the above implies that if a system fault appears, users must be apt to understand the problem to overcome it. It is a vital factor in preventing audience dissatisfaction and traumatic experience of the material. For instance, rather than using code to illustrate an error message, it would also be beneficial to use phrases while also proposing an alternative. The final principle is "Help and documentation," that further states that it could be imperative to define documentation to allow users to understand the procedures at instances. This documentation must be well-structured, with direct terms and limited layout. As
previously stated, these directives are regulations, so each application or framework can be investigated to display the above aspects for that to be regarded to portray usability aspects.

The characteristics listed above are critical for an application's consistency. As a result, "CSR Academy" was developed around these characteristics and will be evaluated by a broader audience to gather useful data and assess the overall structure.

### 6.2. Adopted Evaluation Methodology

The process of evaluating the usability of a multimedia project has an impact on the desired outcome for the users. As a result, it is critical to accurately determine the effect that will be created during the design or development phases. This is the most effective way to achieve the highest level of user satisfaction and product quality. Dimoulas (2015) distinguishes between formative and summative evaluation. The former is used to provide valuable feedback to the team during the analysis, design, and development phases, whereas the latter is used to generate some final thoughts about the multimedia project overall.

A formative and summative evaluation was conducted for the purposes of this multimedia project, combining valuable insight from a group of subject-matter experts – referred to as Experts – with the final assessment by real users who reviewed the high-fidelity prototype in its entirety.

#### 6.2.1 Conducted Formative Evaluation

As mentioned previously, formative evaluation is carried out during the productive phases of analysis and design, as well as across the development phase, by regularly updating the original intent and adjusting to different perspectives that may emerge. The requirement to evaluate the multimedia project on a regular basis contributes to its continuous functional improvement and the debugging process (Dimoulas, 2015).

To add extra value and optimize the evaluation process of the application, during the questionnaire-based application evaluation process, there was a concurrent evaluation of the application by a group of three individuals strongly linked to the SME sector and with vast knowledge of CSR and UX design. Each one of these experts made a series of advice and recommendations to improve the overall framework of the application. Some were associated with the CSR Academy's design features and visual appeal, while others were related to the system's usability (Table 6.1). The profession and recommendations of each specialist are
noticeable in the table below. It is critical to emphasize that this phase occurred between early and late April to maximize the significance and added value. Due to the current COVID19 pandemic, all interviews were held using Skype video conferencing software.

<table>
<thead>
<tr>
<th>Job Occupation</th>
<th>Key Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR Specialist</td>
<td>Provide more information regarding the application on the first screen</td>
</tr>
<tr>
<td></td>
<td>Reduce some extra frames</td>
</tr>
<tr>
<td></td>
<td>Add the “Error – Wrong” aspect in CSR Bootcamp</td>
</tr>
<tr>
<td>UX Designer</td>
<td>Change the upper part of the application with more familiar icons</td>
</tr>
<tr>
<td></td>
<td>Reduce the extra illustrations</td>
</tr>
<tr>
<td></td>
<td>Change the back – next buttons</td>
</tr>
<tr>
<td>Former General Manager</td>
<td>Provide more information regarding the application</td>
</tr>
<tr>
<td></td>
<td>Add frames with the team members and ranking</td>
</tr>
<tr>
<td></td>
<td>Provide more information concerning the ranking and the quests</td>
</tr>
</tbody>
</table>

### 6.2.2 Conducted Summative Evaluation

According to Dimoulas (2015), the summative evaluation considers the overall progress of the multimedia project to obtain a reasonable conclusion. These conclusions would be useful for any future development advancement.

For this reason, a second questionnaire was developed so that feedback can be received by the audience, which could assist in future improvements. For the productive phase of the dissertation, the gamified application was developed and consequently, feedback will be requested also for the application. The distribution of the second questionnaire was completed on April 8th. To achieve correspondence with the first questionnaire, also the second one was distributed to the same target audience. In this case, it will be possible to understand the attitude of the audience towards CSR, gamification, and sustainability and the correlation to the
application created. Furthermore, all the questions developed were created concentrated on the Heuristic evaluation theory and characteristics as examined earlier. Following the guidelines appointed by the Heuristic evaluation, a questionnaire was developed based on these. Each characteristic from Nielsen’s evaluation corresponds to questions posed for the respondents to answer. Table 6.2 shows the correlation between the questions posed by the questionnaire and the characteristics of Heuristic evaluation.

Due to its interactive prototype's nature, it was essential that the audience analyse the entire project and provide constructive criticism in this instance. As a result, a questionnaire was created and distributed via email, including a connection to the application prototype. The questionnaire, like the prototype, was written in English, presuming that the majority of the Greek viewing public is comfortable with the terminology and, at the same time, that it is accessible to a broader international audience. 25 participants interacted with the prototype application and completed the questionnaire. It is vital to highlight that the majority of the participants was members of companies which took part in the first phase of the target audience analysis in order to have a continuity.

During the quantitative evaluation process, beneficial results are presented to determine whether the original objective was met, but also to obtain solicit feedback from the audience on the research questions raised. This questionnaire was developed using multimedia content and questions inspired by the concept of "Heuristic evaluation." To enable participants to evaluate the application, they first were provided with a link to the overall project prototypes. The audience could then traverse the gamified application and draw conclusions about the ultimate result.

Over the first question, the goal was to determine how well the project's concept is conveyed through the first display. 48% of the respondents have voted for number 4 on the scale with number 5 on 40% (Figure 6.2). The general outcome is considered positive because most of the respondents chose numbers 4 and 5 in the scale concerning the characteristics of “Visibility of system status”. In the next question to examine if it is a match between the real world, the respondents were asked about the general use and usefulness of the application. The general feedback is satisfactory with 88% of the respondents choosing options 4 and 5.

Table 6.2 List of the characteristics from the Heuristic Evaluation and the correspondence to the questions used for the questionnaire
<table>
<thead>
<tr>
<th>Characteristic from Nielsen’s Heuristic Evaluation</th>
<th>Explanation of the Characteristics posed</th>
<th>The question posed in the questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visibility of system status</td>
<td>Through appropriate feedback, designers should always keep users informed.</td>
<td>How well do you understand the idea behind the application from the homepage?</td>
</tr>
<tr>
<td>Match between system and the real world</td>
<td>Adhere to real-world conventions to ensure that information appears in a natural and logical order.</td>
<td>Are there any symbols or icons you are not familiar with? The application is useful. The icons (illustrations and vectors) are explanatory.</td>
</tr>
<tr>
<td>User control freedom and error prevention</td>
<td>Users frequently make mistakes when performing actions.</td>
<td>Have you faced any functional issues while navigating? The application uses clear language.</td>
</tr>
<tr>
<td>Consistency and standards/ Flexibility and efficiency of use</td>
<td>Observe platform and industry norms. / Design can conform to both experienced and novice users.</td>
<td>How easy was it for you to learn how to use the application?</td>
</tr>
<tr>
<td>Recognition rather than recall</td>
<td>Make elements, actions, and options visible to reduce the user's memory load. The information required to use the design should be included.</td>
<td>How often would you use this application?</td>
</tr>
<tr>
<td>Aesthetic and minimalist design</td>
<td>Interfaces should not contain irrelevant information.</td>
<td>How attractive do you think the design of the application is?</td>
</tr>
<tr>
<td>Help users recognize, diagnose, and recover from errors / Help and documentation</td>
<td>Error messages should be written in plain language. It is preferable if the system does not require extra explanation.</td>
<td>How satisfied are you with the application’s general use? I would recommend the application to a friend.</td>
</tr>
</tbody>
</table>
Eager to respond to Nielsen's Heurist Approach's second characteristic, the next question was about the match between the system and the real world. To be more specific, participants were required to answer the question, "Are there any symbols or icons you are not familiar with?" As shown in Figure 6.3, the reaction has been encouraging, with 76% of those polled voting "No." An answer following the application's "technical terms" was stated in the "Other" option.
The next question is to assess the system's functionality in order to avoid errors. In response to Nielsen's "User control freedom and error prevention," participants were asked if they had encountered any technical difficulties while navigating. As shown in the figure 6.4 above, 84% of respondents chose "No."

**Figure 6.3** Familiarization with symbols in CSR Academy

**Figure 6.4** Facing functional issues in CSR Academy while navigating
Regarding the very same notion and characteristic, the next question sought to determine whether the application employs clear language. The overall response (Figure 6.5) has been optimistic, with 91.7% selecting 4-5 as their answers.

![The application uses clear language](chart1.png)

**Figure 6.5** The language used in the CSR Academy is clear

When respondents were asked if the symbols are descriptive, they came to realize the match between the system and the real world. In terms of design and usability, 100% of respondents chose “Yes,” which is a promising indicator (Figure 6.6).

![The icons (illustrations and vectors) are explanatory](chart2.png)

**Figure 6.6** The icons used in the CSR Academy are explanatory
The audience is asked how convenient it was for them to understand how to use the application in the next question on CSR Academy. 88% (Figure 6.7) of them selected the options "Easy" and "Very Easy," emphasizing the application's user-friendly design and concept.

![Figure 6.7 Ease of use concerning CSR Academy](image)

The next question on CSR Academy concerned the frequency with which the application was used. When asked how frequently they would use the application, 52% of users said 2 to 3 times per month, 32% said 2 to 3 times per week, and 16% said once or more during the day (6.8).

![Figure 6.8 Frequency of use of CSR Academy](image)
In relation to the element of "Aesthetic and minimalist design," a question about the popular sentiment on the design and how appealing it appears was added. In response to this question, the findings demonstrate that 56% of respondents chose the number 5 in the scale metrics, which equates to “Very Attractive,” while 24% chose “Attractive” (6.9). Both responses are regarded as positive and optimistic.
The final two questions concerned the entire experience with the application. In response to the question, "How satisfied are you with the general use of the application?" 64% of those polled said they were “Satisfied,” with 32% saying they were “Very Satisfied” (Figure 6.10). Finally, the last question concerns the likelihood of recommending the application to a friend or relative. The results are shown in Figure 6.11 below, and they are deemed more than favourable.

Ultimately, some meaningful statements were made in the elective comment box question in the final section of the questionnaire, which are encapsulated in the word cloud (Figure 6.12). In total, 7 comments were received, with the significant proportion of them recognizing out creative ideas and concepts to improve the overall experience. Even so, the feedback received was reluctant regarding the application's integration due to the general public's and, more specifically, SMEs' lack of information and awareness.

Finally, by using outcomes of this quantitative evaluation process, many valuable findings have unquestionably arisen. Concerning the created multimedia content, the consensus sentiment of the audience appears to be positive, and based on their responses, it is evident that the application is fully operational and user-friendly. On the other hand, there have been some potential enhancements that could be incorporated, particularly about the content provided and technical terms so that it appears more intriguing, attracting the audience to use the application more regularly. All of this can be considered with the goal of preserving the positive attributes while improving the vulnerabilities.
6.2.3 Debugging and Project Updates

Recognizing all the above-mentioned remarks, most of the crucial recommendations have been enacted in the CSR Academy prototype. Numerous improvements were achieved to eliminate confusion between the application's various screens and conceptual frameworks. Additionally, some additional features regarding the "Top Bar Menu" in each screen with more evident symbols and illustrations have been introduced, the principle of the core idea has also been introduced in the first screen, and additional stages have been created in the members of the team section and "CSR Bootcamp" questionnaires introducing the "Wrong" feature.

All the helpful hints are noticeable in the prototype version of the application in the figures below. All of them aimed to improve the usability, efficiency, and aesthetics of CSR Academy. The suggestions did not completely significantly change the application, its concept, or its goals, but they did modify the user's experience.
6.3 Summary of Chapter 6

The sixth chapter provided a presentation of the evaluation process for the CSR Academy application, which is an essential process in detecting potential problems and converting them into new opportunities. In addition, all the features that the material must have to be perceived usable were presented, based on the usability research mentioned. In the preceding context, analysing the “Heuristic evaluation” was critical, as it will be used in the evaluation of Winning Streak. This methodology was designed to trace usability issues in user interface design. As a result, quantitative research was carried out in this chapter, with the creation and distribution of a questionnaire. The questionnaire was designed using Google Forms to obtain feedback on the multimedia content produced. To contribute positively and optimize the application evaluation process, a group of three individuals with close ties to the SMEs sector and deep understanding of CSR and UX design evaluated the application concurrently during the questionnaire-based application evaluation process. In conclusion, the results showed a positive overall result in terms of usability and ease of use, and changes to the design of the prototype were identified to enhance the experience.
Chapter 7

Experimental results and discussion

The CSR Academy was realized as a result of this thesis, and this final part will portray the conclusions reached. Finally, it contains a novelty and contribution sub-chapter that examines the product's prospective enhancements and adjustments. The previous research questions are also addressed in this chapter. It should be noted that this project adhered to scholarly policies and procedures with no outside specialist advice; consequently, some of the limitations addressed are also discussed in this chapter.

7.1. Research Findings

The purpose of this research was to investigate the characteristics and concepts of Corporate Social Responsibility (CSR), Gamification, and Greek Small and Medium-Sized Enterprises (SMEs). Throughout the whole theoretical section, gamification was thoroughly investigated and its impact on both the execution of a CSR agenda and the strategy was considered. CSR is a concept that is gaining a lot of attention now, both on an organizational and individual level, because of exponential global warming, globalization, and rapid technological advancement. Following a literature review, the relationship between a gamified application and CSR was examined, as was the possibility that the gamification process could also improve a SME's adherence and adjustment, thereby increasing employee engagement and participation. The preceding procedure is accomplished through the examination and analysis of various terms, patterns, and schemes associated with these definitions. The thesis' central argument is that gamification influences how a CSR agenda is implemented. The technique used to investigate the preceding questions began with the creation of a theoretical framework to serve as a foundation for all these issues. The vital next step was to establish a methodological foundation for the establishment of multimedia content with gamified elements. This phase was designed to test not only the stages involved in creating excellent multimedia content, but also the application's gamification effect. Quantitative data was gathered regarding respondents' behaviour and attitude when interacting with gamified features.

Some intriguing findings emerged because of this quantitative evaluation process. The findings of this study demonstrate that CSR is a concept that users understand, and that the prospect of an application that could increase employees' awareness of CSR in a small business would have
been lauded and implemented. The rapid growth of mobile devices enables users to access applications that aid in cognitive enhancement. Additionally, respondents may use an application on the job. The preceding status is critical and extremely beneficial during the development phase of the application. Gamification has garnered considerable attention in recent years. Businesses have recognized that by gamifying specific procedures, they can increase the enjoyment and interaction of operations. As a result, an increasing number of businesses are experimenting with gamification to motivate customers and employees while also improving the user experience. While the term gamification is new, as evidenced by the aforementioned research, the concept has been around for years. This method is applicable to a wide variety of industries, but it is critical to establish a set of processes when customizing a system to each industry's unique characteristics. This study confirmed initial expectations and indicated that gamification elements are critical for employee motivation, based on the reviewed literature.

Additionally, the results of the analysis, in conjunction with the multi-level analysis conducted via questionnaires and interviews, as well as the summative and formative evaluation processes conducted on the outcomes, can be used to address the research questions posed in Chapter two. According to the former, the overwhelming amount (90%) of the audience is interested in the presence of an application provided by their employer that seeks to improve their level of Corporate Social Responsibility. When questioned about the impact of a SME's general implementation of a CSR agenda on the workplace environment, more than half (64.4%) of participants were favourable, with 30% selecting "extremely possible" for the beneficial impact on the overall workplace. Simultaneously, the occurrence of an application aimed at enhancing employees' cognitive abilities and encouraging them to become more involved in CSR initiatives is praised for its potential to improve the working environment in a business, with 34.2% of respondents believing it is possible to improve the work atmosphere and 18.5% believing it is extremely possible. The aforementioned data, when integrated, fully address the first research question (RQ1), which concerns the use and enforceability of a gamified application by employees in a SME. Concerning the implementation and significance of such an application for internal integration in a SME, the overwhelming majority of respondents (36%) and usefulness of such an application (52%). Simultaneously, it was extremely simple (36%) and straightforward (52%) to utilize such an application, and 64% of them are pleased with it. This positive result relates to the second research question (RQ2) – the feasibility of implementing a gamified application and its impact on a SME's overall CSR level – and based
on the data, it is accurate to state that the research question's purpose was also successfully achieved.

Due to the numerous functionalities included, the creation of this project proved to be quite complex. As a result, it was critical to establish a team of "Experts" who conducted practical testing of the application at various stages to pinpoint inaccuracies and to come up with ideas to create a consistent navigation. This section of the evaluation was extremely beneficial to the research as a whole and inserted extra value to all significant choices taken. To achieve the research, aim for this project, a summative evaluation was conducted after the application was finalized to ascertain the users' perspectives on the subject. The summative evaluation was designed to elicit positive insights about the completed project and its utility. The methodologies and various types of research discussed previously will be used to address the research questions presented at the start of this project.

The methodologies and various types of research reported earlier should be used to address the research questions presented at the start of this project. The research questions were directly resolved relying on the combined results of the analysis and summative evaluation, and the project was completed without foreknowledge of any specialized software or design experience.

7.2. Contribution and novelty

As previously stated, numerous applications incorporate gamified elements into the process of increasing an employee's sustainability and CSR level. Several of them are regarded as innovative and successful in terms of impact and inspiration through various business sectors and novelty. CSR Academy, on the other hand, was created by gathering the major benefits portrayed by these components and outlining the negative traits to avoid them. The main drawback of all applications is that they do not incorporate different elements which might positively impact a company's CSR procedure. They rely on a particular sector and facet of the overall sustainability procedure. Besides that, they are all specifically oriented toward major businesses and global enterprises. Because of the significance of SMEs in the national and international economic systems, the presence of an application designed for them would be fundamental. CSR academy should have a distinct identity based on a comprehensive investigation and evaluation of relevant terms, patterns, and theoretical background. Accurately, the application presents a vibrant community environment by empowering
participants to engage, develop skills, skill up, and do good while playing. The feeling of working as a team associated with quizzes containing detailed terminology and theory is also an illustration of how gamification can enhance interaction while also optimizing the user's cognitive level with easy steps and a thriving ranking system influenced by the military. The various aspects and characteristics of this application, as well as the terms, used such as "Social Rockets," "CSR Bootcamp," and the incentives of "Post a Photo," "Organize an Action," establish a pleasant and stimulating environment for the user to continuously engage, feel like a member of a bigger team, and have the desire to be sustainable for a worthwhile purpose. Furthermore, the project encourages people to collaborate, have fun while learning, and feel like they are a part of the entire process by providing rewards.

7.3. Conclusions and future directions

During the development of CSR Academy, all the necessary steps for the creation of multimedia content were examined. The core idea evolved into the final project piece by piece, beginning with inspiring processes such as navigating online browsing for successful works or investigating and researching insightful publications. The foundation for the steps to be taken was laid by conducting methodology research. This was essential to tailor the procedures to the special requirements of the preferred result. The emphasis was on developing an application with a distinct identity to distinguish it from similar applications and concepts and stand out. It is safe to say that CSR and sustainable development are megatrends that will arise significantly in the coming years, and CSR Academy could be used to hasten the process while also encouraging users to be smarter and more trained.

In the long term, that would be very intriguing to move forward with the development of this application with the guidance of a coding firm or organization. This application will be remarkably useful to a wide range of SMEs. This will also occur through quizzes getting modified and more quizzes and instructional stages being provided. As previously discussed, Gamification components could be used in a wide range of industries, and therefore, this engaging content created can be developed to integrate into the strategic plan of various brands, progressively but effectively boosting their level of engagement, the implementation level of CSR agendas, by doing good while playing, which is the major motto of this project. To summarize, it would be important to witness the impact of this application in larger firms.
REFERENCES


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Zicherman, G. Cash is for SAPS. Gamification Co. (October 18, 2010), [http://www.gamification.co/2010/10/18/cash-is-for-saps/](http://www.gamification.co/2010/10/18/cash-is-for-saps/)
APPENDIX

Google Forms Questionnaire about Corporate Social Responsibility SMEs and Gamification

Corporate Social Responsibility (CSR) and Gambling in Small and Medium Enterprises

Welcome to the questionnaire on Corporate Social Responsibility (CSR) and Gamification in Small and Medium Enterprises. This research is carried out in the context of the dissertation entitled ‘Corporate Social Responsibility and Gambling in Small and Medium Enterprises’ and tries to define the familiarity and relationship of the public with the above terms. The survey is anonymous and will take about 5 minutes to complete. Thank you for your time!

* Required

Gender *

- Man
- Woman
- Other.

Age *

- 18-24
- 25-36
- 37-45
- 46+

Education *

- High School
- Undergraduate
- Postgraduate
- Doctorate
Corporate Social Responsibility (CSR) and Gambling in Small and Medium Enterprises

How well do you think you know the term Corporate Social Responsibility? *

1 2 3 4 5
Not at all  ○  ○  ○  ○  ○ Excellent

How likely would you be to choose a company that runs a Corporate Social Responsibility program? *

1 2 3 4 5
Not at all possible  ○  ○  ○  ○  ○ Very likely

Do you think that SMEs can implement an organized Corporate Social Responsibility program? *

○ Yes
○ No

If you selected ‘NO’ select the reasons that make the above difficult:

☐ Lack of motivation
☐ Lack of funding
☐ Small number of employees
☐ Lack of corporate conscience
☐ Other: _____________________________

Do you think that if a Small and Medium Enterprise implemented a Corporate Social Responsibility program it would improve the relations between the employees? *

1 2 3 4 5
Not at all  ○  ○  ○  ○  ○ Very much
Corporate Social Responsibility (CSR) and Gambling in Small and Medium Enterprises

Do you play games on your mobile? *

- Yes
- No

How often do you play games on your mobile - tablet? *

- Daily
- 2-3 times a week
- 4-7 times a month
- Never

Do you play games that improve your cognitive level? *

- Yes
- No

Do you think that you would use a mobile application that through short games and quiz would improve the user’s level of knowledge regarding Corporate Social Responsibility? *

- Yes
- No
What characteristics would you like a game related to Corporate Social Responsibility to have?

- Good Graphics
- Rich Audiovisual Content
- Intense Elements of Gambling
- Other: __________

Would you like your employer to provide you with an application that aims to improve your level of Corporate Social Responsibility? *

- Yes
- No

How do you think such an application would improve the climate among the employees of a company? *

1 2 3 4 5

Not at all  0  0  0  0  0  Very much

How likely is it for you a Small and Medium Enterprise in Greece to make use of such an application? *

1 2 3 4 5

Not at all possible  0  0  0  0  0  Very likely
Google Forms Questionnaire about the application CSR Academy

**CSR ACADEMY Evaluation**

Please before responding to the questionnaire visit the following link to navigate through the application:

https://www.fqmsa.proto/5WbQ0Q6L3i4xIWEF13EU5ns/CSR-ACADEMY?node-id=1%3A2&scaling=scale-down&page-id=0%3A1

General Information:

Welcome to the questionnaire for the evaluation process of "CSR Academy" a gamified application developed to improve the level of CSR implementation in Greek Small and Medium Enterprises (SMEs). This questionnaire is totally anonymous and it will take no more than 3 minutes to complete.

Thank you for taking the time to review this and for your cooperation.

Disclaimer:

"The responder is able to leave the research at any time, and your data would not be saved. The information gathered will be completely anonymous, it will be used expressly for the purpose of the aforementioned examination. It will never be forwarded to third parties.

All personal data processing is carried out in accordance with the General Data Protection Regulation by implementing the necessary organizational and technical security measures. Whenever the legitimately specified period has passed or the objective of their processing recedes to exist and that there is no legal obligation, legitimate interest, or right to proceed with their preservation, your personal data is maintained only for the period required for the legal purposes for that they were gathered, guaranteeing their safe demise."

*Απαιτείται*
How well do you understand the general idea behind the application from the initial pages? *

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<th>3</th>
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<th>5</th>
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<tr>
<td>Not at all</td>
<td></td>
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<td></td>
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<td></td>
<td>Very well</td>
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The application is useful. *

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<tr>
<td>Not at all</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Very much</td>
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Are there any symbols or icons that you are not familiar with? *

- Yes
- No
- *If Yes:*
  - *What symbols/icons are you not familiar with?*

Have you faced any functional issues while navigating? *

- Yes
- No
- *If Yes:*
  - *What issues did you face?*

The application uses clear language. *

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<tr>
<td>Not really</td>
<td></td>
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<td></td>
<td>Absolutely</td>
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</table>
The icons (illustrations and vectors) are explanatory.

- Not really
- Yes

How easy was it for you to learn how to use the application?

1 2 3 4 5
Very Difficult 0 0 0 0 0 Very Easy

How often would you use this application?

- Once or twice per day
- 2-3 times per week
- 2-3 times per month

How attractive do you think the design of the application is?

1 2 3 4 5
Very unattractive 0 0 0 0 0 Very attractive

How satisfied are you with the application's general use?

1 2 3 4 5
Very unsatisfied 0 0 0 0 0 Very satisfied

Please provide any comments regarding the application.

Your answer

Submission