



International Journal of
Marketing, Innovation
and Strategy

■ ■ ■ **Regular Issue**

60 Editorial

104 Digital marketing and sustainable tourism: A resiliency proposal

62 Business Model Innovation in SMEs: A Systematic Literature Review

113 LGBT Tourism: Hotel Industry and Local Community Perceptions and Attitude

74 Design Thinking and Innovation Strategy: A Review of Requirements, Success Factors and Barriers in SMEs

122 Package Label Redesign: Spices Case-Study

87 Antecedents and consequences of Apple brand love

131 Innovative Approaches to Teaching and Learning Project Based Learning (PBL) Practices for Good

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International Journal of Marketing, Innovation and Strategy (IJMIS) is an open access double-blind peer-reviewed scientific journal which publishes original, high-quality theoretical and empirical research focusing on the fields of marketing, innovation and strategy. All articles published in IJMIS must provide a significant contribution to these fields and focus on topics that are new and advance the current state of scientific knowledge in marketing, innovation and strategy.

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- consumer behaviour & market research;
- data science, artificial intelligence, machine learning, social media strategy, marketing and business intelligence;
- destination marketing and niche tourism;
- digital / integrated communication, advertising and promotion;
- entrepreneurship, competitiveness and innovation in small and medium-sized companies;
- innovative approaches to teaching & learning in marketing, innovation and strategy;
- open innovation, business models and business model innovation;
- social marketing, corporate social responsibility and circular economy;
- other topics in marketing, innovation and strategy.

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Editorial

Volume 1, Issue 2

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Editorial

In the second edition of our journal, we start with a selection of scholarly works encompassing five traditional papers: two systematic literature reviews related to innovation in business models and design thinking, and three empirical papers focused on marketing and tourism. Notably, this edition marks the inauguration of a new section titled "Innovation in Teaching & Learning," dedicated to showcasing papers related to innovative teaching methodologies and projects implemented in higher education, aligning with the focal areas of our journal. Two additional papers bring into spotlight distinctive teaching and learning initiatives undertaken in two higher education institutions.

Kicking off the edition is Lucio Marques Peçanha's comprehensive systematic literature review, centering on business model innovation in small and medium-sized enterprises (SMEs). Employing a final sample of 122 records from Web of Science, the author utilized R software and VOS Viewer for bibliometric analysis, identifying five clusters. Through content analysis, these clusters were characterized, culminating in the development of a theoretical framework for SMEs' business model innovation.

The second paper belongs to Fatma Demir and colleagues. The authors focused on SMEs and developed a systematic literature review on design thinking and innovation strategy, presenting a systematic literature review on design thinking and innovation strategy. Drawing from a final sample of 70 papers sourced from Web of Science – Current Contents, the authors leveraged Endnote for descriptive statistics and NVivo for content analysis. The paper identifies prerequisites for implementing design thinking in SMEs, shedding light on success and failure factors.

The third contribution, authored by Anabela Marcos and Ana Rita Silva, explores the antecedents and consequences of Apple brand love. Based on a questionnaire-based survey with 215 respondents, the authors applied structural equation modeling. Their findings underscore the pivotal role played by the hedonic attribute of the product, brand experience, and brand satisfaction in fostering Apple brand love, which, in turn, contributes to loyalty and positive word-of-mouth.

The fourth paper belongs to Luzia Arantes, who focuses on digital marketing and sustainable tourism. Using structural equation modelling, she analyzes data collected through a questionnaire-based survey involving 422 respondents. The results reveal the role of sustainable measures in influencing tourists' adoption of sustainable behaviors. The ensuing model delineates the advantages of digital marketing and social networks in fostering a resilient environment for the tourist market in Portugal.

The fifth and final traditional paper, co-authored by Sónia Sousa-Silva and Laurentina Vareiro, investigates the perceptions of hospitality professionals and local communities regarding LGBT tourism. Combining data from 143 accommodation units in northern Portugal and an online questionnaire survey with 240 respondents, the study identifies discriminatory behaviors towards LGBT tourists that warrant correction. While the local community displays overall hospitality towards LGBT tourism, instances of reluctance and discrimination, particularly among males with lower education levels, were identified.

In the newly introduced "Innovation in Teaching & Learning" category, Liliana Vitorino and colleagues share their experiences with the Case-Based Learning (CBL) method. Implemented in a Design and Marketing of New Products class at Leiria Polytechnic Institute, undergraduate students collaborated on developing sustainable packaging to address a company challenge over a two-month period. Both the company and the students indicated they were satisfied with the results.

Concluding this edition is a paper by Sandra Filipe and colleagues, detailing an innovative project undertaken at Universidade de Aveiro. Involving three teachers and 300 students from the bachelor's in marketing (second and third year) and master's in competitiveness and business development (first year), the project focused on sustainability concepts and sustainable development goals. Incorporating diverse teaching and learning methods, interactive technologies (Kahoot! and Padlet), and real-world applications, the results were positively assessed by both students and teachers.

We extend our gratitude to all contributing authors, the editorial team, reviewers, and our community for their invaluable support in shaping this second edition. We trust that these seven papers will serve as a valuable resource for scholars interested in the realms of marketing, innovation, and forward-looking pedagogy.

Happy readings!

Business Model Innovation in SMEs A Systematic Literature Review

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Abstract

To innovate in their business model, small and medium-sized enterprises (SMEs) have to be open to innovation, i.e., open to new technologies and sustainable practices among other possible strategies. The sustainability is crucial in this as the circular economy is growing as a new paradigm and the digital transformation and industry 4.0 are building knowledge around it. The organizations must, therefore, be aware of these contemporary practices and try to include the sustainable perspective into their business models. Many scholars produced knowledge related to business model and innovation, yet no systematic literature review (SLR) relating business model innovation to SMEs was found. Therefore, this SLR explains that phenomenon by answering to three research questions: (1) How the studies of business model innovation have evolved? (2) What are the challenges that SMEs have to struggle to innovate their business model? and (3) What are the trends in the study of business model innovation? A total of 247 documents retrieved from the Web of Science database were submitted to the analysis protocol. The final sample of 122 records was submitted to bibliometric analysis using the R software and VOSviewer software. Additionally, there was a content analysis of the articles to find trends, identifying clusters and presenting the results of condensed information in the form of tables and figures. Those results allowed the proposal of a framework for business model innovation in SME. At last, the conclusions and future studies agenda are presented to support new studies.

Keywords: Business Model Innovation, Small and medium-sized enterprises, Sustainability, Digital transformation, systematic literature review.

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1. Introduction

Business model innovation (BMI) is gaining the spot as a hot topic in management research. The huge momentum it has gotten in recent years is the reflection of about 20 year's continuous development. The importance of business models for the sustainability and competitiveness of small and medium-sized enterprises (SMEs) is certainly flourishing. Upon the emergence of the COVID-19 crisis, the SMEs have found in the digitalization a path to innovate in the way they do business. (Filser et al., 2021; Strakova et al., 2022; Giotopoulos et al., 2022). The crisis also created significant challenges to industries due to changes in consumption patterns and government measures (Singh et al., 2022).

Latifi and colleagues (2021) point out that BMI promotes enormous and irreversible alterations in key components of a company's business model, i.e., modification in the core of the business and brings along elevated risk, ambiguity and uncertainty. Many organizations fail to obtain the results they expect when implementing the designed innovations in their business models. Chen and colleagues (2021) say that SMEs face more challenges than big companies when trying to renew their business operations. They act, in most cases, reacting to the need imposed by the market, while bigger organizations have more conditions to plan the modifications and test it in different settings to find the best alternative. Business model experimentation is highly important for the development of a new business model (Molina-Castillo et al., 2022).

The digital era leads the way for significant changes in society and have been modifying the way firms do business. Internalization, digitalization and sustainability are growing paths for firms nowadays, with the digital transformation being a relevant aspect for innovation and business renewal (Garzella et al., 2021; Denicolai et al., 2021). BMI can positively contribute for the performance of SME and generate competitive advantage (Anwar, 2018). A study conducted by Asemokha and colleagues (2019) shows that BMI and entrepreneurial orientation (EO) are important drivers for the performance of internationalizing SMEs.

The sustainability arises as a factor of influencing change in organizational business model as the transition to a circular economy has been in the center of discussions among governments, industries and the civil society (Bashir et al., 2022; Uvarova et al., 2021). Marucci and colleagues (2022) say that the circular economy replacing the linear paradigm is a key point that SMEs have struggled to incorporate in their business models. Therefore, the study of the incorporation of the sustainable principles into the core of business model focusing on the SMEs is high relevant.

Small and medium-sized enterprises, in order to achieve digital development, need to conduct investments in information and communication technology (ICT) infrastructure, according to Giotopoulos and colleagues (2022). Strakova and colleagues (2022) states that the stability and development limitation of SMEs relates to the degree of digitalization of corporate processes. The capacity to innovate the business model became a high factor to survive competition especially for SMEs facing the need to keep up with international competition in a globalized world. (Garzella et al., 2021; Von Joerg & Carlos, 2022).

The BMI is capable of create a firm's advantage and improve SMEs performance (Latifi et al., 2021). Many studies have been conducted to identify important aspects of Business Model Innovation (Guimaraes et al., 2021; Magni et al., 2022; Herrero-Luna et al., 2022; Suchek et al., 2022). Although there is a relevant increase in studies related to business models and innovation combined, there is a lack of studies relating it to the context of SMEs. Filser and colleagues (2021) present a bibliometric analysis related to business model innovation and pointed out the study of the SMEs context as a trend.

The unique contribution of this paper is to synthesize the studies related to business model innovation and small and medium-sized enterprises to generate the first systematic literature review (SLR) of business model innovation in SME. In the end, this study aims to be able to answer to three research questions:

- How have evolved the studies of business model innovation?
- What are the challenges that SMEs have to struggle to innovate their business model?
- What are the trends in the study of business model innovation?

The first question shall be answered by performing a bibliometric analysis that demonstrates the evolution of the studies concerning this field. To answer the second question, it is necessary to perform the content analysis of the records in order to find what has been identified so far about the challenges to innovate in SMEs business models. To answer the third question, it is mandatory to identify the clusters within the sample. After that, the trends shall be identified and organized in a table of proposed future studies.

The reading of the articles allowed the identification of five thematic groups: innovation business model, SME business models, sustainability, digital transformation and industrial innovation. Among the results, the review found that small and medium sized enterprises could engage in business model development by getting involved in a regional innovation ecosystem as BMI demonstrate to be a crucial element to explain the firm's performance.

In the next sections of this paper, we show the methods adopted in the research, the systematic literature review itself, as well as the identified clusters and present a framework for the business model innovation in SMEs. At last, we present the final considerations and references used.

2. Methods

To bring forth a broad understanding of the most recent findings related to the business model and innovation in SMEs, this article carried out a critical and systematic literature review. The research protocol was conceived following the study of Agrawal and colleagues (2022) that conducted a reliable and replicable systematic literature review.

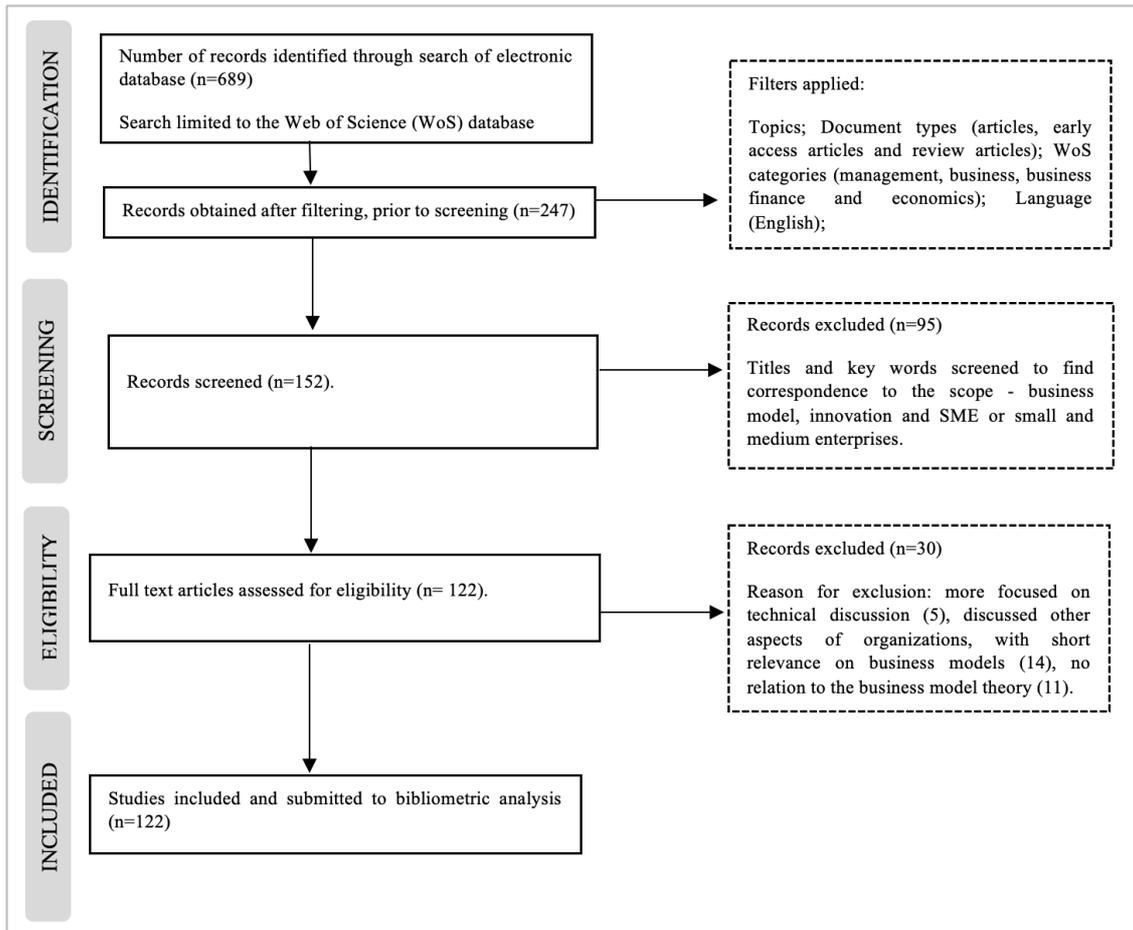


Figure 1 – Representation of the methodological approach

Source: Adapted from Haddaway and colleagues (2022)

The articles incorporated in this SLR derived from the Web of Science (WoS) database. A search by topics for articles was conducted based on the criteria established using the query “(("Business Model*") AND ("Innovat*")) AND (("SME*") OR ("Small and medium ent*"))”. The aim was to identify investigations surrounding the fields of business models and innovation related to small and medium enterprises considering the categories “Management, Business, Economics and Business Finance”. Articles (including early access) and review articles in the English language with no time restriction were additional filters adopted in the search.

The outcome generated a total of 247 articles that were submitted to the protocol, based on the study of Haddaway and colleagues (2022), as described in Figure 1, to be properly analyzed in this study.

This research used the VOSviewer and R Studio software to conduct a bibliometric analysis of the final 122 records obtained. Then, the procedure combined the bibliometric to a content analysis of the articles to find trends, identifying clusters and presenting the results of condensed information in the form of tables and figures. Those results were the base to the proposal of a framework and to foster the conclusions and future studies agenda.

3. Results and discussion

3.1. Research profile

The business model and innovation have been object of study combined since 2003. The search developed in this study could only find articles written between 2003 and 2022, as seen on table 2. The 122 articles were published in 71 different sources with an annual growth rate of 18,46%. The collaboration is a factor identified as only 10 documents are single authored and the remaining 112 present a mean of 3,2 authors per document.

Table 1 – Main information about data

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	2003 - 2022
Sources (Journals, Books, etc.)	71,00
Documents	122,00
Annual Growth Rate %	18,46
Document Average Age	2,60
Average citations per doc	24,30
References	7.573,00
DOCUMENT CONTENTS	
Keywords Plus (ID)	359,00
Author's Keywords (DE)	421,00
AUTHORS	
Authors	354,00
Authors of single-authored docs	10,00
AUTHORS COLLABORATION	
Single-authored docs	10,00
Co-Authors per Doc	3,20
International co-authorships %	34,43

Source: Own elaboration

Among the 78 sources identified, Table 2 shows the 10 most prolific publishers. Combined, the first four sources represent 21,3% of the total amount of publications identified. The data retrieved from the Web of Science and analyzed using the R studio software demonstrated the most relevant authors, i.e., the authors that published more articles related to the focus of this study.

Table 2 – Most relevant sources

Sources	Articles
Journal of Business Research	10
International Journal of Innovation Management	6
R & D Management	5
Technology Analysis & Strategic Management	5
Business Strategy and The Environment	4
Journal Of the Knowledge Economy	4
Journal Of Manufacturing Technology Management	3
Journal Of Small Business and Enterprise Development	3
Technological Forecasting and Social Change	3
Technology Innovation Management Review	3

Source: Own elaboration

Table 3 illustrates that Anwar, Bouwman, Kraus, Torkkeli, with four articles each, and Clauss, Cucculelli and Mueller, with three articles each, are the authors that produced more for this field in collaboration with other authors.

Table 3 – Most relevant authors

Authors	Articles
Anwar M	4
Bouwman H	4
Kraus S	4
Torkkeli L	4
Clauss T	3
Cucculelli M	3
Mueller J	3
Bettinelli C	2
Breier M	2
Buliga O	2

Source: Own elaboration

3.2. Keyword and citation analysis

According to Agrawal and colleagues (2022), the keyword statistic is used to analyse the frequency of relevant keywords of the articles in the title and keyword sections. Different keywords are frequently used since the authors have different perspectives in the development of their research. In the fields of business models and innovation related to SMEs it is also observed and the keywords analysis is so important because of that. Using the R software, a word cloud was created to demonstrate the most frequent keywords used by the authors, as seen in Figure 2.



Figure 2 – Word Cloud based on the article keywords

Source: Own elaboration

The 20 most frequently used keywords used are shown in Table 4. These are the most used keywords from a total of 790 keywords. Business model, business model innovation and SMEs appear as the most common words used. The plural and singular variations of these words are seen too. The sustainability, circular economy, entrepreneurship, internalization and open innovation are other terms that caught the attention based on this analysis.

Table 4 – Most frequently used keywords

Words	Occurrences	Words	Occurrences
business model	43	open innovation	6
business model innovation	38	digital transformation	4
SMEs	33	digitalization	4
SME	18	enterprises	4
innovation	16	absorptive capacity	3
business models	11	ambidexterity	3
sustainability	10	business	3
circular economy	9	collaboration	3
entrepreneurship	9	competitive advantage	3
internationalization	8	covid-19	3

Source: Own elaboration

In order to highlight the most cited documents among the collected sample, Figure 3 presents a citation analysis, based on the documents obtained, using the Vos Viewer software. It reveals that Mueller (2018) and Coreynen (2017) are the most cited articles with 385 and 262 citations respectively, followed by Jenkins (2009) and Mangematin (2003), the only articles published in their respective year and mentioned as responsible for the high average for the total citations observed.

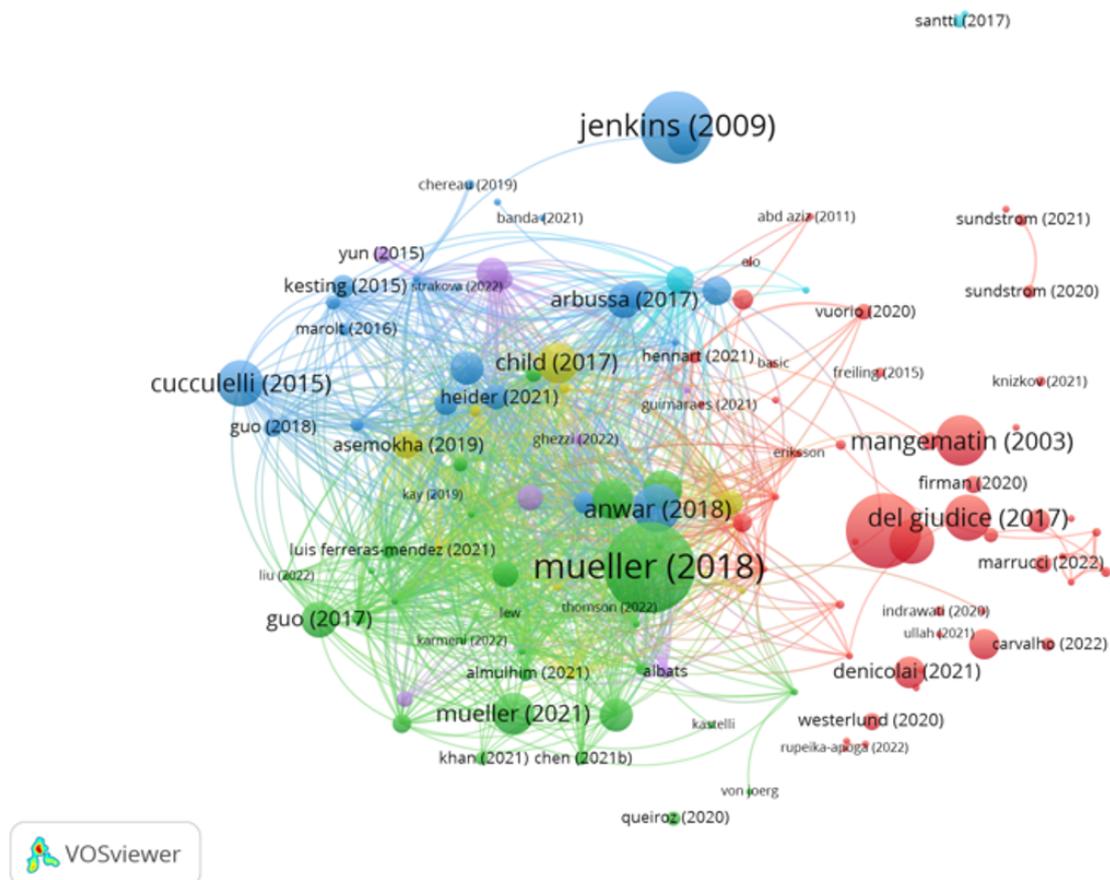


Figure 3 – Citation analysis based on the documents

Source: Own elaboration, using VOSviewer

3.3. Identified clusters

The documents from the Web of Science database were analysed using the VOSviewer software to identify the relation among the keywords for clustering the articles. Figure 4 represents the result of the analysis. Five clusters were identified and, after that, the articles were grouped and submitted to content analysis.

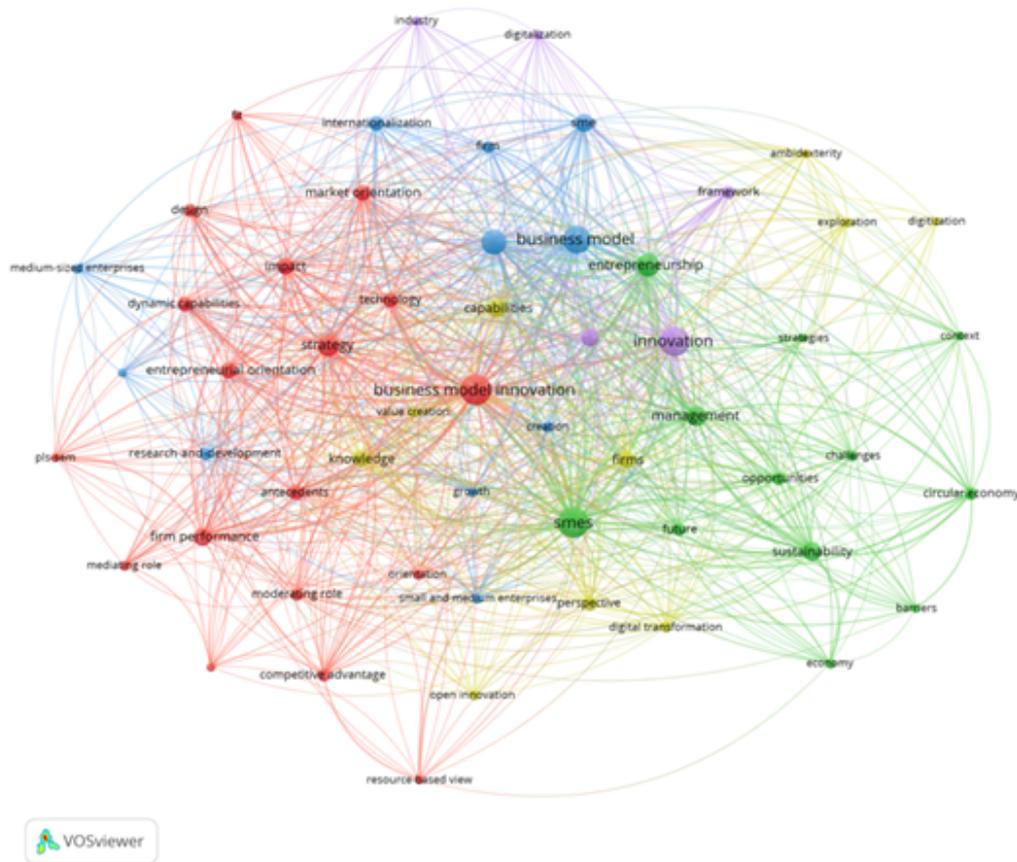


Figure 4 – Keyword analysis

Source: Own elaboration, using VOSviewer

The Innovation and Business Model cluster was divided in three subgroups – innovation, dynamic capabilities and firm performance. The SME Business Models was divided in two subgroups – SME business model and business models. The third cluster is Industrial Innovation. The fourth cluster identified is Digital Transformation and it was divided in two subgroups – digital transformation and open innovation. The fifth and last group is sustainability. The key findings related to these clusters are shown in Figure 5. After that are presented relevant aspects of each of these clusters.

3.3.1. Innovation business model

The fast-changing business environment made the Business Model Innovation (BMI) study increasingly important (Marolt et al., 2016). Firms should set BMI among the most important strategic decisions to take considering that it represents a relevant signal of an open business model and may contribute to the financial and nonfinancial performance of the enterprise (Guo et al., 2018; Ghezzi et al., 2022; Al-Nimer et al., 2021). The continuous development of new technology that brings changes to business environment, make a push on the patterns and systems used by the organisations, what breaks the old guarantee that the business would last forever as it was conceived. According to Ammar & Chereau (2018), this innovation in business model can take a large range of differentiations, from the firm's entrepreneurial choices to administrative or engineering choices.

Changes in the BM bring a positive effect in the ability of an organisation to improve its performance. The smart technologies are helpful for the firm performance as they connect the firms with the digital transformation. The BMI involves the search to create and capture value in different ways, by the acquisition of external resources and its integration and adaptation to internal capabilities (Cucculelli & Bettinelli, 2015; AlMulhim et al., 2021; Denicolai et al., 2014).

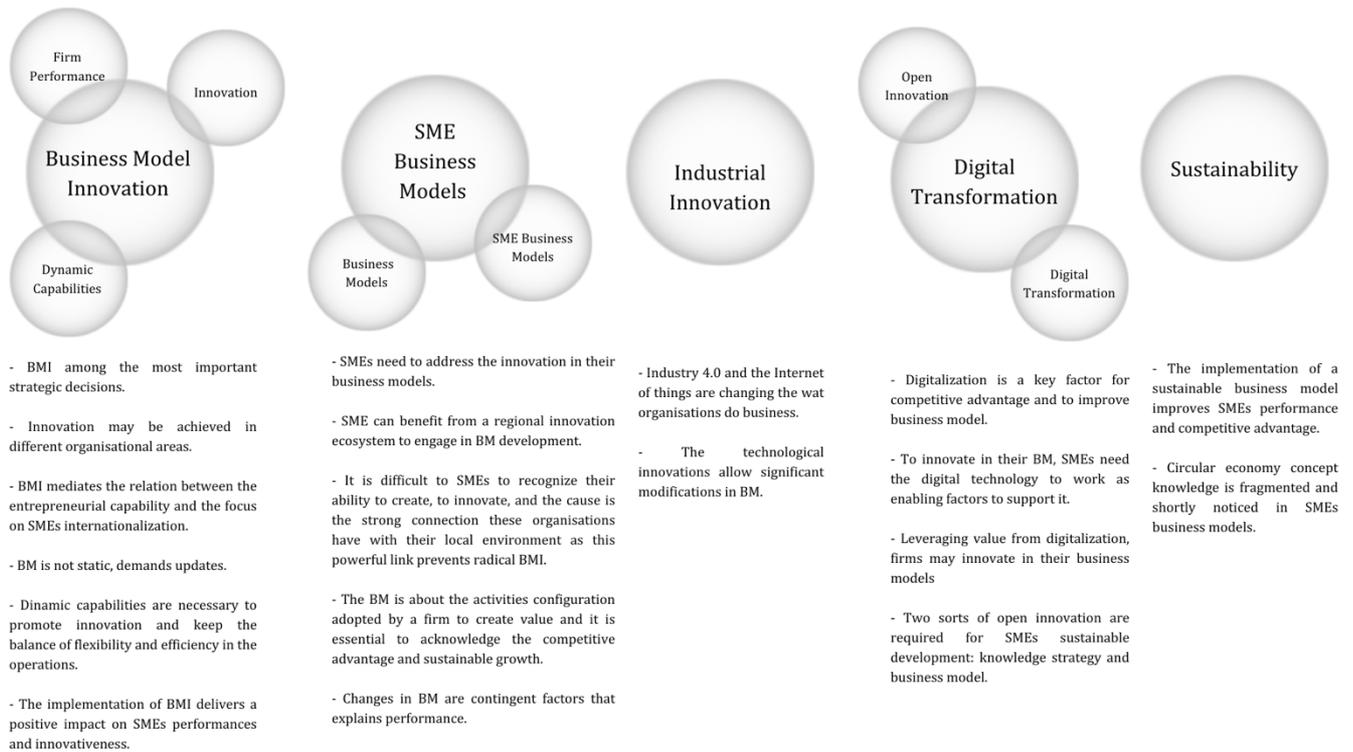


Figure 5 – Identified clusters related to the study of business model innovation for SMEs

Source: Own elaboration

3.3.2. SME business model

To be able to compete and survive in the contemporary global market the SMEs need to address the innovation in their business models. The markets change in a fast pace and the small and medium sized businesses have to find ways to meet their clients' expectations in order to remain relevant to them. The Industry 4.0 can assist the SMEs in speeding up their growth targets and turn into more innovative companies as innovation helps to trail a path to sustainable competitiveness and smart growth. (Von Joerg & Carlos, 2022; Cosenz & Bivona, 2021; Gerlitz, 2016). Heikkila and colleagues (2018) imply that the SMEs may take different innovation paths in terms of business model depending on their strategic goals.

3.3.3. Industrial innovation

The innovation is unstoppable, people have to accept change and so the organisations. The industry 4.0 is changing the way organisations do business. Technologies such as the Internet of Things (IoT) allow companies to manage their business around the world and improve the products and services in a faster way. (Ekiksson et al., 2022; Paiola et al., 2022).

These technological innovations may be considered the usher for firms, even those established, to promote significant modifications in the BM. The BMI process is incremental based on experimentation and learning. It intermediates the relation between information technology capabilities and organisational performance and between this last one and the entrepreneurial orientation. (Mueller et al., 2021; Paiola et al., 2022; Ullah et al., 2022).

3.3.4. Digital transformation

Digitalization is a pivotal element for organisations seeking competitive advantage and improve their business model. (Andersen et al., 2022) The crisis developed by the arise of Covid-19 created the need for a significant change in BM for SMEs worldwide as open innovation more and more became an issue to be addressed and finally became the lifeline for many firms. Industry 4.0, Web 2.0, servitization and social media networks assist SMEs as valid networking and information content opportunities to address and retain customers, creating value and improving revenue (Muller, 2019; Jabeen et al., 2022; Gutierrez-Leefmans & Holland, 2019). Industrial, commercial and value servitization can be enabled for companies using digitalization (Coreynen et al., 2017).

3.3.5. Sustainability

The sustainability is a hot topic for practitioners and academia research related to BMI and it promote a wider spectrum for the SMEs performance and competitive advantage by the implementation of a sustainable business model (SBM). First globalization and recently the COVID-19 crisis pushed small and medium enterprises in the innovation way, to find innovative capabilities to compete local and internationally (Bashir et al., 2022; Clauss et al., 2022; Lee et al., 2012). SBM requires that the organisation advance on sustainability practice along its entire supply chain in order to achieve success in the implementation (Machion et al., 2022).

SMEs find in B Corp certification a remarkable alternative to engage in sustainable practices as it certifies social and environmental performance and requires the organisation to promote changes in mission, practices and capacities (Carvalho et al., 2022). In order to engage in these sustainable practices and innovative performance, SMEs need financial support locally or internationally and the government should be aware of that necessity since these companies can contribute to a nation economic growth (Ullah et al., 2021).

4. Framework

The clusters analysis demonstrates that there is an inter connection between the articles. In order to demonstrate that relation, Figure 6 presents a framework for business model innovation in SMEs.

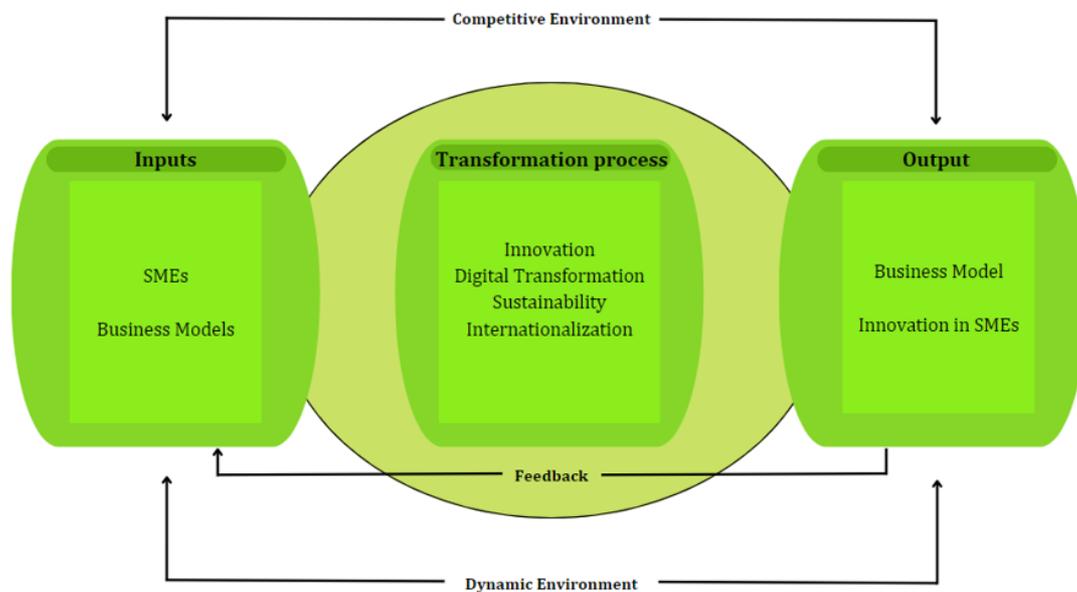


Figure 6 – Framework for business model innovation in SME

Source: Own elaboration

SMEs need to bring changes to their business models in order to be able to compete in today's market and create value. The transformation process requires the SMEs to innovate process in many ways, adapting the firm to absorb the digital technologies and take advantage from it. At the same time, the firm has to establish sustainable development policies that can be facilitated by the adoption of certifications such as B Corp, or by finding place in a regional ecosystem. That process of opening to innovation additionally brings internationalization perspective and, by that, wider market opportunities. That transformation process of an outperformed BM into an innovative one generates the business model innovation in SMEs as output. The whole process is conducted within a dynamic and competitive environment. Therefore, constant feedback during the process is necessary.

5. Conclusions, limitations and future studies

This study is a SLR addressing business model innovation in SMEs. A bibliometric analysis using VOSviewer and R software was made in combination with content analysis of the 122 articles sample retrieved from Web of Science. In the course of the research, the studies published so far related to business model innovation and small and medium-sized enterprises were integrated to generate the results and discussions of the previous section.

The first question answered in this paper was how the studies of business model innovation have evolved? This question was answered through the bibliometric analysis developed using the R software. The analysis showed the evolution of the studies about business model innovation. The second research question asked: what are the challenges that SMEs have to struggle to innovate their business model? The content analysis of the articles was mandatory to answer this question. Most SMEs find it difficult to identify the innovation they produce, since its day-by-day activities and seems common to them (Biloslavo et al., 2022). To innovate in their business models, SMEs have to be open to innovation. The sustainability is crucial in this as the circular economy is growing as a new paradigm and the digital transformation and industry 4.0 are building knowledge around it.

The ultimate research question was: what are the trends in the study of business model innovation? The SLR demonstrates that business model innovation is a trend itself. Most SMEs do not focus on innovating their business model and are not familiar with concepts such as circular economy, digital transformation and Internet of Things. Firms that are aware of these concepts tend to be more innovative, internationalized, focused on sustainable development and digital transformation.

Established SMEs need support to innovate in their business models. A future study should be undertaken to identify what kinds of assistance the governments and international agencies promote to incentive established organisations to be more innovative. Born sustainable companies and start-ups have the innovation in their core, but many manufacturers and other industries do not access it. Future studies should try to identify specific dynamic capabilities required for the implementation of BMIs. Additionally, SMEs encounter challenges when it comes to effectively managing knowledge, which hinders their ability to pursue innovation. Therefore, leaders within these organizations should address these limitations in order to foster a culture of innovation. Another future study proposition is about the sustainable business model. This hot topic is poorly explored in the literature and the SMEs are aside of it.

This SLR documents a large amount of information concerning the BMI in SMEs, yet it has limitations. The sample was retrieved from the Web of Science database and was limited to articles and review articles in spite the fact that there are other databases that might have a great amount of high-quality information that was not gathered.

Besides the limitations, this research has potential to affect academics, practitioners, policy makers and other people interested in the development of this field of study and there is a lot more to dig in the process to assimilate it.

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Design Thinking and Innovation strategy by SMEs for competitiveness: a review

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Abstract

Throughout the world, small and medium-sized enterprises (SMEs) are recognized as integral components of the economic landscape. Historically focused on domestic markets, since the late 1990s, SMEs have found themselves operating within a globalized marketplace characterized by increasingly discerning customers and intense competition. This newfound global exposure presents a considerable challenge for SMEs, given that many of them possess limited resources and capabilities, often lacking the capacity to establish and sustain a structured innovation management system. In light of this backdrop, this paper embarks on a systematic literature review aimed at exploring the nexus between Design Thinking, innovation, and competitiveness within the context of SMEs. The study involved the retrieval of 308 papers published between 1998 and 2021 from ISI Web of Science – Current Contents. These papers underwent comprehensive analysis with the help of Endnote 20 and NVivo 20, encompassing both bibliometric and content-based analysis. Subsequently, a refined sample of 70 papers, directly related to the research question, was isolated following the application of the exclusion criteria. The findings of this study underscore the need for the development of an innovation framework tailored specifically to SMEs, to seamlessly integrate Design Thinking processes while maintaining alignment with overarching corporate strategy. This holistic approach to innovation management is poised to play a pivotal role in enhancing the competitive standing of SMEs in today's complex and dynamic business landscape.

Keywords: Design Thinking, SME, Innovation, Systematic literature review, Innovation strategy

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1. Introduction

New technologies and evolving markets have been posing new challenges and opportunities for companies. The significance of corporate innovation management is on the rise, even for small and medium-sized enterprises (SMEs), which often struggle with resource constraints while playing a pivotal role in their respective nations' economic landscapes, a role expected to persist in the near future (van de Vrande, de Jong, Vanhaverbek, & de Rochemont, 2009).

This study addresses a relevant research gap marked by heightened interest but a scarcity of comprehensive overviews concerning the realm of Design Thinking within SMEs, including its implications for innovation capacity (van de Vrande, de Jong, Vanhaverbek, & de Rochemont, 2009).

This type of research inquiry is well-suited to literature reviews, which offer an orienting service, elucidate connections and disagreements in prior research, and establish a grasp of the theoretical concepts and terminology within the field (Williams, Clark, Clark, & Raffo, 2020). Notably, prior literature reviews fall short in filling this particular research gap, as indicated by the ensuing results from our systematic literature review, presented in the subsequent sections.

The decision to conduct a literature review is typically motivated by three primary factors: the nature of the research interest, the attributes and scope of preceding reviews, and the phenomenon of information proliferation (Williams, Clark, Clark, & Raffo, 2020). In today's information-rich environment, maintaining a comprehensive understanding within specialized domains is a daunting task due to the sheer volume of available data, often challenging to access.

The choice of a systematic review methodology, particularly in terms of its complexity, hinges on the primary research objective and the overarching constraints of the research context (Crossan & Apaydin, 2010). The most important considerations for the preparation of a systematic literature review chiefly revolve around formulating a clear, focused research question, as all subsequent processes hinge directly on its formulation.

For this study, a broad research question aligns with the overarching aim of comprehensively exploring the research field, particularly the developments within innovation strategy (Wardati & M., 2019). Given the comprehensive scope of this work and its specific focus on innovation strategy within the framework of Design Thinking, intentionally broad research questions have been posed:

- Which factors contribute to shaping a Design Thinking innovation strategy, and how can they be systematized?
- What obstacles and barriers are responsible for the failures encountered in implementing systematic innovation management systems within organizations?
- How has the scholarly output pertaining to the Design Thinking innovation strategy evolved concerning the specific case of SMEs?

To address these questions, this paper is organized as follows. First, it introduces the concept of design thinking within the context of SMEs. Subsequently, it outlines the methodology employed and presents the findings from the systematic literature review. Finally, it discusses the implications of the results and presents the conclusions.

2. Creative Development Approach Design Thinking in SMEs

In the realm of SMEs, the role of entrepreneurs is key for the implementation of Design Thinking. This has a bigger significance compared to large corporations since it can be reasonably assumed that within SMEs, the introduction of Design Thinking into a single department is unlikely to occur without the knowledge and endorsement of the entrepreneur. In SMEs, the entrepreneur bears the responsibility for the successful execution of innovation strategies, including Design Thinking (Mortati & Cruickshank, 2011).

The level of commitment from the entrepreneur is high. While in larger organizations, especially during the initial stages of a project, implementation can commence on a smaller scale, eventually garnering support from top management as initial project results materialize (Judy & Savatore, 2011), SMEs need the focus and direct involvement of the entrepreneur in operational aspects as a prerequisite for Design Thinking implementation (Geldermann, Lerche, & Sepulveda, 2018).

Furthermore, if, in addition to the routine business operations, there is limited time available for the creation and utilization of reflective Design Spaces (e.g., repositioning the design thinking space into a cloud-based virtual environment) (Lim, Kim, Kim, & Kim, 2019), it can be argued that the willingness to engage with an approach likely unfamiliar to the entrepreneur and misaligned with conventional business thinking will be limited (Moultrie, Clarkson, & Probert, 2006).

To ensure the successful implementation of Design Thinking within SMEs, specific success factors tailored to SMEs are required. Time resources and budgetary allocations are key for effective innovation implementation (Acklin, 2013). However, the prerequisites for SMEs in this regard diverge from those of larger enterprises. Large corporations often maintain dedicated research and development departments (inclusive of creative spaces), along with innovation managers or Design Thinking experts. Consequently, they possess the necessary infrastructure and personnel to evaluate new approaches like Design Thinking (Acklin, 2013).

Conversely, in SMEs, employees typically engage in such endeavors alongside their routine work responsibilities, and there are fewer specialized departments with designated experts. Additionally, SMEs typically exhibit caution when considering the implementation of innovative strategies such as Design Thinking, requiring a clear understanding of the anticipated benefits beforehand (Acklin, 2013). In contrast, large corporations are generally more inclined to allocate resources and space to pursue optimization and innovation.

3. Systematic Literature Review: Innovation Strategy Design Thinking in SMEs

3.1. Research Design

This study is underpinned by a systematic literature review, a methodology that differs from traditional reviews in its pursuit of synthesizing research through a methodical, transparent, and iterative process (Crossan & Apaydin, 2010). The fundamental principles of systematic reviews encompass transparency, focus, equity, accessibility, concreteness, homogeneity across research and practice communities, and the ultimate achievement of synthesis. In essence, systematic reviews offer a clear and organized approach to managing research knowledge, serving as a manifesto for both the scientific and practical domains (Crossan & Apaydin, 2010).

The primary objective of this systematic review is to structure the realm of research pertaining to Design Thinking and its application within the context of SMEs. This endeavor aims to identify the researched topics, enumerate the most notable research gaps, and, consequently, contribute to the development of theory in this domain.

A systematic review entails a dual-pronged approach encompassing quantitative, bibliographic analysis and more qualitative, thematic analysis (Saur-Amaral, Reis Soares, & Proenca, 2018). Although systematic reviews can encompass various types of publications, we have adhered to the precedent set by fellow researchers by focusing exclusively on peer-reviewed academic journal articles in the English language. This selective approach ensures the quality of the included studies while also maintaining a manageable sample size.

Regarding the temporal scope of our review, we contend that Design Thinking has garnered substantial attention and witnessed pronounced interest from practitioners and international researchers in the last two decades. Therefore, our review encompasses academic papers published from 1998 to 2021, encapsulating the substantial developments in this field during this period.

3.2. Data Collection

To pinpoint the pertinent literature on innovation related to Design Thinking within SMEs, a systematic literature review was carried out. The initial step involved delineating the search terms and keywords. We exclusively considered literature published in the English language to maintain consistency and ease of analysis. Moreover, to uphold the quality of the included literature, we exclusively focused on journals indexed in ISI/WoS.

On April 4, 2021, we conducted a comprehensive search of the extensive Web of Science database spanning the publication years from 1998 to 2021. Search queries within the Web of Science database were initially crafted, and subsequent hit lists were refined and extended as necessary (refer to Table 1).

Table 1 - Preliminary search terms for the systematic literature review

	Search term	Results	Purpose	Criticism
Surface search	“Innov*” (Current Contents Connect)	169,307	Edition of all works that contain a combination of words all about "innovation", "innovate", "innovative" etc. included	Too many hits, not very specific, usually wrong context
	“Innov*” AND “SME*” (Current Contents Connect)	2,804	Restriction of the works from the first query to those containing the term "SME*"	Too general, context continues to vary greatly
	“Design Thinking” (Current Contents Connect)	602	Overview of the hits on the topic Design thinking in general	Consolidation of the topic of Design Thinking without direct reference to the topic of innovation
Advanced search	“Design Thinking” AND “Innov*” (Current Contents Connect)	308	Specification of the previously made request. Limitations to works that are explicit engage in Design Thinking in the field of innovation management.	Strongly limited search space
	“Design Thinking” AND “Innov*” – related to specific research areas	70	Sample of selected articles to analyse and import to NVivo	Very Strongly limited search space, for importing it to NVivo

Source: Own elaboration

This preliminary step aimed to provide an initial assessment of the volume of available literature. Central works within the designated subject area and specific journals, equipped with comprehensive table of contents and bibliographic information, were employed as reference points. As a result, the effectiveness of the search terms was evaluated following a cursory examination of the results. Subsequent refinement of the search queries was undertaken to further narrow down the scope of results, as the initial outcome remained excessively broad. Ultimately, the investigation was restricted to the results derived from the combination of the terms "Design Thinking" and "Innov*" and 308 distinct articles remained. The final search query incorporated the exact word sequences "Design Thinking" AND "Innov*" in Title (see Table 1).

Table 2 - Exact search term for the systematic literature review

Database	Exact search term	Number of articles
Web of Science – Current Contents Connect	"Design Thinking" AND "Innov*" in Topic	308

Source: Own elaboration

To manage this body of literature, all 308 entries were exported to Endnote and a list of abstracts was created. Each paper underwent a scrutiny of its title and abstract for content relevance specifically related to Design Thinking and innovation. The following exclusion criteria were applied:

- Contributions that primarily considered Design as human-centered problem-solving.
- Those that predominantly focused on the specific design of objects, methods, or products.
- Works predominantly situated within Design Science, encompassing the advancement of specific methods or exploring the mindset of designers, without direct application to Design Methods for innovation.
- Entries that broadly and indiscriminately employed the term "Design Thinking," especially in the context of SMEs.
- Entries that did not align with these criteria were systematically excluded.

This rigorous screening process yielded a final sample of 70 literature entries, which were included in the subsequent analysis in NVivo 10.

During the manual content analysis of the abstracts, apart from identifying potential sources of knowledge, specific content pertinent to SMEs was extracted. Additionally, we singled out barriers or failures in the realm of innovation as a valuable tool for analysis through the lens of failures. As a result, we obtained a synthetic perspective over the topic, based on the 70 papers, that allowed us to integrate the findings and discern differences, commonalities, and factors contributing to innovation failures, shedding light on the related research landscape.

3.3 Descriptive Data Analysis

A descriptive analysis of the 308 articles in question unveiled that the first article linking Design Thinking and innovation within the sample emerged in 2007 (as depicted in Figure 1). Notably, starting from 2008, a discernible upswing in the number of articles becomes evident. This surge can be attributed, at least in part, to the Special Issue of the Harvard Business Review in 2008, featuring the highly-cited (1,060 citations) article "Design Thinking: Thinking like a designer can transform the way you develop products, services, processes - and even strategy" authored by IDEO CEO Tim Brown. This publication significantly amplified interest in the subject matter (Brown, 2008). Notably, the year 2020 marked the highpoint with a remarkable 77 contributions.

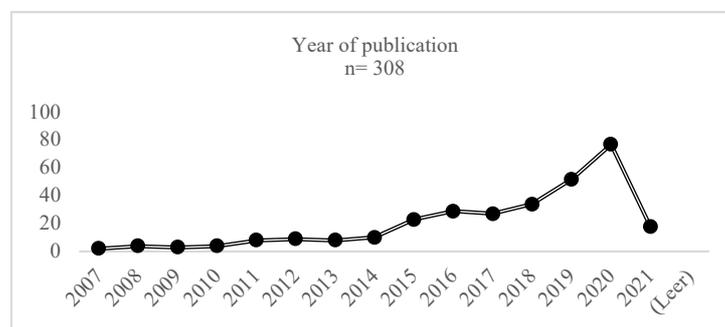


Figure 1 - Publications per year

Source: Own elaboration

Figure 2 considers the 152 most frequently occurring journals. The journal with more publications is Design Journal, by far a regular in the publications associated to design thinking and innovation, followed by International Journal of Engineering Education, Creativity and Innovation Management, Journal of Cleaner Production and Sustainability.

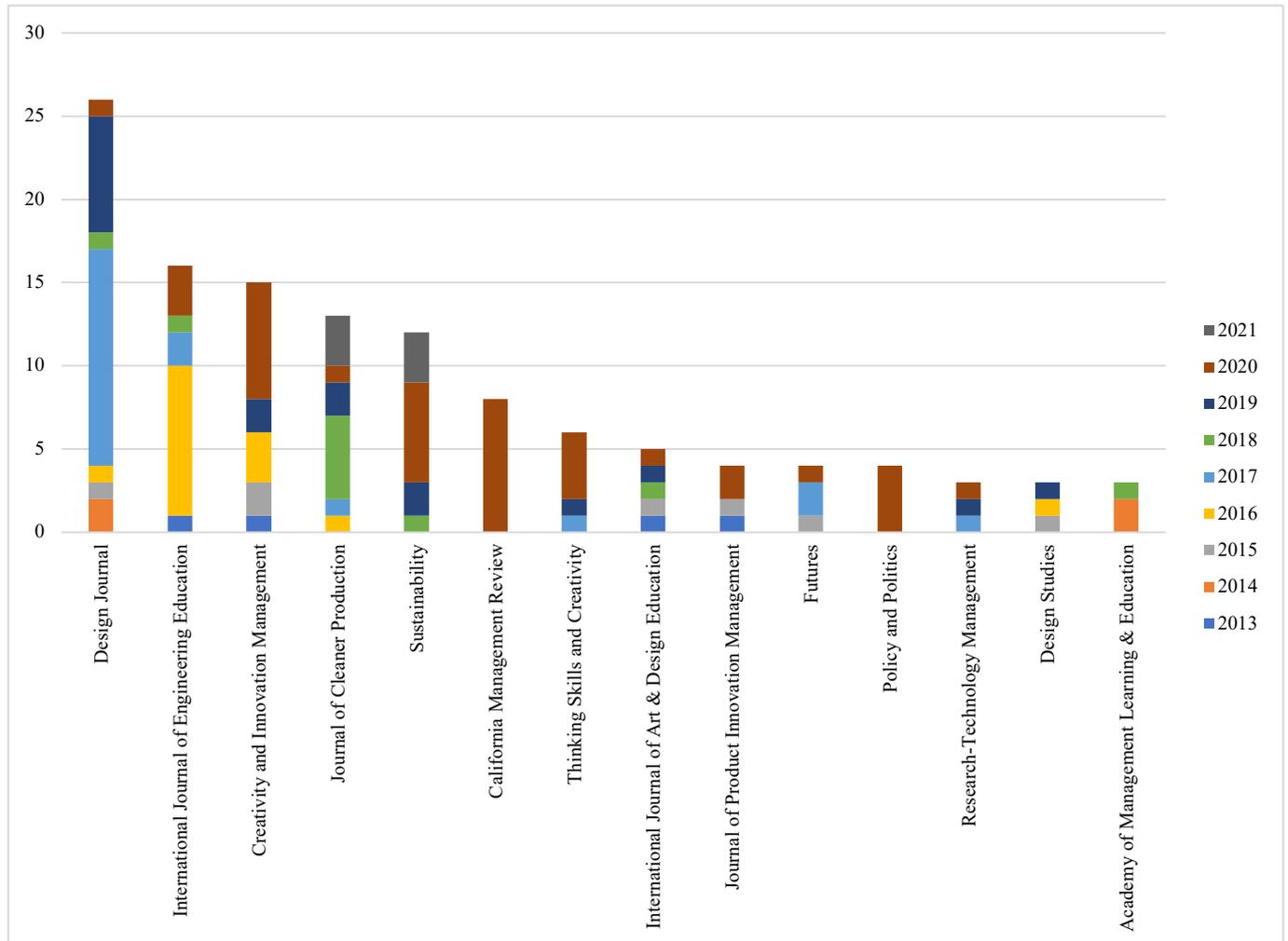


Figure 2 - Most important journals

Source: Own elaboration

3.4 Content Analysis

The content analysis was entailed on 70 articles, which directly related to Design Thinking and innovation. The process included thematic coding to determine the main attributes of Design Thinking, looking in detail at the SMEs and resulted in the development of a framework / set of relevant categories regarding the requirements, success factors and failures in implementing Design Thinking in SMEs.

Two distinct groups emerged: one centered on the failure of Design Thinking interventions, encompassing direct and indirect shortcomings in the articles (e.g., lack of understanding, inflexibility), and the other highlighting factors associated with notable successes (e.g., management support, customer-centric).

Furthermore, the analysis factors were tailored to SME characteristics, taking into account six SME-specific traits:

- *Entrepreneurial Dependence*: SMEs often rely heavily on the entrepreneur or entrepreneurial family for management and leadership (Kammerlander, Burger, Fust, & Fueglistaller, 2015).
- *Operational Focus*: In SMEs, managing directors frequently engage in operational activities, limiting their capacity for strategic management (Gasda & Fueglistaller, 2015).
- *Skilled Workforce*: Many SME employees receive in-house training, and both entrepreneurs and employees are deeply involved in day-to-day tasks, posing challenges to innovation (Liedtka & Ogilvie, 2011).
- *Agility Challenges*: SMEs may struggle to maintain the agility required for rapidly changing technologies and short product lifecycles (Sarooghi, Sunny, Hornsby, & Fernhaber, 2019).

- *Financial Constraints*: SMEs often have more limited financial resources compared to larger corporations, particularly for investment projects (Kammerlander, Burger, Fust, & Fueglistaller, 2015).
- *Lean Structure*: SMEs typically have a lean organizational structure, with low formalization and a flat hierarchy (Durst & Edvardsson, 2012).

Drawing from these SME characteristics, the criteria for Design Thinking in SMEs were applied. Within the context of this study, the identified requirements from the literature were categorized as "Mandatory" (Table 3) and "Nice To Have" (Table 4). "Mandatory" requirements may pose greater challenges for implementation in SMEs compared to larger companies.

Table 3 - Specific Requirements for Design Thinking in SMEs: Mandatory

Mandatory	Explanation	References
Management support for the DT team	In the context of SMEs, the likelihood of introducing Design Thinking within a single department without the involvement and endorsement of the entrepreneur is significantly diminished. The commitment and support of the entrepreneur are imperative prerequisites for the successful execution of such projects.	(Appleyard et al., 2020; Bason & Austin, 2019; Crites & Rye, 2020; Eppler & Kernbach, 2016; Lee & Ma, 2020; Snyder et al., 2018; Vagal et al., 2020)
Time Resources	In SMEs, employee involvement in the innovation process is typically an auxiliary endeavor at best. These businesses often have fewer specialized departments. SMEs must exercise caution when contemplating the initiation of a Design Thinking project, especially when the precise benefits cannot be reliably quantified in advance.	(Agogino et al., 2016; Ahn et al., 2021; Beltagui, 2018) (Bicen & Johnson, 2015; Cagnin, 2018; Carlgren et al., 2014; Coco et al., 2020; Crites & Rye, 2020; de Carvalho et al., 2021; Ghajargar et al., 2017; Kimbell, 2011; Nagaraj et al., 2020; Yu et al., 2015)
Budget for design thinking projects	Here the statement for Budget is the same as in "time resources"	(Baldassarre et al., 2020)

Table 4 - Specific Requirements for Design Thinking in SMEs: Nice To Have

Preferable	Explanation	References
Small projects and small teams	In SMEs, the implementation of innovations differs significantly from large corporations. In these smaller enterprises, even modest projects can yield substantial successes.	(Baldassarre et al., 2020; Manzini & Rizzo, 2011)
DT team strategically well positioned (team selection)	SMEs often face challenges in allocating the required resources and space for pursuing optimization and innovation efforts.	(Beckman & Barry, 2007; Brown, 2008; Fleury et al., 2016; Hölzle & Rhinow, 2019; Kurtmollaiev et al., 2018; Nagaraj et al., 2020; Seidel & Fixson, 2013; Vagal et al., 2020; Yang & Hsu, 2020; Yeoman & Carvalho, 2019)
Strategic alignment with customer-centric or benefit-oriented approaches firmly established	SMEs tend to exercise caution when considering the initiation of a Design Thinking project, as they often require a clear understanding of the anticipated benefits before committing to such endeavors.	(Diepenmaat et al., 2020; Hankammer et al., 2019; Hölzle & Rhinow, 2019; Knight et al., 2020; Vetterli et al., 2016; Yan, 2018)

Success factors have been separated in "Specific to SME" (Table 5) and "General factors" (Table 6), in order to distinguish those factors which are dependent on company type and those which are not.

Failures that are not acknowledged and shared lose their significance in the realm of innovation. Consequently, organizations waste significant time, money, and resources by repeatedly making the same mistakes, all because these failures are not openly discussed. Entrepreneurs and managers show a growing interest in understanding the failures of innovation projects as a means of preventing potential issues and risks.

Table 7 illustrates the failures extracted from the articles, encompassing both direct and indirect contexts. Given the limitations and resource constraints often encountered by SMEs when implementing innovation projects, it is advisable for them to proceed with caution by taking smaller, more manageable steps in their projects.

Table 5 - Success factors unique for SMEs

Unique for SMEs	Explanation	References
Potential benefits of DT project known in advance	Only if it can be seen early on that the initial investment has paid off will others follow.	(Carlgren et al., 2014)
Design thinking steps well defined	SMEs lack the financial resources to take bigger risks. Therefore, the steps for innovation should be taken in smaller but safe steps.	(Bairaktarova et al., 2016; Carmel-Gilfilen & Portillo, 2016; Hookway et al., 2019; Pluchinotta et al., 2019; Shafiee et al., 2021)
External design thinking experts to support the project	Given the substantial involvement of employees in daily operations, it is often impractical for SMEs to allocate the time, resources, and expertise needed for internal design thinking implementation without the assistance of external coaches.	(Ghajargar et al., 2017; Jun et al., 2014; Kozlowski et al., 2018; Kulick, 2017; Na et al., 2017; Shapira et al., 2017)
Design Thinking success is measured differently	Small steps lead to greater success.	(Braslett & O'Reilly, 2015; Chandler & Ward, 2019; Conforto et al., 2016; Knight et al., 2019)
Cross-departmental projects with DT	Due to the flat hierarchical structures in SMEs, communication within teams tends to be more rapid compared to larger organizations.	(Seidel & Fixson, 2013)
DT is also integrated and applied to existing projects	In SMEs, innovation approaches are frequently applied in projects without explicit definition or recognition as formal innovation strategies.	(Liem & Brangier, 2012; Shafiee et al., 2021)
First application to design affinity areas	The advantage for SMEs is that DT can be introduced even with a small budget.	(Agogino et al., 2016; Beckman & Barry, 2007; Chandler & Ward, 2019; Lande, 2016; Lim et al., 2019)
External experts are involved	Outsourcing allows employees to focus on their own day-to-day work.	(Buhl et al., 2019; Carlgren et al., 2016; Eppler & Kernbach, 2016; Fleury et al., 2016; Glen et al., 2014; Kim & Strimel, 2020; Liem & Brangier, 2012; Olsen, 2015; Yu et al., 2015)

Table 6 – General success factors independent of being SMEs

Mandatory	Explanation	References
DT is visually represented and communicated	Visual representation of DT is possible in both SMEs and large enterprises.	(Na et al., 2017)
DT involved persons are professionally trained	The engagement of professional coaches can be beneficial for enterprises of all sizes. However, this factor holds greater significance and tends to be more effective in SMEs.	(Na et al., 2017; Shapira et al., 2017)
Physical space for DT projects is available	This area appeals more to large companies than to SMEs.	(McGann et al., 2018; McGann et al., 2021)
DT is easy to learn and use for company employees	Design Thinking remains practical and straightforward when adhering to its core steps, making it a feasible approach in companies of all sizes.	(Souza et al., 2020)
Internal employees involved in the project. Usually, no external experts necessary.	Large companies often have dedicated innovation departments, which can lead to limited external perspectives and involvement.	(Brown, 2008; Carlgren et al., 2014; Roberts & Palmer, 2012; Snyder et al., 2018)

Table 7 - Failure factors based on the nature of SMEs

Failure factors	Explanation (based on the nature of the SMEs)	Literature
Lack of customer input in customer analysis (customer goals, personas, customer journeys, etc.) and prevalent misconceptions of already knowing customer needs and expectations	Comprehending customer goals and the present customer experience as perceived by the customer is key to actively improve customer experience. Companies should acquire a deep understanding of the customer's objectives, requirements, viewpoints, and interactions in order to enhance their offerings effectively.	(Dhaliwa, Hussain, & Asif, 2019; Liu & Lu, 2020; Rau, Zbiek, & Jonas, 2017; Sohaib, Solanki, Snyder, Ingelsson, & Backstrom, 2018)
No comprehensive or incorrect survey of actual customer needs and expectations	A holistic and correct recording of the customer's needs and expectations require comprehensive ethnographic, qualitative and quantitative data collection and evaluation of internal and external information sources. Personal points of contact should be used for in-depth insights and feedback.	(Hankammer, Brenk, Fabry, Nordemann, & Piller, 2019)
Qualitative survey methods with the customer (surveys, interviews, etc.) are designed to create negative customer experiences	The process of directly collecting customer input should be utilized judiciously to prevent negative customer reactions and survey fatigue, which can diminish their willingness to provide valuable feedback.	(Andreassan, Kristensson, Lervik-Olsen, Parasuraman, McColl-Kennedy, & Edvardsson, 2016; Lim, Kim, Kim, & Kim, 2019; Pande & Bharathi, 2020)
No complete coverage of all touch points and no Evaluation of the importance of individual touchpoints from the customer's point of view	All touchpoints must be captured, and an assessment of relevance made from the customer's perspective.	(Hankammer, Brenk, Fabry, Nordemann, & Piller, 2019)
No linkage of the assessment of relevant touch points with entrepreneurial significance	The touchpoints deemed relevant by customers must also be assessed in terms of their economic significance for the company so that design priorities can be defined later.	(Martin, 2011)
Insufficient analysis (resulting in a lack of understanding) of the value-adding processes	Understanding how the company create value for the customers is key to effectively align the processes and value proposition with customer needs and expectations.	(Appleyard, Enders, & Velazquez, 2020; Holzle & Rhinow, 2019)
No identification of relevant stakeholders and decision makers as well as their holistic customer journeys, goals and pain points	To create optimal experiences for all relevant customer stakeholder groups, it is key to capture the individual goals, pain points, and customer journeys from start to finish.	(Bas & Guillo, 2015; Geldermann, Lerche, & Sepulveda, 2018; Magistretti, Dell'Era, & Doppio, 2020; Pluchinotta, Kazakci, Giordano, & Tsoukias, 2019)
Insufficient analysis of a customer's interactions with other service providers in the ecosystem or other customers	A holistic understanding of the customer experience requires capturing the entire value-creating ecosystem. Companies should conduct a thorough analysis of this ecosystem to comprehend how it generates added value and utility for customers. Moreover, they should understand how this ecosystem shapes customer expectations and perceptions.	(Sorice & Donlan, 2015)
No adequate recording of own value-adding processes or current value proposition to customers	A common understanding of the existing value proposition and internal processes serves as the foundation for subsequent design choices and for aligning processes to deliver valuable experiences to customers.	(Hankammer, Brenk, Fabry, Nordemann, & Piller, 2019; Hirano, Ishizuka, & Sakaguchi, 2013)
No situation analysis of the competencies and resources currently available in the company, related to customer experience and organizational performance	The subsequent execution, monitoring, and control of customer experiences demand dedicated competencies and resources. It's only through analysis that any identified gaps can be addressed.	(Nagaraj, Berente, Lyytinen, & Gaskin, 2020)

4. Findings & Discussion

The findings from our analysis indicate that research on design thinking in the context of innovation is still a relatively young field, with steady development over the 15 years leading up to the study.

Notably, the most significant articles in the realm of design thinking research and innovation often had a strong design-oriented focus, with publications in journals like the *Design Journal* playing a predominant role. Furthermore, there were contributions in well-established innovation journals such as the *International Journal of Engineering Education*, *Creativity and Innovation Management*, *Journal of Cleaner Production*, *Sustainability*, and *California Management Review*. This diversification suggests that design thinking has garnered interest from various research streams.

Following our content analysis, we were able to pinpoint key elements and dimensions of design thinking practices within the SME context. These encompassed a focus on requirements, key success factors, and failures (as detailed in Tables 3 to 7). These objective elements for evaluating the effectiveness and shortcomings of design thinking and innovation methodologies can be employed to enhance innovation capabilities.

Our results underscore that, although there are some studies centered on the implementation of design thinking approaches in SMEs, there is still ample terrain to explore. The concept of design thinking is not widespread in SMEs (Gasda & Fueglistaller, 2015), partly because they are absorbed in day-to-day operations, making them slow to adopt new approaches (Magistretti, Dell'Era, & Doppio, 2020). This situation may pose a risk to their competitive advantages in the medium to long term.

Furthermore, as SMEs are not frequent users of Design Thinking, the academia has manifested a relevant interest in the topic (Kammerlander, Burger, Fust, & Fueglistaller, 2015), leading to insufficient academic knowledge about the phenomenon.

Nevertheless, SMEs exhibit certain characteristics that make them receptive to design thinking principles. Their openness to integrating design thinking practices is often greater than that of larger corporations (Shapira, Ketchie, & Nehe, 2017). Additionally, due to their flat organizational hierarchies, SMEs are capable of swiftly adapting to changes—a trait not as readily observed in large companies.

Consequently, these factors provide opportunities to further enhance and support the strategic sustainability behavior of SMEs and align them with the innovation objectives that Design Thinking pursues, in line with what is defended by Magistretti, Dell'Era, & Doppio (2020).

5. Conclusions

The primary objective of this study was to identify the scholarly output related to Design Thinking innovation strategy in SMEs context, and identifying requirements, success factors and barriers (associated to failures in implementation) through a systematic literature review. In doing so, we have made several contributions to the existing literature.

First, we have identified that innovation approaches, at their core, incorporate distinct Design Thinking parameters. These parameters revolve around managing uncertainty, fostering adaptability, flexibility, understanding, speed, and integration. Recognizing these interconnections between Design Thinking and innovation strategies can empower SMEs to enhance their response to uncertainty and mitigate risks.

Second, by developing the categorized Design Thinking framework, we provided scholars and practitioners a conceptual tool to put together innovative solutions and compare them against varying requirements and success factors within the context of SMEs. This paves the way for hybrid methodologies that offer multiple avenues for addressing uncertainty and other challenges.

It is worth considering that this study has limitations. While we have compiled a list of requirements, key success factors, and failures tailored to SMEs based on the literature, these elements have not been empirically tested. Future research could benefit from empirical validation.

Also, as a systematic literature review, the findings cannot be universally applied or provide managerial or policy recommendations.

Finally, as SMEs encompass a wide spectrum of firms, ranging from startups to well-established entities, their specific requirements, success factors, and failures can vary significantly. Future studies should consider examining these elements while controlling for variables such as size, age, industry, and other characteristics that may contribute to differences among SMEs.

Moving forward, researchers could explore the design principles found in the innovation management literature in relation to SMEs, developing a similar list tailored to these firms. Additionally, investigating the implementation of Design Thinking projects in the context of SMEs through empirical methods, such as expert interviews or multiple case studies, could yield a deeper understanding of the phenomenon.

Ultimately, researchers and scientists can further test, refine, and enhance the Design Thinking solution approaches introduced in this study across various business scenarios, including small and medium-sized enterprises and startups. They can also experiment with applying these Design Thinking criteria and principles at different stages of the Design Thinking process, employing diverse practices and techniques, and studying their influence on innovation performance.

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Antecedents and consequences of Apple brand love

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Abstract

For many years, satisfaction was the main goal of marketing strategy. However, subsequent studies revealed that merely satisfying consumers was not sufficient for a company to succeed in a highly competitive market. Therefore, the concept of brand love emerged. Consequently, the study of the factors that lead consumers to feel love for a brand has become increasingly important, as nowadays consumers develop emotional and passionate relationships with brands. The purpose of our study is to identify the main antecedents and consequences of Apple brand love. Based on a sample of 215 respondents, we employed the structural equation model. The antecedents of Apple brand love considered were hedonic product, brand experience, and brand satisfaction. As consequences of Apple brand love, brand loyalty and brand word-of-mouth were analyzed. The results showed that purchasing a hedonic product, brand experience, and brand satisfaction are essential for consumers to nurture Apple brand love. In turn, the hedonic product is also an antecedent of brand experience and brand satisfaction, while brand experience also proved to be crucial in achieving Apple brand satisfaction. Moreover, Apple brand love and satisfaction with this brand generate loyalty and positive word-of-mouth. Finally, loyal consumers speak positively about the Apple brand.

Keywords: Brand Love, Brand antecedents and consequences, Apple.

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1. Introduction

In the context of brand love, researchers have applied similar concepts from Rubin's (1973) work, which focused on interpersonal relationships, to explore emotional attachments between consumers and brands. Love, considered as a highly complex relationship, encompasses various feelings toward another. When discussing consumer-brand relationships, Fournier (1998) suggested that love exists as a higher-order bond that helps to create strong and positive relationships that can lead to loyalty. By extrapolating interpersonal theory to assess interaction with 'objects of love', Shimp and Madden (1988) initiated the investigation of brand love. Since then, research on consumers' love for brands has flourished (Cacho-Elizondo et al., 2020). Brand love, or the amount of passionate, emotional attachment a consumer has for a particular brand, includes desire and affection for the brand, positive brand evaluation, and emotions towards the brand, as well as declarations of love for the brand (Ahuvia, 2005a, 2005b; Carroll & Ahuvia, 2006).

Satisfaction, the core of the marketing concept, has been seen as the key objective of marketing strategy for many years. Oliver (1999) defined satisfaction by emphasizing the cognitive and emotional aspects of customer experience evaluation with a product or service. Wirtz and Bateson (1999), in the context of services, also proposed that satisfaction consists of both cognitive and affective aspects in a customer's experience. Satisfaction incorporates cognitive judgments and affective reactions during consumption (Oliver, 1993). Satisfaction has assumed a crucial and dominant position in marketing theory and practice because, as the primary outcome of marketing activities, it transforms initial consumption and purchase into post-purchase phenomena such as repurchase and brand loyalty (Churchill & Surprenant, 1982). However, there have been studies suggesting that consumer satisfaction may not be enough to maintain success in competitive markets (Carroll & Ahuvia, 2006), hence brand love, being a more recent marketing construct, helps explain variations in post-consumption behaviors of satisfied consumers.

Brand love is different from satisfaction for several reasons (Carroll & Ahuvia, 2006). Firstly, satisfaction is generally conceptualized as a cognitive judgment, whereas brand love has a much stronger affective focus. Secondly, satisfaction is typically seen as an outcome of a specific transaction, whereas brand love oftentimes is the result of a consumer's long-term relationship with the brand. Thirdly, satisfaction is frequently related to the expectancy disconfirmation paradigm, whereas brand love requires neither expectancy nor disconfirmation (e.g., the consumer experiences an emotional response to the brand in the absence of cognition; the consumer knows what to expect from the brand, so little, if any, disconfirmation occurs). Finally, brand love includes a willingness to declare love (e.g., 'I love this brand!') and involves integration of the brand into the consumer's identity, neither of which is requisite in satisfaction.

The purpose of our study is to analyze the antecedents and consequences of Apple brand love. To do so, we propose a model in which we consider, as antecedents of brand love, hedonic product, brand experience, and brand satisfaction, and, as consequences of brand love, brand loyalty and brand word-of-mouth. Finally, brand loyalty was understood to be a precursor of word-of-mouth about the Apple brand.

2. Literature Review and Research Hypotheses

In this section, the theoretical framework supporting the construction of our research model is presented, centered around Apple brand love. Consumers find satisfaction with a brand when they have positive experiences and perceive the brand as hedonic. A hedonic brand also contributes to consumers considering their experience with the brand as memorable. On the other hand, consumers seem to develop emotional and passionate relationships with a brand, cultivating brand love, when the brand provides them with a pleasant experience, is perceived as hedonic, and when they are satisfied with the brand. Satisfied and brand-loving consumers, in turn, develop brand loyalty and engage in positive word-of-mouth. Lastly, loyal customers speak positively about the brand to others.

2.1. Apple Brand Love: Antecedents and Consequences

Hedonic product, brand experience, and brand satisfaction were chosen as antecedent variables of Apple brand love. On the other hand, brand loyalty and positive word-of-mouth (WOM) regarding the brand were selected as consequences of Apple brand love, as they are fundamental variables in the marketing literature. Consequently, if a consumer purchases a hedonic product from the Apple brand, has a positive experience with that product, and becomes satisfied, he or she will likely develop Apple brand love. In turn, satisfaction and brand love will translate into the consumer's loyalty to the Apple brand and positive brand word-of-mouth. Finally, loyalty to the Apple brand will lead to word-of-mouth about the brand.

The concept of brand love emerged in marketing literature thanks to the pioneering work done by Shimp and Madden (1998), which was based on theories of psychology. They adapted Sternberg's (1986) triangular theory of love to the context of marketing and branding, arguing that brand love encompasses the dimensions of passion, intimacy, and commitment. However, it was

Ahuvia who, in 2005, initiated empirical research into the concept, using an interpretive paradigm, which revealed that consumers can develop intense emotional relationships with a variety of consumer objects, including brands (Ahuvia, 2005a, 2005b). Ahuvia's work (2005b) showed significant similarities between love in interpersonal relationships and in the consumer context. In 2006, Carroll and Ahuvia defined brand love, in a unidimensional way, as the degree of passionate emotional attachment a satisfied customer has for a brand.

A more complex interpretation of the phenomenon was suggested by Albert et al. (2009) when brand love was considered a multidimensional concept. These authors showed that brand love consists of two macro-dimensions, affection, and passion, which, in turn, include several dimensions. Another multidimensional view of the concept was proposed by Batra et al. (2012), who used the notion of 'prototype' to define brand love because, according to these authors, it better describes complex phenomena, such as love, which are difficult to capture using rigorous and precise definitions.

A different interpretation of brand love was also provided by Rossiter (2012), who emphasized the need to define brand love in a way that allowed researchers to distinguish it from love for a person. This author defined brand love by the simultaneous presence of a consumer's deep affection for the branded product and the anxiety felt in anticipation of separation if the product is not available. He measured brand love in contrast to other brand-related emotions, namely liking, neutral feeling, dislike, and hate.

The concept of brand experience has been attracting the attention of marketing managers as consumers seek brands that provide them with unique and memorable experiences (Zarantonello & Schmitt, 2010; Moreira et al., 2017). According to Schmitt (1999), traditional marketing appeals to functional connections with the customer. However, customers now look for more exciting activities and experiential marketing, by creating distinctive experiences, can provide significant economic value for companies (Pine & Gilmore, 1999). Brand experience was defined by Brakus et al. (2009, p. 53) as "subjective, internal consumer responses (sensations, feelings, and cognitions) and behavioral responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications, and environments". Whenever consumers engage in these activities, they are exposed not only to the attributes of the product itself but also to other specific brand-related stimuli, such as brand-identifying colors, actions, design elements, slogans, mascots, and brand characters (Brakus et al., 2009). These brand-related stimuli constitute the major source of internal subjective consumer responses, which are at the very essence of brand experiences (Brakus et al., 2009).

Brand experiences can vary in strength, intensity, and valence. Furthermore, some experiences happen spontaneously and are short-lived, while others occur intentionally and are long-lasting (Brakus et al., 2009). Brand experience is formed from a sensory dimension (related to visual, auditory, tactile, gustatory, and olfactory stimuli provided by a brand); an affective dimension (including the feelings created by brands and their emotional connections with consumers); a behavioural dimension (referring to bodily experiences, lifestyles, and interactions with the brand); and finally, an intellectual dimension (including the brand's ability to engage consumers in convergent and divergent thinking). Depending on the number of dimensions and the strength evoked by a stimulus, brand experiences can be more or less intense. These brand-related stimuli are part of the brand's identity and design (name and logo), packaging and marketing communications (advertising and brochures), or the environments where the brand is marketed (stores) and are the main source of internal subjective consumer responses or brand experiences (Brakus et al., 2009).

For Dhar and Wertenbroch (2000), consumer choices are driven by considerations related to utilitarian and hedonistic aspects. For instance, when purchasing a car, consumers might be concerned about utilitarian features (e.g., gas mileage) as well as hedonic aspects (e.g., sporty design). Given the relevance of this division regarding consumer behavior, it is the marketer's task to understand the weight of each variable at the moment of purchase decision. Hedonic products are products associated with the concepts of fun and pleasure, as their consumption is expected to evoke strong emotional responses in consumers (Carroll & Ahuvia, 2006).

Hedonic goods provide more experiential consumption, fun, pleasure, and excitement; in other words, they are related to a pleasant consumption experience (e.g., designer clothes, sports cars, luxury watches), whereas products with utilitarian features are more related to functional aspects (e.g., microwaves, personal computers) (Hirschman & Holbrook, 1982; Strahilevitz & Myers, 1998). While for utilitarian products, the salient benefits are more cognitively oriented than emotional, for hedonic products, emotional responses will be more important in the formation of brand evaluation than cognitions (Kempf, 1999). Consequently, when the emotional elements of pleasure are high and positive for a product category, consumers should experience more favorable affect toward the brand consumed (Chaudhuri & Holbrook, 2001).

Customer satisfaction has occupied a prominent place in the fields of marketing and services. According to the expectancy-disconfirmation paradigm, satisfaction is the result of the discrepancy between expectations and perceived performance (Oliver, 1980). As highlighted by Tse and Wilton (1988, p. 204), some researchers define satisfaction as "the consumer's response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product as perceived after its consumption".

Zeithaml and Bitner (2003) emphasized that satisfaction is an evaluation made by the customer, regarding a product or service, indicating whether it meets the customer's needs and expectations, and Kotler and Keller (2012) underlined that satisfaction is the feeling of pleasure that results from the comparison between the perceived performance (or outcome) of a product and the buyer's expectations. Customer satisfaction depends on the product's perceived performance relative to a buyer's expectations

(Kotler & Armstrong, 2012). However, two general conceptualizations of satisfaction exist in the literature: transaction-specific satisfaction and overall or cumulative satisfaction (Johnson et al., 1995; Olsen & Johnson, 2003). Transaction-specific satisfaction dominated the marketing and consumer behavior literature up through the early 1990s. This approach defines satisfaction as a customer's evaluation of his or her experience with and reactions to a particular product transaction, episode, or service encounter.

Satisfaction research has grown to include an emphasis on cumulative satisfaction, defined as a customer's overall evaluation of a product or service provider to date, that is, describes customers' total consumption experience with a product or service. According to Olsen & Johnson (2003, p. 185) "one advantage of cumulative evaluations is that they should better predict customers' intentions and behavior". Consequently, the emphasis on cumulative satisfaction or overall satisfaction reflects a growing interest in understanding customer evaluations and relationships over time.

In the literature, many works establish a positive relationship between brand love and some psychological variables linked to brand performance, which include, among other variables, brand loyalty (Carroll & Ahuvia, 2006; Batra et al., 2012), purchase intention (Sarkar & Sreejesh, 2014), and word-of-mouth (Carroll & Ahuvia, 2006; Batra et al., 2012; Albert & Meruka, 2013). In this study, we considered brand loyalty and positive word-of-mouth (WOM) about the brand to be the most relevant consequences of brand love.

Brand loyalty is more than repurchasing; it is a long-term psychological relationship (Oliver, 1999). Loyalty was described as a "deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior" (Oliver, 1999, p. 34). The concept of loyalty is strongly related to relational marketing, as it requires developing a customer-brand relationship for the individual to become loyal (Sheth, 1971). Loyalty has been extensively investigated, not only because it is a fundamental issue in companies' marketing strategies, but also because customers have become more volatile and have reasons to be less loyal. Before any strategy is defined, the organization must understand its customers, their preferences, and how to serve them better, in order to establish a long-term relationship (Dick & Basu, 1994).

Researchers began to consider two dimensions in brand loyalty: behavioral and attitudinal (Dick & Basu, 1994), due to the limitations of the behavioral approach. Dick and Basu (1994) stressed upon the need to extend the concept of brand loyalty to include attitudinal influences. As highlighted by Chaudhuri & Holbrook (2001), the definition of loyalty by Oliver (1999) emphasizes the two different aspects of brand loyalty, behavioral and attitudinal, that have been described in previous work on the concept, such as those by Day (1969), Jacoby and Kyner (1973), Jacoby and Chestnut (1978), and Aaker (1991). Behavioral loyalty consists of repeated purchases of the brand, whereas attitudinal brand loyalty includes a degree of dispositional commitment in terms of some unique value associated with the brand.

Word-of-mouth was defined as "informal, person-to-person communication between a perceived non-commercial communicator and a receiver regarding a brand, a product, an organization or a service" (Harrison-Walker, 2001, p. 63). Word-of-mouth, which can be negative or positive, refers to personal and impersonal communication about goods and services (Godes & Mazlin, 2004). East et al. (2008) underlined that positive word-of-mouth encourages brand choice, and in contrast, negative word-of-mouth discourages brand choice. Positive word-of-mouth concerns the degree to which the consumer praises the brand to others (Westbrook, 1987; Carroll & Ahuvia, 2006). It is worth noting that positive word-of-mouth is "the primary factor behind 20 to 50 percent of all purchasing decisions. Its influence is greatest when consumers are buying a product for the first time or when products are relatively expensive, factors that tend to make people conduct more research, seek more opinions, and deliberate longer than they otherwise would" (Bughin et al., 2010, p. 2).

Prior research shows the impact of the hedonic and utilitarian values on satisfaction (Carpenter, 2008; Irani & Hanzae, 2011). Several studies, such as those by Hsu and Chen (2018), Lee and Kim (2018), El-Adly (2019), Vijay et al. (2019), Li et al. (2021), and Pang (2021) have demonstrated that hedonic product has a positive impact on brand satisfaction. Consequently, we developed the following research hypothesis:

H1: Hedonic product positively influences brand satisfaction.

For Carroll & Ahuvia (2006), as hedonic products tend to generate stronger emotional responses, the consumers will find them more lovable. More hedonic products have nontangible, symbolic benefits and are likely to encourage a greater potential for positive brand affect. In recent studies, hedonic product has a positive impact on brand love (Karjaluo et al., 2016; Hsu & Chen, 2018; Liu et al., 2018; Junaid et al., 2019; Hossain et al., 2023) Thus, we propose the following research hypothesis:

H2: Hedonic product positively influences brand love.

The brand experience is influenced by the perception of utilitarian and hedonic products, although hedonic products had a greater influence on brand experience (Yu & Yuan, 2019). According to Klein et al. (2016), hedonic shopping value have an impact on brand experience. High levels of atmospherics create fascination with the brand, which might translate into brand experiences (Hollenbeck et al., 2008). Given the beforementioned, we developed the following research hypothesis:

H3: Hedonic product positively influences brand experience.

For Brakus et al. (2009), brand experiences provide value to consumers and, consequently, confer a higher level of satisfaction with the brand. As in the study by Brakus (2009), Ishida and Taylor (2012), Beckman et al (2013), Barnes et al. (2014), and Moreira et al (2017) tested the influence of sensory, affective, behavioral, and intellectual dimensions of experiences on brand satisfaction. Good experiences when consumers interact with a particular brand are more likely to make them feel satisfied (Nysveen et al., 2013). Experience results from a stimulus. Once it can cause enjoyment, if a brand can offer various experiences, it can be expected that the consumers will want to repeat the experience and, thus, the brand can enhance customer satisfaction (Kim et al., 2015).

The literature provides an understanding of customer satisfaction as an outcome of brand experience for services (Barnes et al., 2014), retail brand (Khan & Rahman, 2015), and online brands (Lee & Jeong, 2014). Recent works by Hussein (2018), Kharat et al. (2018), Iglesias et al. (2019), Shanti and Rofiq (2019), Asghar et al. (2020), Lacap and Tungcab (2020), Singh and Söderlund (2020), and Slaton et al. (2020) have proven that brand experience has a positive impact on brand satisfaction. Therefore, we formulated the following hypothesis:

H4: Brand experience positively influences brand satisfaction.

Zhang (2019) considers three dimensions of brand experience to influence brand love: sensory, emotional, and social. Sensory experience enables individuals to have a unique “emotional capability” of their favorite products, that is, they can obtain a sense of pleasure and satisfaction, which means that consumer atmosphere will promote individuals to actively experience the environment or products with strong sensory colors and deepen their impression and favorable impression of the brand through unique feelings (Zhang et al., 2007; Yang et al., 2010, Zhang, 2019).

Hepola et al. (2017) stated that sensory element is a central component of brand experience and argues that the sensory dimension of brand experience can capture customers’ attention toward the brand. In emotional experience, pleasant consumption experience will promote consumers to have positive, active, and effective cognition, use and communication of products or services. That is, if between the consumer and the brand an engagement results, characterized by a strong emotional attachment, a love relationship can be built between the two (Thomson et al., 2005; Park & Macinnis, 2006). In social experience, being the highest stage of experience, through dreaming and unexpected consumption experience, consumers can enjoy the unique and surreal environment to the fullest, improve their cognition and evaluation of the brand, and promote the generation of their beloved emotion.

For Roy et al. (2013), in the literature, the link between brand experience and brand love only explored the relationship between affective experience and brand love. However, as Garg et al. (2015, 2016) pointed out, when researching the relationship between brand experience and brand love, it is necessary to consider the four dimensions of brand experience: sensory, affective, behavioral, and intellectual.

Many studies have recognised that positive brand experience is a necessary element in the development of brand love (Sarkar et al., 2012). Recently, Bıçakcıoğlu et al. (2018), Ferreira et al. (2019), Madeline and Sihombing (2019), Prentice et al. (2019), Shanti and Rofiq (2019), Trivedi (2019), Anwar and Jalees (2020), Khamwon and Masri (2020), Amaro et al. (2021), Cacho-Elizondo et al. (2021), Fernandes and Inverneiro (2021), Rodrigues and Brandão (2021), and Singh et al. (2021) proved that brand experience has a positive impact on brand love. Thus, we formulated the following hypothesis:

H5: Brand experience positively influences brand love.

Brand love, being a construct that has gained relevance in the marketing literature (Vernuccio et al., 2015, Kaufmann et al., 2016; Hegner et al., 2017) is formed due to higher levels of satisfaction obtained through brands (Carroll & Ahuvia, 2006). Zhang (2019, p. 899) emphasized that Carroll and Ahuvia (2006) “proposed that brand love was the emotional dependence on the brand of highly satisfied consumers, which includes positive emotional response, positive brand evaluation, brand attachment and declaration of brand love”. Consistent with the thinking of Fournier and Mick (1999), brand love is “a response experienced by some, but not all, satisfied consumers” (Carroll & Ahuvia, 2006, p. 81). As Aro et al. (2018, p. 73) underlined, for Roy et al. (2013), as in Carroll and Ahuvia (2006), satisfaction is considered a requirement for brand love, although not all satisfied consumers feel brand love.

Fournier and Mick (1999, p. 11) suggest that “satisfaction-as-love probably constitutes the most intense and profound satisfaction of all”. Therefore, for Fournier and Mick (1999), the most intense satisfaction was experienced when the satisfaction of a consumer for a product or a brand turned into love (Unal & Aydin, 2013). In the same line of thought, Unal and Aydin (2013) defend that satisfaction levels forms a basis for the creation of brand love. It establishes and strengthens the bond between the brand and the customer. Therefore, consumers who love a brand are highly satisfied with it and often develop a sustainable relationship with the brand.

Recent studies such as those by Hsu and Chen (2018), Anwar and Jalees (2020), Bigné et al. (2020), Diniso and Duh (2020), Nawaz et al. (2020), Slaton et al. (2020), and Joshi and Garg (2021) have proven that brand satisfaction has a positive impact on brand love. In this sense, we formulated the following research hypothesis:

H6: Brand satisfaction positively influences brand love.

If consumers are satisfied with their experiences, they are likely to be willing to purchase a product and recommend it to others (Menidjel et al., 2020). Brand loyalty may be defined as the degree to which the consumer is committed to repurchase the brand (Oliver, 1999, Carroll & Ahuvia, 2006). Loyalty leads to repeated purchase of the brand, even if situational influences and marketing efforts cause changes in behaviour (Oliver, 1997). Loyalty may be defined as “the degree to which a customer exhibits repeat purchasing behaviour from a service provider, possesses a positive attitudinal disposition toward the provider, and considers using only this provider when a need for this service arises” (Gremler & Brown, 1996, p. 173). Past research demonstrates a link between satisfaction and loyalty (Oliver, 1980; Fornell, 1992).

Word-of-mouth, on the other hand, includes any information about a target object (e.g., company, brand) transferred from one individual to another either in person or via some communication medium (Brown et al., 2005). Word-of-mouth (WOM) communications “consist of informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services and/or their sellers” (Westbrook, 1987, p. 261). Consumers often recommend their favourite brands to friends and family (Carroll & Ahuvia, 2006; Ismail & Spinelli, 2012). Similarly, those who are satisfied with their products, services or brands often engage in positive WOM (Mittal et al., 1999; Sweeney & Swait, 2008).

Carroll & Ahuvia (2006) showed that satisfied customers tend to be more loyal to a brand and to undertake more positive word-of-mouth about the brand. Recent studies have highlighted the impact of brand satisfaction on both brand loyalty and brand word-of-mouth (Popp & Woratschek, 2017; Santini et al., 2018; Shimul & Phau, 2018; Leri & Theodoridis, 2019; Singh & Söderlund, 2020; Khan et al., 2021). Thus, we formulated the following hypotheses:

H7: Brand satisfaction positively influences brand loyalty.

H8: Brand satisfaction positively influences positive word-of-mouth.

There are three distinctive approaches to measure loyalty: behavioural measurements; attitudinal measurement; and composite measurements (Bowen & Chen, 2001, Yoo & Bai, 2013). The behavioural measurements consider consistent, repetitious purchase behaviour as an indicator of loyalty. Attitudinal measurements use attitudinal data to reflect the emotional and psychological attachment inherent in loyalty. The third approach, composite measurements of loyalty, combine the first two dimensions (Bowen & Chen, 2001). According to Chaudhuri & Holbrook (2001), attitudinal and behavioural loyalty can be developed through brand affect, which refers to positive emotional responses to a brand. Furthermore, Razzaq et al. (2019) show that positive emotions increase consumers' loyalty intentions. These perceptions are likely to strengthen the positive impact of brand love on brand loyalty.

Westbrook (1987) and Carroll and Ahuvia (2006), as we have seen, defined positive word-of-mouth as the degree to which consumers praise the brand to others. Arndt (1968, p. 190) described this communication as simply “oral, person-to-person communication between a perceived non-commercial communicator and a receiver regarding a brand, a product, or a service”. Gremler and Brown (1999, p. 273) consider WOM communication to be “communication about a service provider offered by someone who is perceived not to obtain monetary gain from so doing”.

Consumers prefer to rely on informal and personal communication sources (e.g., other consumers) in making purchase decisions instead of on formal and organizational sources such as advertising campaigns (Bansal & Voyer, 2000). Consumers appreciate WOM because it is seen as more reliable and trustworthy than other information sources (Day, 1971). Albert and Merunka (2013) demonstrated the influence of brand love on word-of-mouth. That is, if consumers feel they love their brands that in turn may translate into a desire of the recommend it to friends and relatives (Ismail & Spinelli, 2012).

For Carroll and Ahuvia (2006), satisfied consumers who also love the brand are expected to be more committed to repurchase and more eager to spread “the good word” to others. Batra et al. (2012) also confirmed that loyalty and positive word-of-mouth is an important consequence of brand love. Several studies have proven that brand love exerts a positive impact on both brand loyalty and positive brand WOM (Bıçakcıoğlu et al., 2018; Hsu & Chen, 2018; Coelho et al., 2019; Rodrigues & Rodrigues, 2019; Anwar & Jalees, 2020; Cho & Hwang, 2020; Martín et al., 2020; Amaro et al., 2021; Madadi et al., 2021; Trivedi & Sama, 2021). Thus, the following hypotheses were proposed:

H9: Brand love positively influences brand loyalty.

H10: Brand love positively influences positive word-of-mouth.

Loyalty is often associated with a positive shopping experience that individuals like to share with their friends, so loyalty can be directly related to word-of-mouth (Watson et al., 2015). As noted by Dick and Basu (1994), loyal customers are more likely to provide positive word-of-mouth. Reynolds and Arnold (2000) defended the influence of loyalty on word-of-mouth, based on previous studies, in which loyalty leads to referrals, endorsement, and positive word-of-mouth. Loyal customers are more likely to intensively use WOM towards their favourite brands (Srinivasan et al., 2002). Loyal customers usually promote the firm by emphasizing the main attributes of its products (Casaló et al., 2008).

Recent studies have confirmed the influence of loyalty on word-of-mouth (Bıçakcıoğlu et al., 2018; Mukerjee, 2018; Coelho et al., 2019; Larregui-Candelaria et al., 2019; Ali et al., 2020). In view of the above, we developed the following research hypothesis:

H11: Brand loyalty positively influences positive word-of-mouth.

3. Research Methodology

The conceptual model proposed in the present study is depicted in Figure 1. This research model investigates brand satisfaction and brand love as mediating variables between the variables hedonic product and brand experience and between the variables brand loyalty and brand WOM. We also propose the impact of hedonic product on brand experience and the effect of brand satisfaction on brand love. Finally, brand loyalty has an impact on brand WOM. Consequently, it is a pioneering model in the Apple brand field, since WOM, being important, is equally crucial in the divulgation of this brand.

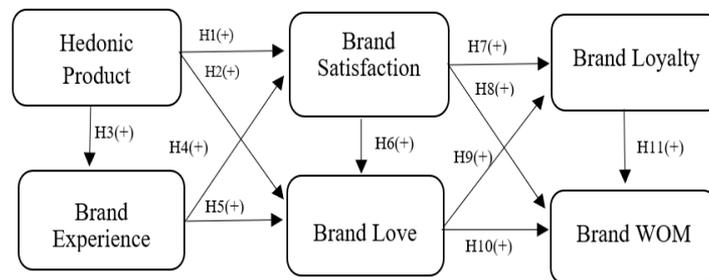


Figure 1 - Proposed Conceptual Model

Source: Elaborated by the authors

3.1. Sample selection and data collection

This research study used a structured and self-administered questionnaire that addressed all the information needed. Thus, to obtain all the data needed, a sample of convenient elements was obtained by using a non-probabilistic convenience sample. Data were collected mainly through email and the social media Facebook. A total of 215 valid responses were obtained. The demographic characteristics indicate that a diverse group of respondents was recruited. Regarding the gender of the respondents, 125 responses were obtained from females (58.1%) and 90 from males (41.9%). Regarding the age of the respondents, 58.2% of the sample is aged between 18 and 30 years. Regarding academic qualifications, 52.1% of the respondents had a university degree and 24.2% had secondary education.

3.2 Measurement scales

The measurement scales of the constructs were based on the literature and adapted to the academic literature. All variables, presented in Table 2, were measured on a seven-point Likert scale, ranging from 1- strongly disagree to 7- strongly agree. The hedonic product, brand love, brand loyalty and brand word-of-mouth measures were adapted from Carroll and Ahuvia (2006). The scale to measure brand experience was adapted from Brakus et al. (2009). The scale to measure brand satisfaction was adapted from Russell-Bennett et al. (2007).

4. Results

4.1 Measurement Model

An initial screening of each scale was conducted using item-total correlations, and exploratory factor analysis (EFA) using SPSS 26.0. Following Anderson and Gerbing's (1988) two-step approach, a measurement model was estimated before testing the hypotheses, using a structural model. The analysis of data was realized through confirmatory factor analysis (CFA) and structural equation modeling (SEM) using the statistical software AMOS (Analysis of Moment Structures) version 26.0. Maximum likelihood estimation procedures were used since these afford more security in samples that might not present multivariate normality. First, we examined the most relevant fit indices of the measurement models recommended by Chin and Todd (1995) and Hu and Bentler (1999).

The measurement model fits the data well. To test a model's fit, the chi-square (X^2) test statistic concerning degrees of freedom (df) can be used. If the X^2/df value is less than 3, the model is considered a good fit. The chi-square (X^2) was 553.244 with 260 degrees of freedom at $p < 0.001$ ($X^2/df = 2.13$). Because the chi-square is sensitive to sample size, we also assessed additional fit indices: (1) normed fit index (NFI), (2) incremental fit index (IFI), (3) Tucker-Lewis's coefficient (TLI) and (4) comparative fit index (CFI). All these fit indices are higher than 0.9 (NFI=0.91, IFI=0.95, TLI=0.95 and CFI=0.95). Because fit indices can be improved by allowing more terms to be freely estimated, we also assessed the RMSEA, which is 0.073.

CFA enables the performance of tests regarding the convergent validity, discriminant validity and reliability of the study constructs. A commonly used method for estimating convergent validity examines the factor loadings of the measured variables (Anderson & Gerbing, 1988). Following the recommendations by Hair et al. (2006), factor loadings greater than 0.5 are considered very significant.

Also, we used the AVE to contrast convergent validity. Fornell and Larcker (1981) suggested adequately convergent valid measures should contain less than 50% error variance (AVE should be 0.5 or above). Convergent validity was achieved in this study because all the factor loadings exceeded 0.5 and all AVEs were greater than 0.5. Next, CFA was used to assess discriminant validity. If the AVE is larger than the squared correlation between any two constructs, the discriminant validity of the constructs is supported (Fornell & Larcker, 1981).

Discriminant validity was also assessed for each pair of constructs by constraining the estimated correlation between them to 1.0, and a difference test was performed on the values obtained from the constrained and unconstrained models (Anderson & Gerbing, 1988). Discriminant validity of the scales was also supported, as none of the confidence intervals of the phi estimates included 1.0 (Anderson & Gerbing, 1988). Finally, Gaski (1984) suggests the existence of discriminant validity if the correlation between one composite scale and another is not as high as the coefficient alpha of each scale. These tests demonstrated that discriminant validity is present in this study.

Table 1 – Factor Correlation and Measurement Information Matrix

Construct	CR	AVE	X_1	X_2	X_3	X_4	X_5	X_6
Hedonic Product (X_1)	.92	.74	.92					
Brand Experience (X_2)	.91	.66	.79	.91				
Brand Satisfaction (X_3)	.97	.88	.65	.60	.97			
Brand Love (X_4)	.95	.80	.80	.81	.79	.95		
Brand Loyalty (X_5)	.92	.75	.67	.67	.76	.84	.93	
Brand WOM (X_6)	.93	.81	.75	.68	.89	.83	.80	.92

Note: The Cronbach's alpha coefficients are found on the diagonal (italic).
Abbreviations: AVE (average variance extracted), CR (composite reliability).

To assess reliability, the composite reliability (CR) for each construct was generated from the CFA. The CR of each scale must exceed the 0.7 thresholds (Bagozzi, 1981). As Table 1 shows, the composite reliability coefficients of all the constructs are excellent, being larger than 0.9. Cronbach's alpha indicator was also used to assess the initial reliability of the scales, considering a minimum value of 0.7 (Cronbach, 1970; Nunnally, 1978). As shown in Table 1, coefficient alpha values are all over 0.9, exhibiting high reliability. Table 1 also shows the AVE for each construct, and a correlation matrix of constructs is also shown. In Table 2, we can also see the standardized loadings and t-value of all scale items.

Table 2 - Measurement scales, results of standardized estimated parameters and t-values of the measurement model

Measures	Standardized Loadings	t-value
<i>Hedonic Product</i>		
Apple products are enjoyable.	0.884	16.223
Apple products provide satisfaction.	0.864	15.634
Apple products are fun.	0.826	14.571
Apple products are a sensory experience.	0.870	15.812
<i>Brand Experience</i>		
This brand stimulates me both visually and with my other senses.	0.749	12.558
This brand induces feelings and emotions.	0.852	15.229
This brand is an emotional brand.	0.785	13.453
I engage in a lot of thoughts when I encounter this brand.	0.877	15.963
I engage in thoughts when I come across this brand.	0.797	13.759
<i>Brand Satisfaction</i>		
I am satisfied with my decision to buy this brand.	0.961	19.099
My choice in buying this brand was the best.	0.974	19.164
I feel good that I consider this brand to be my favourite brand.	0.876	16.240
I think I did the right thing when I decided to buy products from this brand.	0.944	18.487
<i>Brand Love</i>		
This brand is completely amazing.	0.861	15.721
This brand makes me feel very happy.	0.910	17.248
I love this brand.	0.929	17.885
I have a particular feeling for this brand.	0.875	16.155
I am in love with this brand.	0.887	16.531
<i>Brand Loyalty</i>		
This is the only brand I will consider in the future when buying this product.	0.908	17.013
When I go shopping, I don't even look at competing brands.	0.881	16.177
If the shop I usually go to doesn't have the brand available, I either postpone my purchase or look for it in another shop.	0.841	15.010
I prefer to be deprived of the brand than to buy another brand.	0.841	15.004
<i>Brand WOM</i>		
I talk about this brand with my friends.	0.838	15.062
I try to spread the good name of this brand.	0.971	19.357
I am constantly doing good publicity for this brand.	0.889	16.582

4.2. Structural Model

The structural model fits the data very well ($X^2=565.373$, $df=264$, $p<0.01$, $X^2/df=2.141$, $NFI=0.91$, $IFI=0.95$, $TLI=0.94$, $CFI=0.95$, $RMSEA=0.073$). This model is represented in Figure 2.

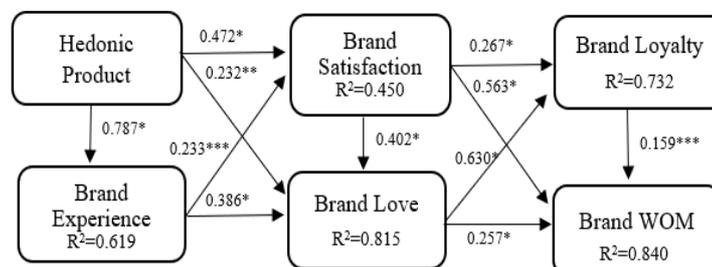


Figure 2 – Structural Model

Note: * $p<0.001$; ** $p<0.01$; *** $p<0.05$; R^2 =Squared Multiple Correlations.

The results in Table 3 show the relationships proposed in the structural model. The model supports the eleven proposed hypotheses.

Table 3 - Estimation results of the structural model

Path	Standardized Loadings	t-value	Hypothesis
Hedonic Product --> Brand Satisfaction	0.472*	4.573	H1 (+): S
Hedonic Product --> Brand Love	0.232**	3.260	H2 (+): S
Hedonic Product --> Brand Experience	0.787*	10.508	H3 (+): S
Brand Experience --> Brand Satisfaction	0.233***	2.284	H4 (+): S
Brand Experience --> Brand Love	0.386*	5.353	H5 (+): S
Brand Satisfaction --> Brand Love	0.402*	7.581	H6 (+): S
Brand Satisfaction --> Brand Loyalty	0.267*	3.676	H7 (+): S
Brand Satisfaction --> Brand WOM	0.563*	8.543	H8 (+): S
Brand Love --> Brand Loyalty	0.630*	8.071	H9 (+): S
Brand Love --> Brand WOM	0.257*	3.429	H10 (+): S
Brand Loyalty --> Brand WOM	0.159***	2.202	H11 (+): S

Note: * p<0.001; ** p<0.01; *** p<0.05 (one tail tests).

According to Bollen (1989), it is very important to analyze the effects of total effects (direct and indirect effects) because an examination of only the direct effects could be misleading. The analysis of indirect effects highlights the importance of mediating variables in explaining social media adoption. Thus, in Table 4, we can observe the standardized direct, indirect and totals effects.

Table 4 - Standardized direct, indirect, and total effects

Paths	Direct Effects	Indirect Effects	Total Effects
Hedonic Product → Brand Experience	0.787*		0.787**
Hedonic Product → Brand Satisfaction	0.472*	0.183***	0.655*
Hedonic Product → Brand Love	0.232**	0.567*	0.799*
Hedonic Product → Brand Loyalty	-	0.678*	0.678*
Hedonic Product → Brand WOM	-	0.682*	0.682*
Brand Experience → Brand Satisfaction	0.233***	-	0.233***
Brand Experience → Brand Love	0.386*	0.094***	0.480*
Brand Experience → Brand Loyalty	-	0.364*	0.364*
Brand Experience → Brand WOM	-	0.312**	0.312**
Brand Satisfaction → Brand Love	0.402*	-	0.402*
Brand Satisfaction → Brand Loyalty	0.267**	0.253*	0.520*
Brand Satisfaction → Brand WOM	0.563*	0.185*	0.748*
Brand Love → Brand Loyalty	0.630*	-	0.630*
Brand Love → Brand WOM	0.257**	0.100***	0.357*
Brand Loyalty → Brand WOM	0.159***	-	0.159***

Note: * p<0.001; ** p<0.01; *** p<0.05.

We used the bootstrapping technique with a sample of 2,000 random observations generated from the original sample, and a confidence interval of 95% was also used in the estimation of the proposed model. This is because the analysis of total and indirect effects is only possible with the use of this method of estimation.

5. Discussion and Conclusions

The hedonic product has a very strong effect on brand experience, then on brand satisfaction, and finally on brand love. In other words, the hedonism associated with the product motivates a stronger experience with the Apple brand. Additionally, the hedonic product enhances brand satisfaction. The influence of the hedonic product on brand love is weaker, although significant. Yu and Yan (2019) demonstrated a very strong effect of the hedonic product on brand experience. Li et al. (2021) also found a strong impact of the hedonic product on brand satisfaction. Finally, Bragagnolo et al. (2020) showed that the hedonic product has a significant influence on brand love.

The experience with the Apple brand strongly influences the love for this brand. Apple brand customers are also satisfied when their experience with the brand is favourable. Rodrigues and Brandão (2021) confirmed that experience with the brand has a positive impact on brand love. Meanwhile, Slaton et al. (2020) demonstrated a direct effect of brand experience on brand satisfaction.

Apple brand satisfaction has the strongest effect on brand word-of-mouth, followed by its impact on brand love, and then on brand loyalty. In the study by Sukhu et al. (2019), brand satisfaction has a significant impact on brand word-of-mouth. Slaton et al. (2020) highlighted that brand satisfaction positively influences brand love. According to Song et al. (2019), brand satisfaction has a positive effect on brand loyalty.

Apple brand love positively influences both brand loyalty and brand word-of-mouth. As in our study, Martín et al. (2020) demonstrated that the relationship between brand love and brand loyalty is stronger than the relationship between brand love and brand word-of-mouth. Finally, in our work, as well as in the study by Coelho et al. (2019), brand loyalty has a positive effect on brand word-of-mouth.

In summary, when only the direct effects are analysed, the hedonic product has the strongest impact on the experience with the Apple brand, followed by its effect on brand satisfaction. The strongest direct impacts on Apple brand love come from brand satisfaction and experience with this brand. Experience with the Apple brand, in addition to its effect on brand love, also has a significant effect on brand satisfaction. Regarding Apple brand loyalty, love for this brand has a much stronger direct effect than brand satisfaction. When it comes to word-of-mouth about the Apple brand, satisfaction with this brand has a stronger direct effect than brand love. Apple Brand loyalty also has a significant but weaker direct effect on brand word-of-mouth.

It should be stressed, however, that the total effects (direct and indirect) should be investigated, because considering the total effects will give us a more rigorous assessment of the relationships between the variables under analysis. The strongest total effect (direct and indirect) on Apple brand love resulted from Apple having hedonic products, followed by experience with the brand, and finally, brand satisfaction. Once again, the hedonic product proved to be crucial for Apple brand satisfaction, as its total effect was very strong. Regarding total effects on Apple brand loyalty, the hedonic product is once again fundamental in achieving loyalty to this brand. Apple brand love and brand satisfaction also have a very strong total effect on loyalty to this brand. The impact of experience with the Apple brand on brand loyalty is weaker. Lastly, in Apple brand word-of-mouth, the strongest total impact comes from satisfaction with Apple brand, followed closely by the hedonic product, which also exerts a very strong influence. Experience with the Apple brand and brand love have a significant impact on brand WOM, though not as strong. As for the impact of Apple brand loyalty on brand word-of-mouth, the effect, while significant, was weaker.

In summary, Apple has always emphasized the hedonic nature of its products, which has been a successful marketing strategy. As we have seen, this feature of its products enhances the experience with the brand and fosters brand love, brand satisfaction, brand loyalty, and brand word-of-mouth.

6. Implications and Limitations

6.1. Theoretical Implications

Much of the interest of the present work lies in the analysis of the variables that are antecedents and consequences of Apple brand love. Apple products are considered hedonic, leading customers to experience unforgettable moments that will both satisfy them and make them love the brand. In turn, brand satisfaction and brand love encourage brand loyalty and word-of-mouth about Apple. Finally, loyal customers speak positively about the Apple brand. Therefore, our intention is to contribute to the analysis of the main determinants and consequences of Apple brand love.

6.2. Management Implications

The main objective of this research was to assess the antecedents and consequences of love for Apple brand products. This brand seems to be associated with hedonic and experiential aspects that are extremely important for its customers to feel satisfied with the brand and develop a deep love for the Apple brand. When this happens, Apple brand customers become brand loyal and recommend the brand to others.

6.3 Limitations and Future Research

The results of the research should be interpreted taking into consideration certain limitations. Future studies may examine other determinants of Apple brand love. Other consequences of Apple brand love may also be researched.

Given that the present study used cross-sectional data, it would also prove of great interest for future research to use a longitudinal sample to assess the nature of loyalty and word-of-mouth over time.

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Digital marketing and sustainable tourism: a resiliency proposal

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Abstract

Social media and digital marketing are increasingly used in order to shape the behavior of individuals. With their far-reaching influence, they have emerged as powerful tools for promoting sustainable behaviors. Consequently, it has become imperative to develop a meticulous strategic plan that integrates both digital marketing and social media, thus building a lasting communication network that inspires tourists to adopt sustainable practices during their travels. This approach can contribute to the promotion of sustainable tourism and, at the same time, positively contribute to environmental conservation efforts on a global scale. 422 individuals participated, 149 (35.2%) male, 273 (64.5%) female and 1 (0.2%) participant of another sex, aged between 18 and 73 years, with an average age of 42.74 years (SD = 15.94%). Using structural equation modeling, the relationships between sustainable destination measures, social networks, tourists' predisposition to sustainability, and tourists' sustainable behaviors were analyzed. The results of this research suggest that the sustainable measures implemented by the tourist destination have an impact on the adoption of sustainable behaviors among tourists, when mediated using social networks by the destination or by the prior predisposition of tourists to adopt these behaviors. However, the sustainable measures of the tourist destination alone are not sufficient for tourists to adopt sustainable behaviors. The application of the model makes it possible to identify the advantages of digital marketing and social networks in sustainable tourism and thus promote a resilient environment for the tourist market in Portugal.

Keywords: Digital marketing, Social networks, Sustainable tourism, Sustainability, sustainable development, Structural Equation Modeling (SEM)

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1. Introduction

The tourism sector has undergone significant changes in recent years due to the rapid advancement of technology, as well as the impacts of the SARS-CoV-2 pandemic. To keep up with these changes, tourist destinations must adapt to new marketing strategies that use digital platforms.

In addition, it is also essential that tourism be sustainable to guarantee the long-term viability of destinations and their economies. Research (e.g., Putra et al., 2021) demonstrated that sustainable tourism is not only a matter of a company committed to social responsibility, but also involves three dimensions: economic, environmental and social.

The collaboration of these three dimensions gives rise to innovations in the tourism sector that can increase the resilience and competitiveness of destinations. Therefore, it is important to propose digital marketing strategies that give priority to sustainability to create resilience in the tourism sector. The proposal of digital marketing strategies requires the incorporation of sustainable principles in tourism planning and practices to create a win-win situation between industry and natural resources. In this sense, this study aims to contribute to the understanding of the role that digital marketing can play of sustainable tourism destinations, as well as contribute to the construction of their resilience.

However, the construct of resilience, understood, in tourism, as the "persistence of systems and their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables" (Holling, 1973, p. 14) is not present in the structural model, since the focus is to test the proposed structural model and that this, subsequently, contributes to resilience in the sector. To this end, the study will focus on the analysis of the current literature on digital marketing and sustainable tourism to identify the main themes and trends, as well as test the proposed structural model.

Research hypotheses were stipulated with the objective of defining the possible relationships between the constructs present in the study, and measures were also defined that seek to assess the sustainable measures implemented by tourist destinations, the use of social networks by tourists, the predisposition of tourists to adopt sustainable behaviors and the effective adoption of sustainable behaviors by tourists in tourist destinations.

For the development of this study, questionnaire surveys were used, where it was possible to obtain 422 participants during the three-month period, between January 2022 and April 2022. The results obtained allowed us to test the structural model and carry out a path analysis that allowed us to confirm the hypotheses under study, as well as to prove the suitability of the data to the model.

This article is comprised of six main sections. After this introduction, the second section is dedicated to the literature review, which summarizes contributions on digital marketing, social networks, measures implemented for sustainable tourism, predisposition and behaviors adopted by tourists. Subsequently, the third section presents the methodology of this study, the fourth section consists of the analyses performed and the fifth section presents the results obtained, as well as their discussion. The article ends with the conclusion, the main limitations, and suggestions for future research.

2. Literature Review

2.1. Digital Marketing and Social Networks

In the current digital era, in which traditional marketing methods have taken a back seat and companies are increasingly resorting to online advertising, social networks play a fundamental role in the success of digital marketing campaigns (Housley et al., 2018). Social networks such as TikTok, Facebook, Twitter, Instagram and LinkedIn offer companies an economic platform to promote their products or services through digital marketing.

The use of emojis is also a common practice on social networks, especially in digital marketing. Previous research (e.g., Huang et al., 2021; Wang et al., 2023) shows an influence of emojis on social networks on the involvement of the media and on the intention of cooperation in environmental campaigns. In addition, social networks also facilitate two-way communication between companies and customers, allowing for a personalized experience that is crucial for experimental marketing campaigns. These campaigns have the potential to influence consumers' social norms, attitudes, and buying behaviors, regardless of the regulations themselves.

In the tourism sector, social networks have emerged as a powerful tool for digital marketing campaigns. By harnessing the potential of social networks, tourism companies are reaching a wider audience and creating new experiences (Ndekwa & Katunzi, 2016). Tourism companies can build a digital identity and establish a financial infrastructure that promotes sustainable development, as part of the digital transformation in tourism (e.g., Dabeedooal et al., 2019; Wang et al., 2022). In addition, social media campaigns have become a strategy for transmitting messages related to sustainability to society.

2.2. Measures for Sustainable Tourism, Predisposition and Behaviors Adopted by Tourists

Sustainable tourism has become increasingly important in the modern world, as individuals are increasingly aware of the impact that tourism can have on the environment and local communities (e.g., Parmawati et al., 2020; Wang et al., 2023). Sustainable tourism is a broad concept, with different interpretations, however, to guarantee sustainable tourism development, the authors

agree that it is essential to apply measures that address the economic, environmental and social aspects of tourism (e.g., Niavis et al., 2019; Nurjaya, 2022).

One way to achieve sustainable tourism development is through the adoption and implementation of sustainable measures in the tourist destination. These measures include actions such as reducing the environmental impact of tourist activities, supporting local communities through the use of their resources and knowledge, the promotion of cultural heritage and traditions, the improvement of the quality of life of local residents, the protection and respect for the environment by reducing pollution, recycling, the use of renewable energies and the conservation of natural areas (e.g., Francis et al., 2019; Horn & Proksch, 2022; Niavis et al., 2019; Parmawati et al., 2020; Zhao & Li, 2018). As more and more tourists travel responsibly, the sustainability of a tourist destination can have a significant impact on your choice of destination. Tourists tend to prefer destinations that have adopted sustainable measures to preserve the environment and promote responsible tourism practices.

According to Flagestad and Hope (2001), the application of strategic management theories developed for companies can be applied to manage a tourist destination in a sustainable way. This includes focusing on long-term sustainability objectives, incorporating sustainable practices into all aspects of the operation, involving stakeholders and the local community in decision-making processes, and continuously monitoring and evaluating the impacts of tourism on the destination. Having said that, we formulate the following hypothesis:

Hypothesis 1: It is estimated that the adoption and implementation of sustainable measures in the tourist destination is directly related to the use of social networks by tourists.

In addition, tourists themselves can adopt responsible behaviors to contribute to sustainable tourism. This includes activities such as reducing water and energy consumption, turning off all equipment or air conditioning when leaving a room, avoiding single-use plastic products, supporting businesses and local communities, respecting cultural norms and values, reusing towels and sheets in the chosen accommodation, traveling on foot, by bicycle or public transport, and recycling (e.g., Dolnicar, 2023; Hu et al., 2021; Singh & Ogbeide, 2018). In this sense, he will formulate the following hypothesis:

Hypothesis 1.1: It is estimated that the adoption and implementation of sustainable measures in tourist destinations is indirectly related to the behaviors adopted by tourists in tourist destinations through the use of social networks by tourists.

Culture influences tourists' attitudes and behaviors regarding sustainability in their favorite destinations (Aydın & Alvarez, 2020). Thus, it is important that managers not only implement sustainable measures, but also educate tourists about their role in the preservation of the environment and encourage them to adopt sustainable behaviors during their trips. The behavior of tourists plays a fundamental role in promoting the development of sustainable tourism. Destination marketing and communication tools are effective in influencing tourists' decision-making processes to adopt sustainable behaviors (Shen et al., 2020). The following hypothesis was defined:

Hypothesis 2: It is estimated that the adoption and implementation of sustainable measures in the tourist destination is directly related to the behaviors adopted by tourists.

The predisposition of tourists to adopt sustainable behaviors has increased in recent years (Aydın & Alvarez, 2020). This leads to a shift in the tourism industry towards promoting sustainability as an important factor to consider when choosing a travel destination (Almeida-Santana & Moreno-Gil, 2019). In fact, tourists may be predisposed to adopt sustainable measures in destinations. To this end, this predisposition may be reflected in the choice of the destination through the sustainable practices adopted by them, payment of additional amounts for services called sustainable, and loyalty to destinations for practicing sustainable tourism (e.g., Aydın & Alvarez, 2020; Marchi et al., 2021; Solis-Radilla et al., 2019). Thus, the following hypotheses were defined:

Hypothesis 3: It is estimated that the adoption and implementation of sustainable measures in tourist destinations is directly related to the predisposition of tourists to adopt sustainable behaviors in tourist destinations.

Hypothesis 3.1: It is estimated that the adoption and implementation of sustainable measures in tourist destinations is indirectly related to the behaviors adopted by tourists in tourist destinations through the predisposition of tourists to adopt sustainable behaviors in tourist destinations.

Figure 1 shows the causal relationships between the previously presented research hypotheses.

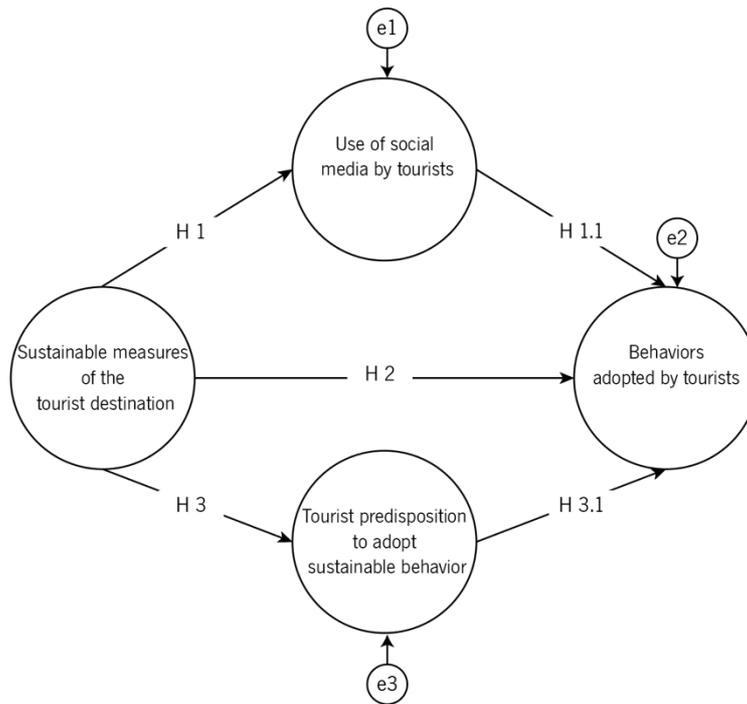


Figure 1 – Proposed Structural Model

Source: Own elaboration

3. Method

The investigation was conducted using a non-probabilistic convenience sample. Questionnaire surveys were accessible online for the three-month period from January to April 2022 and were no longer available after this period for data collection purposes. It is important to take these limitations into account when interpreting the results and drawing conclusions from this study.

Initially, the participants received a request for informed consent that described various aspects of the research project, such as its purpose and confidentiality measures. Subsequently, they were presented with a set of questionnaires related to different facets of digital marketing and sustainable tourism. These included issues related to the use of social networks by tourists, the measures implemented by destinations for sustainable tourism, the predisposition and behaviors adopted by tourists when visiting destinations. Finally, the participants filled out a sociodemographic questionnaire with personal information. Overall, this comprehensive approach aimed to gather valuable information about contemporary trends in digital marketing practices, as well as their impact on environmental sustainability efforts.

3.1. Characterization of the Participants

The sample has 422 participants, 148 (35.1%) men, 273 (64.7%) women and 1 (0.2%) participant from another gender. The age of the participants is between 18 and 73 years, with an average age of 42.77 years (SD= 15.94%), of which 420 (99.5%) are of Portuguese nationality, 2 (0.5%) are of Brazilian nationality.

Table 1 shows the geographical distribution of the participants in Mainland Portugal, the majority from the North region, 174 (41.2%). Regarding marital status, 175 (41.5%) are married, 163 (38.6%) are single, 36 (8.5%) are divorced, 36 (8.5%) are in a consensual union, 4 (0.9%) are separated, and 4 (0.9%) are widowed, and 4 (0.9%) are at another level of civil commitment. Regarding education, 165 (39.1%) have doctorates, 100 (23.7%) have degrees, 86 (20.4%) have master's degrees, 38 (9%) have post-doctorates, 31 (7.3%) have secondary education, 1 (0.2%) have specialization and, finally, 1 (0.2%) have a bachelor's degree.

Table 1 – Distribution of participants per region

Mainland Portugal Region	Number of participants	Percentage of participants
North	174	41,20%
Center	114	27,00%
Lisbon Metropolitan Area	80	19,00%
Alentejo	20	4,70%
Algarve	15	3,60%
Azores Autonomous Region	8	1,90%
Madeira Autonomous Region	5	1,20%

Source: Own elaboration

3.2. Instruments

To measure the variables under study, we structured measures based on the literature review conducted. To assess the adoption and implementation of sustainable measures in the tourist destination, a scale was constructed consisting of eight items (e.g., item one “The destination respects and protects the environment.”), answered on a Likert-type response scale, between 1 (very low) and 5 (very high), which for the present study sample showed a good internal consistency index, according to Cronbach's Alpha ($\alpha=.95$) presented by Gliem and Gliem (2003). To assess the use of social networks by tourists, a scale consisting of six items was constructed (e.g., item three “The information I find on social networks influences the choice of a tourist destination or the purchase of a product.”), answered on a Likert-type response scale, between 1 (I totally disagree) to 5 (I totally agree), which for the present study sample, presented a good internal consistency index ($\alpha=.83$). To assess the behaviors adopted by tourists, a scale consisting of seven items was constructed (e.g., item six “I reused the towels and sheets in my accommodation.”), answered on a Likert-type response scale, between 1 (always) and 5 (never), which for the present study sample, presented an acceptable internal consistency index ($\alpha=.78$). To assess tourists' predisposition to adopt sustainable behaviors in tourist destinations, a scale was constructed consisting of four items (e.g., item one “I would visit a destination due to the sustainable practices that are adopted there.”), answered on a Likert-type response scale, between 1 (I totally disagree) to 5 (I totally agree), which for the present study sample, presented a good internal consistency index ($\alpha=.81$).

4. Analyses

Statistical analyses were performed using the Statistical Package for the Social Science (IBM SPSS), version 28.0 for Mac and the Analysis of Moment Structures (AMOS), version 28.0 for Windows.

Table 2 shows the correlations between the variables under study, the internal consistency indices of the structural model variables, for the total sample ($n=422$), the average values and the standard deviations. The magnitude of the relations indicates the presence of moderate relations ($.30 < r < .50$) and of strong relationships ($r > .50$) (Cohen, 1988) between the variables, without the existence of multicollinearity. Furthermore, the correlations are statistically significant ($p < .001$), thus fulfilling the linearity assumption.

Table 2 – Correlations between study variables, mean values, standard deviations, and internal consistency indices (N=422)

	Adoption and implementation of sustainable measures in the tourist destination	Use of social networks by tourists	Behaviors adopted by tourists	M	DP	α
Adoption and implementation of sustainable measures in the tourist destination	.	.	.	31.33	6.56	.95
Use of social networks by tourists	.15**	.	.	22,61	4.44	.83
Behaviors adopted by tourists	.18**	.11**	.	28.53	3.17	.78
Tourists' predisposition to adopt sustainable behaviors	.50**	.13**	.30**	15.28	2.70	.81

Note: ** $p < .01$

Source: Own elaboration

The statistical assumptions inherent to structural equation models were verified, namely: (1) lack of multicollinearity (Cohen, 1988); (2) the principle of linearity of relations (statistically significant correlations between variables, Marôco, 2010); (3) minimum sample size between 100 and 200 participants (Schumacker & Lomax, 2010).

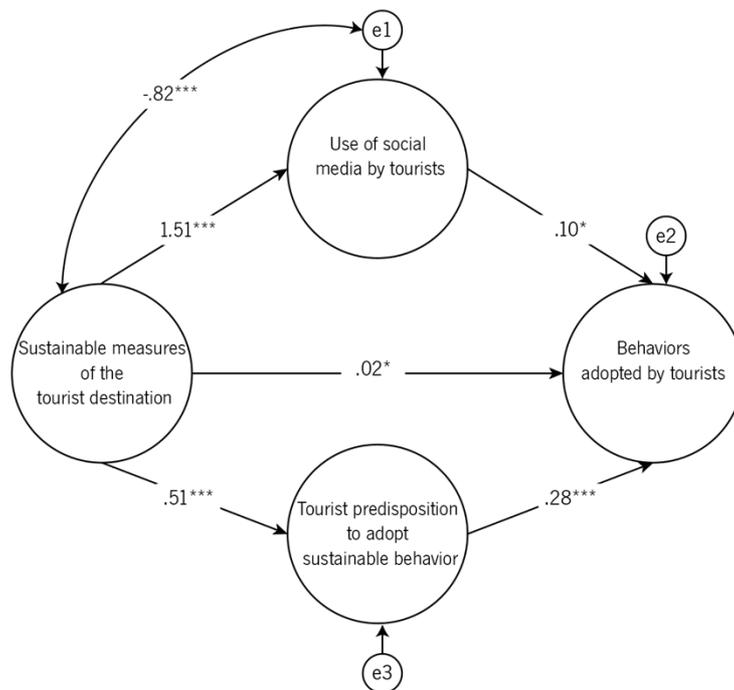
However, a violation of the (4) multivariate normality was found when $sk=ku=0$, (Mardia coefficient ~ 3), so the bootstrapping method was used with 500 samples and a 95% confidence interval (e.g., Marôco, 2010; Gilson et al., 2013) and the absence of extreme outliers (Mahalanobis Distance $< .001$), and in the case of the presence of outliers, the analyses were performed without them.

Subsequently, path analysis was performed to assess whether the structural model was well adjusted to the data and whether the hypotheses defined later are verified, thus confirming the existence, or not, of the proposed relationships between the constructs.

The structural model, without outliers, showed a very good CFI value ($\geq .95$; for the present sample .98), a very good GFI value ($\geq .95$; for the present sample .99), a good RMSEA value ($.05 > RMSEA < .10$; for the present sample .08) and an AIC value of 67.23.

5. Discussion

Figure 2 shows the standardized estimates between the constructs of the final structural model. These estimates were analyzed and normalized to provide an academically rigorous representation of the relationships between these key components.



Note: $*** p < .001$; $* p < .05$

Figure 2 – Final Structural Model

Source: Own elaboration

The results point to statistically significant relationships between the constructs, and it is possible to verify that there is a direct relationship between the adoption and implementation of sustainable measures in the tourist destination and the use of social networks by tourists ($\beta=1.51$); there is a direct relationship between the adoption and implementation of sustainable measures in the tourist destination and the behaviors adopted by tourists when visiting destinations ($\beta=.02$) and there is also a direct relationship between the adoption and implementation of measures sustainable in tourist destinations with the predisposition of tourists to adopt sustainable behaviors ($\beta=.51$). With regard to the indirect effects, it is possible to verify that the adoption and implementation of sustainable measures in the tourist destination are indirectly related to the behaviors adopted by tourists in tourist destinations through the use of social networks by tourists ($\beta=.15^*$) and it appears that the adoption and implementation of sustainable measures in the tourist destination is indirectly related to the behaviors adopted by tourists in tourist destinations through the predisposition of tourists to adopt sustainable behaviors in tourist destinations ($\beta=.14^*$)

In view of these results, it is possible to confirm all the hypotheses initially formulated.

The results indicate that social media campaigns emerged as an effective tool for communicating messages related to sustainability to society, as already presented by previous research (e.g., Dabeedooal et al., 2019; Wang et al., 2022). This disruptive digital modification has particularly affected the tourism industry, leading to a shift in how destinations are marketed and promoted (Arasli et al., 2021). The advent of social media has revolutionized tourism communication and provided destination marketing tools to promote sustainability initiatives (Arasli et al., 2021). By leveraging the vast reach and influence of these platforms on consumer decisions, sustainable destination marketers can effectively promote their ecological practices, while educating tourists about responsible travel behaviors - thus contributing positively to achieving sustainable development goals on a large scale.

We can infer, through the results, that tourists play an important role in promoting sustainable tourism, with the adoption of responsible behaviors that contribute to the preservation of the environment and local communities. To do this, they can engage in various activities, such as reducing water and energy consumption levels, making sure that all equipment or air conditioning is turned off when they leave the room, always avoiding single-use plastic products, supporting companies and local communities through ethical spending practices, respecting the cultural norms and values of the host countries visited during their trips.

In addition, tourists can also make conscious efforts to promote sustainable tourism by reusing the towels and sheets provided at the accommodation facilities instead of ordering new towels every day. Moving responsibly on foot or by bicycle while exploring destinations, whenever possible, not only reduces carbon emissions, but also provides opportunities for physical exercise while enjoying the beautiful landscape that surrounds them. In addition, participation in recycling programs created at tourist sites promotes environmental awareness among fellow travelers, while contributing positively to the reduction of waste production (e.g., Dolnicar, 2023; Hu et al., 2021; Singh & Ogbeide, 2018).

The predisposition of tourists and the effective adoption of sustainable behaviors by tourists when traveling to destinations has increased significantly in recent times, according to research by Aydın and Alvarez (2020). The results obtained corroborate this trend of change, which is significant in the tourism industry, where the promotion of sustainability has become an essential aspect to consider when choosing a travel destination (Almeida-Santana & Moreno-Gil, 2019). In fact, tourists have shown an inclination to adopt ecological measures during their trips. This is manifested in various ways, such as the choice of destinations that practice sustainability or offer sustainable services. In addition, they also do not hesitate to pay more for these offers and tend to show loyalty to places that follow ecological practices - all indicators of tourists' growing appreciation for environmentally conscious choices (e.g., Marchi et al., 2021; Solis-Radilla et al., 2019).

One important aspect of sustainable tourism is the ability to adapt and be resilient in the face of challenges. Resilience in the tourism industry, defined as "the ability of systems to adapt to and recover from disturbances while maintaining their essential functions" (Holling, 1973, p. 14), is crucial because with the increasing impacts of climate change, it is imperative that destinations address their environmental footprints and adopt sustainable initiatives. Governments around the world recognize this need for resilience and are actively seeking ways to promote long-term sustainability in tourism. One approach is through digitalization and innovation, leveraging technology's potential to transform operations within the industry. By embracing digitization and adopting new technologies, businesses can enhance competitiveness on a global scale during these challenging times. Furthermore, information technology plays a pivotal role in promoting products and marketing strategies that support good governance principles. Implementing effective promotion campaigns utilizing digital platforms will expedite recovery efforts not only for the tourism sector but also small- and medium-sized enterprises involved.

Digital marketing plays a crucial role in promoting sustainability in the tourism industry and increasing its resiliency (Corte et al., 2021; Luo et al., 2022). Digital marketing can improve destinations' image and showcase their commitment to sustainability. By utilizing social media platforms, destinations can communicate their initiatives and efforts towards sustainability to a wide audience. Through social media, destinations can share information about conservation initiatives, eco-friendly accommodations and activities, and community involvement in sustainable practices.

6. Conclusions

In conclusion, sustainable tourism has become increasingly important in the sector due to global concerns such as climate change and social responsibility. The adoption of sustainable tourism requires collaboration between tourists, service providers and host communities and thus contributing to the resilience of the sector in the face of times of crisis.

The adoption of ecological behaviors by tourists increases their positive impact on the environment, while promoting local economic development. Marketing strategies that promote sustainable tourism formats can also bring about an effective change in behavior, which is beneficial for both service providers and travelers. Thus, to recover sustainably from uncertain pandemic circumstances, it is vital to adopt research models related to Tourist Co-Creation Behavior. The future of the tourism industry depends on a conscientious approach.

The findings of the study underline the importance of tourist destinations to create a robust digital identity and develop a solid financial infrastructure that promotes sustainable growth, thus boosting the digital transformation in tourism. Notably, the investigations of Dabeedooal and colleagues (2019) and Wang and colleagues (2022) provide evidence that supports this notion.

The study presents as suggestions for future research the need to investigate or other factors that are associated with the error

between the construct of adoption and implementation of sustainable measures in the tourist destination and the construct of the use of social networks by tourists, to understand what other factors can explain this relationship. Furthermore, as a limitation, the sample is non-probabilistic by convenience, which does not allow generalizing the results. In this sense, as a future perspective, it would be relevant to conduct further research in this area with structured data collection that would allow the generalization of the results.

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LGBT Tourism: Hotel Industry and Local Community Perceptions and Attitude

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Abstract

In tourism, the achievement of acceptance, freedom of expression, equal rights, and respect in various destinations and public spaces has stimulated growing interest from companies and destinations, reinforced by the strong purchasing power and the availability for more frequent trips by LGBT community (Baxter, 2010; WTO, 2017). For a destination that aims to attract and build a strong relationship with the LGBT market, it is vital, regardless of their motivation, to offer a safe and welcoming environment, interacting with understanding and respect. This study analyses the North of Portugal stakeholders' attitudes and perceptions, particularly the hotel industry and the local community, towards the LGBT tourism/market. By conducting two separate studies that complement each other, it was concluded that the region has the right conditions to engage in LGBT tourism and captivate this market segment, but for this, there are still slight prejudices that must be corrected.

Keywords: Discrimination, Hospitality, LGBT tourism, Northern Portugal, Stakeholders

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1. Introduction

Similar to what happens at national and international level, there is a before and an after Covid 19 in the tourism performance of Northern Portugal. Until then, this region showed a highly competitive behaviour, with above-average growth in Portugal (+7.9%), overnight stays reaching 10.8 million in 2019 (Turismo de Portugal, 2021). In the 2nd and 3rd quarters of 2020, a sharp drop in tourism performance is observed in the order of 89.1% and 49.7%, respectively, compared to the same period (CCDR-N, 2020).

Regardless of the current pandemic situation, it is common knowledge that tourism is vital to the economic growth of various countries and regions, and it is expected that, with the gradual generalization of the vaccine for COVID-19, consumer confidence will be re-established, travel restrictions will decrease, and travel and tourism will normalize during the next year (WTO, 2021). In this context, the destination Porto e Norte de Portugal (PNP) must "prepare the ground" to receive tourists with the hospitality as usual.

For the tourist segment targeted by this study - the LGBT tourist - in clear growth but very susceptible to the social character of the destination, some relevant questions urgently need to be answered. Does the hospitality of people from the North also apply to LGBT tourists? Can and should the destination Porto e Norte de Portugal invest in LGBT tourism?

LGBT tourism is a niche tourism aimed at developing and marketing products and services attractive to the LGBT (lesbian, gay, bisexual, and transgender) market that has evolved considerably in both demand and supply. The LGBT tourist is an experienced traveller and demonstrates an above-average aptitude for consumption. With an estimated purchasing power of more than €3 trillion per year and a population of 371 million individuals globally (+15 years old) (LGBT Capital, 2020a), the LGBT community makes, on average, four trips and stays eleven nights in a tourist accommodation unit (CMI, 2019), with spending over €100 billion in incoming tourism alone. In Portugal, the revenues exceed 2 billion in 2019 (LGBT Capital, 2020b; Variations, 2020).

These data leave no doubt about the potential of LGBT tourism and, in a differentiating and captivating perspective of this segment, countries, and regions make a point of promoting themselves as LGBT-friendly destinations. According to the available literature, this market segment is still underdeveloped, so it is pertinent to analyse the opportunities and requirements of this market to satisfy its expectations and build its loyalty and understand the performance of stakeholders in the North region towards this market. To understand, through e-mail (request for the availability of accommodation) and an online survey, the reactions and attitudes of front office professionals and the local Northern community towards the market - hospitality, acceptance or prejudice/discrimination based on sexual orientation and gender identity are key issues to be clarified in this study.

2. The LGBT Tourism

The tourism industry is in constant mutation. The emergence of new technologies and tenacious changes in behaviours and desires of tourists leads to the appearance of different tourism products through the creation of new resources and attractions and the development of those already on the market. This mutability requires the adaptation in a persistent way of tourism activity to the real desires of consumers (Medaglia, Maynard & Silveira, 2013).

For this purpose, it is essential to analyse and knowledge of tourists' characteristics, needs, motivations, and consumption habits, and, simultaneously, the resources and products that the destination has to offer to adapt the tourism activity to the real desires of consumers and the destination's capacity. Tourists differ in their motivations, needs, desires, and other characteristics, so ignoring these differences and creating an undifferentiated destination marketing will lead to the satisfaction of a residual number of people (Dolnicar, Lazarevski & Yanamandram, 2013) and, consequently, to the failure of the sector.

Currently, new niche markets are the target of study, being one of them the LGBT market. This research process has been facilitated by the growing number of LGBT individuals willing to identify themselves. However, there are still over 70 countries where homosexuality is illegal, making it impossible to quantify the actual size of the LGBT community (WTO, 2017).

Nevertheless, policymakers and businesses recognise the importance of these growing minority subcultures in size, increased purchasing power, and greater political and cultural awareness and pride alongside the need to respond to consumer differences with strategies to differentiate and capture these markets. The visibility, acceptance, and legal recognition of the equal rights of people in the LGBT community in many countries has fostered the confidence of destinations and tourism businesses to target LGBT consumers. The tourism sector was one of the economic sectors that led the way in targeting the LGBT market not simply because of the "purchasing power" factor but because tourism is a sector associated with openness, diversity, acceptance, and the celebration of differences among people around the world (Jordan & Traveller, 2018).

The phenomenon of niche tourism targeting the market of lesbian, gay, bisexual, and transgender people encompass several concepts and specificities that provide the creation of several subgroups and terminologies subject to change and in permanent evolution over time - gay tourism, gay and lesbian tourism, queer tourism, pink tourism, LGS tourism, LGBT tourism, LGBTI tourism, LGBT+, LGBTQ, LGBTQ+, LGBTIQ etc. According to Community Marketing & Insights (2019), the LGBT terminology is preferred by the whole community (particularly by older generations) and is considered by organisations to be

the 'safest'.

LGBT tourism comprises those activities undertaken and marketed to attract the LGBT (lesbian, gay, bisexual, and transgender) market, or those that by nature and/or design appeal to and are pursued by the LGBT market. The interaction between suppliers, managers, facilitators and consumers of the LGBT tourism product and service and their subsequent relationship is integral to the concept (Southall & Fallon, 2011; WTO, 2012).

In the view of several authors (Hughes, 2002; 2005; Jordan & Traveller, 2018; Kyriakaki & Abanoudis, 2016; Paradela, Gonzalez & Vila, 2014; Poria, 2006; Ram, Kama, Mizrachi & Hall, 2019; Sanches, Mancini & Nascimento, 2011; Weeden, Lester & Jarvis, 2016; WTO, 2012; 2017) this market represents a relevant contingent, with an above-average cultural level, high probability of taking holidays, frequent holidays and with high income and spending, therefore, an important consumer segment. For many, frequent travelling represents a valuable opportunity for personal enrichment and socialisation and to live more freely when this is not possible in their place of residence (Jordan & Traveller, 2018).

However, the LGBT segment is not homogenous; quite the contrary, it is a highly diverse segment (Jordan & Traveller, 2018). The experience of LGBT tourist, like travellers in general, can vary according to gender, race, income, social class, age, among other criteria (WTO, 2017). Community Marketing Inc., a consultancy company, recognised worldwide for its LGTB relevance, in the studies conducted on LGBT tourism and hospitality, carries out the delimitation of the community by sub-niches, subdividing them not only according to gender "Gay & Bi Men" and "Lesbian & Bi Woman" "Gender Expansive", but also in generational terms "Millennials+", "Generation X" and the "Boomers".

CMI (2011; 2018; 2019) reports that gay and bisexual men travel around 3.9 times a year and are more likely to go to urban, LGBT hotspots (experience with the local LGBT community, events, and nightlife) and warm-weather destinations, whereas gay and bisexual women travel 3.3 times a year and preferentially seek LGBT friendly, beach and nature destinations. In generational terms, "Millennials+" are the most likely to consider themselves "urban travellers", and LGBT hotspots and friendly destinations (CMI, 2018).

In terms of purchasing power, many LGBT tourists consider themselves "moderately priced travellers with a bit of luxury" regardless of their high level of purchasing power. With a slight tendency more toward luxury stand out the Gay and Bi men, Generation X" and the "Boomers", on the opposite side, with a tenuous propensity for more modest spending, the Gay and Bisexual women, the "Gender Expansive" and the "Millennials+" generation (CMI, 2018; 2019). Paradela et al. (2014) highlight that young people (aged 19-25) spend the least, while the highest tourist expenditure per day (+150€) occurs mainly in the over 36 age group. Although the LGBT segment (particularly gay) is often associated with tourists with high purchasing power and luxury travel, most LGBT tourists come from different socio-economic backgrounds and seek experiences at various prices (Jordan & Traveller, 2018).

At the destination choice level, tourists travel for many needs and motivations, and LGBT consumers are no exception. Tourists are seeking social interaction in LGBT circles (freedom, affirmation of their identity, and social interaction with the LGBT community, events, and nightlife), and tourists seeking comfort, relaxation, and cultural offer, but recognise the feeling of safety and respect for LGBT status as key factors in destination choice (Berezan et al., 2015; CMI, 2018, 2019; Hughes, 2002; Hughes & Deutsch, 2010, Paradela et al., 2014).

Several authors are stating the importance of safety, an open-minded and forward-thinking culture, hospitality, a history of acceptance, and equal rights for people from the LGBT community as key elements when choosing a destination (e.g., CMI, 2019; Hodes et al., 2007; Hughes & Deutsch, 2010; Jordan & Traveller, 2018; Monterrubio, 2008; Monterrubio, Madera & Pérez, 2020; Paradela et al., 2014; Pritchard et al., 2000; Ram et al., 2019; Sanches et al., 2011; Usai, Cai & Wassler, 2020; WTO, 2017). As tourism represents the opportunity to "get away from it all", the desire to escape from the pressure of being gay in the predominantly heterosexual world is undoubtedly one of the main motivations in choosing a destination. LGBT-friendly spaces, a term used to describe places, destinations, and businesses open to welcome and receive with hospitality the LGBT community (Hughes, 2002; CMI, 2017), are for many considered "havens" because they provide a sense of safety, affirmation of identity, therefore are preferable destinations for LGBT tourists (Monterrubio, 2008; Pritchard et al. 2000, Weeden et al., 2016).

The majority opt for four and 5-star hotels or villas and flats in gated communities regarding the selection of tourist accommodation. Gay and bisexual men opt more for urban hotels (luxury hotels, design hotels, and boutique hotels), and lesbian and bisexual women tend to be more varied in accommodation options, more apologists for Airbnb, and outdoor options. As for brand, tourists still consider it essential to stay in a branded hotel with a positive LGBT reputation, with Hilton and Marriott hotel chains being the most popular in this regard (CMI, 2018, 2019). The main motivations when choosing an accommodation beyond the requirements traditionally requested by heterosexuals (quiet rooms, comfortable beds, value for money, late-breakfast, internet, location), LGBT tourists value above all an environment of respect, acceptance, and non-discrimination (CMI, 2011, 2018, 2019; Paradela et al., 2014; Poria, 2006).

For a group that has suffered and continues to suffer repression in many parts of the world, elements such as non-discrimination in relation to gender are important when choosing destinations and their tourism products and services.

In this sense, all those who wish to attract this market must recognise the importance of social acceptance and recognition for all, based on modern, non-discriminatory legislation, with equal rights for all, including same-sex couples (WTO, 2012). Engagement and attraction towards the LGBT market, regardless of their motivation, should have a central focus on creating a

safe and welcoming environment for LGBT travellers, interacting with understanding and respect (Jordan & Traveller, 2018). Destinations and businesses should be aware of the need for destination development as a systemic, participatory, sustainable, and persistent process, within which tourism interests, those of the LGBT market, and the interests of destinations both territorially and in terms of their residents should be balanced. It will be useless to offer LGBT-friendly hotel services if the surroundings, such as security, complementary services, access, the population's sense of hospitality, show signs of exclusion and non-acceptance towards the LGBT market. An LGBT-friendly culture should be transversal to all tourism product components and destinations since the LGBT tourist experience is lived in its entirety (Kastenholz, 2005, 2006).

3. Methodology

This research combines qualitative and quantitative techniques and methods. For the analysis of the perception and attitude of the professionals of accommodation units towards the LGBT market, it was decided based on the works of Howerton, Meltzer, and Olson (2012) and Rodrigues, Moniz, and Tiago (2017), to use email to request information and availability of accommodation, using mystery customers (LGBT couple and another heterosexual couple), to analyse whether the LGBT couple is treated differently compared to heterosexuals: rejection in the availability of accommodation, more negative attitudes, less friendly, affectionate, attentive and hospitable due to their sexual orientation. The study's universe was considered the hotel industry (hotels, flats, villas, and tourist complexes) from 4 to 5 stars, which were selected according to the official list of the National Tourism Register available on the Turismo de Portugal portal.

The initial sample was 161 accommodation units. However, for various reasons - accommodation units out of service or exclusive to members; request for information/booking exclusively through the online booking centre; a single booking centre for several hotel chains - we had to reduce the sample to 143 units. In terms of procedure, we decided to create two fictitious accounts on the Gmail email platform, one of the best known and most used in the world. The next step was to send the emails on two different days, but consecutively so as not to raise suspicions about the real interest of the stay in the accommodation unit: first the emails from the homosexual couple on 17 March 2019 and on 18 March 2019 the emails from the heterosexual couple. A total of 286 emails were sent and 187 replies were received, corresponding to 65.4%.

As for the perception of the local Northern community towards LGBT tourism and market, in particular their reactions and attitudes towards the market - hospitality, acceptance or prejudice/discrimination based on sexual orientation and gender identity - and towards LGBT tourism - knowledge and impacts for the region, we opted for an online questionnaire survey. This methodology allowed a more exhaustive study and maintained a perception of total anonymity to the respondents.

The questions were mainly closed-ended, simple choice, multiple-choice, and mostly measurement and scale (Likert of five propositions) to measure the behaviour and attitude of the local North community towards the LGBT market and the impacts of LGBT tourism. The target population consisted of the Northern region community, with the questionnaire applied to a random non-probability sample (Eusébio, Kastenholz, & Carneiro, 2003) consisting of 240 individuals, between March and August 2019.

The information collected through the application of the questionnaire was entered into SPSS (Statistical Package for the Social Sciences), and several statistical procedures were performed: univariate statistics; factor analysis (KMO test and Bartlett's Test of Sphericity applied to assess the adequacy of the factor analysis); comparative analysis (contingency tables, Chi-square (χ^2) test of independence, t-test, and the Kruskal-Wallis test) to identify differences between the sociodemographic variables, gender, age, and educational qualifications; cluster analysis (non-hierarchical method using the k-means clustering algorithm) aimed at identifying groups of residents who are similar in terms of sociodemographic variables and opinions.

4. Results

Tourist accommodation units represent a fundamental pillar for a tourist destination; without them, tourist activity becomes unfeasible, in the same way, that the hotel business cannot survive without tourists. For that very reason, when the North region was investing in LGBT tourism, it was considered essential to listen to the hotel units trying to understand if they were willing to receive people with different sexual orientations and gender identities with the same hospitality and quality of service.

According to our results, the front office professionals of the hotel units that answered the emails did not show any prejudice or discrimination towards LGBT couples (see Table 1), despite the answers projecting poor quality, independently of sexual orientation (for more detailed information, see Silva & Vareiro, 2020). However, some discriminatory behaviours towards homosexuality were identified by some hotel units in the North of Portugal (with emphasis on 4-star units and located in Minho and Trás-os-Montes sub-destinations), although expressed implicitly.

Similar to the study by Howerton et al. (2012), these behaviours are marked by the denial of accommodation availability, to the extent that there was a considerable differential in responses. The results attest that 66% of the front office professionals in the hotel units who rejected the LGBT couple sent an affirmative email of accommodation availability to the HETERO couple.

Table 1: Availability request: perception and attitudes of prejudice

Availability request: perception and attitudes %		Porto		Douro		Minho		Trás-os-Montes		Porto & North of Portugal %	
		H 4*	H 5*	H 4*	H 5*	H 4*	H 5*	H 4*	H 5*		
Availability	LGBT	66	67	44	6	40	40	13	100	55	
	HETERO	76	75	78	10	71	71	88	100	76	
No availability	LGBT	34	33	56	3	60	60	88	0	45	
	HETERO	24	25	22	0	27	27	13	0	23	
Presence or not of prejudice	Friendliness	LGBT	88	88	100	100	100	100	100	100	93
		HETERO	79	100	86	100	53	100	71	100	74
	Affection	LGBT	12	38	0	25	0	0	0	0	12
		HETERO	4	11	0	14	0	0	0	0	4
	Attention	LGBT	44	63	25	75	44	33	100	100	49
		HETERO	27	44	29	14	34	50	29	100	32
	Hospitality	LGBT	29	50	75	50	17	33	0	100	33
		HETERO	13	56	29	43	13	0	29	100	21

Most of the professionals surveyed responded to the email within two days of receiving it, confirming availability in most of them. However, the non-response was still significant (35%), a high percentage which, as already mentioned, may be symptomatic of some lack of attention to the client (regardless of sexual orientation or gender identity) and professionalism, and this quality deficit will dictate the success or failure in an increasingly competitive market.

As for the local community, key players in the experience of the LGBT tourist who can be directly affected, positively or negatively, by the development of tourism or can affect, positively or negatively, the tourist experience (Pinto & Kastenholz, 2011) the matrix applied in the study allowed to establish a comprehensive methodology that enabled the collection of relevant data for a greater and more detailed knowledge of the perception and attitudes of the local Northern community about the LGBT market and tourism (see Table 2). For more detailed information, see Silva & Vareiro (2021a; 2021b).

The answers gathered from the application of the questionnaire allowed us to ascertain that the respondents are predominantly female, aged between 36 and 50 years old, with higher education, and living primarily in the Minho sub-destination. It should be noted that the method used in this study - the online survey - may have been a conditioning factor for the absence/poor participation of older and less educated people.

The questions arising from the knowledge of LGBT tourism, LGBT-friendly destinations, and the potentialities of the Northern region for this tourism niche became useful and essential as an introductory part of the questionnaire. They made it possible to ascertain that the majority of the surveyed residents know the term and the priority characteristics for an LGBT-friendly destination - "Presence of a tolerant and open population to sexual minorities", "LGBT friendly spaces," and "Safety" (opinions in agreement with several authors analysed in the literature review), identifying as the main LGBT friendly cities in the region, the cities of Porto and Braga and as attraction factors, hospitality, historical and cultural heritage, and nature and rural spaces.

Identifying the population's hospitality as a central element of attraction proves and reinforces the recognition of the northern people's friendliness and hospitality extended to all people regardless of their sexual orientation and gender identity. In their majority, the residents strongly agree on the acceptance and spirit of hospitality towards lesbian, gay, bisexual, and transgender people in the region, being more relevant among female residents and those with higher education. This positive attitude of the local community towards the LGBT market is reinforced by recognizing the region's potential to attract this market and by the incentive to bet on LGBT tourism. For this purpose, it is fundamental to have an open, tolerant, and accepting mentality toward LGBT tourists and the recognition of their civil rights. These variables also received the agreement of most of the residents surveyed, demonstrating greater expressiveness by residents with higher literacy.

Even so, using the scale of hospitality and prejudice or discrimination against LGBT people, it is possible to perceive some incongruence in people's attitudes toward gender identity issues. Some resistance and even prejudiced attitudes towards this market stand out, particularly among male residents and those with basic education. The results indicate that the lower the level of schooling, the greater the prejudice and discrimination towards people from the LGBT community.

Admittedly, markedly homophobic attitudes are not observed in the present study. On the contrary, the local community surveyed, when confronted with homophobic statements, show, in general, feelings of repudiation. The majority did not agree at all with the repulsion towards homosexual behaviour, their eventual isolation, and their non-existence with the local community and other tourists. However, when confronted with the statements "tourists should repress their sexual orientation," and those who "cross-dress are not welcome in the North," the respondents did not strongly disagree.

Table 2: Residents' behaviours and attitude to the LGBT Market/Tourism

Behaviours and attitude to the LGBT Market/Tourism		Likert Scale (1-5 points)	
		μ	σ
Prejudice / sexual discrimination	LGBT tourists should be separated from other tourists	1,48	0,864
	LGBT tourists should not socialise with the local community	1,49	0,874
	I avoid talking to gays, lesbians, bisexuals and transsexuals	1,46	0,853
	Homosexual behaviour is something that is simply wrong and should not be exposed in society	1,57	0,914
	Tourists visiting Porto and Northern Portugal should repress their sexual orientation	1,93	1,057
	Transvestite tourists are not welcome in the northern region	2,26	1,107
Hospitality	The "people of the North" are a very hospitable people. This hospitality also applies to LGBT tourists	3,54	0,986
	The local community in the Norte region is willing to maintain a relationship with LGBT tourists	3,49	0,868
	I live in an LGBT-friendly city or region (acceptance, non-discrimination and public spaces for the LGBT market)	3,07	1,020
	Discrimination against Lesbians, Gays, Bisexuals and Transsexuals is no longer a problem in the Northern Region of Portugal	2,96	1,024
	The northern region is safe for LGBT tourists	3,58	0,988
LGBT-friendly destination	The region should have more information specifically for the LGBT market	3,76	1,015
	The region should have more spaces and establishments specifically for the LGBT market	3,42	1,108
	The advances made in civil rights for gays and lesbians, namely marriage and adoption, improve Portugal's image in the world.	3,79	0,995
	Open-mindedness, tolerance and acceptance of LGBT tourists are important factors in choosing a destination for this market	4,14	0,876
	I would go to a bar frequented mostly by LGBT people (gays, lesbians, bisexuals and transsexuals) without any problem.	3,87	1,137
	The advances made in civil rights for gays and lesbians have generally improved society as a whole.	3,79	0,973
Positive impacts of LGBT Tourism in the region	Improves diversity in the region	3,54	0,963
	Develops local infrastructure and other facilities	3,38	0,982
	Preserves local heritage	3,23	0,944
	Improves public services, health and others	3,21	0,929
	Increases leisure alternatives	3,51	0,981
	Increases cultural diversity	3,68	0,951
	Increases employment	3,29	0,959
	Improves people's quality of life	3,22	0,921
Negative impacts of LGBT Tourism in the region	Increases violence and crime	1,91	0,946
	Increases drug consumption/trafficking	1,98	0,977
	Increases prostitution	2,00	1,017
	A loss of cultural identity in the region	2,03	0,919
	Increase conflicts between LGBT tourists and residents	2,12	0,993

"People from the North" are by nature hospitable people; they have a genuine interest in meeting people, and other cultures, and in relating to each other. The hospitality of the local community is undoubtedly a competitive advantage for tourism in the region. The surveyed residents of the Northern region of Portugal provide these qualities. They show, in general, a spirit of hospitality and attitudes that reflect pro-diversity ideals and acceptance and valuation of citizenship and rights of LGBT people. However, there is still some prejudice and hesitations due to gender expressions or behaviours seen as non-standard, especially by males and those with lower levels of education. Therefore, there is still some preparatory work to be done, and all agents involved in the market and respective destination will have to make a concerted effort to make the slight resistance identified, basically linked to a lack of definition of opinion or interest, to the side of the "concordant".

As expressed by the local population in the analysis of their attitudes toward the LGBT market and the impacts of LGBT tourism in the region, there are many undecided people, especially regarding the positive impacts. Most indeed have a positive attitude defending that this activity contributes to the increase of diversity and leisure alternatives, and they recognize the benefits it can bring in the development of infrastructures and other facilities for the locals themselves. The negative impacts are not

expressive. However, in specific themes, namely improving the quality of life, employment, public services, and heritage preservation, there is still some hesitation.

Taking this data into account, the first step was to understand how demographic variables may or may not be important concerning these factors. Thus, only in the residents' educational level was it found that the higher the level of education of the residents, the more positive they are about LGBT tourism and the less insecure they are about the negative impacts that could come from it (Silva & Vareiro, 2021a).

Secondly, and to aggregate the information collected, we tried to group residents according to their common perceptions regarding the impacts of LGBT tourism on the region (Silva & Vareiro, 2021b).

The result fell into three groups: Undecided, Enthusiasts, and Sceptics. The Indecisive, considered the youngest of the groups, with lower levels of education and where the male gender is more notable (regardless of the predominance of females in all groups), show the greatest share of indifference or lack of knowledge regarding LGBT tourism and the impacts that may arise, perhaps due to lack of knowledge of the area or indifference, resistance and/or prejudice towards the market.

Enthusiasts, predominantly aged between 36 and 50, female and with higher education levels, are the most representative group and the most optimistic about LGBT tourism in the region. They are also the most hospitable and have the slightest fear of difference. On the contrary, they consider that LGBT tourism can benefit the region and agree that this niche market should be targeted.

The Sceptics, the oldest group and the least apologist for LGBT tourism, although not agreeing with the negative impacts, reject the positive impacts attributed to LGBT tourism and the investment in this niche of tourism.

5. Conclusion

The success of the tourism bet is based on realistic, efficient, and transversal planning, ensuring the respect and integrity of the community, the tourists, and the destination itself. In this context, if Porto e Norte de Portugal intends to invest in the LGBT market, the conclusions drawn justify the need to adopt intelligent planning and policies that ensure the success of LGBT tourism in the region. In this assumption, as a diagnostic assessment for the planning of LGBT tourism in Northern Portugal, it was deemed pertinent to reflect upon and understand the behaviour and profile of the LGBT tourist followed by an empirical analysis of the hotelier's and local community's perceptions and attitudes towards the LGBT market.

The literature review contributes to understanding the market, its potential, and the socio-economic benefits for destinations that declare themselves LGBT-friendly. Fundamentally, we found that the LGBT tourist is a frequent traveller, with purchasing power, and when choosing a destination, they value safety, freedom, acceptance, and respect for LGBT status.

In Portugal, it is notorious the evolution in the acceptance of people from the LGBT community within the Portuguese society and the conquest of their civil rights (e.g., Law no. 9/2010 of 31 May; Law no. 2/2016 of 29 February). However, there are still some abusive situations toward the LGBT community that must be eradicated.

Through the studies applied to hotel front office professionals and the local community in the North region, we were able to objectively identify their weaknesses regarding LGBT tourism, namely in terms of discrimination and prejudice towards the market. In the Northern region's hotels, discriminatory behaviours towards LGBT people, expressed by some front office professionals' denial of accommodation availability, were observed. However, it can be seen that in the answers, there was no correlation between the sexual orientation and gender identity of the customers, either regarding the time and quality of communication or the presence of less friendly, affectionate, attentive, and hospitable answers. As for the Local community surveyed, in general, they consider that the region has the necessary conditions to attract the LGBT market and that the advances achieved concerning the rights of people from the LGBT community improve the whole society and, in particular, Portugal's image in the world. They identify the hospitality of its population, its historical and cultural heritage, and nature and rural spaces as competitive advantages for tourism in the region and encourage investment in LGBT tourism. Recognizing their hospitality and attitudes towards diversity and acceptance of citizenship and LGBT rights, there is still some reluctance and discrimination concerning sexual orientation and gender identity, more expressive in male residents and basic education.

Following these assumptions, one can conclude that, yes, Porto e Norte de Portugal can and should invest in LGBT tourism, but this investment requires integrated and collaborative planning and management with all stakeholders.

This research presents some limitations, especially in terms of its scope. Firstly, the application of the empirical study delimited to the hotel industry and the local community circumscribes the results to the extent that it is not possible to perceive the attitudes and behaviours of all those involved in tourism. Secondly, there are some limitations concerning the sample regarding categories, gender, age, and educational attainment. Regarding possible future research lines, it is considered pertinent to consider an analysis of all the destination's stakeholders that would allow for the evaluation of the results of their perception in totality. It is also worth highlighting the need to extend the studies on this subject to the whole Portuguese territory, not only in terms of stakeholder perception and attitude analysis but also in conducting research on LGBT tourist and on the perception of the local LGBT community. Finally, one of the research lines that assumes importance in future work is the analytical comparison of several case studies that determine the evolution of destinations.

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Package Label Redesign Spices Case-Study

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Abstract

The requirements towards new packaging and consumer expectations with food packages are systematically growing. Packaging is an essential element in modern trade in goods, which guarantees preserving the quality of food products, but simultaneously is an influential communicator in a dynamic market environment where consumers often only make their final purchasing decision when they are inside a retail setting. A Case-Based Learning (CBL) method was applied with students of Design and Marketing of New Products from the Marketing undergraduate degree of Leiria Polytechnic to develop the new package label for a company that operated in Food & Beverage (F&B) industry and needed to change its spice package label. The students achieved the goals proposed by the company and they reported to have had a useful experience, based on a real case study developed in the academia. However, no formal quality evaluation was performed by the professors, a recommendation for future scholars aiming to apply the CBL method in their classes.

Keywords: Packaging; Marketing communication; Redesign; Label; Case-based learning

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1. Introduction

Packaging plays a key role by protecting packed products against external conditions, affecting the quality and health safety of food products, making transportation, storage, and dispensing of products easier (Barska, 2017). It is also an essential element in marketing communication in relation to the customer. A package must communicate the content of the product and how it can be used, together with other required information. Proper labelling should include information about the content and other premium data (Wyrwa, 2012).

The choice of materials is an important issue for engineers and designers, as they need to balance the main functions of the packages (functional and communicational). Also, consumers have been increasingly more conscious regarding environmental issues and, after unpacking, waste is generated with a significant impact on the environment (Kozik, 2020). Being green and acting in an environmentally friendly way has become an inevitability and manufacturers have been pressured to adapt and they started to develop new packaging solutions (Culiberg & Elgaaied-Gambier, 2015). Packaging and innovation go hand in hand, as new packaging may support differentiation. Sometimes a moderate change in the design of the packaging may be a very good solution to draw attention and lead to a favourable perception of a product (Schoormans and Robben, 1997).

To test the impact of the redesign of a package in the context of a classroom and allow students to develop specific competencies and learn with a hands-on approach, we approached a specific company, called 100% Titular. The company was part of Food & Beverage (F&B) industry and needed to change its spice package label. Company representatives provided part of the requirements for the case and the professors added more requirements based on their academic knowledge.

We involved the students enrolled in the course of Design and Marketing of New Products, part of the Bachelor's in Marketing of Leiria Polytechnique and applied a Case-Based Learning (CBL) method to develop the new package label. CBL is a methodology that engages students in discussion of specific situations, typically real-world examples. It is learner-centred and involves intense interaction between the participants (Queen's University Centre for Teaching and Learning, 2023).

This paper is organized as follows. After a literature review focused on marketing communication, marketing strategy and packaging, we present the methodology used to implement CBL. Next, we present the results obtained, we discuss the results and end with conclusions.

2. Literature Review

2.1. Marketing Communication and Packaging

In today's competitive food retailing environment, consumers are exposed to thousands of messages on packages and merchandising (Nancarrow, Wright & Brace, 1998). Therefore, at the Point-of-Purchase (PoP), products available on the shop shelves compete to attract favourable attention and be selected by the clients (Tonder & Mulder, 2015).

Packaging is a powerful vehicle at the PoP and an important tool to communicate persuasive messages. For that reason, it is sometimes referred to as the 'silent salesman' that makes the final sales pitch, seals the commitment, and gets itself placed in the shopping trolley (Rettie and Brewer, 2000, Olaleye, 2017). Or, as Court, Elzinga, Mulder and Vetvik (2009) mention, the package has an important influence in a dynamic market environment where consumers often make their final purchasing decision when they are in front of the shelf.

Ksenia (2013) and Naidoo (2003) reinforce this idea and mention that approximately 70% of the purchasing decisions are made at the PoP, in a context of increased self-service at the point-of-sale. Boon and colleagues (2010) also refer that Front-of-Package (FoP) labels improve consumer understanding and perceptions and argues that concise nutritional information on a food product may influence purchase intentions (Khandpur et al, 2018). So, the role of packaging as a communication tool has increasingly become more important (Kotler & Keller, 2015).

Luca (2006) states in her study that packaging presents elements with essentially informative and communicative power as well: words, images, colours, shapes, among others, which communicate to the consumer in various ways and places, before and after the shopping experience (see Table 1). Underwood and Klein (2002) argue that the package picture has a strong and positive effect on attitudes toward the package itself.

In the specific case of food, the packaging must be in line with food safety requirements to avoid serious health consequences for consumers. Food packaging makes use of a variety of substances, including dyes for printing colourful labels, and glues and adhesives for keeping packaging closed. Some materials e.g. plastic, polyethene, or styrofoam, can become toxic when heated, irradiated or during the deterioration process or transfer unsafe non-food substances into the food. To protect consumers, relevant authorities certify all food packaging materials after submitting them to rigorous testing protocols (Gupta & Dudeja, 2016).

Table 1 – Informational features of packaging

Type of Elements	Main Characteristics	Attributes: First level	Attributes: Second level
Package	Shape	Size Manageability Storability Cleanability Reusability Dimensional Impression Service Portions	n.a.
	Materials	Durability Recyclability Pleasantness	
Labelling	Textual Elements	Names	Company Name Product Line Name of Market Sector Product Name Name of Variant
		Information	Instruction and Suggested Uses Ingredients Nutritional Information Preview of Contents History/Product Description Service Information
		Recall and Repetition	New Products Advertising Slogans Testimonials Line Extension Special Offers
		Information Required by Law	Alpha-Numeric Codes Production and Expiration Dates Weights and Measures Plant and Producer Specific Sectorial Information
	Iconic Elements	Lettering	Logos Functional Text Persuasive Text
		Background	Unvarying Colour Decorative Pattern Transparent
Images		Product Representations Secondary Images Informative and Graphic Images	

Source: Adapted from Luca (2006)

2.2. Packaging and Marketing Strategy

In marketing, the packaging functions can be grouped into two categories: 1) logistical, operative, or technical; and 2) marketing and communication. Packaging design needs to consider both categories.

The first packaging function protects the product during its movement through distribution channels, from production to disposal and the conservation and safe product (Mohamed, et al, 2021). Innovation has played a role in the design of many new packages that are re-sealable, tamperproof, and more convenient to use e.g., for take-away food. These improvements led to packages that are easy to hold, easy to open or more convenient for storage at home (Rundh, 2012).

For communication purposes, packaging is a facilitator of brand and product recognition, and it needs to attract and keep the customer's attention (Schoormans and Robben, 1997). It is a tool to differentiate products from others (Estiri et al., 2010) and it works better when improving both the aesthetic (i.e., shape and size, material, colour, text and graphics) and the functional

components of a package (Rundh, 2012).

Additionally, sustainability requirements need to be considered in order to meet consumers' green consciousness. Packages made of environmentally friendly materials, that are space saving (which subsequently reduces transporting costs and carbon emissions), or that include eco-conscious information may be perceived as more sustainable (Lee et al., 2020) and valued by consumers. To develop sustainable packaging, eight aspects should be considered (Sustainable Packaging Coalition, 2011):

- Being beneficial, safe & healthy for individuals and communities throughout its life cycle;
- Meeting market criteria for performance and cost;
- Being sourced, manufactured, transported, and recycled using renewable energy;
- Optimizing the use of renewable or recycled source materials;
- Being manufactured using clean production technologies and best practices;
- Being made from materials healthy throughout the life cycle;
- Being physically designed to optimize materials and energy; and finally,
- Being effectively recovered and utilized in biological and/or industrial closed loop cycles.

Aware of the fact that the package design has become increasingly important to a brand's success (Shimp and Andrews (2014), manufacturers have been pressured to adapt the industry. Packaging made of conventional materials, e.g. plastics, paper, glass, and metal, started to be used in novel ways to meet the sustainability requirements (Culiberg & Elgaaied-Gambier, 2015) after a process of life cycle analysis and improvement of the way they are produced, used or disposed (Kozik, 2020, Sustainable Packaging Coalition (2019)

Manufacturers may also go beyond the traditional packaging functions and adopt a multifaceted approach over packaging design, incorporating e.g., innovative biodegradable packaging materials and renewable raw materials, while focusing on the need to differentiate on the market and duly communicate with customers.

3. Methodology

We used the CBL methodology. This approach is learner-centred and involves intense interaction between participants as they build their knowledge and work together in groups to examine the case. The instructor plays the role of a facilitator, while the students collaboratively analyse, address problems and solve questions that have more than one correct answer (Queen's University Centre for Teaching and Learning, 2023).

The case was developed in the context of the course of Design and Marketing of New Products, part of the Bachelor's in Marketing of Leiria Polytechnique and supervised by two professors. The main goal was to solve a specific case challenge related to the F&B market, presented by the company 100% Titular.

The company had its headquarters in Aruil, Portugal, was created in 2008 and operated in F&B industry, with a focus on trading food products. The main clients are big retailers, e.g., Auchan, Aldi, El Corte Inglés, E.Leclerc, Spar, Suporcel, Pomar da Rosa, Mini Preço and Pingo Doce.

The company wanted to redesign their spices packages labels (see Figure 1) and provided students and professors the following instructions:

- Change the design of spice package label and align with the new package of cherry tomato (see Figure 2).
- The label had to respect specific dimensions (see Figure 3).
- The label should communicate firstly the brand.
- The label should communicate secondly the product (name and image).
- All line of spices should be consistent in terms of packages label.

The professors added two new instructions:

- Use sustainable materials.
- Design the exhibitor to show the products in the point of sale.

4. Results

The students worked for two months (March and April of 2022) to design a new package label (Figure 4), according to the requirements of the client and the sustainability issues. The brand identity was guaranteed, and the logo emphasised it. The white space was covered, and other changes that were made the package more attractive to the consumer.

According to the students, the inspiration for the new label, with a classic design came from the "old times, when the seeds of the plants were saved in paper to the next harvest". In terms of sustainability, the material used is kraft instead of plastic.

About the colours, the CMYK system was chosen. Each label has five colours: light green for brand logo, dark green for slogan or tagline, black for name of the product or other text, colour spot – space for graphics and texts about the product and dark brown for the sketches in the wallpaper (Figure 5).



Figure 1 – Old package
Source: 100% Titular



Figure 2 – Actual package for cherry tomato with new communication strategy
Source: 100% Titular

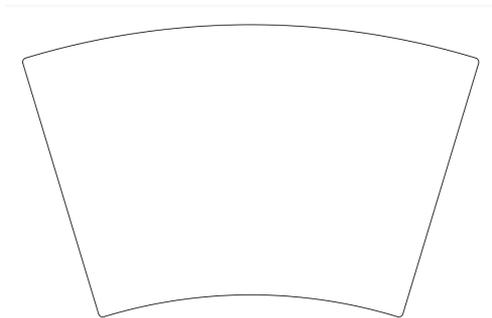


Figure 3 – Cherry tomato cutting shape
Source: 100% Titular



Figure 4 – New package label cutting shape
Source: Authors elaboration



Figure 5 – Package design: before and after
Source: Authors elaboration

The graphics (texts and images) show a classical and craftsmanship visual. The type of letter Nexa Rust Sans Black was selected to write the name of the product in order to increase readability at a bigger distance. Each spice was associated to a specific colour to identify the product, ensuring the design was consistent (Figure 6).

The cap was prepared to be produced in paper. Its design was aligned with the package label in terms of colours, graphics, and texts, so as to better identify the product (Figure 7).

The exhibitor created for the retail shop proposed is illustrated in Figure 8. The simulation of the display and the communication was innovative and contrasted with the classic inspiration of the new packaging for the product.



Figure 6 – Line of new proposed labels for spices packages

Source: Authors elaboration



Figure 7 – Line of new proposed caps for spices packages

Source: Authors elaboration

Students created a new package considering the several requirements imposed by the client and the professors. They agreed that the brand needed a new package and image.

The shape of the new package was aligned with the tomato cherry package, respecting the first requirement posed by the company. The second requirement was also respected: the cutting shape was in line with what the company demanded.

For the third and fourth requirements and consistent with the choice of materials, the new package proposed, was aligned with the communication required. With textual elements and using the colour spot, the brand name was emphasized, and the name of the product with the graphics came second. The new package followed the orientations of Khandpur and colleagues (2018) and included a label with a good understanding and concise information for the consumer.

The visual path of package label promotes the company's slogan "100% do sabor, sempre" – "100% flavour, always". Next, a lower-sized black spot with the text stands out "agora numa embalagem com menos plástico" – "now, with a packaging with less plastic". The latter communicates sustainability measures as referred by the Sustainable Packaging Coalition (2011).

The last requirement of the client was also fulfilled. All packages' labels of spices and condiments were consistent with the marketing communication as well as the caps. This uniformization considered the colours, shapes, graphics, and layouts, all key informative and communication elements as stated by Luca (2006).



Figure 8 – Exhibitor design for the retail shop

Source: Authors elaboration

5. Final Considerations

Packaging is an essential element in marketing communication, it facilitates brand and product recognition and should be developed with sustainability concerns. The shape (triangular cutting shape) and material (kraft) of the new packaging address Sustainable Packaging Coalition (2011)'s concerns. However, the iconic elements of the package label (Luca, 2006) could be improved in terms of background attributes (colour and pattern). Each package proposal has five colours, yet it could be reduced to four or even three colours in total, as the more colours a product has, the less sustainable it is.

The new proposal has the same package shape and size as the package of cherry tomato, optimising both the production and logistics of the company. Also, the new proposed package can protect the packed products against external conditions as required.

The new line of proposed labels for the spice was influenced in both shape and dimensions of the cherry tomato package. The first level label communicates the brand, and the second level label the product name. The different spices have different colours, to identify and distinguish the product and group them into a product line. Furthermore, the exhibitor created for the retail shop should be rethought, as its decoration (pattern background) could overshadow the communication of the packaging label itself to the consumer.

So, from the perspective of the requirements presented by the company and by the professors, the new packaging proposal fulfils the initial instructions.

From the perspective of the teaching and learning innovation, the usage of CBL methodology proved very effective to achieve the initial goals and respond to the requirements from the company and the professors. Student performance was assessed based on their participation in discussions, presentations, research and work results and students achieved the learning objectives of the course of Design and Marketing of New Products, as well as developed technical competencies and soft-skills. The students provided informal feedback to their professors, indicating they truly appreciated this challenge and suggested that the CBL method should continue to be applied in the incoming years.

We note though that the professors did not make any formal quality evaluation assessment, which is a limitation of our study. Several authors recommend evaluating CBL. For instance, Schmidt and Moust (1995) and Das, Das, Rai and Kumar (2021) used a summative questionnaire in their research, with closed questions. Also, Saur-Amaral, Aragonez and Filipe (2023) performed a quality evaluation assessment at the end of the project they implemented in two higher education courses, combining a questionnaire with closed questions and an open essay reflection. This allowed capturing different perspectives from students with different personalities and learning experiences, in a structured way.

We recommend future scholars to duly plan to evaluate the active teaching method of CBL at the end of their course. Quality evaluation is key to measure and discuss the student's perception between the two different teaching methods (traditional and active), the development of concepts based on CBL, to understand the content acquirement and how students apply the knowledge to the case study and to other future scenarios (Das et al., 2021), and it may serve as reference to compare CBL application in different years or with different groups of students.

To sum up, this research allowed a better understanding of the relationship between the industry and academy, and how knowledge and experience can be put together in a win-win situation: the company benefits by receiving different innovative ideas for new packaging labels, while the students understand how the real world, the market, works.

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Innovative Approaches to Teaching and Learning: Project Based Learning (PBL) Practices for Good

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Abstract

The main goal of this paper is to describe a specific teaching-learning project implemented in two higher education courses – Bachelor in Marketing and Master in Competitiveness and Business Development, offered at a higher education institution. The project integrated Project Based Learning (PBL) methodologies and authentic learning, supported by technology, with Sustainable Development Goals (SDGs), studying real companies from different industries, and aiming to improve the quality of the learning experience, students' motivation and academic success. A total of 300 students were involved in the first semester of the year 2022/2023.

The idea of sustainable cocreation was at the base of this pedagogical innovation project, so that students may become aware and assume responsibility on the impact of marketing, strategy and competitiveness decisions in the contemporary society. Students were challenged to include in their works a proposal of actions that had positive impact and contributed to the SDGs defined by the United Nations and to reflect and measure the potential impact of these actions at the level of the community.

From an operational perspective, students developed different activities in their academic works, in four different curricular units, in line with the educational level and syllabus of each curricular unit, always related to real companies from different industries and supported by different technologies, using different immersive learning experiences where students could combine authentic learning and SDGs analysis.

Keywords: Authentic Learning, Pedagogical Innovation, PBL, SDGs, Marketing education

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1. Introduction

Since the adoption of the 17 Sustainable Development Goals (SDGs) created by the United Nations in 2015, as part of the 2030 Agenda for Sustainable Development which set out a 15-year plan to achieve the Goals, efforts emerged from individual and collective people for sustainable development, and Higher Education Institutions (HEI) should have an active role raising awareness and educating their students to this reality (Chaleta et al., 2021; Zamora-Polo & Sánchez-Martín, 2019).

Thus, two research questions arise: (i) is it possible develop innovative approaches to teaching and learning in higher education integrating the 17 SDGs? (ii) what are the benefits and pitfalls of these approaches?

In this context, an innovative pedagogical project titled Higher Education for Good was developed at the University of Aveiro involving students from four curricular units of two higher education courses: Bachelor in Marketing and Master in Competitiveness and Business Development. It involved a total of 300 students.

The project aimed to create a specific teaching-learning context, integrating PBL methodologies and authentic learning, supported by technology, with Sustainable Development Goals (SDGs). The students were challenged to study real companies from different industries and aimed to improve the quality of the learning experience, students' motivation and academic success.

The idea of sustainable cocreation was at the base of this pedagogical innovation project, so that students may become aware and assume responsibility on the impact of marketing, strategy and competitiveness decisions in the contemporary society. Students were challenged to include in their works a proposal of actions that had positive impact and contributed to the SDGs defined by the United Nations and to reflect and measure the potential impact of these actions at the level of the community. The project included different technology to support the teaching and learning process.

The current paper describes this innovative pedagogical project that was implemented during the 1st semester of the 2022/2023 academic year.

This paper as structured as follow: after this introduction, it presents the literature review of the main concepts and context that supported the implementation of the innovative pedagogical project. Next, it describes the innovative approaches to teaching and learning in the curricular units involved in the pedagogical project "Higher Education for Good", as well as the benefits and pitfalls. The paper ends with final considerations.

2. Literature Review

2.1. PBL and Authentic Learning: Innovative Approaches to Teaching and Learning

In current academic and professional context, it is widely accepted that hard skills obtained with a solid formation in HEI are not enough to face real word challenges (Aničić, Divjak, & Arbanas, 2016). Thus, soft skills and other skills of students are vital to be developed in courses of higher education and complement each other (Gibb, 2014; Tadjer et al., 2022).

In this sense, innovative teaching methodologies have been implemented in HEI courses (e.g., project-based learning (PBL), problem-based learning, challenged-project learning (CBL), authentic learning, learning by doing) and several benefits have been found by academic literature, such as critical thinking of students, team-work skills, problem solving, amongst others (Anazifa & Djukri, 2017; Deep, Salleh, & Othman, 2019; Tadjer et al., 2022).

Among the new methodologies and innovative teaching and learning practices, project-based learning (PBL) and authentic learning are widely used (Bell, 2010; Lombardi & Oblinger, 2007; Musa et al., 2012; Nab et al., 2010).

Project-Based Learning (PBL) is an approach that places student at the center of learning process and the teacher as a facilitator (Bell, 2010), while authentic learning places students in an environment close to real-work and real-life problems (Nab et al., 2010).

2.2 Technology-Supported Approaches to Teaching and Learning

In the last decade, the gamified-based learning has been increasingly used in higher education, in different scientific areas. Different scholars have been seeking to understand what factors are responsible for the success and, also, what are the barriers that hinder the successful implementation of such approaches (Aragonez, Saur-Amaral & Gouveia, 2021).

Sitthiworacart and colleagues (2022) defend that the usage of technology as a support for learning will offer, in principle, the opportunity for a more effective learning, yet available technologies are still very much focused on "traditional" learning approaches. According to Cevikvas e Kaiser (2022), when technology is used in the context of customized learning, students are stimulated and their cognitive processed are more easily activated.

Following the same line of thinking, Araújo and colleagues (2023) point out that technology supports different aspects in our daily living, including education, and is considered a tool that connects students and teachers in the knowledge dissemination process. This may allow to raise the interest of students and promote the development of learning processes.

For teachers, the use of technologies allows a higher student involvement, leading to an increased level of motivation. Different technological usages can be promoted, from the design of the learning space to activities that promote active learning or student support (Sitthiworachart et al., 2022).

2.3 Sustainable Development Goals (SDGs) in Teaching and Learning

The Sustainable Development Goals (SDGs) are a set of 17 goals created by the United Nations in order to sensitize the different public and private actors to the need of sustainable action (Kopnina, 2020; United Nations). Higher Education teachers and institutions have been including the SDGs in their learning programs, to foster students' awareness about the environment and to develop new skills and competences in this field (Cottafava et al., 2019; Kopnina, 2020; Leal, 2021).

Teaching SDGs requires competencies of systemic thinking and involvement of different partners, being based on reflection and self-awareness of the participating students and teachers (Cottafava et al., 2019). It seems to be a more complex endeavor than regular teaching.

Walter Leal (2021) emphasizes that sustainable development may be applied and taught in different ways, with different teaching methods, and points out four learning methods that can be used in non-conventional contexts:

- Lifelong learning – helps combining professional and personal interests, specifically applied to working adults, and promotes citizenship;
- Transformative learning – promotes mentality changes and influences future actions based on a new information / knowledge acquired, and promotes citizenship;
- Experience-based learning – is based on emotions and active participation;
- Indigenous knowledge-based learning – promotes intergenerational values and a sense of community participation.

Cottafava and colleagues (2019) point out, as well, the importance of transformative learning and they value, equally, the experience component, which require a change from traditional teaching practices and a focus on the local community and real projects that help involve students and allow them to feel empowered and accountable for any change arising from their learning projects. On her side, Helen Kopnina (2020) refers to the importance of ecological citizenship education, that “*speaks of sustainability of all life on earth*”, indigenous education, similar to Walter Leal, and empowerment education, that focuses on the weaker fringes of the populations and can be used to empower them.

3. The Innovative Pedagogical Project Implemented at University of Aveiro

3.1 Overall Description of the Project

The project we implemented at University of Aveiro, in the first semester of 2022-2023 was sponsored by the Rectorship of the university, being one of the four projects selected to be funded and distinguished as Innovative Pedagogical Project. It was promoted by three teachers, all course directors in one of the 20 departments of the university.

The project had as main goal to promote PBL and authentic learning practices, together with Sustainable Development Goals (SDGs), using real contact with companies, whenever possible, and technology to support learning, to improve the quality of the learning and the motivation and academic success of involved students.

The students involved in the first semester were from the Bachelor of Marketing (second and third year) and the Master of Competitiveness and Business Development (first year), in a total of 300 students. Table 1 summarizes the curricular units and courses involved in this Innovative Pedagogical Project.

Table 1 - Curricular units and courses involved in the Innovative Pedagogical Project

Curricular Unit	Year and Degree	Type	Number of students
Strategic Management	2 nd year Bachelor of Marketing	Mandatory	150
Marketing and Business Planning	3 rd year Bachelor of Marketing	Mandatory	60
Innovation and Entrepreneurship	3 rd year Bachelor of Marketing	Elective	50
International Marketing, Strategy and Competitiveness	1 st year Master of Competitiveness and Business Development	Mandatory	40

Source: Own elaboration

This innovation pedagogical project has as goals, for the second semester of the 2022/2023 academic year: 1) participation of 60 students of 1st year of Bachelor in Marketing; (2) participation of 40 students of Master in Marketing in the project involving 5 curricular units.

3.3 Innovative Project Implementation

Project-based learning (PBL), as previously mentioned, focuses on learning using projects, and it is an effective way to bring more dynamics in traditional classrooms and get students more involved (Anazifa & Djukri, 2017; Bell, 2010; Musa et al., 2012).

Different PBL approaches have been implemented in the disciplines involved in the project, combined with technology support and gamification.

For instance, in International Marketing, Strategy and Competitiveness, students developed interdisciplinary projects with Digital Economy and Commerce, which counted for their assessment, using real companies and real challenges for new markets. Similar approaches have been used in Strategic Management, Innovation and Entrepreneurship and in Marketing and Business Planning, where students developed strategic and marketing plans, including SDG diagnostic and SDG specific goals, focusing on a company at their choice.

Moreover, in Innovation and Entrepreneurship students developed business models for companies, using the Business Model Canvas where SDGs and social & developmental costs and revenues were considered, and used LEGO Serious Play approach (see Figure 1). In all curricular units involved in this project students worked with real companies (see Figure 2).



Figure 1. LEGO Serious Play application in Innovation and Entrepreneurship class



Figure 2. Final interdisciplinary project presentations: Students and the teachers of two curricular units

The close relationship with the industry, either to solve problems previously identified by the companies, or to share experience from real business world, brought to the class of International Marketing, Strategy and Competitiveness, practitioners from marketing and international business fields, from companies Chaise Long (furniture) e Strongstep (services) (see Figure 3). In Strategic Management, students had the opportunity to interact with the Area Manager of Sanitana, and discover how international marketing is implemented in that company (see Figure 4). These activities were considered particularly enriching as students had the opportunity to understand how the theoretical content applies in real life situations.



Figure 3. Classes with the CEO and Marketing Director of Chaise Long and CEO of Strongstep.



Figure 4. Classes with the Area manager of Sanitana.

Classes took place in the special learning spaces (classrooms), but also in the outside environment, where students were challenges to develop different activities and present them in front of the colleagues and pass by people. The teacher used Letter Soups and other gamified tools developed using learning-support technologies (Figure 5).



Figure 5. Classes in the external environment of the campus

In the class of Strategic Management, students developed strategic management plans, working, once again, with real companies, in a similar approach followed in Marketing and Business Planning. Also, during the Project, students were invited to participate in a study visit where they had the opportunity to know PCI – Innovation and Science Park of the University of Aveiro and to interact with the related entrepreneurial ecosystem (see Figure 6).



Figure 6. Visit to the Innovation and Science Park

Technology offered multiple and varied activities to support learning, inside and outside class. In this project, technologies were used to involve students, gamifying the interaction (e.g. Kahoot!) and were part of the classes, in the technological new room available at the University of Aveiro, called SALT.

The SALT room was created with the main goal to promote pedagogical innovation at the University of Aveiro and provides flexible layouts, top-end technologies and promotes new ways of teaching and learning. Hybrid and collaborative learning are particularly well implemented in this space, which was used by teachers to create idea sharing opportunities, receive invited guests which were in another location, promote group work with tutorial support and presentations, while allowing students, as well, to relax and socialize with peers and teachers (see Figure 7 and Figure 8).

Videos were regularly used to showcase concepts, going below the traditional Powerpoint approach, and Moodle was used as learning platform, to share content (1.0 approach) but also to collect students' feedback via quizzes and forums, as well as to interact (2.0 approach).



Figure 7. Example of a class in SALT room



Figure 8. Example of a class in SALT room using gamification (Smart TV Screen)

Padlet was used to aggregate relevant information in Marketing and Business Planning, with very positive results (see Figure 9).

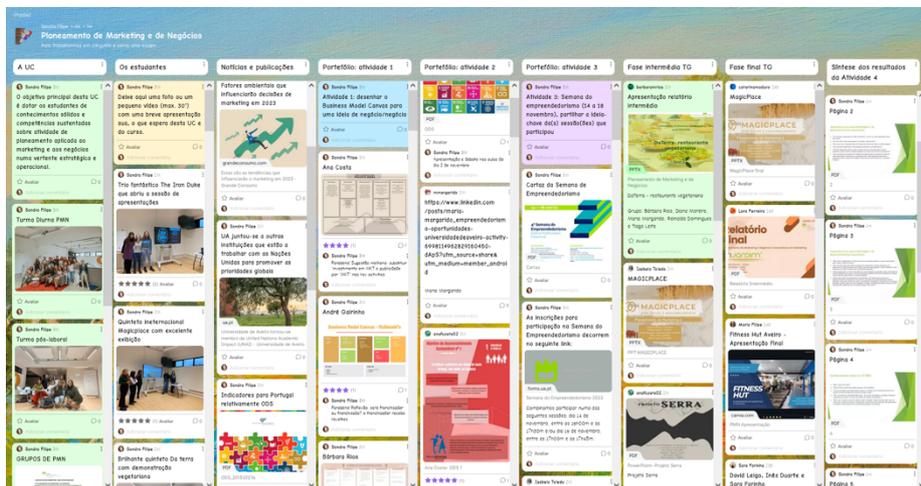


Figure 9. Padlet used in the Marketing and Business Planning class

It was the first time the teachers implemented the Sustainable Development Goals (SDGs) SDG framework in their classes. To ensure the approach was adequate, beside the technical learning and preparation, with material related to sustainability and SDG

application in higher education, the teachers participated in a training session promoted at University of Aveiro, focused on the application of a specific tool developed to apply the SDG framework in a challenge-based learning.

In the different classes, students were exposed to SDG content, did practical exercises in class (e.g. describe SDGs and their relevance for companies and society) and were evaluated, in their group work or in the final exam. In Marketing and Business Plan, they even developed posters to present the SDGs (see Figure 10).

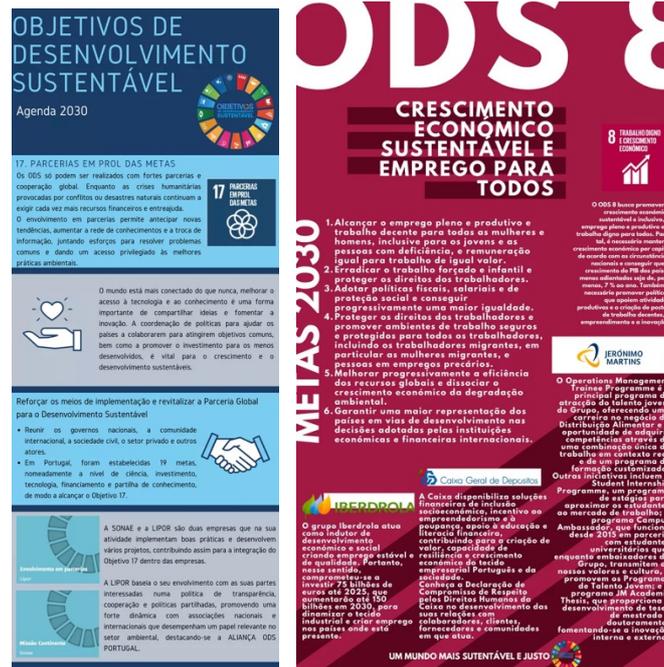


Figure 10. Examples of digital posters made by students on SDGs within the portfolio activities required in Marketing and Business Planning

3.3 Benefits and Pitfalls of the Project

Students had the opportunity to give feedback during the semester and at the end of it, as well. They evaluated very positively the experience – they appreciated the gamification approaches, the possibility to work with real challenged and interact with companies, the SALT room, as well as the possibility to apply the SDGs.

To our surprise, most students hadn't had the possibility to interact with the SDG framework before our classes and, at the end of the semester, they indicated they could have spent more time to understand and apply the framework, something we intend to include in next year's classes.

From teachers' perspective, the classes went quite well, with no particular drawbacks. In some situations, students complained about the work and showed lower resilience, which we associate to pandemics' effects. However, these situations were overcome with the tutorial support and possibility to develop the work in class time. There was also the need to adjust the approach, customizing it depending on the profile of each group.

From a very objective perspective, all classes obtained excellent results in the Quality Evaluation Assessment done by students at the end of the semester, and three of the courses were distinguished with the "Badge of Good Teaching Practices", which of course allowed the team to be recognized publicly for the capacity to implement this challenging project in the four different curricular units that were involved.

4. Final Considerations

Looking back to the experience and results obtained after the implementation of this project, called Higher Education for Good, one may say that it was a busy semester, with a lot of work, yet very satisfying at the end. Students got involved, were motivated and developed very interesting group and individual works.

The capacity to customize the learning approaches to the characteristics of each group of students was a particularly positive aspect, and one that is part of the teaching and learning practice of the involved teacher team.

The usage of technology to support learning happened in a natural, intuitive way, and was not a mean per se but a natural adaptation and variation of the teaching and learning process.

The SDG framework was implemented in an incipient, prototyping way, and there are aspects to be improved and deepened in the next editions of the same curricular units.

Regarding the implementation of the pedagogical innovation project, hereby described, it was successful and fulfilled the stipulated goals. More work awaits in the 2nd semester of the year 2022/2023, when six more curricular units, from three different courses, continue to be involved in the project.

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