

A Work Project, presented as part of the requirements for the Award of a Master's degree in
Management from the Nova School of Business and Economics.

**E-READERS INDUSTRY: WHAT ARE THE PERCEPTIONS OF THE PORTUGUESE
USERS ON E-READERS DEVICES AND HOW CAN BRANDS LEVERAGE THEM IN
THEIR POSITIONING STRATEGIES?**

Maria Inês Nunes Massa

Work project carried out under the supervision of:

Daniela Schmitt

22-01-2025

Abstract – Group Research

This study examines Portuguese consumers' preferences and perceptions of e-reader devices, providing insights into the factors that drive their appeal and adoption in the growing digital reading market. Employing conjoint analysis and perceptual mapping, the study assesses key factors such as usability, price, and technological features that shape consumer decision-making. The findings from surveys provide actionable recommendations for e-reader brands to enhance their devices' appeal, foster stronger consumer engagement, and support strategic growth in the competitive e-reader market.

Keywords: E-readers Industry, Consumer Preferences, Consumer Perceptions, Brand Positioning, Portugal, Digital Reading, Marketing Research, E-books Subscription Service

Abstract – Individual Research

The individual research of this project focuses on developing a cohesive literature review of key trends and themes around the e-reader industry, while focusing on theories capable of modelling consumer decision-making processes, technology acceptance, and brand positioning, in the market under analysis. Furthermore, the study also highlights the rise of digital subscriptions, acknowledging the current research gap regarding e-reading subscription services. Finally, it analyzes high-tech brand positioning strategies in a way capable of informing strategic recommendations for enhancing brand positioning and consumer engagement.

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

1. Introduction

In today's world, digitalisation has become a pivotal aspect of the daily lives of most societies across the globe, giving rise to profound shifts in consumer behaviour, preferences, and perceptions of value (Cham et al., 2022). The technological advancements registered in the last decades, together with the widespread use of the Internet, have been driving a real transformational process, with profound implications for the way the economy and society function (McKinsey Global Institute & Roxburgh, 2011). Moreover, the growing awareness of the finite nature of natural resources and the phenomenon of climate change have prompted a global discourse on sustainability, exerting pressure on companies to offer environmentally friendly solutions. Hence, digitalisation and growing environmental consciousness have driven significant growth in recent years in the market for specialised e-reader devices, with readers appreciating the convenience and accessibility of these devices (E-Reader Market Size | Mordor Intelligence, n.d.).

As reported by Statista (2024), approximately half of the Portuguese population engages in reading activities, with 4.5 million individuals reading physical books and 0.8 million reading e-books. Furthermore, it was verified an increase of 9% in the number of readers embracing digital reading formats, versus 2022 (APEL, 2024). Nevertheless, despite the prevalence of reading habits in Portugal and the apparent increasing attractiveness of digital reading, only 7% of the population owns an e-reader device (Statista, 2024). Therefore, Portugal represents an appealing case study for analysing how companies might enhance the appeal of e-reader devices and the extent to which these devices currently align with the ideal configurations preferred by consumers. Considering this, the objective of this research is to develop a comprehensive understanding of Portuguese consumers' preferences and perceptions concerning e-reader devices. These perceptions will be

further explored to identify optimal positioning strategies that will enhance the market growth of e-reader brands.

In addition, to complement the primary research question, the project aims to provide comprehensive responses to auxiliary questions concerning consumers' perceptions of e-reader brands' e-reading subscription services. In particular, the supplementary research will examine which characteristics of e-reader brands' e-reading subscription services are most highly valued by consumers, what factors are inhibiting the success of these services, and how subscription services can be enhanced to improve adherence and retention rates. The present study excludes any analysis associated with multi-purpose devices, such as tablets, smartphones, or laptops, focusing solely on specialized e-reader devices.

The initial stage of this study encompasses the analysis of secondary data to gain a deeper comprehension of the various brands and their contextual background. In this regard, the literature review examines essential concepts, offering valuable insights into the attributes of e-reader devices, the customer decision-making process, technology acceptance and intention to use, smart product-service systems, subscription-based business models, and brand positioning. The second stage of the study comprises preliminary interviews with e-reader users and an industry specialist, selected to represent a range of backgrounds and demographics. The interviews facilitate the gathering of preliminary insights about the primary factors that consumers consider valuable when engaging with e-reader devices and their associated e-reading subscription services. The third step comprises the creation of two distinct surveys, which will be analysed employing two different methods: conjoint analysis and perceptual mapping. To address the necessity of sharing several surveys within a constrained timeframe and to ensure consistency in analysis results by using the

same sample, both perceptual maps and e-reading subscription questions were integrated into a single survey.

The comprehensive research offers valuable insights into the Portuguese e-reader market, which is primarily characterised by four players: Kobo, Kindle, PocketBook, and Woxter. Kobo and Kindle are established market leaders, whereas PocketBook and Woxter are emerging competitors. These companies demonstrate a consistent commitment to innovation, integrating advanced features into their devices on a continuous basis, thereby contributing to a dynamic market landscape. Furthermore, established market players differentiate themselves through the offering of e-reading subscription plans, which will be subjected to further analysis in this project.

The first method employed during this research is the conjoint analysis, which will be conducted using the “Conjoint.ly” platform. In this research, the type of conjoint method applied is the Choice-Based Conjoint Analysis (CBCA), which utilises a tool that simulates real-market decision-making by presenting respondents with different product profiles to identify their preferred options. Accordingly, the corresponding survey is focused on seven key attributes of e-reader devices, and corresponding levels, selected based on preliminary interviews and prior market research. These attributes are presented in the form of hypothetical device options with varying levels, and respondents are asked to choose their preferred option. Consequently, this method enables the comprehension of consumer preferences through the examination of trade-offs between product attributes. A further analysis of the level partworth utilities enables the quantification of the utility assigned by consumers to different attribute levels, thereby providing valuable insights into consumer preferences and highlighting the impact of different attribute levels on overall product preference.

The second method employed in this study is perceptual mapping, a research tool that enables the visualisation of consumer perceptions of brands within a multidimensional framework. This approach yields valuable insights into consumer preferences, brand positioning, and competitive dynamics. Data for the analysis was collected through a survey created on Microsoft Forms, which examined e-reader usage patterns, brand preferences and awareness, as well as evaluates perceptions across twelve key attributes using a five-point Likert scale. The gathered data was subsequently analysed using SPSS software.

Subsequently, further research is conducted through the analysis of the data collected from the subscription's subset of the perceptual maps survey. This section of the questionnaire comprises a series of questions pertaining to a number of topics, including the current rate of subscribers, levels of brand awareness and preference, primary obstacles to adherence and renewal of e-reading subscriptions, preferred payment frequency, and the relative importance of seven key attributes of e-reading subscription plans, evaluated on a five-level scale. The combination of the data obtained from the survey with insights gathered from secondary research and reviewed literature enables the formulation of conclusions.

This project aims to enhance the comprehension of how consumers perceive not only e-reader devices, but also the complementary e-reading subscription services offered. Considering the findings, recommendations are proposed for the enhancement of brand positioning and the acquisition and retention of users.

2. Contextual Background

In September of 2024, APEL (Associação Portuguesa de Editores e Livreiros), in partnership with Nielsen/GfK released a report regarding the reading habits of the Portuguese population in 2023. The study reported that overall book sales, in Portugal, increased by 7% in 2023, versus the

previous year (APEL, 2024). Furthermore, young adults (ageing from 25 to 34 years old) corresponded to 76% of the overall buyers, and the 15 to 24 years old cohort reported the higher increase in terms of books purchases in comparison with the previous year (Lusa, 2024). The association suggests that this evidence might reflect the adoption of new reading behaviours motivated by the appearance of alternative digital formats, such as e-books and audiobooks (Pinto, 2024). In addition, evidence underscores the rising popularity of the digital book format, in Portugal, with 17% of the readers embracing digital reading practices, in 2023. This represents an increase of nine percentual points versus the previous year (Cunha, 2023). The study also highlights that the most common way of reading digital books is through a specialized e-reader device, suggesting an increasing importance of such devices for the overall reading community, in Portugal.

Due to lack of extensive available data on the e-reader market in Portugal, the assumption of its incumbent potential is reinforced by evidence of market expansion, both at global and European levels. In 2023, the global e-reader market was valued at USD 7.33 billion, with the expectancy of growing at a Compounded Annual Growth Rate (CAGR) of 6.31%, between 2024 and 2029, predicting a revenue base of USD 10.62 billion in 2029 (E-book Market Size | Mordor Intelligence, n. d.). Even though North America is expected to hold the largest share of the market during the period under consideration, Europe immediately follows North America in terms of market size. When looking into other related statistics, 7.2% of EU residents, in 2023, purchased an e-book, representing an increase of 6.6% versus 2022 (Eurostat, 2024), which aligns with the current Portuguese scenario, as well as with accessed increasing Governments' incentives to foster interest in digital reading, in Europe.

Since 2018 that Governments of several European countries have been cutting down VAT taxes on e-books, turning them into a more competitive option in terms of costs for the readers, possibly producing an effect in the attractiveness of e-readers. In countries like Norway and United Kingdom, e-books are currently VAT free, with EU countries progressively following the same path. In Spain, Italy and Portugal the current rates range between 4% to 6% (Apostolos, 2021). Specifically, addressing the case of Portugal, this represents a significant cut in the VAT rate as, before 2019, the applicable rate was of 23%. Moreover, the Covid-19 pandemics had also a role to play in the promotion of digital reading, bringing a new light to the e-readers' market. With the lockdown, many readers were inhibited from going to physical libraries, and the distribution of paper-print books became a complex and time-consuming process, leading to the need to find alternative ways to access books and content.

Even though there is not extensive data available regarding the Portuguese specialized e-reader market, the scenario of increasing relevance of digital books, such as e-books and audiobooks, is expected to be reflected in the number of e-readers' users in Portugal, due to their complementary nature. Thus, this research aims to understand consumers' preferences on these types of devices and perceptions on correspondent providers, setting the basis for a deeper understanding on how far the market currently is from providing the ideal e-reader device in the eyes of consumers.

3. Literature Review

3.1. E-reader Devices – Overview on Key Characteristics

The increased availability of e-books and other digital reading materials online has driven technological advancements, leading to the creation of the e-reader – a portable device designed to make digital reading more convenient and user-friendly while replicating the experience of a traditional paper book. An important relationship between e-books and e-readers is worth noticing.

Even though the definition of an e-book might be complex, object of interest of extensive literature, in this dissertation the definition given by Gibson et al. (2011) is considered. Thus, from this point, the term e-book will refer to the digital book-like text being distributed through Internet, while an e-reader corresponds to the device that makes reading and storage possible (Gibson et al., 2011). The aim of specialized e-readers is to provide the feeling of a computer-free reading experience, making it as similar as possible to the one offered by paper books (PwC, *Turning the Page: The future of eBooks*, 2011). Besides that, e-readers allow for increased convenience and accessibility when it comes to reading, as they are traditionally known by their long-life battery, lightweight and versatile size, durability, and storage capacity (Parry et al., 2017; Richardson Jr et al., 2012; Gibson et.al, 2011). Furthermore, e-readers frequently allow for higher degrees of customisation and engagement, offering the possibility of altering typefaces, tracking personal reading progress, accessing built-in dictionaries, and taking notes (Burk, 2001; Gorissen, 2009; Qian, 2011).

Besides valuing convenience and accessibility, readers who adopt e-readers do also refer to the lower costs of reading digital books versus physical ones, as an impactful benefit retrieved from the use of these devices. Parry et al. (2017) consolidates this argument by emphasizing how adoption rates of e-readers are closely linked to the number of e-books made available through the device, as well as discounts provided on e-books. Moreover, Richardson Jr et al. (2012) does also refer to the close relationship between e-reader devices and e-books, demonstrating that users value the possibility of accessing multiple e-books from one single device. Nevertheless, even though considering digital reading less expensive than traditional reading, the initial investment required to acquire an e-reader device is pointed out as one of the main barriers to use e-readers as a tool for digital reading (Richardson Jr et al., 2012).

Despite multiple advantages offered to readers, the market of specialized e-reader devices is constantly challenged by multi-purpose devices, such as smartphones, tablets, or PCs, that also allow for digital reading, among other functionalities, and evolve at a fast pace in terms of innovation in features. This puts additional pressure on producers to highlight the distinct advantages of e-readers over other devices. The main distinction between these two types of devices is that e-readers are specifically designed for reading purposes, avoiding distractions like social media or messaging notifications, and incorporating E-ink technologies that replicate the appearance of traditional ink on electronic devices (Burk, 2001). The major advantage of these displays versus the LCD displays, used by multi-purpose devices, is the fact that it reduces visual constraints associated with digital reading, turning the activity more comfortable for a longer period of time (Li, 2008; Siegenthaler et al., 2010). Besides that, E-paper displays allow for longer battery life and overall reduced size/ weight of the device as compared to LCD ones as they do not require backlighting nor power to maintain image (Li, 2008; Siegenthaler et al., 2010).

Furthermore, e-readers have been evolving towards the inclusion of certain features that, when lacking, can turn them into a less competitive offering versus multi-purpose devices. There has been a noticeable tendency on e-readers toward the supply of coloured screens rather than the usual black and white display, as well as facilities that allow readers to enhance reading comprehension and engagement, such as the possibility of highlighting passages and taking personal notes. An example is Kobo's most recent model, the Kobo Elipsa 2E, which, in addition to allowing for coloured displays, offers a staggering number of tools that include handwriting recognition for converting notes to text, plus the capability of inserting drawings, diagrams and formulae into users' notes (Sarkar & Carter, 2024). Kindle Scribe is another recent market launch, this time from Amazon Kindle, featuring similar functionalities to Kobo Elipsa 2E. Moreover, with recent

introduction of subscription-based e-books services, such as Kobo Plus and Kindle Unlimited, e-reader's manufacturers have been expanding their revenue baseline while offering consumers enhanced facility to access content any time they want (E-Book Reader Market Size & Share | Analysis Report 2032, 2024).

Discovering user preferences for e-reader features is crucial as the market for these devices continues to evolve toward new features. An evaluation of the market's distance from what consumers consider to be the perfect e-reader device can give businesses important information on where to steer future improvements to the system, device, or services offered.

3.2. Customer Decision Making Process Regarding Consumers' Electronics

By definition, consumer behaviour encompasses the totality of processes and activities that an individual might be involved in when searching for, selecting, purchasing, using, evaluating and disposing of products, services, ideas, or experiences that strive to satisfy a need (Panwar et al., 2019). Understanding the way consumers act, and the reasons behind observable behaviour patterns, has become a topic of extreme relevance for the marketing community. Moreover, significant research has been devoted to understanding the process of consumer decision-making, i.e., the totality of decisions made by the consumer before, during, and after the purchase (Qazzafi, 2019).

In the presented course of research, Stankevich (2017) highlights how today's marketers face the challenge of effectively shaping purchasing behaviour and emphasizes that a deep understanding of these topics can enhance marketing strategies. This includes improving targeting processes, refining product development and delivery, and gaining insight into how consumers perceive a company's offerings in relation to competitors.

Since its introduction, the five-stage decision process has been widely accepted by the marketing community as an important framework to model consumer behaviour. The traditional five-step model of consumer decision journey assumes that consumers experience different stages in their buying decisional journey: need recognition, information search, evaluation of alternatives, purchase and post-purchase (Schiffman et al., 2010). An analysis of this journey is pointed out as of extreme importance, as it will enable marketers to identify “moments that matter” throughout the totality of engagement with consumers (Stankevich, 2017). Stankevich (2017) identifies “moments that matter” as referring to stages in which consumers are more likely to be open to being influenced, with these stages being crucial to determine the likelihood of the purchase.

A wide body of marketing research seems to agree that the traditional five-steps model is an accurate framework to illustrate the consumers’ decision-making journey of a high involvement purchase (Jain, 2019; Panwar et al., 2019). Belch et al. (2008) argue that the proposed model illustrates the consumer as a rational problem solver, who is willing to engage in mental efforts to evaluate different alternatives and determine which one might generate higher value added. This standpoint aligns with the proposed definition of a high involvement purchase, seen by researchers as one requiring higher deliberation and sensitivity to different options, as it might present higher risks or overall costs for the consumer (Friedmann et al., 2019; Keng et al., 2012; Jain, 2019). Thus, the higher the involvement of the purchase, the greater the likelihood of consumers’ engaging in each stage proposed by the model.

The purchase of consumer electronics can be characterized as a high-involvement purchase for most individuals (Raj et al., 2015; Bachnik, 2016; Szopiński, 2020). Bachnik (2016) emphasizes how the purchase of an inappropriate model can lead to significant financial losses for consumers, as well as emotional stress due to high levels of involvement associated with this category. Thus,

a special highlight on pre-purchase stages for high involvement purchases, including consumers' electronics, is drawn by the reviewed literature. Authors perceive the referred type of purchases as ones requiring more cautiousness during pre-purchase phases, namely in the collection and evaluation of information (Park et al., 2007; Ferreira et al., 2015; Friedmann et al., 2019).

In high involvement purchases, consumers tend to extend the information search phase, due to higher risks associated with underinformed choices. The pre-purchase information search can be defined as the process through which the consumer consciously seeks new sources of external information, motivated by the imminent purchase decision (Murray, 1991; Schmidt et al., 1996). Research identifies multiple benefits from such activity, especially in what regards to increasing the likelihood of purchasing a higher quality option, which culminates in further purchase satisfaction (Klein et al., 2003). This stage of the consumers' decision-making journey must be identified by companies as a key moment for interacting with consumers. By establishing a clear communication strategy, brands might capitalize this moment for capturing consumers' attention, especially through advertising which can be seen as a commercial source of information.

After information search, consumers must become aware of existent players and offerings and will start the evaluation process based on their personal definition of "best-deal". The "best deal" is defined as an individual concept that will vary between consumers, depending on what attributes are the most valuable for each, which can be "price, quality, brand, product positioning, a place where to buy, etc." (Stankevich, 2017). In this phase, it is crucial for brands to ensure that consumers are aware of their existence in the marketplace.

Brand awareness is discussed in literature as one of the main drivers of purchase intention (Aaker, 1990; Dodds et al., 1991), with authors such as Keller (1993) arguing that consumers may base their purchase decision solely on the popularity of the brand on the market. Raj et al. (2015)

expands the discussion of the importance of a well reputed brand for driving purchase, in the context of consumers' electronics. The author emphasizes that a "positive brand image" is capable of mitigating some of the perceived risks associated with the purchase, increasing customers' acceptance towards its market offer. In addition, companies must have a solid understanding of what attributes are the most valued by consumers in the market in which they operate to increase the likelihood of being the winner of the evaluation stage. This realization justifies the importance of conducting marketing research using methodologies designed to uncover consumers' trade-offs and the relative importance of various products' attributes.

In summary, research emphasizes that in high involvement categories, in which consumer electronic devices can be included, "moments that matter" for consumers are essentially correlated with pre-purchase stages. Given this, it is essential to recognize the role of the consumer in this context as a rational evaluator of options, who is willing to spend time and resources to make informed choices. Thus, marketers should consider the importance of building brand awareness, providing reliable information, and communicating with consumers in compelling ways. By doing so, companies can significantly improve the likelihood of a successful purchase, fostering long-term consumer trust and loyalty, which ultimately impacts future consumers' journeys.

Returning to the central objective of this dissertation, a gap in literature review exists regarding the trade-off's consumers are likely to face when evaluating different models of e-readers. The power of brand awareness in this specific market is also underrealized by the research community, especially in the Portuguese context. As e-readers are classified as consumer electronics, it is posited that the consumer decision journey for these devices follows a pattern similar to that of traditional high-involvement products, where consumers invest mental resources in gathering

information and carefully assessing available market options in order to select the one that offers the greatest value.

3.3. Technology Acceptance and Intention to Use

The continuous technological development process has prompted users to update the way they approach daily tasks. However, the decision of whether to purchase, or not, a specific technology is complex, being object of investigation of multiple research studies. Despite the emergence of multiple theories aimed at identifying key factors impacting technology usage or rejection, the Technology Acceptance Model (also known as TAM) remains the most influential model (Marangunic et al., 2015). Introduced in 1986 by Fred Davis, TAM aimed to elucidate on the reasons behind users' acceptance towards a technology, as well as key perceptions needed to create an intention to use (Davis, 1986). Furthermore, Wang et al. (2008) emphasizes the importance of such model to the marketing community by arguing that the Technology Acceptance Model can explain consumers' purchasing intentions towards a specific technological device. Moreover, the evidence of increasing marketing research using TAM in the last years supports the argument of the applicability of this model to the study of consumers' behaviour and perceptions towards different models of technological devices (Musa et al., 2024).

TAM is the result of the adaptation of several psychological theories about human behaviour, being one of its buildings blocks the idea that system's usage is determined by two major variables: perceived usefulness and perceived ease of use (Davis, 1989; Marangunic et al., 2015). According to Davis (1989), perceived ease of use produces an additional impact in perceived usefulness in the sense that, when exposed to the same set of features and functions, users will be more likely to choose the option that is more intuitive to use.

Shroff et al. (2011) later expanded Davis's framework, demonstrating that users' attitudes towards the use of a technological system can be a result of perceived ease of use, which was validated as a predictor of perceived usefulness. However, perceived usefulness was found to have an irrelevant contribution on producing positive attitudes towards technology usage, contrasting with the initial proposition of TAM. Acknowledging the rising relevance of e-readers devices, Williams et al. (2014) tested the applicability of TAM to this market. In a few respects, the results contradicted the approach taken by Shroff et al. (2011). The authors confirmed that perceived ease of use had a favourable impact on customers' judgments of how useful the technology is, which is consistent with the findings of previously mentioned studies. However, the main point of contention is that, according to Williams et al. (2014), perceived usefulness is the strongest predictor of intention to use an e-reader device, while perceived ease of use has no effect on consumers' intentions to use an e-reader device (Williams, 2014).

Additionally, a modification of the Technology Acceptance Model (TAM) is investigated to assess the factors influencing the intention to purchase a technological device. In addition to perceived usefulness and ease of use, Özer et al. (2012) included brand credibility as a predictor. The authors illustrated the substantial impact of these factors on consumer purchase intentions by investigating the functions of perceived usefulness, perceived ease of use, and brand credibility as predictors of purchasing intention. Furthermore, they established that perceived usefulness and ease of use were both highly impacted by brand credibility, underscoring the connections between these elements in influencing consumer choices.

Building on the discussion of user perceptions regarding e-reader devices, Huang et al. (2012) explored a different approach from the one proposed by Fred Davis, by acknowledging the multifaceted roles of consumers in adopting technology. The researchers recognized these

individuals both as technology users, who might look for effectiveness and usefulness, but also as consumers that actively evaluate the benefits and costs of multiple alternatives. Huang et.al (2012) revealed that usage behaviour, in the e-reader market, is driven by perceived switching costs, which in turn, are highly influenced by perceptions of relative advantage, compatibility and complexity. Relative advantage (the extent to which consumers believe e-readers are superior than traditional reading solutions) only affects switching costs, but perceived compatibility and complexity – that is, the degree to which consumers believe they can extend previously learned behaviours to the use of e-readers and the degree of intuitiveness associated with the devices – also produce an impact on usage behaviours.

Lee et al. (2011) advances research by considering both cognitive and affective states when predicting approach/avoidance behaviours towards high-tech products, a category in which e-readers are included. The authors hypothesized that approach/avoidance behaviour towards a high-tech device depends on three inner states: attitude (cognitive state that considers consumers' positive or negative evaluations towards a technology), arousal (affective state determining the extent to which one might feel stimulation or excitement), and pleasure (affective state reflecting the degree to which an individual experiences happiness and satisfaction resulting from the use of a technology). Furthermore, the study identifies several associations — such as usefulness, ease of use, innovativeness, prototypicality (the degree to which the item represents its category), visual appeal, and self-expression (the extent to which technology serves as a means of personal expression) — as factors that can impact these internal states. Lee et al. (2011) effectively demonstrated the significant role of attitude and pleasure in shaping approach/avoidance behaviours. The study revealed that innovativeness, visual appeal, and self-expression were positively associated with both attitude and pleasure, while prototypicality exerted a negative

influence on these factors. In terms of ease of use and usefulness, a positive attitude toward a high-tech product was found to be influenced by perceived ease of use, supporting the perspectives of Davis (1989) and Shroff et al. (2011). However, no significant relationship was identified between perceived usefulness and either attitude or pleasure.

The insights gained from these studies are crucial for understanding the factors that drive consumer adoption of technological devices, particularly e-readers, and for positioning these devices effectively in the market. For brands, leveraging these insights is vital in creating product offerings that generate consumer interest and effectively differentiate products in a competitive landscape. Having a strong understanding of what perceptions might enhance consumers' acceptance and purchasing intention towards a technological device is essential to direct brands towards the building of the right associations in consumers' minds.

3.4. Smart Product-Service Systems

Since the early 2000's that global economy is experiencing a servitization trend, with manufacturers acknowledging that future growth would be achievable by bundling tangible products with the delivery of flexible services designed to meet personalised needs of customers (Kowalkowski et al., 2017; Zheng et al., 2019). Together with digitalization, which enables the access to tangible products through virtual spaces, servitization has been disrupting business models and value creation processes around the globe (Tóth et al., 2022).

Servitization gave rise to the concept of product-service system and, later, due to increasing combination with digitalization, the definition of a smart product-service system was introduced by Valencia et al. (2015) to the research community. A product-service system stands for "*a marketable set of products and services capable of jointly fulfilling a user's need*" (Goedkoop, 1999), focused on enhancing users' utility through the design of a flexible need-fulfilment system

(Mont, 2002). As Mont (2002) suggests, this more service-oriented model promotes a dematerialisation of consumption and a change in the traditional ownership structure, with manufacturers focusing on providing “*continuous innovation, improved design and quality, and customized goods*” rather than high volumes of tangible standardized products. This can be observable in multiple markets, with music and books being examples of how the traditional ownership structure has been evolving with servitization and the emergence of these new business models.

Acknowledging the massive technological development in the last decades and the increasing relevance of ICT (information and communication technology) in society’s lives, Valencia et al. (2015) introduced the concept of smart product-service system, combining two other concepts, smart products and e-services, into a single solution capable of providing superior utility and personalisation (Liu, 2018). Smart products make use of microprocessors, data storage, software, connectivity, among others, to track and interpret users’ information; on the other hand, e-services correspond to services that are electronically provided to users, such as apps and web portals, facilitating a two-way communication between consumers and manufacturers and empowering users to make their own transactions at the time they want (Valencia et al., 2015; Liu, 2018).

In their research, Valencia et al. (2015) emphasize that the success of a smart product-service system depends on its ability to treat each user as an individual with unique needs and preferences. The authors argue that companies employing this business model, as illustrated by the case of the Amazon Kindle, should leverage user data and ongoing feedback to customize their offerings. They further stress the importance of continuous development in features and content, which empowers consumers by providing a more personalised experience. This includes enhancing e-services with tailored content, fostering a sense of community through review platforms where

users can interact with one another, and enabling companies to use this feedback for the ongoing improvement of their services.

By reviewing trends in servitization and digitalization, this section of literature review highlights how e-reader devices align with the broader goal of dematerializing the economy. Additionally, it is underscored how it is imperative for e-reader providers to offer consumers more personalised services that meet their evolving needs and preferences. The reviewed authors emphasize growing demands for customization and service flexibility, which e-reader manufacturers should leverage in their marketing strategies.

3.5. Subscription-Based Business Models

As a result of the global widespread of the Internet, alongside digitalization, consumption patterns have changed significantly. Nowadays, consumers value the convenience of accessing different content through multiple devices, at any desired time (Wang, 2005; Berger et al., 2015). Thus, consumption of digital content has registered considerable growth, while traditional content formats (i.e., offline content, such as physical books, magazines, or CDs) have been losing popularity among consumers (Berger et al., 2015). In an era marked by the digitalization of commerce and the servitization of the economy, companies have been forced to adjust their supply-base traditional business models to succeed in new business environments (Schneider et al., 2020; Kavadias et al., 2016).

Fielt (2013) states that a business model can be defined as a reflection of an organization's core value logic regarding its value creation and capturing for its customers. The business model can be represented by key components, including the value proposition, economic dimensions, the structure of the organization, and the interconnected set of elements used to address customers. Furthermore, these models can be classified in diverse manners, one of them being subscription-

based business models (Fielt, 2013). With the growth of digital services at the beginning of the 21st century, subscription-based business models became increasingly popular over time (Nansubuga et al., 2024).

Lumpkin & Dess (2004) define subscription-based models as those used by companies that charge a flat fee for providing access to proprietary content. However, Letht (2016) challenges this view, arguing that such a definition may be misleading, as the term “flat fee” can imply unlimited access, which does not always apply in subscription services where limitations in scope or delivery are often present. Nevertheless, subscription-based business models are becoming increasingly attractive for companies providing e-services and digital content.

Researchers dedicated significant attention to uncovering the main reasons behind the rapid dissemination of the subscription economy. While some authors justify the increasing popularity of subscription-based services with the shift of consumers’ preferences towards at-hand, personalised, and convenient solutions (Wang, 2005; Berger et al., 2015; Olimjonovich, 2024; Echauri, 2023), others argue that the rising of the subscription economy is a result of an enduring change in the ownership structure. Polanka (2013) suggest that consumers increasingly prioritize the utility and convenience of access over the ownership of tangible products. Furthermore, Arditi (2018) emphasizes the link between capitalism and the need for unending consumption. In his paper, the author suggests that, in a dematerialized economy, subscriptions plans turn consumption consistent and constant, with consumptive experience moving towards a continual process.

Through the promotion of continual consumption, subscription-based business models increase the predictability of revenues’ flows for companies, as access to the service or proprietary content is exclusive to users that renew their subscriptions over time (Suryakala, 2019; Arditi, 2018). The

enhanced predictability of revenues allows companies to make more deliberate strategic decisions about their offerings and overall investments (Olimjonovich, 2024).

Olimjonovich (2024), Kelly (2022), and Elanda et al. (2024), emphasize how subscription-based business models foster deeper and longer-term relationships between consumers and companies. Valuable feedback can be collected by companies through the ongoing engagement with consumers. If correctly interpreted, this feedback is valuable information for the design of tailored solutions that will ultimately meet consumers' evolving needs, driving satisfaction and brand loyalty. For this type of business, customer engagement is a key factor to guarantee the growth and long-term success of companies, as it will impact retention rates and customer acquisition costs. However, engagement should not be restricted to the fees' payment. According to Elanda et al. (2024) companies should promote beyond subscription engagement in ways that maximize value for customers, preventing churning.

In the digital field, a substantial body of research has been dedicated to identifying the key motivations that drive users to subscribe to digital services. Chen & Thorson (2021) propose that the desire to maintain a specific social status may be at the origin of potential interest in subscribing to such services. On the other hand, Echaury (2023) demonstrated that positive perceptions regarding digital subscriptions are a result of their convenient and flexible nature that allows consumers to adapt content consumption temporally and spatially according to their preferences. However, most of the literature reviewed emphasizes that the availability and quality of the content provided by the platform are the primary factors influencing the likelihood of purchasing and renewing digital subscriptions (Echaury, 2023; Wang, 2005; Hsiao et al., 2017).

Kübler et al. (2021) places content at the centre of the discussion by identifying it as a possible driver of users' continued engagement. The authors assume that the available content in a digital

platform is one of the main sources of value for consumers, influencing engagement rates, activity levels in the platform, and preventing users from churning. In the case of e-services, consumers are more likely to be satisfied with the subscription plan in cases where the utility obtained by the bundle of content available exceeds utility from acquiring content separately (Kübler et al., 2021). Furthermore, consumers' willingness to pay for subscription-based online content has also been an object of study for the research community. Addressing the specific case of e-books subscription plans, Hsiao et al. (2017) assessed that consumers' intention to pay for an e-book subscription service is a result of consumers' attitude towards the service, as well as of perceived value. Results demonstrated that perceived value is positively impacted by perceived content (i.e., *“user's perception of the quality of the information provided by the online e-book service”*), while perceived price negatively impacts perceived value. Other views argue that willingness to pay for subscription-based digital services can be shaped by expected usage frequency (Wang; 2005), level of involvement with the service (Cesareo et al., 2014), possibility of customizing user experience (Echauri, 2023), and provider's reputation and technical quality (Lopes et al., 2006).

The main barrier of willingness to pay for digital content is the widespread access of illegal free content, a phenomenon that has been fostered by digitalization. Cesareo et al. (2014) argues that willingness to pay for a digital subscription-based service is dependent on users' attitude regarding on-line piracy. Oestreicher-Singer et al. (2013) builds on this argument by emphasizing that consumers may not be willing to pay for online content if there are other free alternatives, independently of their legal nature, that do not significantly differ from paid content in terms of quality. Thus, consumers with positive attitudes towards on-line piracy will be less likely to subscribe to this type of service, which highlights the importance for providers to set an effective price/value point for the consumers (Cesareo et al., 2014).

The shift towards subscription-based models is particularly relevant in the e-reader industry, where companies like Amazon and Rakuten are leveraging e-books subscription services, such as Kindle Unlimited and Kobo Plus, to attract and retain users (Hsiao et al., 2017). Over the past few years, such services have emerged as means for differentiation among e-reader manufacturers, providing value added for readers who value the convenience and flexibility of e-reading. This subscription model not only increases accessibility for consumers but also allows them to personalize their reading habits more deeply, whether by enjoying a variety of content at a reduced price or by gaining greater control over their consumption experience. However, even though there is extensive research on digital subscriptions in industries such as entertainment or music, the e-book industry is still under-studied in terms of users' preferences.

3.6. Brand Positioning: High-Tech Positioning

In today's saturated global market, where many players compete for a valuable place in consumers' minds and industries are becoming increasingly blurred, it is of extreme importance to define a clear path to differentiation and resonance with consumers' needs. To mitigate the impact of fierce competition and fusing marketplaces, companies must place their offer in a way that resonates with consumers' needs and emotions, emphasizing the uniqueness of their products/services (Thompson, 2003). Through the employment of adequate brand positioning strategies, companies can build positive, strong and unique brand associations capable of making their brand stand out from others' operating in the same scope of reference (Keller, 2003).

Many definitions were found to address the concept of brand positioning. Ries et al. (1981) suggested that "*positioning starts with a product. A piece of merchandise, a service, an institution, or even a person. But positioning is not what you do to a product. Positioning is what you do to the mind of the prospect.*", while Cowley (1996) defined positioning as "*owning a credible and*

profitable “position” in the consumer’s mind, either by getting there first, or by adopting a position relative to the competition, or by repositioning the competition.”. More recently, Kotler (2003) re-arranged the definition of brand positioning recognizing it as *“the act of designing the company’s offering and image to occupy a distinctive place in the mind of the target audience”*.

Fuchs et al. (2010) refer that the success of a brand, and its long-term profitability, might be inhibited by the choice of a poor positioning strategy. Moreover, Thompson (2003) refers that the extent to which a brand will become well-positioned in the minds of the consumers, is dependent on how the core idea for the positioning considers four dimensions: relevance, differentiation, credibility, and stretch. A successful brand must be capable of understanding current and potential customers, including their needs, both functional and psychological, aspirations, and the way they experience the world (Thompson, 2003). By acknowledging this, brands should communicate their offer in a way that is relevant to the target audience, emphasizing how their product/service constitutes a unique solution versus the competitive landscape. Furthermore, to build a trustful relationship with consumers, a brand should be credible, i.e., should be capable of aligning its resources and capabilities with the market insights in a way that ensures the accomplishment of what is being communicated to the consumers (Thompson, 2003; Erdem et al., 2006, p. 34). Finally, according to Thompson (2003), the long-term success of a brand lies in its capacity of updating its value proposition with the continuous introduction or improvement of provided solutions, fostering innovation and unveiling a good acknowledgement of future market trends.

Fuchs et al. (2010) added valuable insights to the discussion of positioning effectiveness by analysing, in a consumer-based perspective, different strategies. The authors defined positioning effectiveness as *“the extent to which consumers perceive a brand to occupy a favourable, differentiated and credible position in the minds of consumers”*, which is aligned with the view of

Thompson (2003). The findings indicate that benefit positioning – both direct (functional) and indirect (experiential/ symbolic) – as well as user (surrogate) positioning are superior across all dimensions of positioning effectiveness compared to feature positioning (Fuchs et al., 2010). Moreover, direct positioning appears to be more effective in terms of favourability, when compared to indirect benefit positioning. The authors suggest that this might be a specific result associated with the high-involvement and technological nature of the products' category considered for the study (Fuchs et al., 2010). Further superiority of surrogate positioning is confirmed by Azmat et al. (2015).

For brands providing high-tech products, the discussion on positioning is of extreme importance. As previously mentioned, high-tech purchases are often associated with riskier purchases, due to increased consumers' uncertainty about the technology itself. According to Meldrum (1995), a clear positioning strategy can help to mitigate some of the risks associated with these products, even though it could constitute a challenging task for suppliers. It is argued that effective positioning in this type of market is restricted to a few attributes that highlight the core benefit given to consumers, aligning to the views of authors mentioned earlier in the chapter.

As a key takeaway, brands operating in high-tech contexts are advised to carefully draw a positioning strategy. This will not only allow for effective differentiation in a marketplace that is becoming increasingly crowded but might possibly turn the inherent risk associated with these products into something that consumers might be open to incur.

4. Conclusions

4.1. Discussion

The conducted study provided valuable insights into the preferences and perceptions of Portuguese consumers, emphasizing the attributes of greatest importance and the differing e-reader device's

brand perceptions across key dimensions. By integrating conjoint analysis and perceptual mapping, alongside the additional investigation of the e-reading subscription market, the research offered a holistic understanding of consumer decision-making processes, unveiling key opportunities for brand development and market growth within the e-reader industry.

Consistent with expectations, the findings derived from the conjoint analysis revealed the pivotal role of price in shaping consumer purchasing decisions, demonstrating a pronounced preference for lower price points and highlighting the price sensitivity of Portuguese consumers within the e-reader market. Additionally, functional attributes such as “Accessibility to e-books in Portuguese” also emerged as critical determinants of consumer behaviour, prompting further research and analysis into the e-reading subscription service’s market, recognizing the role the intrinsic connection between these services and the access to and availability of e-books, have in shaping e-reader demand.

From the perceptual analysis, it was possible to identify two dominant dimensions influencing consumer perceptions in the Portuguese e-reader market: general product/brand quality and affordability. Kobo emerged as the brand most strongly aligned with both dimensions, reflecting its balanced appeal through high-quality perceptions and competitive pricing. Kindle followed as a close competitor, with strong quality-related associations but a weaker alignment with affordability perceptions. Meanwhile, Woxter and PocketBook were positioned far from most attributes, indicating weaker or negative perceptions, particularly in terms of quality-related attributes.

The findings of the conjoint and perceptual analyses reveal overlapping yet distinct insights into consumer preferences. While both analyses underscore the competitive strengths of Kindle and Kobo, the perceptual map provides additional nuance in understanding how brands are perceived

across specific attributes. Kobo's appearance at the top of the ranked list of product concepts, derived from the conjoint analysis, indicates its competitive edge when paired with other favourable attribute levels, a result that supports the perceptual map's analysis that indicated strong positive consumer preferences across all attributes relative to this brand, strongly aligning with both the quality and affordability components. Conversely, Kindle demonstrates strong consumer appeal overall, emerging as the utility maximizing brand, but reveals weaker perceptions of affordability. The positioning of Woxter and PocketBook as underperforming brands is consistent across both analyses, aligning with previous expectations regarding the limited awareness of these brands in the Portuguese market and underscoring the challenges these brands face in resonating with Portuguese consumers.

The importance of price and local content accessibility

The results from the conjoint analysis demonstrated the critical role of price and local content accessibility attributes in shaping consumer preferences in their decision-making process when selecting an e-reader device. Additionally, the importance of these two attributes is reflected in their influence in shaping how the selected brands are perceived.

The preeminent importance of "Price" is evident from its consistently high relative importance rating across all four brands, as well as within individual brand analysis. Existing research on the e-reader market supports the survey results, indicating that "Price" might constitute a significant barrier to the adoption of this technology. Consumers frequently express expectations for considerably lower prices for both e-reader devices and electronic books, stating that prices should fall below 100€ (PwC, *Turning the Page: The future of eBooks*, 2011). Nevertheless, the current pricing strategies by the selected brands diverge significantly from these expectations, especially for the devices that incorporate the utility-maximizing attributes identified in the partworth

analysis. For instance, Kindle, Kobo and PocketBook devices are priced between 130€ and 400€, leaving Woxter as the only brand that offers devices for a price below 100€. Interestingly, the analysis conducted on elasticity of demand revealed that the optimal pricing point for the utility-maximizing device is closer to 250€, a range more consistent with current market prices. Consumers are driven by utility maximization, seeking devices that offer optimal value for their money, while still catering to their specific necessities. Research revealed that the increased perceived risk associated with high involvement purchases, often leads consumers to extend this “seeking” stage, which in turn, enhances the likelihood of selecting a higher quality option, which is frequently associated with a greater willingness to pay, as higher quality devices are generally linked to elevated price points.

“Accessibility to e-books in Portuguese” was identified as the second most important attribute, maintaining this ranking at the individual brand level as well. E-reader devices generally operate within brand-specific ecosystems, which determine the extent of their catalogue offerings and subscription models. These ecosystems significantly impact the availability of Portuguese and Portuguese translated e-books, as well as e-books in general. For instance, Kobo’s partnership with Portuguese publisher e-LeYa in 2021, resulted in a catalogue enhancement, providing a broader and more readily available selection of e-books in Portuguese within its subscription services. However, despite such advancements, the disparity between the 9,000 e-books available in Portuguese and the total catalogue of 1.5 million e-books, highlights the accessibility challenges noted by Portuguese consumers (E-LeYa, 2024).

These findings align with prior research discussed in the literature review, emphasizing the inherent connection between e-reader adoption rates and the availability of e-books within the device’s ecosystem. Furthermore, the performed baseline simulation results from the conjoint

analysis, validate this conclusion, by demonstrating how the improvement of e-books accessibility can result in substantial changes in preference shares, consolidating already dominant brands' positioning, and enabling underperforming brands like PocketBook to increase their market penetration.

In conclusion, while affordability remains the most influential factor, there is a clear opportunity for companies to align consumer expectations with utility-maximizing offerings, allowing for enhanced market penetration.

Dominant perceptual dimensions

The perceptual map analysis provided valuable insights into consumer perceptions of the selected brands and their associated attributes chosen for the analysis. Two distinct clusters of attributes and consequent explanatory dimensions emerged in the perceptual map. These clusters reflect the relative correlations between the twelve attributes, with those with higher relative correlation appearing closer together within the perceptual map's quadrants. This proximity is indicative of consumer's similar perceptions regarding these attributes.

On the first cluster attributes related with overall product quality such as “Durable”, “Innovative”, “Portable” and “Aesthetic” demonstrate strong positive correlations with attributes linked to overall consumer experience, including “User-Friendly”, “Local Relevance”, “Accessible”, “Useful”, “Trendy”, “Enjoyable” and “Personalised”. This cluster emphasizes the interconnected nature of these quality-related perceptions, suggesting that consumers associate high-quality technology with features that enhance usability and enjoyment.

These priorities were strongly captured within Component 1 of the perceptual map, emphasizing their central role as core quality-related features influencing consumer preferences.

These observations support existing research that shows that high-quality technological products are perceived as more useful and easier to use by consumers enhancing their overall experience with the product (Kinsella et al., 2011). Furthermore, the results reflect a consistent alignment with consumer priorities identified in the preliminary interviews, as well as in literature findings, underscoring the positive influence of perceived usefulness and ease of use on consumer decisions to adopt technological devices.

The second cluster comprises only the attribute “Affordable”, which is strongly associated with Component 2. While “Affordable” demonstrates a positive correlation with the attributes in the first cluster, this correlation is weaker when compared to the strong inter-relationships among the quality-related attributes themselves. The observed moderate correlation between affordability and quality-related attributes can be associated to the nuanced trade-offs consumers perceive in the e-reader market. These findings align with Ganesh & Nagadeepa (2024), who highlight that budget-conscious consumers often prioritize price as a critical factor in evaluating high-tech devices, reflecting affordability as an independent yet complementary dimension in consumer decision-making. While affordability is often associated with lower-quality features or fewer functionalities in many technological markets, the analysis on the e-reader segment revealed exceptions where the perceptions of affordability align with higher levels of perceived quality.

This phenomenon likely arises from the ability of certain brands to strike a balance between cost-efficiency and acceptable product performance, mitigating the perception that affordability necessarily compromises quality. For example, localized features, such as the availability of e-books in Portuguese, bridge the gap between affordability and quality. Consumers may perceive localized content as both cost-efficient and highly valuable, thereby fostering a moderate positive correlation between affordability and attributes like “Local Relevance” or “Accessible”.

Additionally, the inherent functionality of e-readers – being designed for specific use cases such as reading – ensures that even affordable options meet baseline expectations of usability and practicality. This baseline quality may enhance the association of “Affordability” with attributes like “Useful” or “User-Friendly”, although to a lesser degree than the inter-relationships observed among quality-related attributes themselves. Thus, the moderate correlation reflects a detailed evaluation process, where affordability does not negate quality but instead complements specific aspects of consumer value within the e-reader market.

Brand positioning insights

An analysis of the perceptual map, based on the survey responses, reveals significant differences in the positioning of Kobo, Kindle, PocketBook and Woxter, relative to the twelve attributes and corresponding dimensions. Kobo stands out as the brand with the strongest associations with all twelve selected attributes, particularly in terms of product quality and affordability. These results align with the Portuguese e-reader market reality, where Kobo has a high market penetration and large consumer base. The success of the brand in the target country might be explained by the early efforts made to establish exclusive partnerships with local publishers and bookstore chains, such as FNAC, a well-known high-tech retailer in Portugal (Público, 2024), boosting brand awareness and content availability. Although presenting the best perceptions regarding local content, there is still significant room for improvement regarding this attribute that, as previously noted, poses as one of the main barriers to e-reader adoption. Addressing this can help Kobo solidify and enhance its already favourable position.

Contrasting with its strong global market dominance and reputation, Kindle presented a less pronounced, although still favourable position, displaying positive associations with quality-related attributes such as “Aesthetic”, “Trendy”, “Innovative”, and “Personalised”, but a relatively

weaker association with “Affordable” and “Local Relevance”. The analysis reveals a moderate alignment with quality perceptions, which reflects the brand’s focus on premium features and user experience, yet this is tempered by a weaker association with affordability, highlighting a potential barrier for price-sensitive consumers. The findings indicate that, while the Kindle brand is strongly positioned globally, certain challenges remain in addressing the specific priorities of Portuguese consumers.

Lastly, concerning Woxter and PocketBook, both brands are positioned far from most key attributes on the perceptual map, reflecting predominantly negative perceptions across the evaluated attributes. While Woxter is negatively perceived on most quality-related attributes, such as “Useful”, “User-Friendly”, and “Accessible”, and shows no significant correlation with “Affordable”, PocketBook suffers from negative perceptions across most attributes, including both quality and affordability.

As previously mentioned, Woxter is the most affordable brand, practicing prices below 110€. Nonetheless, its devices feature less favourable attribute levels, justifying its negative perceptions across quality-related attributes. Conversely, PocketBook’s notably weak positioning in the perceptual map is particularly striking, considering its extensive and comparatively robust product portfolio. However, when taking into consideration previous expectations regarding PocketBook’s lack of recognition by Portuguese consumers, later justified by the perceptual analysis survey responses, the results appear to be more coherent. Logically, consumers will have weaker and more neutral perceptions regarding the attributes for brands they are not aware of.

These findings suggest that both brands face significant challenges in competing within the Portuguese e-reader market, emphasizing the critical role of brand awareness and strategic positioning in driving a brand’s success, particularly within the consumer electronics sector. A

strong positive brand image can effectively mitigate perceived risks and exert a favourable influence on consumers' perception and purchase intentions, thereby enhancing the brand's market performance. Companies should position their brands by emphasizing distinctive characteristics that differentiate them from their competitors, designing their offers and image with the aim of occupying a distinct and valued place in the target customer's mind (Cristea, 2014).

Generational differences in attribute preferences

The age-based segmentation analysis offered valuable insights into the distinct attribute preferences between younger and older generations. While both segments exhibited an overall similar ranking of attribute importance, significant variations emerged in the importance scores assigned to individual attributes. Notably, these differences were most pronounced in the two attributes identified as the most important by the overall sample.

The price of the e-reader devices exerts higher influence on the purchasing decisions of younger generations, a result expected given the reduced purchasing power of this segment. Contrastingly, older generations assign greater importance to the accessibility to e-books in Portuguese, when compared to younger generations, a finding that can be explained by the current linguistic reality in Portugal. More than half of the adult population does not speak any language other than Portuguese, positioning the country as the second EU member state with the highest proportion of people who are monolingual (Jornal de Negócios, 2024). This linguistic limitation may emerge from the fact that the promotion of the English language in Portuguese education system began only in the early 1990s with the restructuring of the primary and secondary education (Diário de Notícias, 2024), only impacting younger generations, who place comparatively lower importance on this attribute. This reality underscores the critical barrier that the low accessibility of e-books in Portuguese can represent to e-reader adoption, as the lack of content in this language renders

the device obsolete for most consumers. For younger generations it is more beneficial to read in English, as the content is more readably available in this language (while readers who prefer to or only read in Portuguese may have to wait for years for the translated version), increasing convenience and access to preferred content. Furthermore, national editions have an increased price, given the costs associated with rights acquisition, cover design, translation, editing, among others, that when paired with the price sensitivity of this segment, rises as an additional point in favour of English e-book adoption (Público, 2024).

4.2. Managerial Implications

Invest in building strong brand awareness

During the presented research, consumers emphasized their familiarity with two brands: Kobo and Kindle. As expected, brand recognition has proven to play a critical role in purchasing intentions, with most e-reader owners reporting possession of either a Kobo or Kindle model. As consumers were not significantly aware of PocketBook and Woxter, this restricted their evaluation set to only two brands.

These findings set the stage for recommendations regarding investing in brand awareness and in building a credible brand reputation. Even though consumers reported a high degree of familiarity with Kobo and Kindle, it was also observed that the recognition of these two brands, in Portugal, is mainly built upon word-of-mouth recommendations. As discussed in literature, consumers in this context tend to deliberately look for multiple sources of information to diminish the risk of purchasing a less adequate device, recalling both commercial sources and personal recommendations (word-of-mouth). Thus, it is of extreme importance for brands to have accessible information regarding their offerings in this stage of the purchasing decision process, as it can be a moment in which consumers are more likely to be influenced. As the marketing strategy of Kobo

and Kindle may rely more on organic consumer discussions rather than formal advertising efforts, it must be of Woxter and PocketBook's interest to build awareness through the provision of reliable commercial sources of information about their products, for example, through advertisement. This approach allows these smaller brands to spark curiosity among consumers, gradually integrating into their evaluation sets while shaping perceptions of their benefits and characteristics, ultimately building brand reputation (Keller, 1993).

Segmented strategic advertising

E-reader devices are becoming increasingly popular within the reading community. In terms of promotion, as reinforced by the gathered insights, e-readers' brands lack visibility in the Portuguese market, with insufficient emphasis on showcasing their key benefits. As the acquisition of customers is influenced by both word-of-mouth and marketing initiatives (Abinesh et al., 2024), it is fundamental for brands to invest more heavily on the development of strategic advertising and marketing campaigns, tailored to specific customer segments and markets.

The conjoint analysis revealed that different age groups assign varying levels of importance to different attributes. For this purpose, it is crucial that brands develop differentiated campaigns targeted at different segments employing the correct marketing channels, ensuring alignment with the preferences and media consumption patterns of each age segment.

Social media has become one of the most impactful channels of communication in today's world, given its facilitating nature in interactions between businesses and consumers (Dwivedi et al., 2015). The Social Media Content Strategy Report (2024) revealed that 91% of Generation Z utilizes Instagram, and 86% utilizes TikTok, making them the most prevalent social media platforms among younger generations (Smith, 2024). Thus, to reach younger generations and capture them into their consumer base, companies must focus on building a strong presence on

these social media channels. This can be achieved through the company's personal page by participating in current trends, and opting for authentic and relatable content, leveraging the platform's unique algorithm and engaging format to reach a broader audience. In the context of the e-reading market, TikTok has been gaining traction as a trendsetter in terms of reading habits and device adoption, driven essentially by the rise of the BookTok communities, where consumers share their reading experiences, and acquired content, strongly influencing the behaviour of younger readers (Gonçalves, 2023). Brands should establish partnerships with both micro and macro influencers within this communities, that often post content that resonates with the brands' offering. These influencers can share their experiences with the devices and subscription services sponsored by the brands, discussing their benefits and providing recommendations.

In contrast, older generations, although increasingly present on social media platforms, tend to prioritize traditional media channels, such as television (Deloitte, n.d.). Consequently, while still employing social media platforms, brands should focus their resources on the creation of television marketing. Additionally, the advertisement should be focused on attributes such as Portuguese content accessibility, given the importance placed on this attribute by this segment. These campaigns should also seek to dismantle the perception that e-reader technologies are exclusively for younger generations. Therefore, they might aim to demonstrate the device's user-friendliness and encourage older individuals to engage with e-reading. Such a strategy might be particularly appealing for Kobo, which is the leading brand in terms of local content.

Ensure the balance between advanced features and affordability

Consumers in the e-reader market demonstrate significant price sensitivity, which highlights the critical role of pricing in their purchasing decisions. While the market has evolved to offer advanced features that provide additional utility, the primary factor impacting consumers'

perceived value remains the initial investment cost. Notably, based on the partworth utilities, the absence of advanced features such as notetaking or coloured screens results in a decrease in utility of less than 3 points, while an increase from the lowest (preferred) price to the highest price level, result in a decrease of 10 points in utility.

The forementioned observations must be considered by e-reader providers when designing their product portfolios. Offering advanced features like coloured screens and note-taking capabilities can enhance the reading experience and content comprehension, however, these innovations are often accompanied by price increases, a trade-off that proved to be utility minimizing. To maintain profitability and attract a broader customer base, it is of extreme importance to continue providing budget-friendly options. From the insights gathered through preliminary interviews and conjoint analysis, lower prices are significantly preferred by those who acquired or are considering acquiring a specialized reading device.

In reviewing actual market offerings, models featuring these advanced features often exceed the price points considered reasonable by consumers. For example, the two most advanced models from leading brands – Kobo Elipsa 2E and Kindle Scribe – are priced well above the price range favoured by consumers. These price points can be a constraint to the purchase, in the actual context of the market. Thus, it is of extreme importance for brands to consider a balance between more technological advanced and affordable models when designing their portfolio strategy.

Pricing strategies to enhance customer acquisition

When entering the digital reading world through the utilisation of an e-reader, consumers are required to make a relatively high initial investment given the practiced prices of the devices. Hence, it is crucial for brands to implement effective pricing strategies to encourage new users to make the initial investment.

To boost e-reader sales, companies can use bundling strategies, providing multiple products together at a unified price (OECD, 2024). One potential strategy is to include an e-book voucher with the e-reader, enabling customers to purchase e-books for use on their new device, thereby enhancing the value of the purchase. In addition, brands may wish to consider offering e-readers with discounted accessories, such as cases and screen protectors, to provide a complete package and enhance the appeal of the device.

In the context of subscription services, brands may adopt a dual pricing strategy to attract new users, offering both monthly and annual subscription plans. Monthly plans are appealing to users who are seeking low upfront costs and flexibility, as they permit the consumer to make use of the service without a long-term commitment. Conversely, annual plans are designed to appeal to customers with greater financial stability and a greater propensity to use the service frequently. The discounted rates offered by these plans provide customers with the benefit of significant savings over time. In essence, this dual pricing strategy renders the service more accessible and attractive to a broader customer base, enabling them to select the most suitable payment plan in accordance with their preferences, commitment levels, or financial constraints.

Improve the accessibility of content included in the e-reader's ecosystem

Given the significant importance placed on the accessibility to Portuguese content and general content variety, it is crucial for brands to prioritize the expansion and diversification of their literary offerings, appealing to a broader Portuguese consumer base. By doing so, e-reader brands can position their e-reader devices and corresponding ecosystems as comprehensive, one-stop solutions for accessing and reading content, ultimately enhancing consumer satisfaction and loyalty. Furthermore, as noted in the preliminary interviews, some prominent bookshops sell e-books but restrict access to their content exclusively through their own apps. Addressing this

limitation by enabling e-books purchased from these stores to be used on e-reader devices could present significant advantages.

To this end, it would be advisable for companies to adapt their library content extensions considering the market they are operating at, by investing in partnerships with national publishers and bookstores (both physical and online). Such partnerships would help in the development of a well-established and up-to-date content library that caters to diverse consumer preferences while enabling customers to purchase e-books from a variety of sources.

Mitigate the impact of digital piracy

The willingness to adhere to a subscription-based service can be highly influenced by the consumer's overall attitude regarding the acquisition of content through illicit means. If the consumers perceive online piracy as a financially advantageous and not as ethically wrong, then they will continue to engage in such activity, thereby reducing the likelihood of adherence to a subscription plan (Cesareo et al., 2014), representing a significant threat for these service providers. Nevertheless, there are some strategies that might be adopted by the brands that provide e-reading subscription plans to mitigate this problem.

Given the widespread availability of pirated content, price competition may not be a sustainable strategy for providers. Nonetheless, companies must be conscious of this challenge when determining their price structures, as most participants deemed a reasonable price range of up to 10€. Consumers' perceptions on price ranges are thus aligned with current market offerings, with Kindle Unlimited being the most expensive plan, with a monthly fee of 9.99€. Furthermore, these findings also underscore the need for subscription providers to carefully consider price increases. Raising fees beyond customers' willingness to pay could result in a drop of perceived value, leading to higher churn rates and potentially foster a more positive attitude toward digital piracy.

Additionally, through their communication channels, brands can implement sensibilization campaigns to raise awareness around the importance of legitimate content acquisition, while also highlighting the benefits that subscription services can bring to consumers. Those who subscribe to digital content subscription plans appreciate benefits such as the convenience that they provide, by enabling users to adjust their content consumption timely and spatially, as well the increased accessibility to a diverse range of content (Echauri, 2023; Wang, 2005; Hsiao et al., 2017). These are advantages that illegitimate content access does not provide.

Customisation of experience

Addressed in the literature review chapter, the success of a smart product-service system, such as an e-reader, is closely linked to its ability to address each user as a unique individual, with specific needs and tastes (Valencia et al., 2015). Recalling the data obtained from the subscription perceptions analysis and from the preliminary interviews, it became evident that the lack of personalisation in the current digital reading subscription plans, inherent to the selected device, is a noticeable theme of dissatisfaction around subscribers.

Individuals participating in preliminary interviews shared valuable insights indicating that, in most cases, the new reading recommendations provided by the platforms do not align with their previous reading preferences, fostering a sense of poor algorithm and individual data tracking. Moreover, a notable subset of overall subscribers indicated their openness to subscribe to a more economical plan that would allow the selection of a limited number of literature genres that are selected by them beforehand. This could be an interesting initiative to be explored by e-reader providers, as it can possibly improve the personalisation of these plans and cater to a broader consumers base by reducing the monthly fee associated with the plan.

Furthermore, brands can focus on the improvement of the new readings recommendation system. This would require the development of a better personalisation system, capable of aligning recommendations more closely with consumer's prior reading habits and preferences. Such an approach could be achieved through the application of AI-driven innovation, that enables the provision of better tailored recommendations based on the algorithmic analysis of consumer data (Abinesh & Dulloo, 2024).

Individual brand overview and recommendations for positioning

By closely examining each of the brands covered in this dissertation – Rakuten Kobo, Amazon Kindle, PocketBook, and Woxter – it is possible to derive specific suggestions and insights to enhance their market positioning.

As suggested by Fuchs et al. (2010) and Azmat et al. (2015) effective brand positioning for high involvement products should focus on benefits rather than products' features. Moreover, brands should pursue a consistent positioning strategy that enables them to secure a favourable position in the minds of consumers, setting their offering apart from rivals while capitalizing on their core capabilities (Thompson, 2003).

Given its placement on the perceptual map, Kobo seems to hold a relevant and differentiated place in consumers' minds, being well positioned in comparison with fellow competitors. Kobo has managed to establish itself as the preferred brand for most Portuguese users, largely due to its presence in physical retail stores and its focus on improving accessibility to Portuguese-language content. Considering the high relative importance attributed by consumers to the accessibility to Portuguese-authored and translated e-books, it is advisable for Kobo to continue to differentiate itself from Kindle by heavily investing in the availability of this type of content. By focusing on the functional benefit of providing content tailored to the tastes and preferences of Portuguese

readers, Kobo can cater to a broader audience. This strategic focus on local content would not only enhance its appeal but also strengthen its position as the preferred e-reading platform in Portugal. Kindle, the second most preferred brand in the market, is strongly positioned in terms of overall brand quality. Considering the insights resulting from the performed conjoint analysis, Kindle is the brand that provides higher utility for consumers when assessed separately from other attributes, which can be a result of the strong brand reputation Kindle holds at a global level. Thus, Kindle can capitalize on its solid international brand reputation, namely in the United States (D'Souza, 2024), emphasizing its pioneering and innovative nature. For Kindle, it thus might be appropriate to adopt a surrogate benefit positioning strategy for the Portuguese market, associating its product offer to a more international lifestyle that might particularly resonate with younger generations. Being perceived as being trendier at a global level, Kindle can more easily appeal to younger generations that, besides, being more comfortable with reading in English, are more likely to look for global content, placing less emphasis on region-specific offerings. Moreover, it has been proven the influence of online trends, such as "BookTok", in shaping the reading habits of Gen Z, in Portugal (da Silva, 2024). Thus, Kindle can capitalize on the surrogate benefit of being aligned with popular, global social media-driven trends, appealing to a younger audience looking for the latest and most innovative reading experiences.

For less recognised brands like PocketBook and Woxter, the main challenge is essentially to build and secure a position in consumers' minds, in a market that is highly dominated by the two brands previously mentioned. Leveraging on the insights gained from literature review, it is suggestable that PocketBook and Woxter start building a positioning strategy that relies on the most needed associations to motivate users' acceptance and curiosity around their technological offer. For example, initiating by building associations towards the ease of use and enhanced usefulness of

their products. For PocketBook, this might be an interesting opportunity to be explored as the brand's portfolio counts with high quality products. On the other hand, for Woxter it might be effective to position itself as a more affordable alternative, given the importance of price to the adoption of e-readers by Portuguese users.

4.3. Limitations and Implications for Future Research

Despite substantial efforts to guarantee the veracity of the findings, this dissertation is not free from limitations. In this chapter a reflection of the possible drawbacks of the present study is presented, which should be considered and addressed by future researchers.

Regarding the Literature Review chapter, it is believed that it might possibly carry some limitations in what refers to the inclusion and exclusion criteria of the search strategy. According to Snyder (2019), quality and rigor of the research review is highly impacted by the search strategy employed, which includes deciding on search terms, databases, and inclusion/exclusion criteria. Deciding on inclusion and exclusion criteria is crucial to determine what type of research, and findings, will be included (or excluded) from the discussion, being one of the most important aspects to consider when developing a cohesive literature review (Snyder, 2019). In this dissertation, one of the inclusion criteria employed was the selection of journals and articles peer reviewed. However, when proceeding to select only specific journals, or search terms, the searching sample can become limited. This is an important aspect to recognize as a possible limitation of the present discussion, as it can imply that some useful studies might have been excluded from the research leading to less accurate conclusions. Additionally, articles were also selected based on their contribution to the overall discussion which brings the acknowledgement about the possible less rigorous or relevant nature of some of the reviewed articles. The downsides of the described limitations can be mitigated by future researchers by enlarging the sample of reviewed articles, as well as by

exploring other concepts that might impact the marketing of high-tech devices, such as the case of e-readers.

Other major challenge presented in the building of this dissertation was the fact that reliable secondary data on the Portuguese e-reader market was not widely available. This scarcity made it difficult to establish a strong, data-driven argument concerning the growth potential of the market, as well as to identify key players and market leaders with certainty. Even though, through the combination of primary data collection and global trends assessment, it was possible to identify Kindle and Kobo as the market leaders of the Portuguese e-reader industry, more precise market share data was not accessible. Furthermore, the choice of including PocketBook and Woxter was made based on their availability on local retailers, but quantifiable data on the performance and relevance of these brands to the market were also difficult to address. This lack of quantifiable data on these brands and their consumer base represents a limitation, as it may have led to an incomplete picture of consumer preferences and brand performance. Researchers might find interesting to explore the Portuguese market for e-readers in a more quantitative way, providing valuable insights about how the market and operating brands have been evolving in the last years with increasing digitalization of reading habits and environmental consciousness.

For this research, samples were selected through a non-random sampling procedure: convenience sampling. Convenience sampling is a non-random sampling method in which the only criterion being considered is how easily the researcher can access potential members of the target population (Saumure et al., 2008). This method can be significantly useful to uncover attitudes and perceptions, when researchers have prompted access to the target population (Nikolopoulou, 2022). Even though this type of sampling can be more affordable, simpler and less time consuming, in the sense that research subjects are readily available, the results should be carried out carefully

(Golzar et.al, 2022; Etikan et.al, 2016). Convenience sampling is more likely to be biased, suggesting that results should not be generalized to the overall population (Etikan et.al, 2016). Due to high self-selection, there is always the possibility that behavioural patterns of the selected sample substantially differ from those that could be observed on a randomly selected sample, as well as the existence of unconsidered outliers which negatively impact the validity and reliability of the findings (Farrokhi et.al, 2012). Another risk of convenience sampling is that some classes of subjects might be overrepresented, while others might be involuntarily excluded from the research (Farrokhi et.al, 2012). This is a scenario that will further be discussed as a particular limitation of the chapters of preliminary interviews, conjoint and perceptual analysis. For future research, it is advisable to address these risks either through randomizing samples or enlarging them, two techniques that can be used to reduce the effects of extreme scores and extraneous factors (Farrokhi et.al, 2012).

An outstanding limitation of the research sample is the fact that selected samples for primary interviews, conjoint analysis and perceptual & subscription analysis are female dominated by a large margin. In preliminary interviews, no male (or other genders rather than female) were possible to be interviewed due to demonstrated lack of interest in participating, or difficulty to reach out to non-female individuals who own, or have owned, an e-reader. Regarding gender distribution in the conjoint analysis, 75.3% of the participants identified themselves as female, while in perceptual analysis, female dominance was even more accentuated, with 76.79% of the participants identifying themselves as female. Overall, while this might be a characteristic of the overall population of Portuguese consumers of e-readers, this can also lead to the possibility of the findings being more aligned with preferences and behavioural trends of female consumers, which can significantly diverge from the ones of other genders. Even though it is advisable for future

researchers to try to achieve greater gender diversity to attenuate possible bias of findings, the European reality regarding reading habits aligns with this sample characterization. In Europe, women report higher reading frequency in comparison with men, with 60.5% of women having read at least one book in 2022, versus 44.5% of men (Hábitos de Leitura Em Portugal E Na Europa: Quem Lê?, n.d.).

Still in the demographic field, both surveys, for conjoint and perceptual and subscription analysis, excluded individuals below 15 years old. This age group was deliberately excluded from the research, as it usually refers to individuals with limited purchasing power, and reduced ability to make purchasing decisions. However, it is recognizable that individuals under 15 years old might have an influential role in the consumer decision making journey, especially when referring to parents, educators, or relatives, as e-readers are becoming increasingly relevant for educational purposes. Thus, considering insights from younger generations, including Generation Alpha, could be an interesting direction for future researchers, as they refer to individuals that were already born in the digital era, experiencing technological and portable devices from a very early age and being highly familiar with the consumption of digital content.

Researchers are also aware of the subjective nature of the associations included in the perceptual analysis. Without clear and consistent definitions, interpretations of the given attributes might substantially vary depending on personal characteristics, contexts, or preferences. It is also hypothesized that verified strong correlation among many attributes (except for affordable) arise from misunderstandings or varying interpretations of the terms by participants. While some attributes, such as “Affordable”, “Durable”, or “Innovative”, are more likely to be self-explanatory to participants, others might be more ambiguous to interpret. For instance, the attributes “Local Relevance” and “Accessible”, stood out for how easily readers can access local content through

the e-reader device and for how easily the devices can be acquired, respectively. Regarding these attributes, it might have been useful to add a brief description of what each association stood for, to avoid misconceptions between concepts while ensuring that participants had a consistent understanding of the concepts being assessed. Furthermore, the fact that the survey was designed in English, rather than Portuguese, could have also influenced the meanings attributed to the attributes, as linguistic barriers may have led to different interpretations.

Still referring to perceptual analysis, the fact that respondents were not equally familiar with the four brands under evaluation, might have resulted in incomplete or biased data, in case participants feel compelled to rate unfamiliar brands. Additionally, consumer perceptions may be affected by subjective biases that are difficult to fully account for in the research, including brand loyalty, past experiences, or outside influences. The perceptual map may be distorted by the variability that these elements introduce, especially if respondents rely on broad impressions rather than in-depth brand knowledge. Therefore, perceptual mapping in this study may be impacted by the knowledge limitations and subjective biases of respondents which may affect the validity of the insights obtained.

Relatively to survey-based analysis of the consumers' perspectives on e-reading subscription services, a limitation regarding the number of respondents was found. Out of the 112 respondents to the survey, the opinions were divided, with 53 respondents being non-subscribers to the services and not willing to do so soon, and 59 of them being either current, previous or potential subscribers. Although the 53 respondents were able to indicate the key reasons for their reluctance regarding adherence to the subscription plans, they were excluded from the following parts of the survey that studied the consumer perceptions of subscription services. Thus, despite the significant attempts to investigate customers' perspectives on the characteristics and attributes of e-reading

subscription-based services, only 59 subscriber replies could be registered as valid, falling short of the benchmark minimum of 100 responses required for this study. Nowadays, the economy continues to evolve towards higher degrees of dematerialisation and servitization, with subscription-based business models presenting increasing relevance, especially for digital content providers. While extensive literature can be found regarding streaming and music subscriptions services, little work has been devoted to exploring the topic of e-books and audiobooks in a detailed manner. Thus, future research can focus on exploring consumers' preferences and attitudes towards e-books/audiobooks subscriptions services.

Notwithstanding its shortcomings, this dissertation is thought to offer a solid foundation for directing further studies on the Portuguese e-reader market.

References

Aaker, D. A., & Keller, K. L. (1990). Consumer evaluations of brand extensions. *Journal of marketing*, 54(1), 27-41.

Abinesh, R. C., & Dulloo, R. (2024). The Impact of AI-Driven Personalization on Customer Satisfaction in E-Commerce: Balancing Technology, Transparency, and Control.[JoCAAA]. *Journal of Computational Analysis and Applications*, 33(2), 649-655.

Apostolos. 2021. "VAT Rates for eBooks 2021." *Global VAT Compliance*. <https://www.globalvatcompliance.com/globalvatnews/vat-rates-for-ebooks-2021/>.

Arditi, D. (2018). Digital subscriptions: The unending consumption of music in the digital era. *Popular Music and Society*, 41(3), 302-318.

Azmat, M., & Lakhani, A. S. (2015). Impact of Brand positioning strategies on consumer standpoint (A consumer's Perception). *Journal of Marketing and Consumer Research*, 15, 109-117.

Bachnik, K. 2016. *Consumer Behavior*. Warsaw: Agencja TOP/Warsaw School of Economics.

Başgöze, P., & Özer, L. (2012). Effects of brand credibility on technology acceptance model: adaption of the model to the purchase intention. *International Journal of Humanities and Social Science*, 2(20), 292-298.

Belch, G. E., & Belch, M. A. (2018). *Advertising and promotion: An integrated marketing communications perspective*. mcgraw-hill.

Berger, B., Matt, C., Steininger, D. M., & Hess, T. (2015). It is not just about competition with “free”: Differences between content formats in consumer preferences and willingness to pay. *Journal of Management Information Systems*, 32(3), 105-128.

Burk, R. (2001). E-book devices and the marketplace: in search of customers. *Library hi tech*, 19(4), 325-331.

Cesareo, L., & Pastore, A. (2014). Consumers’ attitude and behavior towards online music piracy and subscription-based services. *Journal of Consumer Marketing*, 31(6/7), 515-525.

Cham, T. H., Cheah, J. H., Memon, M. A., Fam, K. S., & László, J. (2022). Digitalization and its impact on contemporary marketing strategies and practices. *Journal of Marketing Analytics*, 10(2), 103-105.

Chen, W., & Thorson, E. (2021). Perceived individual and societal values of news and paying for subscriptions. *Journalism*, 22(6), 1296-1316.

Coutinho, I. 2021, April 23. “Kobo Plus, Serviço de Subscrição de Ebooks e Audiolivros, Chega a Portugal Numa Parceria com a LeYa.” *PÚBLICO*. <https://www.publico.pt/2021/04/23/culturaipilon/noticia/kobo-plus-servico-subscricao-ebooks-audiolivros-chega-portugal-parceria-leya-1959801>.

Cowley, D., ed. (1996). *Understanding Brands: By 10 People Who Do*. Kogan Page.

Cristea, A. (2014). Positioning strategies for obtaining and sustaining competitive advantage. *International Journal of economic practices and theories*, 4(5), 894-902.

Cunha, T. S. (2023). “Os Portugueses Estão a Ler Mais e Isso Deve-se aos Jovens: São Eles Quem Mais Compra Livros em Portugal.” *Expresso*. <https://expresso.pt/cultura/Livros/2023-08-31-Os-portugueses-estao-a-ler-mais-e-isso-deve-se-aos-jovens-sao-eles-quem-mais-compra-livros-em-Portugal-958dcebf>.

D’Souza, J. (2024). “E-Readers Statistics by Geography, Demographics, Genres and Users.” *Cooler Gadgets*. <https://www.cooler-gadgets.com/e-readers-statistics/>.

da Silva, M. J. G. P. (2024). “O impacto do Booktok na decisão de compra do consumidor da geração Z.” Doctoral dissertation.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.

Davis, F. D. (1986). A technology acceptance model for empirically testing new end-user information systems: Theory and results (Doctoral dissertation, Massachusetts Institute of Technology).

Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers’ product evaluations. *Journal of marketing research*, 28(3), 307-319.

Dwivedi, Y. K., Kapoor, K. K., & Chen, H. (2015). Social media marketing and advertising. *The Marketing Review*, 15(3), 289-309.

E-book Market Size | Mordor Intelligence. n.d. <https://www.mordorintelligence.com/industry-reports/e-book-market/market-size>

E-Book Reader Market Size & Share | Analysis Report 2033. n.d. <https://www.imarccgroup.com/e-book-reader-market>

Echauri, G. (2023). Digital subscribers: Between freedom and constraint. *Media, Culture & Society*, 45(6), 1175-1191.

Elanda, Y., & Rizki, A. (2024). Subscription Economy: The Future of Customer-Centric Marketing. *Jurnal Informatika Ekonomi Bisnis*, 529-533.

Erdem, T., Swait, J., & Valenzuela, A. (2006). Brands as signals: A cross-country validation study. *Journal of marketing*, 70(1), 34-49.

E-Reader Market Size | Mordor Intelligence. n.d. <https://www.mordorintelligence.com/industry-reports/e-reader-market>

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.

Eurostat. (2024). "Online Purchases: Printed Books Preferred to Ebooks." Eurostat. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240423-2>

Farrokhi, F., & Mahmoudi-Hamidabad, A. (2012). Rethinking convenience sampling: Defining quality criteria. *Theory & Practice in Language Studies (TPLS)*, 2(4).

Ferreira, A. G., & Coelho, F. J. (2015). Product involvement, price perceptions, and brand loyalty. *Journal of Product & Brand Management*, 24(4), 349-364.

Fielt, E. (2013). Conceptualising business models: Definitions, frameworks and classifications. *Journal of business models*, 1(1), 85-105.

Friedmann, E., & Lowengart, O. (2019). Gender segmentation to increase brand preference? The role of product involvement. *Journal of Product & Brand Management*, 28(3), 408-420.

Fuchs, C., & Diamantopoulos, A. (2010). Evaluating the effectiveness of brand-positioning strategies from a consumer perspective. *European Journal of Marketing*, 44(11/12), 1763-1786.

Ganesh, K. R., & Nagadeepa, C. (2024). Perceived Value and Affordability: Examining the Interplay in Consumers' Purchase Intention of IoT Gadgets. In *AI in Business: Opportunities and Limitations: Volume 2* (pp. 165-176). Cham: Springer Nature Switzerland.

Gibson, C., & Gibb, F. (2011). An evaluation of second-generation ebook readers. *The Electronic Library*, 29(3), 303-319.

Goedkoop, M. (1999). Product service systems. Ecological and economic basis.

Golzar, J., Noor, S., & Tajik, O. (2022). Convenience sampling. *International Journal of Education & Language Studies*, 1(2), 72-77.

Gorissen, C. (2009). Towards an educational model of eReaders in education.

Hábitos de Leitura em Portugal e na Europa: Quem Lê? n.d.
<http://livro.dglab.gov.pt/sites/DGLB/Portugues/noticiasEventos/Paginas/HabitosLeituraPortuga/IEuropa.aspx>

Hsiao, K. L., & Chen, C. C. (2017). Value-based adoption of e-book subscription services: The roles of environmental concerns and reading habits. *Telematics and Informatics*, 34(5), 434-448.

Huang, L. Y., & Hsieh, Y. J. (2012). Consumer electronics acceptance based on innovation attributes and switching costs: The case of e-book readers. *Electronic Commerce Research and Applications*, 11(3), 218-228.

Hughes, J. L., Camden, A. A., & Yangchen, T. (2016). Rethinking and updating demographic questions: Guidance to improve descriptions of research samples. *Psi Chi Journal of Psychological Research*, 21(3), 138-151.

Hussain, A., Mkpojiogu, E. O., Musa, J. A., & Mortada, S. (2017, October). A user experience evaluation of Amazon Kindle mobile application. In *AIP conference proceedings* (Vol. 1891, No. 1). AIP Publishing.

Jain, M. (2019). A study on consumer behavior-decision making under high and low involvement situations. *IJRAR-International Journal of Research and Analytical Reviews*, 6(1).

Kavadias, S., Ladas, K., & Loch, C. (2016). The transformative business model. *Harvard business review*, 94(10), 91-98.

Keller, K. L., Apéria, T., & Georgson, M. (2008). *Strategic brand management: A European perspective*. Pearson Education.

Keller, K.L. (1993). "Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57, 1-22.

Keller, K.L. (2003). "Strategic Brand Management (2nd ed.)". Prentice-Hall, Englewood Cliffs, NJ.

Kelly, J. P. (2022). "“This title is no longer available”": Preserving television in the streaming age". *Television & New Media*, 23(1), 3-21.

Keng, C. J., Liao, T. H., & Yang, Y. I. (2012). "The effects of sequential combinations of virtual experience, direct experience, and indirect experience: The moderating roles of need for touch and product involvement". *Electronic Commerce Research*, 12, 177-199.

Klein, L. R., & Ford, G. T. (2003). "Consumer search for information in the digital age: An empirical study of prepurchase search for automobiles". *Journal of Interactive Marketing*, 17(3), 29-49.

Kobo. n.d. Kobo Plus Portugal. Retrieved from <https://www.kobo.com/pt/pt/plus?srsId=AfmBOorMzAjTRt7-6t1aG5DNwVM5WIRXPCLRRFBYG-I35D1At0D6u-Uz>

Kotler, P. & Keller, K.L. (2012). *Marketing Management* (14th ed.).

Kotler, P. (2003). *Marketing Management* (11th ed.). Prentice-Hall, Englewood Cliffs, NJ.

Kowalkowski, C., Gebauer, H., & Oliva, R. (2017). "Service growth in product firms: Past, present, and future". *Industrial Marketing Management*, 60, 82-88.

Kübler, R., Seifert, R., & Kandziora, M. (2021). "Content valuation strategies for digital subscription platforms". *Journal of Cultural Economics*, 45, 295-326.

Kuusisto, M. (2018). "Consumer preferences in adopting product-service systems with a subscription revenue model".

Lee, S., Ha, S., & Widdows, R. (2011). "Consumer responses to high-technology products: Product attributes, cognition, and emotions". *Journal of Business Research*, 64(11), 1195-1200.

LeYa Online. n.d. Kobo Plus.

Leya. n.d. E-books & Audiobooks. Retrieved from <https://www.leya.com/pagina/ebooks-audiobooks>

Li, Hui. (2019). Intertemporal price discrimination with complementary products: E-books and e-readers. *Management Science*, 65(6), 2665-2694.

Li, Y. (2008). Dedicated e-reading devices: The state of the art and the challenges.

Liu, Z., Ming, X., Song, W., Qiu, S., & Qu, Y. (2018). "A perspective on value co-creation-oriented framework for smart product-service systems". *Procedia CIRP*, 73, 155-160.

Lopes, A. B., & Galletta, D. F. (2006). "Consumer perceptions and willingness to pay for intrinsically motivated online content". *Journal of Management Information Systems*, 23(2), 203-231.

Lumpkin, G. T., & Dess, G. G. (2004). "How the Internet adds value". *Organizational Dynamics*, 33(2), 161-173.

Lusa. (2024). "Venderam-se mais livros em Portugal e houve mais jovens a comprar em 2023". Público. Retrieved from <https://www.publico.pt/2024/09/05/culturaipsilon/noticia/venderamse-livros-portugal-jovens-comprar-2023-2103026>

Mandal, S., & Mandal, S. (2023). "Woxter Scriba 195S e-reader review". Good e-Reader - the Latest News on E-readers, Ebooks & Audiobooks. Retrieved from <https://goodereader.com/blog/reviews/woxter-scriba-195s-e-reader-review>

Marangunić, N., & Granić, A. (2015). "Technology acceptance model: A literature review from 1986 to 2013". *Universal Access in the Information Society*, 14, 81-95.

McKinsey Global Institute, & Roxburgh, C. (2011). "The Great Transformer: The Impact of the Internet on Economic Growth and Prosperity". Retrieved from https://www.mckinsey.com/~/media/mckinsey/industries/technology%20media%20and%20telecommunications/high%20tech/our%20insights/the%20great%20transformer/mgi_impact_of_Internet_on_economic_growth.pdf

Meldrum, M. J. (1995). "Marketing high-tech products: The emerging themes". *European Journal of Marketing*, 29(10), 45-58.

Mont, O. K. (2002). "Clarifying the concept of product-service system". *Journal of Cleaner Production*, 10(3), 237-245.

Murray, K. B. (1991). "A test of services marketing theory: Consumer information acquisition activities". *The Journal of Marketing*, 55(1), 10-25.

Musa, H. G., Fatmawati, I., Nuryakin, N., & Suyanto, M. (2024). "Marketing research trends using technology acceptance model (TAM): A comprehensive review of researches (2002-2022)". *Cogent Business & Management*, 11(1), 2329375.

Nansubuga, B., & Kowalkowski, C. (2024). "Moving to subscriptions: Service growth through business model innovation in consumer and business markets". *Journal of Service Management*, 35(6), 185-215.

Nikolopoulou, K. (2022). "What is convenience sampling? Definition & examples". Retrieved from <https://www.scribbr.com/methodology/convenience-sampling/>.

Oestreicher-Singer, G., & Zalmanson, L. (2013). "Content or community? A digital business strategy for content providers in the social age". *MIS Quarterly*, 37(3), 591-616.

Olimjonovich, D. B. (2024). "The subscription economy: Transforming business models". *Web of Discoveries: Journal of Analysis and Inventions*, 2(3), 71-76.

Panwar, D., Anand, S., Ali, F., & Singal, K. (2019). "Consumer decision making process models and their applications to market strategy". *International Management Review*, 15(1), 36-44.

Park, D. H., Lee, J., & Han, I. (2007). "The effect of online consumer reviews on consumer purchasing intention: The moderating role of involvement". *International Journal of Electronic Commerce*, 11(4), 125-148.

Parry, M. E., & Kawakami, T. (2017). "The encroachment speed of potentially disruptive innovations with indirect network externalities: The case of e-readers". *Journal of Product Innovation Management*, 34(2), 141-158.

Pinto, I. L. (2024). "E-readers: Como cresce o mundo dos livros sem páginas". *Expresso*. Retrieved from <https://expresso.pt/revista/vicios/2024-10-03-e-readers-como-cresce-o-mundo-dos-livros-sem-paginas-b6550c35>

Polanka, S. (2013). "Ebook access: Business models for subscription services". *Online Searcher*, 37(2), 65.

Público. (2012). "A Fnac.pt começou ontem a vender e-books com a Kobo". *Público*. Retrieved from <https://www.publico.pt/2012/09/25/culturaipilon/noticia/a-fnacpt-comecou-ontem-a-vender-ebooks-com-a-kobo-1564430>

Público. (2024). "Há jovens que só leem livros em inglês, o que preocupa as editoras". P3.

PwC. (2011). "Turning the Page: The Future of Ebooks".

Qazzafi, S. H. E. I. K. H. (2019). "Consumer buying decision process toward products". *International Journal of Scientific Research and Engineering Development*, 2(5), 130-134.

Qian, J. (2011). "Evaluating the Kindle DX e-book reader: Results from Amazon.com customer reviews". *Performance Measurement and Metrics*, 12(2), 95-105.

Raj, M. P. M., & Roy, S. (2015). "Impact of brand image on consumer decision-making: A study on high-technology products". *Global Business Review*, 16(3), 463-477.

Richardson Jr, J. V., & Mahmood, K. (2012). "eBook readers: User satisfaction and usability issues". *Library Hi Tech*, 30(1), 170-185.

Ries, A., & Trout, J. (1981). *Positioning: The Battle for Your Mind*. McGraw-Hill.

Shroff, R. H., Deneen, C. C., & Ng, E. M. (2011). "Analysis of the technology acceptance model

in examining students' behavioural intention to use an e-portfolio system". *Australasian Journal of Educational Technology*, 27(4).

Siegenthaler, E., Wurtz, P., & Groner, R. (2010). "Improving the usability of e-book readers". *Journal of Usability Studies*, 6(1), 25-38.

Siegenthaler, E., Wurtz, P., Bergamin, P., & Groner, R. (2011). "Comparing reading processes on e-ink displays and print". *Displays*, 32(5), 268–273.

Şimşek, T., Öner, M. A., Kunday, Ö., & Olcay, G. A. (2022). "A journey towards a digital platform business model: A case study in a global tech-company". *Technological Forecasting and Social Change*, 175, 121372.

Snyder, H. (2019). "Literature review as a research methodology: An overview and guidelines". *Journal of Business Research*, 104, 333-339.

Stankevich, A. (2017). "Explaining the consumer decision-making process: Critical literature review". *Journal of International Business Research and Marketing*, 2(6).

Statista. (2024). Share of eReader owners in selected countries worldwide. Retrieved from <https://www-statista-com.eu1.proxy.openathens.net/forecasts/1452549/share-of-ereader-owners-in-selected-countries-worldwide>

Statista. n.d. Media - Books - Portugal. Retrieved from <https://www-statista-com.eu1.proxy.openathens.net/outlook/amo/media/books/portugal>

Suryakala, B. (2019). "Towards A Subscription Economy: Digital Transformation Journey of a Traditional Product-Based Company (Master's thesis)".

Szopiński, T. S., Bachnik, K., & Nowacki, R. (2020). "Cross-channel information search and patterns of consumer electronics purchasing". *Economic Research-Ekonomska Istraživanja*, 33(1), 2806-2824.

Thompson, A. B. (2003). "Brand positioning and brand creation". *Brands and Branding*, 1, 79-95.

Tóth, Z., Sklyar, A., Kowalkowski, C., Sörhammar, D., Tronvoll, B., & Wirths, O. (2022). "Tensions in digital servitization through a paradox lens". *Industrial Marketing Management*, 102, 438-450.

Valencia, A., Mugge, R., Schoormans, J., & Schifferstein, H. (2015). "The design of smart product-service systems (PSSs): An exploration of design characteristics". *International Journal of Design*, 9(1).

Van Leth, T. P. (2016). "Typologies of Subscription-based Business Models". Rotterdam School of Management, Erasmus University.

Wang, C. C., Lo, S. K., & Fang, W. (2008). "Extending the technology acceptance model to mobile telecommunication innovation: The existence of network externalities". *Journal of Consumer Behaviour*, 7(2), 101–110.

Wang, C. L., Zhang, Y., Ye, L. R., & Nguyen, D. D. (2005). "Subscription to fee-based online services: What makes consumer pay for online content?". *Journal of Electronic Commerce Research*, 6(4), 304.

Williams, M. D., Slade, E. L., & Dwivedi, Y. K. (2014). "Consumers' intentions to use e-readers". *Journal of Computer Information Systems*, 54(2), 66-76.

Zheng, P., Wang, Z., Chen, C. H., & Khoo, L. P. (2019). "A survey of smart product-service systems: Key aspects, challenges and future perspectives". *Advanced Engineering Informatics*, 42, 100973.