Investigating Factors That Affect Willingness to Pay – An Analysis on Freemium Social Media Apps

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Master's in Business Administration

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BUSINESS SCHOOL

Department of Marketing, Strategy and Operations

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Resumo

Embora as redes sociais tenham crescido em popularidade e utilização nos últimos anos, pouco se sabe sobre a vontade dos utilizadores de pagar pela versão premium das mesmas. Neste estudo, investigamos como o valor percebido pelos consumidores está associado à sua intenção de utilizar os serviços *freemium* e de adquirir conteúdos *premium*. Investigamos os dados recolhidos através de um inquérito online (N=200) e testamos 15 hipóteses diferentes, utilizando PLS-SEM. Em primeiro lugar, encontrámos suporte para a hipótese de Segurança proposta neste estudo, indicando que os utilizadores que valorizam a componente de segurança nas redes sociais *freemium* terão uma maior intenção de utilizar o serviço. Em segundo lugar, a maior qualidade da rede social leva a maiores intenções de utilização, o que leva a maiores intenções de compra. Em terceiro lugar, o valor do preço dos serviços *freemium* mostra ter uma associação negativa com a intenção de compra de conteúdos premium. Em quarto lugar, observámos que a comunidade social afeta positivamente as compra da versão premium. Finalmente, encontrámos apoio para a hipótese de frequência de utilização proposta neste estudo, indicando que se um utilizador estabelecer o hábito de utilizar uma rede social *freemium*, acabará por decidir comprar a versão premium. As conclusões do presente estudo realçam a singularidade do modelo de negócio *freemium*, implicando que o aumento do valor percebido do serviço, a melhoria da segurança, ou o aumento da frequência de utilização podem contribuir ou subtrair da rentabilidade futura através do aumento da retenção ou da redução da monetização.

Palavras-chave: *Freemium*, Redes Sociais, Qualidade, Preço, Divertimento, Publicidade, Segurança, Frequência de utilização.

JEL Classification System: M15 IT Management; M31 Marketing

Abstract

While social media has grown in popularity and usage in recent years, little is known about users' willingness to pay for the premium version of them. In this study, we investigate how consumers' perceived value is associated with their intention to use freemium services and to purchase premium content. We employ data gathered through an online survey (N=200) among the users of freemium social media networks, like LinkedIn, YouTube, Reddit and Flickr and tested 15 different hypotheses, using PLS-SEM. Firstly, we find support for the security hypothesis proposed in this study, indicating that if users value the security component of the freemium social media, they will have a higher intention to use the service overall. Secondly, the higher quality of the freemium service leads to higher usage intentions, which further leads to higher purchase intentions. Thirdly, the price value of freemium services shows to have a negative association with the intention to purchase premium content. Fourthly, social platform community is found to positively affect premium purchases. Lastly, we find support for the usage frequency hypothesis proposed in this study, indicating that if a user establishes a habit of using a social media, he will eventually decide to buy the premium version. The current study's findings contribute to the uniqueness of the freemium business model, implying that increasing perceived value of the freemium service, improving security, or increasing usage frequency can all contribute to and subtract from future profitability via increased retention on the one hand and reduced monetization on the other.

Keywords: Freemium, Social Media Networks, Quality, Price, Enjoyment, Advertisement, Security, Usage Frequency.

JEL Classification System: M15 IT Management; M31 Marketing

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List of Abbreviations

AVE	Average Variance Extracted
B2B	Business to Consumer
CEO	Chief Executive Officer
CR	Composite Reliability
EU	European Union
eWOW	Electronic Word-of-Mouth
GDPR	General Data Protection Regulation
HTMT	Heterotrait-Monotrait
IPMA	Importance-Performance Map Analysis
IS	Information Systems
IT	Information Technology
PLS	Partial Least Squares Technique
SEM	Structural Equations Modeling
SNS	Social Networking Sites
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behavior
VIF	Variance Inflation Factor
WTP	Willingness to Pay

1. Introduction

The use of social networking sites has emerged rapidly as an ideal platform for social interaction. Different social networking sites are characterized according to their usage like business networking, entertainment and social interactions (Praveena & Thomas, 2014). Different social networking sites, such as LinkedIn, Instagram, Facebook, YouTube, and Reddit, serve different objectives and target different demographics. The emergence of a multitude of social networking sites with a variety of uses and offerings has increased the level of competition in the use of these sites (Praveena & Thomas, 2014). Free content on the internet has become an important aspect of the current consumer experience. Consumers are still hesitant to pay for digital entertainment, despite the increase in demand. The majority of businesses that give free digital access to their content rely on advertising revenue to stay afloat (Dwivedia, et al., 2021). They are, however, increasingly seeking for methods to charge customers for their material these days.

The term "freemium" ("free" + "premium") refers to a business model in which a core product or service is provided for free, with extra features accessible for purchase inside the service (Kumar, 2014). When using the freemium model, the service provider has the capacity to retain paying consumers while also converting non-paying ones, which is a key success element (Mäntymäki, Islam, & Benbasat, 2019). It's also a marketing strategy for breaking into new markets, creating buzz or brand awareness, accessing more price-sensitive market segments, or disrupting competitors (Hamari, Hanner, & Koivisto, 2020). The research challenge that supports this study is based on the fact that the freemium business model has lately been a popular issue, mostly because it appears to be the greatest approach to boost sales in the mobile app industry (Wagner & Hess, 2013).

Consumer behavior research is essential for marketers to have a better knowledge of how consumers think and express their preferences. Compared to only the choosing process, Willingness to Pay (WTP) is connected with a considerably stronger preference for utilitarian goods over a more hedonic one (O'Donnell & Evers, 2019). This topic becomes even more important when we consider that the differences between the factors that drive basic users to upgrade from free to premium subscriptions and those that drive premium users to keep their paid subscriptions are poorly understood, and despite its practical importance, very few studies have addressed the question of why customers are

willing to pay (Wagner & Hess, 2013), which represents an opportunity in the context of the current study.

With this in mind, the topic at hand is more relevant than ever before, with significant managerial implications. In today's highly competitive business world, the better firms understand their users and purchasers, the better for business, since knowing your consumers' preferences and habits is critical for outsmarting your competition, establishing loyalty, and generating customer retention. Furthermore, recognizing and enhancing client knowledge and relationships will put any business ahead of the competition.

The purpose of this paper is to investigate the factors that influence users' willingness to pay for social media apps that are free to use but provide additional services for a price, also known as freemium apps, and to provide a better understanding of what motivates users to purchase a product or service in a strategic and organizational context. We want to shed further light on the variations in reported preferences between choices and WTP, as well as the psychological mechanisms that explain how consumers make decisions, in this paper.

The first objective related to the present research is to develop a theoretical framework on consumers' perceptions, attitudes and how the perceived value is associated with the willingness to pay premium in social media apps. As mentioned before, the reasons why customers are willing to pay for a service when they can obtain the basic functions for free remain underdeveloped. Thus, the second goal of this study is to understand what benefits users actually take advantage of, and emphasize them in order to associate an economic value to the content. A third goal of the present project is to study the relationships between the free and premium users regarding their motivations. For that I will study 7 variables: social platform community, enjoyment, price, quality, usage frequency, security and advertisement, in order to understand if there is indeed a link between these variables and the continue use intention (free) and the purchase intention (premium), and if so, if the impact is positive or negative. A fourth and final goal of this dissertation is to study these benefits, in a willingness to pay context, and relate them to the users' motivations and attitudes, resorting to documental analysis and questionnaires.

This study contributes to marketing research and practice in two ways. First, as a relatively new construct in the willingness to pay and freemium business literature, the influence of security is not well understood, and empirical evidence on its impact is

limited. However, according to Acquisti & Gross's (2006) study, an individual's privacy concerns are a weak predictor of his participation in the social network. Also, according to Featherman, Miyazaki, & Sprott's (2010) study, the perspective of loss of privacy and misuse of information in, for example social networks, can influence the user's willingness to provide their data. And second, by performing an Importance-Performance Map Analysis, we will study the links between the variables and the users' willingness to continue using the social media's free version and the purchase intention of the premium version, attempting this way to study the three most influential variables on the two dependent variables. By studying these relations, we will seek to bring greater conceptual clarity to the willingness to pay for freemium social media and provide a more solid base for future investigation and discernment of managers' implications. To achieve the proposed objectives, we will first develop a valid and reliable measure for all our variables, based on several different authors. After we create the questionnaire, we will collect the data from 200 social media users. The sample will be tested by mean of a variance-based structural equations modeling called PLS Path Modeling (Hair, Hult, Ringle, & Sarstedt, 2017). Our results will illustrate how our independent variables influence the continue use intention (free) and the purchase intention (premium).

In line with these research objectives, this study begins with an in-depth literature review, which represents the theoretical knowledge that will be used in the development of the conceptual model and the research hypothesis. Next, we will present the methods used to gather the sample, construct the variables, and measure them. After collecting all of the data from the questionnaire, we'll use the PLS technique to evaluate the results and interpret them in light of our hypothesis. Then we'll discuss the PLS results and try to answer our research questions. Finally, this paper concludes with the theoretical and managerial implication of the results and offers suggestions for future research on this topic.

2. Literature Review

2.1 - Freemium as A Business Model

The concept of business model gained importance in the literature in the late 1990, associated with the term innovation, which has become a key element of today's business models (Tohanean, 2018). When using the freemium business model, companies offer a free basic version of a product or service and a value-enhanced version of the same product or service that the customers have to pay for (Koch & Benlian, 2016). Also, the premium version can offer several benefits: no advertising, offline availability, and access via mobile devices (Dörr, Benlian, Vetter, & Hess, 2010). This means that a subscription-based (premium) online service must differentiate and segment its free content to increase its perceived worth, because customer perceptions and attitudes can lead to various market segments that are either willing or unwilling to pay a premium (Wang, Zhang, Ye, & Nguyen, 2005).

Wilson (2006, p. 1) was the creator of the term freemium, which is a combining of the words "free" and "premium", and he described it as "*Give your service away for free, possibly ad supported but maybe not, acquire a lot of customers very efficiently through word of mouth, referral networks, organic search marketing, etc., then offer premium priced value added services or an enhanced version of your service to your customer base.*". Many of today's well-known brands, products or services are based on a freemium business model, especially in the area of software and internet services, as for example: Skype, YouTube, Dropbox, LinkedIn, Spotify, OneDrive, League of Legends and Candy Crush (Lucht, 2019). The existing research of the freemium business model underlines the success of this relatively new way of doing business and this depends on the number of customers who purchase the premium version in the presence of the free version (Holm & Günzel-Jensen, 2017; Gu, Kannan, & Ma, 2018).

Although the underlying business model of these products is based on the same core idea, the companies generate their profits through different types of the freemium business model (Lucht, 2019). Three forms of freemium models are described by Falko Lucht (2019), (1) if the product/service is only available for a short time, (2) where customers may only utilize the product and not share, embed, or re-distribute it, and (3) where the free user has restricted capabilities. Despite the differences, all three business models depend on premium customers in order to be profitable. Therefore, the number of

paying premium customers' needs to reach a critical level, so that revenue can be made, or else the business model will fail. Whether freemium works or not, depends on a firm's ability to monetize free users and to raise the conversion rate (Wagner, Benlian, & Hess, 2014), which makes the companies' ability to retain paying users and convert non-paying users into paying ones, a critical success factor.

While premium users (paying customers) are important for a business adopting a successful freemium model, the customers that only use the free or basic version of a product or service, (non-paying customers) also create huge value for a company, and sometimes they are as necessary as the paying customers, because they can also create considerable benefits, for example through data, advertising or customer attraction, and therefore they should not be neglected (Lucht, 2019). As above mentioned, according to some authors, the willingness or unwillingness to pay for online services is possibly related to the users' perception of convenience, essentiality, added-value, service quality, usage rate and perceived fairness (Wang, Zhang, Ye, & Nguyen, 2005).

Freemium has become the dominant model in the smartphone app industry. As said before, users get basic features at no cost and can access more functionalities for a subscription fee. The freemium model is a powerful marketing tool that allows new ventures to scale up and attract a large user base without the need for a traditional sales force or ad campaigns (Hamari, Hanner, & Koivisto, 2020). The rise of subscription fees has become a more sustainable revenue source for online businesses, especially among advertisers who look to reduce their expenses. As Phil Libin, CEO of Evernote, a note-taking freemium app designed to collect and organize text, pictures, videos, and audio recordings, said "*the easiest way to get 1 million people paying is to get 1 billion people using*" (Manola, 2020, p. 1). One of the primary goals of freemium is to bring in new users and if a company fails to achieve this goal, it is likely because its free products are insufficiently appealing, and it needs to provide more or better features for free. If a company receives a lot of traffic but few individuals pay to upgrade, it may have the opposite problem, meaning that its free offerings are too rich, and they should cut back (Kumar, 2014).

To have a deeper understanding of this model and its characteristics, we will describe two successful companies that use this type of model in their businesses, the social network LinkedIn, and Dropbox, the cloud-based that works with shared files. At a B2B level, we also have examples of freemium business models, like Box and Splunk, which are cloud content management tools for companies and Yammer, a social networking tool

that allows workers to openly connect and engage across their organizations. As for Dropbox and LinkedIn, they have contradictory models. Dropbox has 200 million members due to its simple offer: everyone who registers receives two gigabytes of free cloud storage. If individuals run out of space, they can upgrade to 2 TB of storage for €11.99 per month (or €119.88 per year). The free version is sufficient for basic documents, but anyone who wishes to back up images or other material rapidly reaches the limit, so the benefits of upgrading are clear. The benefits of upgrading are less evident for many LinkedIn users. The company offers four premium subscriptions, some of which are targeted towards certain customer segments, such as recruiters or salespeople, but all offer enhanced search capabilities, improved e-mail functionality, and more visibility of the costumers' profile. Despite its success (being one of the first freemium companies to go public), LinkedIn could undoubtedly monetize more people if the lines between its free and paid services were clearer (Kumar, 2014).

According to Vineet Kumar (2014), companies that fail to recognize these nuances may face financial difficulties as the number of free users increases and the cost of maintaining them rises. This is why many organizations who started with a freemium model later shift, converting to free time-limited trials or removing free offerings entirely. Also, it's critical to realize the entire worth of free users, which can take two forms: some convert to subscribers, and some attract new customers. It's a mistake to think of freemium as solely a customer acquisition tool, then abandon it when new customers start flowing in or the upgrade rate starts to rise. Users who join later are more difficult to convert, as a result, you'll need to continually boost the value of your premium services to keep increasing upgrades. Freemium is viewed as a revenue model as well as a commitment to innovation by smart businesses (Mäntymäki, Islam, & Benbasat, 2019; Kumar, 2014), and Dropbox is an excellent example of this. When it first began in 2008, it was primarily a file backup service. It subsequently included shared folders, transforming it into a collaborative tool, and its newer capabilities enable syncing of cellphones and other devices, as well as automatic photo uploading, and also, the user interface has enhanced over time. As a result, each new feature has increased the premium offering's value.

2.2 - Social Media Apps

The study of social networks originated in the field of Sociology and Social Anthropology, in the 20th century, and was assuming a prominent role transversal to various fields of knowledge, gaining special relevance with the technological revolution and the development of the internet (Boyd & Ellison, 2007).

According to Garton et al. (1997), a social network can be described as a set of people, organizations or other social entities that are linked by a set of social relationships, such as friendship, work or exchange of information. These relationships can be established personally or be mediated by technology, such as computers and the internet. A more recent study defines social networks as "*the label attached to any consumer-initiated communication with other consumers who share an interest and use the World Wide Web as a platform for creating a community*" (Quinton & Harridge-March, 2010).

When this is the case, processes tend to be faster and the network effect tends to increase exponentially, as networks become faster and have the capacity to carry more information, overcoming time and space constraints (Kozinets, De Valck, Wojnicki, & Sarah, 2010).

Online social networks are virtual spaces designed to allow users to meet, communicate, share content and build communities. Thus, since its creation, online social networks have been proliferating and attracting millions of users, many of whom have incorporated visits to these websites in their daily practices (Boyd & Ellison, 2007). These virtual networks can be organized around various niches of interest or content and this is where, nowadays, many of the conversations of post-modern society take place (Simmons, 2008). The proliferation of the internet thus resulted in the creation of new social and marketing spaces, giving rise to new forms of interaction and identity formation (Ozuem, Howell, & Lancaster, 2008). Although the vast majority of these platforms share the same key technical features, the cultures associated with each of them can vary widely. There are social networks open to all types of users and others aimed at specific audiences, whether in terms of interests and themes, or identity characteristics, like ethnicity, religion, politics or sexual orientation (Boyd & Ellison, 2007).

Typically, an online social network allows its users to create and maintain a network of contacts between which social or professional interaction is established. Generally, this type of networks is based on a set of individual, public or semi-public profiles, which are made up of descriptions of personal characteristics and interests, images, multimedia content and links to external content. The level of privacy of these profiles and the type of information available to other users may vary (Boyd & Ellison, 2007).

Once registered on the network, users can associate their profile with that of other users by searching the website and sending affiliation requests, which take on different names depending on the site in question: friends, fans, followers, contacts, etc. An important characteristic of these networks is that the contents are generated by users, arousing interest and contributing to their retention, and interactions usually occur on these contents (Trusov, Bucklin, & Pauwels, 2009). According to studies on social networking sites (SNS) usage, SNS are mostly used for messaging, exchanging information, and keeping in touch with one another (Agarwal, 2009).

The emergence of social networks has changed the way in which online communities are organized, which previously tended to organize themselves around common interests and now tend to organize themselves around people. Whereas previously communities were structured around topics of discussion, today they are structured around personal networks in which the individual is at the center of the community to which he belongs (Boyd & Ellison, 2007). As said before, social media is now being utilized as a marketing and commercial tool. These sites are used by the media for promotion, and many businesses and organizations utilize them for business and marketing, and customers' perceptions of existing products and services are gathered through these communication channels (Praveena & Thomas, 2014).

2.3 - Perceived Value

Emotional value, social value, quality, and economic value are the four components of value in the perceived value theory. According to literature on perceived value, such as Sweeney and Soutar's (2001) original study, these characteristics predict various service/product use-related actions rather effectively. Perceived value has been defined as "the consumer's overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given" (Zeithaml, 1998). Perceived value, in particular, can be thought of as a trade-off between perceived benefits and perceived costs (Lovelock, 2001). When people believe that the benefits of a product or service outweigh the costs, perceived value rises. Perceived value has been connected to a variety of beneficial outcomes, including enhanced user satisfaction and loyalty (Lee, Yoon, & Lee, 2007; Ledden, Kalafatis, & Samouel, 2007), a high level of behavioral intention to use (Lin & Wang, 2006), and, in many cases, purchase intention (Chang & Tseng, 2013).

In the context of consumer value, perceived value is viewed as a multi-dimensional construct (Sweeney & Soutar, 2001). Performance/quality value, emotional value, value for money, and social value are all included. Also, the validity of four sub-values of consumer perceived value has been proven in previous studies (Sánchez-Fernández & Iniesta-Bonillo, 2009; Turel, Serenko, & Bontis, 2007; Walsh, Shiu, & Hassan, 2014). The utility obtained from the product's perceived quality and anticipated performance is known as functional/quality value, similar to that of perceived usefulness. Emotional value is the value gained from the feelings or affective states generated by the product. The utility gained from a product combined with the perceived economical value is known as Value-for-Money. The utility resulting from a product's potential to improve social self-concept is known as social value.

App users can derive four forms of perceived value as they download and utilize various apps such as social networking, community, and communication in the context of this study (e.g., LinkedIn, YouTube, Flickr and Reddit). As a result, perceived value is defined in this study as a consumer's overall judgment of an app's four forms of utility based on perceived benefits and costs.

In the market, perceived value has a frequent influential role, because as customers' contentment and intent to purchase rise, they recognize the value of the product and service. For example, Lin and Wang (2006) discovered that in the online commerce market, perceived value had a significant impact on consumer satisfaction and repurchase intention. Similarly, Kuo et al. (2009) established and empirically tested a conceptual model of elements influencing mobile value-added services post-purchase intention. According to their research, perceived value positively influences customer satisfaction and post-purchase intention. Customers may build this value impression while using mobile-related applications and services, according to previous research it has shown that perceived value influences user happiness and behavior intention (Cronin, Brady, & Hult, 2000; Yang & Peterson, 2004).

2.4 - Conceptual Models and Research Hypothesis

2.4.1 - Social Platform Community

In the perceived value framework, the social dimension refers to the value generated from a service or product's potential to improve the customer's social self-concept (Sweeney & Soutar, 2001). In other words, one's perceptions of how the product or service positively

affects one's notion of himself, as well as the conceptions that one projects others to have of himself, make up the social value (Belk, 2013; Sánchez-Fernández & Iniesta-Bonillo, 2007). This point of view is closely related to the perception of subjective norms, which is often utilized in information systems and marketing research to operationalize social values (Ajzen, 1991).

As previously said, the relevance of social value in services has risen in recent years, especially due to the rise of the internet, as an increasing number of services rely heavily on social features and other types of user-generated content (Oestreicher-Singer & Zalmanson, 2013). While the mechanisms for sustaining social values within services might vary, some of the more typical socio-psychological processes on which these features are based include self-presentation (Kim, Chan, & Kankanhalli, 2012), social influence (Hamari, Hanner, & Koivisto, 2020), social presence (Mäntymäki & Riemer, 2014), and status (Guo & Barnes, 2012).

One of the most important factors in Social Communities is status, and status is defined by sociologists as an actor's position in a group when that position is based on prestige, honor, or deference (Thye, 2000). By extension, status seeking encompasses acts aimed at enhancing a users' social standing and is thus measured by the degree to which associated activities result in increased prestige, honor, and/or respect. People may seek status for phycological and emotional reasons, but they may also crave it for financial and social ones. Lin's (1999, p. 48) assessment of how people improve their social position exemplifies this viewpoint. He defines aspiration for improved status as "*the process by which individuals mobilize and invest resources for returns in socioeconomic standing*".

Given modern society's social dynamics, this identity creation is frequently molded by a desire for status. Individuals can project personas that are closer to their ideal self in the relative safety of online experiences, compared to real-world contexts. This technique will invariably provoke strong emotions in individuals who participate in it. These feelings are at the heart of the motivation that keeps people participating in online social activities.

H1a. Belonging to a Social Platform Community is positively associated with the continued use intention.

According to Hamari et al (2020), increasing premium purchases in freemium services by increasing the social factor (Oestreicher-Singer & Zalmanson, 2013) and leveraging from the network effects of the user base (Lin & Bhattacherjee, 2008) has

become a crucial technique for many online businesses. The conception of social value is a vital element in determining whether or not users upgrade from free to premium.

When it comes to using social media apps, it has been proven that socializing with peers is quite important. Social Interaction refers to the gratifications related to socializing with other media consumers (Hamari & Sjöblom, 2017). In social networks, for example, this social value has been found to be a powerful predictor of the propensity to buy virtual items (Kim, Gupta, & Koh, 2011) or pay membership fees (Vock, Dolen, & Ruyter, 2013). Furthermore, Oestreicher-Singer and Zalmanson (2013) demonstrate that users who participate more actively and deeply in the freemium service's community are more likely to convert to paying customers.

The growth of the Internet has coincided with the rise in popularity of the concept of a virtual community, a community where strangers help strangers with guidance and information online. As such, user reviews are becoming increasingly relevant in emerging economies when it comes to purchasing decisions (Chen & Xie, 2008). Given the unpredictability of the online transaction environment, consumers rely even more on reliable and helpful information to better understand items and, as a result, to support their purchasing decisions (Hsu, Lin, & Chiang, 2013). On a more practical level, evidence that online opinion and information impact purchasing decisions suggests that, despite the relative anonymity of online engagement, trust can also grow in virtual communities (Dellarocas, 2003).

We can consider user reviews as a social interaction, since the reviews provide a quick look into the app and experience of the business/product and market it to new customers. Users believe that the information offered by other consumers is more trustworthy than information created by sellers themselves (Dellarocas, 2003). The Reference Group Theory, which emphasizes that a consumer's behaviors (e.g., purchase decision) can be influenced by a group of people whose opinions he or she values, can explain this behavior (Brown & Reingen, 1987; Kotler, 1999).

Another line of research implies that online rating, a type of electronic word-of-mouth, has a beneficial impact on purchase intent. Jalilvand and Samiei (2012) found that electronic word-of-mouth (eWOW) is one of the most effective elements influencing purchase intent in consumer marketplaces in an empirical study. Given the importance of online reviews on online shopping behavior, this study implies that a positive app rating will influence a user's propensity to purchase the app's paid version (Yoo, Sanders, & Moon, 2013). To conclude, in a digital environment, social media allows users to present

an expanded or enhanced self (Belk, 2013). Virtual services/products, for example, have socially constructed meanings and cultural implications similar to possessions in the offline world, and hence owning or using specific products and services may have a positive or bad impact on self-image (Kuo, Wu, & Deng, 2009). Users commonly spend money on items and services that improve their online social experience (Messinger, et al., 2009), and as previously stated, social values are thought to have a substantial influence on purchasing decisions. Thus, it can be expected that if users perceive the social component of the social media they use as valuable they are likely to spend money to emphasize these effects.

H1b. Belonging to a Social Platform Community is positively associated with the intention to purchase premium content

2.4.2 - Enjoyment

In the perceived value framework, the emotional value refers to the affective states and emotions that are evoked by using the product or service (Sweeney & Soutar, 2001). This emotional value has been operationalized as enjoyment in previous literature, and it has also been recognized as the major motivator of usage for many hedonically oriented systems (Van der Heijden, 2004). People engage with these hedonic systems, of which social media is a major example, for the sake of amusement, enjoyment, fun, and pleasure, and they are also thought to stimulate intrinsic motives (Malone, 1981). The positive impact of this pleasure value on system usage has been well documented in the context of entertainment-oriented hedonic systems (Van der Heijden, 2004). Moon and Kim (2001) discovered that perceived enjoyment is positively related to attitudes about using a specific source. In previous research, enjoyment has been shown to have an effect on user behavior (Dickinger, Arami, & Meyer, 2008).

Similarly, several studies in the context of social media have discovered that enjoyment is a powerful driver of engagement and continued use intentions of the platform in the future. According to the study developed by Hart, et al. (2008), enjoyment is one of the main reason people choose to use social media, and the desire to utilize a website is heavily influenced by how much fun users have while using it (Davis, Warshaw, & Bagozzi, 1992). Therefore, in this study we expect there to be a positive association between the enjoyment and continue use intention.

H2a. Enjoyment is positively associated with the continue use intention.

The relationship between enjoyment and continued use intention would be expected to be similar to the relation between enjoyment and purchase intention among entertainment-oriented services that use the freemium model. However, some existing freemium services may purposefully aim to reduce enjoyment in order to induce consumers to acquire the premium content/service (Hamari, 2011; Hamari & Lehdonvirta, 2010).

While some few studies show a small positive relationship between enjoyment and purchase behavior of the premium product/service (Mäntymäki & Salo, 2015), several others suggest that enjoying the free available product/service may actually reduce any future willingness to pay for the premium version (Hamari, 2015; Heimo, Harviainen, Kimppa, & Mäkilä, 2018).

According to the last hypothesis (H2a) it is possible to say that if consumers are already satisfied with the service and its use is free, they would gladly continue to use it. However, as long as the purchases aren't seen as necessary, they'll be less likely to spend money on it if they are satisfied with the product/service they have. Therefore, when the link between enjoyment and usage intentions is positively accounted for, we predict a negative association between enjoyment and purchase intentions.

H2b. Enjoyment is negatively associated with the intention to purchase premium content.

2.4.3 - Price

In the perceived value model, the economic value, also known as pricing in various literatures, relates to the perception of the costs associated with the service. It relates to how affordable or reasonably priced the service is thought to be (Sweeney & Soutar, 2001). Price has traditionally been regarded critical for consumer value judgments, particularly in informal conversations (Sweeney & Soutar, 2001), but the importance of economic value has decreased as the value concept has broadened.

Traditionally, one of the most important factors of consumer surplus has been the price of goods and services (Alford & Biswas, 2002). Freemium services, on the other hand, have no monetary charges in the free version of the products/services and so provide an attractive environment for researching price-related elements of consumer value experience. Hence, it is expected, in this study, that there will be a positive association between price and continue use intention.

H3a. Price is positively associated with the continued use intention.

Although there is currently a scarcity of research and literature on the perception of economic value in freemium services (Hamari, Malik, Koski, & Johri, 2019), we know that freemium models are sometimes used by businesses to entice people into their businesses, also known as the "foot-in-the-door" technique, by giving away free items and cross-selling additional services, which is the case, for example, of the social network LinkedIn or the cloud-based social network Flickr. The freemium model appeals to businesses because it can produce huge levels of visitors and allow direct access to prospective paying consumers without requiring significant marketing expenses (Kumar, 2014). Meaning that the freemium model may be used as a marketing tool to attract new clients through word-of-mouth and search results, and from the customer's standpoint, the freemium model offers a risk-free method to try out a new product or service.

The challenge resides in how organizations can deliver significant added value beyond the free core service in such a way that customers would be prepared to pay for the premium service (Oestreicher-Singer & Zalmanson, 2013). Although the entry fee under the freemium business model is essentially null, this does not mean that using the service is completely without cost for the business. The freemium model allows for more dynamic pricing, allowing operators to modify the 'price' of the service based on the willingness-to-pay of its customers. This is especially true in freemium games, where the premium content is sometimes split into hundreds of little parts that may be purchased. This type of content slicing results in a large range of possible consumer behavior patterns, as well as an unfixed overall service pricing (Hamari, Malik, Koski, & Johri, 2019).

Companies may profit from these clients by providing a premium product to individuals who value utilizing the product so highly that they are prepared to pay for additional or different features. In this situation, the biggest challenge for organizations that use the freemium model is figuring out how to boost the number of consumers who buy the premium version even while the free version is available.

Therefore, when the link between price and usage intentions is positively accounted for, we predict a negative association between price and purchase intentions.

H3b. Price is negatively associated with the intention to purchase premium content.

2.4.4 - Quality

In the perceived value framework, the quality value refers to the product or service's performance value to the consumer, meaning its functional value as well as the utility obtained from expected performance (Sweeney & Soutar, 2001).

Providing freemium core services for free raises concerns about the service's possible quality. These issues have been particularly evident in the context of games, as freemium games have been often seen as of lower quality by gamers (Alha, Koskinen, Paavilainen, Hamari, & Kinnunen, 2014). As a result, the price structure may put the service provider in a difficult position in terms of developing a freemium product of adequate quality to please users but constraining quality features enough in order to encourage premium payments. Also, the technological quality of games has been found to influence online game usage intentions (Lin & Bhattacherjee, 2010).

Since switching between several freemium apps is basically free, as freemium services have no entrance price, freemium app users are quick to try out a variety of apps and abandon them if the quality isn't pleasing (Alha, Koskinen, Paavilainen, Hamari, & Kinnunen, 2014). Thus, it can be expected that if users perceive the quality component of the social media they use as pleasant they are likely to continue using the app, so we expect there to be a positive association between quality and continue use intention.

H4a. Quality is positively associated with the continued use intention.

Several empirical studies have demonstrated the relevance of service quality in achieving important business objectives such as customer retention, productivity and profitability, corporate image, and consumer intents to share their pleasant experiences with others (Ladhari, 2009; Carrillat, Jaramillo, & Mulki, 2007). However, unlike the quality of physical commodities, which can often be assessed based on factors such as durability and the absence of faults in the item (Garvin, 1983), identifying the drivers of service quality in online contexts has proven difficult for both service providers and researchers (Parasuraman, Zeithaml, & Berry, 1985).

Furthermore, Guo and Barnes (2009) and Hamari, Hanner, and Koivisto (2017), demonstrated that support for quality is a significant factor in purchase intentions in online contexts. Freemium developers, on the other hand, are faced with a conundrum because the service must be of sufficient quality to keep consumers, yet still have quality gaps that can be filled with premium additional services, making the user interested enough to pay for the upgrade (Pauwels & Weiss, 2008). Thus, it can be expected that if

users perceive the quality component of the social media they use as valuable they are likely to spend money on emphasizing this.

H4b. Quality is positively associated with the intention to purchase premium content.

2.4.5 - Usage Frequency

Usage Frequency, also known as habit in some literatures, refers to a behavior pattern formed through the repeated performance of an action. This is an important variable in this study because it looks for a link between social media users and the development of habits which then promote the continuation of the same type of behavior.

Gefen (2003) discovered that habit alone can account for a significant amount of the variance of continued website usage. Lin and Wang (2006) also found that in mobile commerce contexts, habit had a substantial impact on loyalty. Similar results have been reported in other studies.

The extent to which people tend to perform activities automatically as a result of learning is defined as a habit (Limayem, Hirt, & Cheung, 2007). According to Ouellette and Wood (1998), once a behavior has become a habit, or well-practiced behavior, it becomes automatic and is carried out without conscious decision. Hence, it is expected, in this study, that there will be a positive association between usage frequency and continue use intention.

H5a. Usage Frequency is positively associated with the continued use intention.

Researchers have paid close attention to usage frequency, particularly in the area of post-adoption IT use. Limayem et al. (2007) incorporated habit into the expectation-confirmation theory and suggested that habit has a direct impact on IT continue usage, therefore, previous repetitive app usage will impact the user's inclination to purchase paid apps.

Prior studies Trafimow (2000), found habit to be an influential antecedent in predicting behavioral intentions, by incorporating habit into the Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB). Lin and Wang (2006) found that habits have a major impact on user loyalty, in the setting of mobile commerce. By adopting a freemium strategy, many mobile app developers believe that if a user learns the app's characteristics and features and establishes a habit of using it, he or she will eventually decide to buy the premium version (Hsu & Lin, 2015). Therefore, this study also expects a positive effect of usage frequency on the intention to purchase premium content.

H5b. Usage Frequency is positively associated with the intention to purchase premium content.

2.4.6 - Security

When it comes to security and privacy, it refers to different things, in which security means that the system must preserve its integrity and functionality even when it is subject to attacks, whereas privacy means that the system must preserve the confidentiality of information personally identifiable (Symanovich, 2021). Concern for privacy predates the internet age. An article published in 1878 (Cooley, 1878), by the American judge Thomas Cooley, defines privacy as the limitation of access to information about a specific person, to the person and to their intimacy, involving issues of anonymity, secrecy, removal and the right to be left in peace. In today's world, in which the use of computers and technological communication mechanisms is increasingly present, according to Levy (1998), the issue of the end of privacy and the preservation of information emerges, arising from the informational flow produced and made available in large scale on the world wide web.

The privacy and security of information on the internet corresponds to an area that arouses study interest due to the large amount of personal and corporate information that is obtained, stored, transmitted and published on the world wide web. Information has become a valuable asset for organizations, which can be processed electronically and using public and private internet networks (Thong & Hong, 2013). These assets that can be corporate and/or personal make up the current business environment of organizations and are under constant threat of viruses, system invasions, abuse of privileged information, breach of privacy and unauthorized disclosure of information (Johnston & Warkentin, 2010).

Given the context in which the rights to privacy and data protection have been elevated to the level of human rights in the international arena, governments have paid special attention to dealing with these challenges. In this scenario, the General Data Protection Regulation (GDPR), published in 2018, by the European Union (EU), stands out, which aims to provide users with greater control over their personal data and increase restrictions on organizations that treat and deal with this data. Also, Drinkwater (2016) emphasizes that online information leakage increases users' concerns about the risk of information.

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Security issues will increasingly be among the concerns of consumers, which may result in them being more resistant to connecting to brands and allowing access to personal data. While new forms of communication, registration, access and information retrieval are being made possible, there is a growing concern with the privacy and security of information, and according to a survey conducted by the Boston Consulting Group, privacy of personal data is an important issue for 76% of global consumers (Rose, Barton, Souza, & Platt, 2014). Therefore, it can be expected that if users perceive the security component of the social media they use as pleasant they are likely to continue using the app, so we expect there to be a positive association between security and continue use intention.

H6a. Security is positively associated with the continued use intention.

Social networks are based on the trust that members place in the system to achieve widespread success (Coppola, Hiltz, & Rotter, 2004). One of the main problems of social networks is privacy and the way the user has to control information about himself. With this, security problems arise, such as identity theft or even the simple public publication of something that was supposed to be private to a certain group or individual, like private conversations, or photos. There is therefore an attempt by social networks to enable the creation of privacy systems that can give its users the confidentiality they want and need.

There are numerous ways to violate users' privacy. As evidenced by Wondracek et al. (2010) one way to violate the privacy of users is through accessory applications to social networks. Of the approximately 150 most popular applications on Facebook, only 14 need personal information for their operation. This means that more than 90% of applications have unnecessary access to users' personal information. (Felt & Evans, 2008).

The need to insert privacy in the context of the internet is stressed, in which individuals are not only concerned with data collection, but also with how this data will be analyzed and used (Thong & Hong, 2013). The perspective of loss of privacy and misuse of information in for example social networks, can influence the user's willingness to provide their data (Featherman, Miyazaki, & Sprott, 2010). Thus, it can be expected that if users perceive the security component of the social media they use as valuable they are likely to spend money on emphasizing it.

H6b. Security is positively associated with the intention to purchase premium content.

2.4.7 - Advertisement

The high growth in the use of social networks, like YouTube for example, as well as the fact that these platforms usually only have two sources of revenue, namely the revenue from premium subscribers and the revenue from advertisement, makes a deeper investigation of this theme necessary, analyzing the variables inherent to the emergence of advertisements.

When a service has too much advertisement in it, it may generate a negative attitude from the consumer. The intrusion of ads, usually transversal to all their types, means that it is also necessary to analyze their use in this type of platform, looking for ways to minimize their negative effects and maximize their effectiveness. In addition to the fact that they may have negative effects for the organization to which the advertisement belongs, advertisements may also have an impact on the platform on which they appear and, therefore, this factor is of special importance (Mäntymäki, Islam, & Benbasat, 2019).

Adds appear, normally, interrupting some task that had been performed until then by consumers. Thus, it is possible that its appearance generates fewer positive attitudes on the part of users (Mäntymäki, Islam, & Benbasat, 2019). On social media platforms, the user's attempt to avoid this type of advertisement is not as easy as in other types of advertising (like for example television advertisements, in which the consumer can simply change channel).

The level of intrusion of an ad must be taken care of because intrusive ads interrupt the user's cognitive processing and affect their perceptions about the brand (McCoy, Everard, Polak, & Galletta, 2008). For a marketing campaign to be successful, it is necessary that the level of intrusion perceived by the consumer is taken into account. Intrusive advertising can increase awareness about the brand, but, on the other hand, it can negatively affect the company, through the creation of negative attitudes or less positive evaluations about the brand and/or product of the ad (Acquisti & Spiekermann, 2011). Hence, when a service has too much advertisement in it, it may generate a negative attitude from the user, and the user may not want to continue using the service, so it is expected, in this study, that there will be a negative association between advertisement and continue use intention.

H7a. Advertisement is negatively associated with the continued use intention.

If the premium version of the social network offers a free-of-publicity space, it may be the booster the consumers need in order to purchase the premium version, because

commercials that disrupt the user experience, reduce the overall value of the basic subscription.

The motive for employing advertising from the perspective of a freemium service provider is due to two factors: To begin with, ads are a way to cover the costs of supplying a large number of nonpaying customers. Second, freemium service providers utilize a technique known as strategic inconvenience (Barnett, 2012) to encourage basic users to upgrade and premium users to keep their paid subscriptions. Wagner et al. (2014), for example, point out that freemium services provide trial periods for premium versions and utilize advertising to entice users to upgrade from free to premium.

As a result, it's reasonable to believe that the intrusiveness of advertising in the free subscription has a positive impact on the intention to upgrade, the desire to keep the premium membership, and the premium subscription price value. Because ads are only available with the free membership, basic consumers generally have more frequent encounters with advertising intrusions than premium users. As a result, it's acceptable to conclude that the impact of advertising intrusiveness in free subscriptions is typically greater for basic consumers. Similarly, advertising should have a negative impact on basic users' enjoyment but not on premium users.

Thus, it can be expected that if users perceive the advertisement component of the social media they use as intrusiveness they are likely to spend money on minimizing it.

H7b. Advertisement is positively associated with the intention to purchase premium content.

2.4.8 - Added Value from Free to Premium

One of the most important reasons to use the freemium model is to attract a wide client base with zero entry prices (Oestreicher-Singer & Zalmanson, 2013). But customers are unlikely to acquire premium products and services unless the services have a solid user acquisition and retention strategy. As a result, a regular usage of the freemium service is a requirement for purchasing premium content (Hanner & Zarnekow, 2015), but while keeping a premium membership is essentially the same as continuing an existing behavior, upgrading from a free to a premium subscription represents a departure from the user's status quo (Polites & Karahanna, 2012)

Typically, app developers use a try-before-you-buy strategy and provide free trial versions of their applications. In today's competitive market, consumers not only have a multitude of applications with similar functions, but the majority of them are also free,

which may reduce the user's desire to pay for an app with comparable capabilities, even though the premium version may provide a greater function (Anderson, 2010).

Likewise, users may incur high switching costs if they decide to migrate to another platform, because they will lose the benefits they have collected through their usage of this platform. With this said, considering all of the elements that influence fremium product/service consumption, switching barriers may operate as inhibitors, preventing consumers from switching and so facilitating continued usage (Zhou, 2013).

Therefore, it can be expected that if users continue using the social media network, they are likely to purchase the premium version of it.

H8. Users continued use intention is positively associated with the intention to purchase premium content.

2.4.9 Conceptual Model

Mäntymäki, Islam & Benbasat (2020) studied the factors that affect willingness to pay and premium users' intentions to retain their paid subscription. Their study identified five dimensions of consumer value on digital content services that employ the freemium model: enjoyment, intrusiveness of advertising in the free subscription, ubiquity, social connectivity, discovery of new content, and price value of the premium subscription. The results of their study showed that enjoyment and price value were found to be the only determinants of the intention to upgrade (Mäntymäki, Islam, & Benbasat, 2020). Interestingly, ubiquity and the discovery of new content drove the intention to retain premium subscriptions, while neither enjoyment nor price value had any effect. And finally, social connectivity had a negative effect on the intention to retain the premium subscription.

During the research on these topics, we also came across a research model developed by Juho Hamari, Nicolai Hanner and Jonna Koivisto (2020), called the "Perceived Value Framework", which analyses four dimensions of value: emotional, social, quality and economic value. This model was inspired by the related literature by Sweeney and Soutar (2001), which studied a 19-item measure (PERVAL) that assessed customers' perceptions of the value of a consumer durable good at a brand level. This research model was used to study the perceived value, continued use and purchase intentions in free-to-play games.

In line with the need to explore which factors affect willingness to pay for freemium social media apps and the need to develop a hypothesis study, the work developed by

Sheth, Newman and Gross (1991), the work developed by Mäntymäki, Islam and Benbasat (2019) and the work developed by Hamari, Hanner and Koivisto (2020) will be adapted and used as a hypothesis development model.

This research model will study the theoretical relationship among the 7 variables: social platform community, enjoyment, price, quality, usage frequency, security and advertisement, in order to understand if there is indeed a link between these dependent variables and the continue use intention (free) and the purchase intention (premium), and if so, if the impact is positive or negative. This research model and corresponding hypotheses of the present study is illustrated in the figure bellow (figure 2.1).
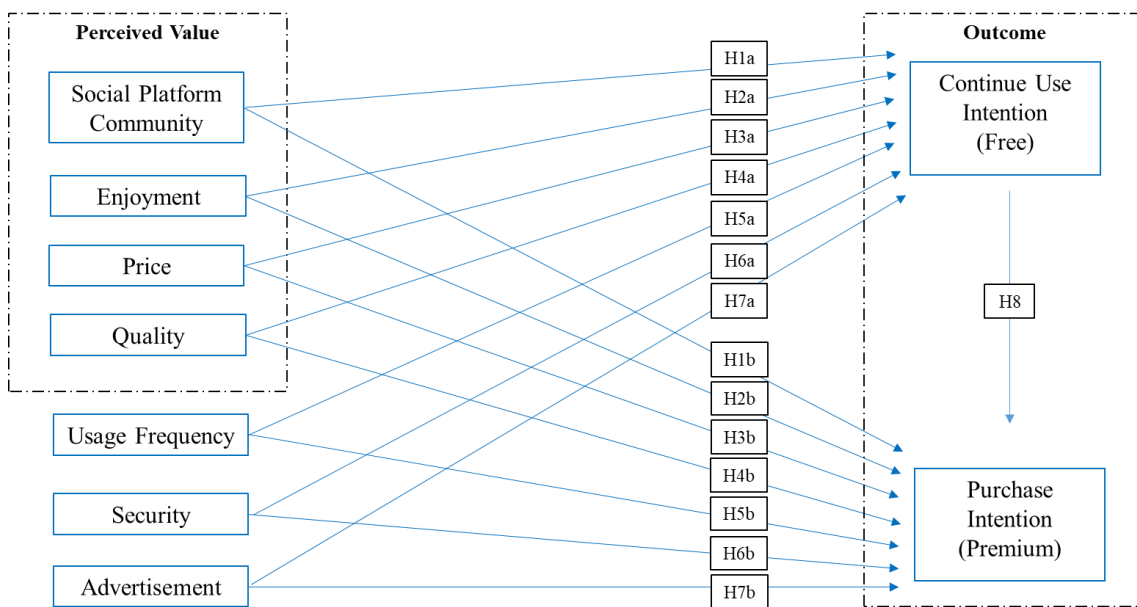

Figure 2.1. Conceptual Model

3. Methodology

3.1 - Research Design

As previously mentioned, the development of the present study focuses on a solid literature review on the main authors that approached the freemium business model and what factors influence willingness to pay. Thus, it will be possible to present the most appropriate methodology to address this issue and achieve the objectives of the present project.

This study consists of the assessment of the willingness to pay for Freemium Social Media apps. In this section, we will describe the methodology used in the present research in order to answer to the research questions of this research.

Firstly, it is important to point that the research methodology used in any investigation is heavily determined by the study's goals and objectives. It might be exploratory or confirmatory in nature when it comes to research methodologies (Jansen & Warren, 2020). Scientific research, according to Sampieri (2014), is the collection of systematics and empirical methods that are applied to a given topic. A confirmatory research will be conducted in this study by collecting data using a quantitative approach (questionnaires) and analyzing that data using statistical analysis.

The methodology of Williams (2007) considers three types of data gathering methods: quantitative, qualitative, and mixed method. A quantitative technique was applied, as previously said, by means of an online questionnaire, in order to achieve valid results for the current investigation. When the study goals are confirmatory in nature, a quantitative technique is often applied, according to Jansen & Warren (2020). For example, in the present study, a quantitative technique will be used to evaluate the connection between variables and test a set of hypotheses.

As indicated in the preceding paragraph, a quantitative technique was employed to solve the research questions raised in Chapter II, namely the modeling of structural equations (Structural Equations Modeling or SEM). SEM is a broad statistical modeling approach extensively used in behavioral sciences. It is based on path analysis, which was developed by geneticist Sewall Wright in 1921 (Wright, 1921). SEM is represented by latent variables with structural coefficients estimated from observable variables' correlation.

This model is a set of equations with assumptions in the statistical approach, in which the factors are determined based on the statistical observation. As a result, structural equations are linked to equations involving components in observable or latent variable analysis (Jöreskog & Sörbom, 1993).

According to Tarka (2018), SEM aids researchers in explaining, predicting, and identifying specific development trends, as well as describing the details associated with the behavior of individuals, groups, or organizations, by recognizing a set of conditions and defining and discovering the critical factors and relationships that set trends in a given society. With this said, since the main goal of the social sciences is to reveal the cause-and-effect links between scientific areas and social reality in addition to conducting an elementary statistical description and recognizing individual factors and behaviors, complex statistical methods, such as SEM, are required (Tarka, 2018).

The widespread use of this methodology can be attributed to two factors: its ability to provide researchers with a comprehensive approach to quantifying and testing theories, and the fact that models of equations structural factors explicitly consider measurement error, which is common in most situations (Raykov & Marcoulides, 2000). When measuring the total effect (direct and indirect) of the explanatory variable on the dependent, SEM is presented as a superior instrument (Haque, Fernando, & Caputi , 2019).

That being stated, the Partial Least Squares Technique (PLS), a variance-based structural equation modeling technique, was employed to verify the conceptual model using SEM. For that matter, the SmartPLS 3 software was used. The study and explanation of the acquired data took a two-step approach: first, the measurement model's reliability and validity were evaluated, and then the structural model was evaluated.

3.2 – Participants

The target population of the present investigation were individuals that use social media apps. For the purpose of data collection, an online questionnaire was developed in Google Forms, available through a link. The questionnaire was in Portuguese and was distributed via social networks, namely, LinkedIn, Facebook, WhatsApp and Instagram. The result was a total of 200 questionnaires answers and a total of 169 valid questionnaire answers. The networks used can lead to a Biased information since it is expected that most of the

users of those apps are in a younger age distribution, leading to a biased sample, being consequently not representative of the population.

Table 3.1. Demographic information of respondents, including gender, age, employment, education and monthly income

Gender	N	%	Employment	N	%
Female	160	80	Full time employment	96	48
Male	40	20	Part time employment	21	10,5
Other	0	0	Student	40	20
			Student Worker	26	13
Age			Unemployed	9	4,5
< 19	22	11	Retired	3	1,5
20-29	126	63	Other	5	2,5
30-39	20	10			
40-49	5	2,5	**Monthly income**		
>50	27	13,5	< 299€	41	20,5
			300€ - 599€	32	16
Education			600€ - 899€	43	21,5
Less than High School	7	3,5	900€ - 1199€	30	15
High School	57	28,5	> 1200€	54	27
Bachelor's Degree	78	39			
Master's Degree	56	28			
Doctorate Degree	2	1			

Table 3.1 outlines the demographic details of the respondents. The gender distribution of the data is unequal, with female respondents representing 80% of the sample. This most likely reflects the usage of the social media channels used for spreading the questionnaire, like Instagram for example. Regarding age, most respondents (63%) were between 20 and 29 years old. The respondents reported to be mostly full time employed (48%). The highest completed level of education revealed that most respondents have a bachelor's degree (39%). A high school degree and a master's degree came in second place, with almost the same percentage (28,5% and 28%, respectively).

Given the high percentage of full-time employees in the sample, a heavy proportion of respondents reported their monthly income to be above 1200€ (27%), which is understandable.

3.3 – Measures

Validated scales were used to measure the nine constructs presented in the structural model. The respective model was developed in order to answer the research questions based on the following hypotheses formulated accordingly.

The constructs used in the survey were derived from previously published sources. Constructs connected to perceived value, such as quality, economic value, emotional value, and social value (Hamari, Hanner, & Koivisto, 2020), as well as constructs relating to security importance, frequency of use and advertisement intrusion, were included as independent variables. The dependent variables measured intentions to continue using, as well as purchase intentions (Table 3.2 - Measurement instruments - the items of the variables and the sources from which they have been adapted).

The following table 3.2 reveals the relationship between the conceptual model variables and respective items that integrated the conceptual model of the present investigation. Furthermore, the constructs used in the instrument consisted of three to seven items. All items were measured on a five-point Likert scale, being 1 "completely disagree" and 5 "completely agree". The survey was conducted in the Portuguese language. Therefore, items adapted from prior research literature were translated from English into Portuguese (consult appendix A) and revised by a high school English teacher who is a Portuguese native speaker to verify their correspondence with the original items.

Table 3.2. Measurement instruments - the items of the variables and the sources from which they have been adapted

Variables	Short	Item in English	Source
Social Platform Community	SPC	**SPC1**. People who I appreciate like this social network. **SPC2**. Using this social network brings me social approval. **SPC3**. Using this social network helps me feel accepted **SPC4**. This social network improves the way I am perceived. **SPC5**. The fact I use this social network makes a good impression on other people	Ajzen (1991), Sweeney & Soutar (2001), Hsu & Lin (2015), Hamari et al. (2020).
Enjoyment	EJ	**EJ1**. This social network is enjoyable. **EJ2**. This social network is pleasant. **EJ3**. This social network is exciting. **EJ4**. This social network is interesting. **EJ5**. I enjoy using apps	Davis et al. (1992), Sweeney & Soutar (2001), Van der Heijden (2004),

		EJ6. Using apps makes me feel relaxed **EJ7**. Using apps make me feel good	Hsu & Lin (2015), Hamari et al. (2020).
Price	P	**P1**. All in all, the game offers value for money. **P2**. All in all, the game is a good product/service for the price. **P3**. All in all, the game is cheap. **P4**. All in all, the game is expensive. (reversed)	Sweeney & Soutar (2001), Hsu & Lin (2015), Hamari et al. (2020).
Quality	Q	**Q1**. This social network is of good quality. **Q2**. This social network is well made. **Q3**. I believe that this social network works reliably. **Q4**. I think that this social network works as I expect it to **Q5**. This social network has an acceptable standard of quality	Sweeney & Soutar (2001), Hsu & Lin (2015), Hamari et al. (2020).
Usage Frequency	UF	**UF1**. I often use this social network to communicate with others. **UF2**. In general, this is my preferred social network. **UF3**. I am addicted to using this social network.	Limayem et al. (2007), Hsu & Lin (2015).
Security	S	**S1**. My personal information is safe on this social network. **S2**. I trust this social network. **S3**. I can find safer substitute social networks. **S4**. The protection of my personal data on social media is important to me. **S5**. This social network respects the European Union's data protection and collection rules	Self-developed
Advertisement	A	**A1**. The commercials in the free subscription of the social network are distracting. **A2**. The commercials in the free subscription are intrusive. **A3**. The commercials in the free subscription are annoying.	Mäntymäki et al. (2019)

		A4. The commercials in the free subscription are enjoyable.	
Purchase Intention (Premium)	PI	**PI1**. I plan to upgrade to the premium subscription in the next three months. **PI2**. I will upgrade to the premium subscription in the next three months. **PI3**. I intend to upgrade to the premium subscription in the next three months	Bhattacherjee, 2001 Mäntymäki et al. (2019) Hamari et al. (2020).
Continue Use Intention (Free)	CUI	**CUI1**. I predict that I will keep using this social network in the future, at least as much as I have used it lately. **CUI2**. I intend to use this social network at least as often within the next month as I have previously used it. **CUI3**. I plan to use this social network during the next month.	Bhattacherjee, 2001 Mäntymäki et al. (2019) Hamari et al. (2020).

3.4 - Data Collection

Bardin (2002) defines content analysis as "a set of communication analysis techniques aimed at obtaining, through systematic and objective procedures for describing message content, indicators (qualitative and quantitative) that enable the inference of relative knowledge concerning a particular topic".

A questionnaire was developed using Google's platform, Google Forms, containing three sections of closed questions. The surveys initiated with a section that approached the respondents' demographic characteristics, including questions concerning their age, gender, current occupation, and their monthly income.

The second section was composed of the respondent's preferences and habits in social media, in order to find out if they had knowledge of the premium version of some social media apps, like YouTube, LinkedIn, Reddit and Flickr. The results are shown in table 3.3. The first question of this section asked if the respondents had an account in any social media, and if the answer was "no" the questionnaire would be over at the end of this section, in order to filtrate the respondents. From all the 200 answers, only 169 were valid answers, which means that only 169 respondents had at least one social media account. In the last question in this section, the respondents were asked to choose one of the four social media apps that they use more frequently, between YouTube, LinkedIn, Reddit and

Flickr so that they could answer the questions the questions of the next section accordingly.

Table 3.3. Consumer profile information

N = 200	Consumer Profile Variables	%
Do you have a social media account?		
	Yes	99
	No	1
Do you have an account in any of these social networks?		
	Instagram	93,5
	Facebook	91
	LinkedIn	52,5
	YouTube	76
	TikTok	90
	Reddit	6,5
	Flickr	2
Which do you use more frequently?		
	LinkedIn	14
	YouTube	70,5
	Reddit	0
	Flickr	0
	Neither	15,5
Did you know that the social networks in the last question had a premium version?		
	Yes, all of them	20
	Only some	71
	No	9

In the third and last section, respondents were asked to evaluate statements in order to measure the research model variables: Social Platform Community, Enjoyment, Price, Quality, Usage Frequency, Security, Advertisement, Continue Use Intention (Free) and Purchase Intention of premium account upgrades. There was a small introduction to this section followed by a table where the details of the characteristics of the premium version were shown (see table 3.4. Premium Plan of Social Media Apps Translated), and the respondents were asked to base their answers on their chosen social media from the ones present on the table.

Table 3.4. Premium Plan of Social Media Apps (Translated)

YouTube Premium	reddit premium	LinkedIn PREMIUM	flickr PRO
€8.49 por mês	€5.99 por mês	€14.95 por mês por um ano	€7.49 por mês
Sem publicidade	Sem publicidade	InMail Messages	Sem publicidade
Ouça em segundo plano	Roupas Exclusivas para o Avatar	Acesso a quem viu o sei perfil	Armazenamento Ilimitado
Download para ver offline	700 Moedas mensais	Cursos de aprendizagem sobre o Linkedin	Estatísticas Avançadas
Youtube Music	Acesso ao Salão de Membros	Preparação para entrevistas	Backup com auto upload
Youtube Kids	Ícones personalizados da app		
	Evolução mensal		
	Prémios Premium e de boas vindas		

The questionnaire was built from the measure items presented in the last chapter, and after the coordinator revision, it was pilot tested in August 2021, for a day. Twenty people from my social groups answered it and were encouraged to comment and feedback on the questionnaire composition. As none of the respondents suggested any changes in the questionnaire, we proceed to the final survey distribution. We reached out to private WhatsApp groups, LinkedIn and Facebook posts, and Instagram stories. After a couple of hours, we decided to share the link with an Instagram lifestyle Influencer with 22 thousand followers, called Vanessa Pereira, and she shared the link with her followers, which allowed us to achieve 200 responses in less than two hours.

As for the surveys' results treatment, the Google Forms tool allowed to compile the received data in Excel files that were exported to the SmartPLS 3.

4 – Results

4.1 - Data Analysis

We employed structural equation modeling (SEM) and the partial least squares (PLS) approach to test the given conceptual model. The partial least squares approach is a variance-based structural equation modeling technique that has been validated using the SmartPLS 3 software (Ringle, Wende, & Will, 2015). The findings of the questionnaire were examined and interpreted using two distinct methods. The first is concerned with the examination of the measurement model's reliability and validity, while the second is concerned with the evaluation of the structural model. The concentration of specific indicators that forecast the model capabilities is necessary to evaluate the quality of the measurement structural model, with the most significant indicators being reliability, convergent validity, and discriminant validity (Hair, Hult, Ringle, & Sarstedt, 2017).

According to the table below (table 4.1), the fact that all of the items have standardized factorial loads over 0.6, with a minimum value of 0.643, and are all significant at p <0.001 reveals the reliability of the individual indicator (Hair, Hult, Ringle, & Sarstedt, 2017). The internal consistency's dependability was validated based on Cronbach's alpha and composite reliability (CR) indicator values that are all above 0.7, according to Hair et al. (2017), which is the minimal value and lower than 0.95, which is the maximum value. The table below, Table 4.1, contains all of the previously reported results. It is reasonable to conclude that the convergent validity was proven owing to three primary elements based on the results in the table below (Table 4.1). First, as noted in the preceding paragraph, all elements were positive and significant in their respective constructions. Second, the CR values for all constructions were more than 0.70. Finally, the average variance extracted (AVE) values for all constructs were larger than the minimal value of 0.50 (Bagozzi & Yi, 1988).

Two methods for assessing discriminant validity were used. The first method was the square root of the AVE construct (the diagonal numbers in bold in Table 4.1) which must be larger than its maximum correlation with any construct to satisfy the Fornell & Larcker (1981) criterion, which, according to the table below, was fulfilled in all constructs. The HTMT criteria was employed as the second method (Hair, Hult, Ringle, & Sarstedt, 2017). The table below (Table 4.1) shows that all HTMT values are less than 0.85 (Henseler, Ringle, & Sarstedt, 2015; Hair, Hult, Ringle, & Sarstedt, 2017), indicating that discriminant validity has been confirmed.

Table 4.1. Composite reliability, average variance extracted, correlations, and discriminant validity checks

Latent Variables	α	CR	AVE	1	2	3	4	5	6	7	8	9
(1) Advertisement	0,767	0,866	0,686	**0,828**	0,217	0,276	0,106	0,064	0,098	0,069	0,205	0,195
(2) Continue Use Intention	0,902	0,939	0,837	0,181	**0,915**	0,426	0,231	0,101	0,477	0,210	0,504	0,303
(3) Enjoyment	0,934	0,946	0,717	0,233	0,399	**0,847**	0,126	0,079	0,628	0,189	0,531	0,480
(4) Price	0,804	0,884	0,719	0,026	0,204	0,114	**0,848**	0,350	0,200	0,271	0,276	0,095
(5) Purchase Intention	0,933	0,957	0,882	-0,017	0,093	0,070	0,309	**0,939**	0,053	0,295	0,115	0,375
(6) Quality	0,938	0,953	0,801	0,078	0,448	0,598	0,180	-0,044	**0,895**	0,225	0,673	0,245
(7) Social Platform Community	0,893	0,926	0,759	0,009	0,191	0,113	0,229	0,276	0,204	**0,871**	0,229	0,301
(8) Security	0,774	0,855	0,597	0,169	0,432	0,458	0,218	-0,004	0,570	0,185	**0,773**	0,218
(9) Usage Frequency	0,643	0,848	0,736	0,136	0,230	0,361	0,071	0,293	0,191	0,236	0,143	**0,858**

Note: α - Cronbach Alpha; Cr – Composite reliability; AVE – Average variance extracted. Bold numbers are the square roots of AVE. Below the diagonal elements are the correlations between the constructs. Above the diagonal elements are the HTMT ratios.

The evaluation of the structural model was made through the significance of the structural path coefficients, the magnitude of the coefficient of determination R^2 of each variable as way to assess the expected accuracy of the model, and Stone-Geisser's Q^2 values as way to assess the predictive relevance of the model (Hair, Hult, Ringle, & Sarstedt, 2017). Nonetheless, according to Hair et al. (2017), we still needed to examine collinearity before the structural model was evaluated. To check if collinearity exists, we analyze the VIF values of the model. The VIF (variance inflation factor) values ranged from 1.083 to 2.011, all of which were below the critical value for collinearity of 5 (Hair, Hult, Ringle, & Sarstedt, 2017). In fact, the ideal values that guarantee no collinearity problem should be lower than 3, which is proved by the VIF values of the model (Hair, Hult, Ringle, & Sarstedt, 2017).

As for the evaluation of the structural model, the coefficients of determination R^2 for the two endogenous variables, Continue Use Intention (Free) and Purchase Intention (Premium), were 29,3% and 23,2%, respectively, above Falk & Miller's (1992) limit of 10%. The Q^2 values for the two endogenous variables (Continue Use Intention (Free) = 0.215; Purchase Intention (Premium) = 0.182) were above zero, which according to Hair et al. (2018), indicates the predictive relevance of the model. To evaluate the significance of the parameter estimates, we used bootstrapping with 5000 subsamples.

4.2 - Quantitative Results

The results in Table 4.2 show that belonging to a Social Platform Community has a non-significant effect on Continue Use Intention ($\beta = 0.055$, ns) and a significantly positive impact on Purchase Intention ($\beta = 0.190$, $p < 0.05$). These results don´t support the H1a hypothesis and accept the H1b, respectively.

Enjoyment has a non-significant effect on Continue Use Intention ($\beta = 0.106$, ns) and a non-significant effect on Purchase Intention ($\beta = 0.074$, ns). These results don´t support both the H2a and H2b hypothesis.

Price has a non-significant effect on Continue Use Intention ($\beta = 0.087$, ns) and a significantly positive impact on Purchase Intention ($\beta = 0.283$, $p < 0.001$). These results don´t support the H3a hypothesis and accept the H3b, respectively.

Quality has a significantly positive relation with Continue Use Intention ($\beta = 0.220$, $p < 0.05$) and with Purchase Intention ($\beta = 0.203$, $p < 0.05$), which supports the H4a and H4b hypothesis, respectively.

Usage Frequency has a non-significant effect on Continue Use Intention (β = 0.090, ns) and a significantly positive impact on Purchase Intention (β = 0.248, p < 0.01). These results don´t support the H5a hypothesis and accept the H5b, respectively.

Security has a significantly positive relation with Continue Use Intention (β = 0. 200, p < 0.05) and a non-significant effect on Purchase Intention (β = -0.063, ns). These results support the H6a hypothesis and don´t support the H6b, respectively.

Advertisement has a non-significant effect on Continue Use Intention (β = 0.090, ns) and a non-significant effect on Purchase Intention (β = -0.058, ns). These results don´t support both the H7a and the H7b hypothesis.

Users Continue Use Intention has a non-significant effect on Purchase Intention (β = 0.041, ns). These results don't support the H8 hypothesis.

Table 4.2. Structural model assessment

Path	Path Coefficient	Standard Errors	t statistics	p values
Advertisement → Continue Use Intention	0,090	0,075	1,202	0,230
Advertisement → Purchase Intention	-0,058	0,077	0,752	0,453
Continue Use Intention → Purchase Intention	0,041	0,061	0,666	0,506
Enjoyment → Continue Use Intention	0,106	0,103	1,028	0,305
Enjoyment → Purchase Intention	0,074	0,104	0,707	0,480
Price → Continue Use Intention	0,087	0,064	1,366	0,172
Price → Purchase Intention	0,283	0,072	3,948	0,000
Quality → Continue Use Intention	0,220	0,096	2,277	0,023
Quality → Purchase Intention	-0,203	0,102	1,985	0,048
Social Platform Community → Continue Use Intention	0,055	0,067	0,821	0,412
Social Platform Community → Purchase Intention	0,190	0,082	2,312	0,021
Security → Continue Use Intention	0,200	0,090	2,219	0,027
Security → Purchase Intention	-0,063	0,097	0,652	0,514
Usage Frequency → Continue Use Intention	0,090	0,068	1,318	0,188
Usage Frequency → Purchase Intention	0,248	0,086	2,871	0,004

To test the mediation hypothesis, we followed the Hair et al. (2017) method, where we used a bootstrapping procedure to test the significance of this mediation hypothesis. The results showed that the indirect effects via the mediator of Continue Use Intention are all non-significant (see Appendix B - Bootstrap results for indirect effects).

In the last step, we conducted a study of Importance-Performance Map Analysis (IPMA), in order to identify potential areas that need to be addressed and improved through management actions. In instance, the influence of latent variables with a relatively high relevance but low performance on a certain endogenous latent variable would be found applying IPMA's path modeling (Hock, Ringle, & Sarstedt, 2010).

In PLS-SEM, the Importance-Performance Map Analysis is a helpful analysis that extends the standard path coefficient estimates in a more practical approach, more specifically, instead of only analyzing the path coefficients, the IPMA also considers the average value of the latent variables and their indicators (Ringle & Sarstedt, 2016). Meaning that IPMA examines not only the performance of an item but also the importance of that item (Hair, et al., 2018).

Following that, the IPMA results give management insight into how to handle and enhance the identified high-importance and low-performance areas (Ringle & Sarstedt, 2016). In this research, the purchase intention and continue use intention are predicted by seven predecessors (Advertisement, Enjoyment, Price, Quality, Social Platform Community, Security and Usage Frequency). This analysis was carried out, and the results are presented in Figure 4.1.
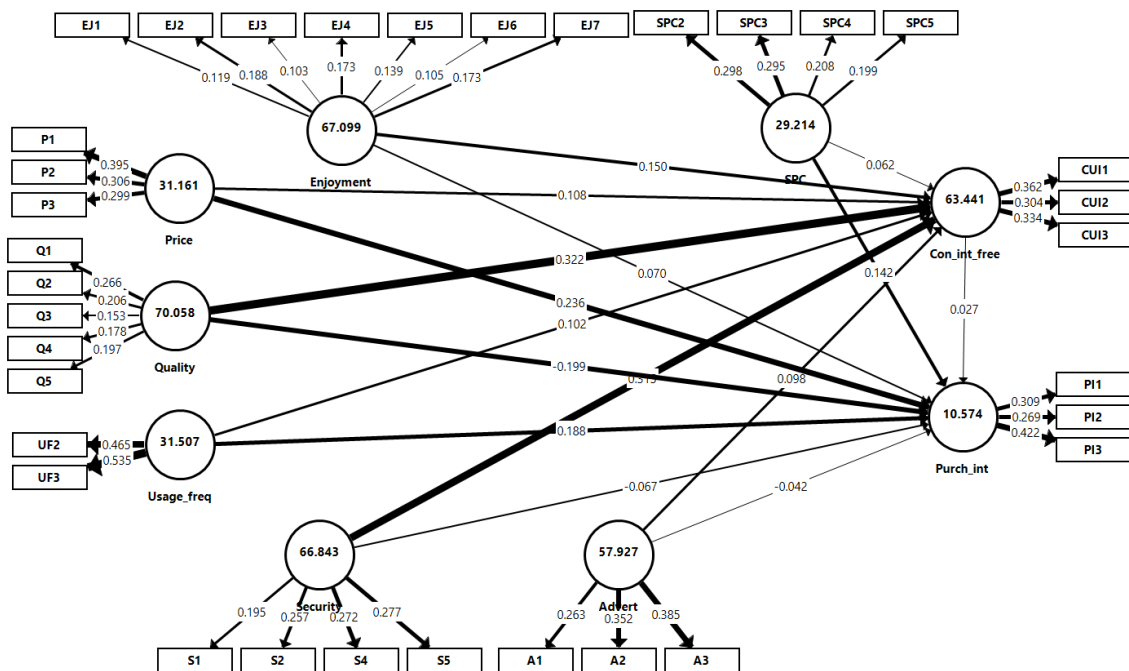

Figure 4.1. Importance-Performance Map Analysis (IPMA)

Table 4.3. IPMA Results

Latent Variable	Continue Use Intention		Purchase Intention	
	Total Effect (Importance)	Index Value (Performance)	Total Effect (Importance)	Index Value (Performance)
Advertisement	0,098	57,927	-0,042	57,927
Continue Use Intention	-	-	0,027	63,441
Enjoyment	0,150	67,099	0,070	67,099
Price	0,108	31,161	0,236	31,161
Quality	0,322	70,058	-0,199	70,058
Social Platform Community	0,062	29,214	0,142	29,214
Security	0,315	66,843	-0,067	66,843
Usage Frequency	0,102	31,507	0,188	31,507

Table 4.3 illustrates the results of IPMA, and Figure 4.1 visualizes the IPMA results for the two criterions of Continue Use Intention (Free) and Purchase Intention (Premium). As presented in Figure 4.1, the path coefficient, depicted as arrows, demonstrates the relative importance (the bolder the arrow, the higher the importance to the criterion), whereas the performance values, depicted as circles, are the average values of latent variables' scores on a scale of 1 to 100. It should be noticed that a score closer to 100 indicates a higher performance latent variable (Hair, Hult, Ringle, & Sarstedt, 2017).

It is evident from the importance-performance analysis map that for both criterions, Continue Use Intention (Free) and Purchase Intention (Premium), the three highest performances belong to Quality, Enjoyment and Security, with scores of 70.058, 67.099 and 66.843, respectively.

However, the variable with the highest importance for Purchase Intention (Premium) is different. When we look at Purchase Intention (Premium), we can see that Price has a relatively high positive importance with the path coefficient of 0.236, which means that this latent variable has a very strong relation with the target construct. Quality also shows a very high importance value with the path coefficient of 0.199 which matches the performance scores. Whereas Continue Use Intention (Free) has the lowest importance for Purchase Intention (Premium), with the path coefficient of 0.027.

In Figure 4.1 and in table 4.3, when we look at the final target construct, Continue Use Intention (Free), the top two priorities belong to Quality and Security, with a relatively high positive importance, with the path coefficient of 0.322 and 0,315 respectively, whereas for example, Advertisement has the lowest importance with the path coefficient of 0.098.

Overall, the three most important variables for both Continue Use Intention (Free) and Purchase Intention (Premium) are Quality, Security and Price, in order.

5. Discussion

5.1 - Social Platform Community

In the present chapter, the results obtained through the data collection will be compared with the Literature Review.

Social motivations have been deemed to be one of the main categories of motivations for purchases of premium content and other virtual goods in general (Lehdonvirta, 2009). Several studies have looked at the connection between social value (Shang, Chen, & Huang, 2012), self-presentation (Kim, Chan, & Kankanhalli, 2012), social influence (Hamari, Hanner, & Koivisto, 2020), social presence (Mäntymäki & Riemer, 2014), status (Guo & Barnes, 2012), and virtual goods purchases. The pursuit of social status is a common component in the construction of virtual identities in social media. These desires are the driving forces for people's involvement in online social activities.

Our findings corroborate the findings of prior studies on the social psychological aspects, with the exception of Mäntymäki et al. (2019), by showing that social value has been found the be a positive predictor of purchase intentions for premium content. On the other hand, contrary to what we expected, the quantitative results of our study showed that there isn't a direct influence of the social value factors on the continued use intention.

5.2 – Enjoyment

In the case of freemium services, enjoyment is still an elusive characteristic of consumer value. As the current study has frequently stated, enjoyment appears to have a double effect on consumer behavior: on the one hand, it may enhance user retention, but on the other hand, it may diminish user monetization. The more satisfied a user is with the free service, the less likely they are to pay for premium material.

However, the findings of the literature review are incongruent. For example, Hamari, (2015) and Hamari, Alha et al., (2017) support the concept of a negative relationship between enjoyment and purchase intent, however Mäntymäki et al. (2019) is the only study in the literature review that finds a positive relationship between enjoyment and premium purchase.

Our study's quantitative results, contrary to expectations, revealed that enjoyment had no direct influence on the desire to continue using the service. In contrast to Li et al.

(2015), the enjoyment factor was found to have a non-significant relationship with continuance intention, indicating that users may not care about amusements as much as expected.

5.3 – Price

The pricing structure, according to Venkatesh et al., (2012), may have a substantial influence on customers' technology use. Users have numerous options of mobile applications with similar functions in the mobile app market, and the majority of them are also free, which reduces the user's desire to pay for a mobile app with comparable features, even though the premium version may provide higher-quality functions (Hsu & Lin, 2015).

Our findings reveled that indeed price has a negative association with the intention to purchase premium content, since our results showed that H3b. has a significantly positive impact on Purchase Intention. These findings corroborate the studies mentioned above. However, Hamari, Hanner & Koivisto's (2020) findings, showed a positive significant association between price and premium purchases only when mediated by the willingness to continue the use of the freemium portion of the service, which our study did not validate.

The price value association with continued use intention was found to be non-significant in our proposed model, which contradicts Hamari, Hanner & Koivisto's (2020) findings, perhaps because most of the Apps on the market are free or reduced in price, or due to the smaller sample of this study.

5.4 – Quality

One of the most important aspects of perceived worth is quality (Sweeney & Soutar, 2001). Hamari et al., (2017) looked at numerous dimensions of service quality, and the findings are similar to the current study in the sense that overall service quality appears to be closely linked to the desire to use the freemium service and the willingness to purchase the premium content.

Our study's quantitative results revealed that quality had a significant influence on both the continued use intention and intention to purchase premium content. In contrast to Hamari, Hanner & Koivisto's (2020) findings, the quality variable was found to have

a significant relationship with intention to purchase premium content, indicating that users appreciate quality as much as we expected.

The results of our study are in accordance with the results of Liu et al. (2014), that showed that higher service quality leads to higher usage intentions, which further leads to higher purchase intentions. In our IPMA study we can see very clearly that there is a relation between the perception of quality and the continued use of the basic service, that again can explain the intention to purchase the premium version, since the premium version may provide higher quality functions.

5.5 - Usage Frequency

Usage frequency, or habit, is "*the extent to which people tend to perform behaviors (use IS) automatically because of learning*" (Limayem, Hirt, & Cheung, 2007, p. 705). Users with prior experience in IS usage typically form habits which then promote the continuation of the same type of behavior (Gefen, 2003).

The results of our study contradicts studies conducted by Barnes (2011) and Limayem et al., (2007) when it comes to Usage Frequency being positively associated with the continued use intention (H5a.), since our hypothesis was not proven in our study. According to Barnes (2011), the amount to which a behavior has become automatic as a result of earlier learning, also known as habit or usage frequency, might indicate continuation intention. The habit of using mobile applications, according to this study, will support the aim of continuing to use the same mobile apps, since people have a tendency to execute automatic actions (Barnes, 2011). In addition, the construct habit has been proven to be a crucial element in predicting technology usage in a research work done by Limayem et al., (2007).

The findings of our study are consistent with previous work by Lin and Wang (2006), who suggested that habit had an influence on user purchase intentions in the context of mobile commerce. However, these results seem inconsistent with the study performed by Hsu & Lin (2015), that showed that usage frequency was found to have no direct effect on purchase intention.

One possible reason for the disparity in the results is that, while users displayed regular behaviors in using a single app, they may easily find substitute apps in app stores with minimal switching costs.

5.6 – Security

As explained in the literature review chapter, security and privacy mean that the system must preserve its integrity and functionality even when it is subject to attacks, and it preserve the confidentiality of personal information (Symanovich, 2021).

According to Thong & Hong (2013), nowadays individuals are not only concerned with data collection, but also with how this data will be analyzed and used. Also, according to Featherman, Miyazaki, & Sprott (2010), the perspective of loss of privacy and misuse of information in for example social networks, can influence the user's willingness to provide their data.

The quantitative results of our study demonstrate a direct positive influence between Security and continued use intention, which goes accordingly with the research made by the Boston Consulting Group, where they found that there is a growing concern with the privacy and security of information, and according to a survey conducted by the Boston Consulting Group, privacy of personal data is an important issue for 76% of global consumers (Rose, Barton, Souza, & Platt, 2014). This means that if users perceive the security component of the social media they use as trustworthy they are likely to continue using the app.

Although this might be true in the case of continued use intention, the same was not proven in relation to intention to purchase premium content, since our study showed no direct influence between security and intention to purchase. As a result, our study did not support our hypothesis that if users value the security component of the social media they use, they will spend money to emphasize it.

In addition, we can clearly see a link between security and continued use of the basic service in our IPMA study (see Figure 4.1 and table 4.3), and when we look at the final target construct, Continue Use Intention (Free), Security is the second most important factor, with a relatively high positive importance.

5.7 – Advertisement

When we studied the variable advertisement, we were analyzing the level of intrusion perceived by the consumer. Intrusive advertising can increase awareness about the brand, but, on the other hand, it can negatively affect the company, through the creation of

negative attitudes or less positive evaluations about the brand and/or product present on the ad (Acquisti & Spiekermann, 2011).

In contrast with our hypothesis, the study conducted by Mäntymäki, Islma & Benbasat (2019), showed that advertising in the free subscription had a significant negative impact on the premium subscription among the basic users. Which means that our study's quantitative results, contrary to what we expected, shown that there isn't a direct influence between advertisement and continued use intention (H7a.).

Also, our study did not support our hypothesis that when a service has too much advertisement in it, it may generate a negative attitude from the user, the user may not want to continue using the service, and in the presence of a premium plan with no advertisement, they will spend money to emphasize it. This result is in accordance with the findings of Mäntymäki, Islma & Benbasat (2019), although in this study they used price value as a driver of basic users' intentions to upgrade to premium, which showed that there is an indirect effect between intrusiveness of advertising and basic users' intentions to upgrade to the premium subscription

Our results may be explained by the fact that while users displayed concerns related to security when using an app, they may easily find a substitute apps with minimal switching costs and a short learning curve. This exemplifies the specific challenges related to employing the so-called strategic inconvenience (Barnett, 2012) in differentiating between the free and premium versions (Mäntymäki, Islam, & Benbasat, 2019).

5.8 - Continue Use Intention

As said in the literature review chapter of the present study, the use of the freemium service on a regular basis is required in order to purchase premium content (Hanner & Zarnekow, 2015). However, in today's competitive market, customers not only have a multitude of apps with similar functions, but the bulk of them are also free, which may diminish the user's motivation to pay for an app with identical capabilities, even though the premium version may provide more features (Anderson, 2009). Given all of the factors that drive fremium product/service use, switching obstacles may act as inhibitors, stopping customers from switching and so enabling sustained use (Zhou, 2013).

The core idea of the freemium business model is to affect the use of the free service through designed inconveniences like, for example, the use advertisement as an intrusion

in order to tempt users to purchase premium services (Hamari, 2015; Mäntymäki, Islam, & Benbasat, 2019; Wagner, Benlian, & Hess, 2014).

The quantitative findings of our study show no significant relationship between continued use intention and intention to purchase premium content, which aligns with Hamari, Hanner, and Koivisto's (2020) findings. This study shows that the more enjoyable a freemium service is perceived to be, the more willing users are to use it, but the less willing they are to purchase premium content.

Our findings might be explained by the fact that customers must first be negatively affected by the limits of the free version in order to have a demand for these premium services. Equally, customers who just like the freemium service may not feel compelled to upgrade to the premium features (Hamari, Hanner, & Koivisto, 2020).

The table below (table 5.1) shows the overview of our study's findings.

Table 5.1. Overview of Findings

Hypothesis	Findings
H1a. Belonging to a Social Platform Community is positively associated with the continued use intention.	Not Supported
H1b. Belonging to a Social Platform Community is positively associated with the intention to purchase premium content	Supported
H2a. Enjoyment is positively associated with the continue use intention.	Not Supported
H2b. Enjoyment is negatively associated with the intention to purchase premium content.	Not Supported
H3a. Price is positively associated with the continued use intention.	Not Supported
H3b. Price is negatively associated with the intention to purchase premium content.	Supported
H4a. Quality is positively associated with the continued use intention.	Supported
H4b. Quality is positively associated with the intention to purchase premium content.	Supported
H5a. Usage Frequency is positively associated with the continued use intention.	Not Supported
H5b. Usage Frequency is positively associated with the intention to purchase premium content.	Supported
H6a. Security is positively associated with the continued use intention.	Supported
H6b. Security is positively associated with the intention to purchase premium content.	Not Supported
H7a. Advertisement is negatively associated with the continued use intention.	Not Supported
H7b. Advertisement is positively associated with the intention to purchase premium content.	Not Supported
H8. Users continued use intention is positively associated with the intention to purchase premium content.	Not Supported

6 - Conclusion and Recommendations

6.1 - Theoretical contributions

This study was motivated by a desire to better understand the factors that affect willingness to pay for the premium version of social media apps that also have a free version. To evaluate the contribution of these factors, we analyze several variables, like social platform community, enjoyment, price, quality, usage frequency, security and advertisement in relation to two dependable variables, continue use intention (free) and purchase intention (premium). As such, a quantitative method was used to collect data, through questionnaires and analyzed afterwards the data using statistical methods, namely through SEM (Structural Equations Modeling), the questionnaire was distributed via social networks, specifically through WhatsApp, LinkedIn, Facebook and Instagram. Based on the answers to the questionnaire, we were able to identify the most contributor factors that influence both dependable variables. This chapter seeks to present and discuss the study's main findings and highlighting its final conclusions

While the present study did not venture very deep into specific levels of consumer value, it did cover all of the relevant dimensions in a theoretically-sound manner whereas most studies have investigated only two-dimensional levels, as for example the relation between enjoyment and performance (Mäntymäki & Salo, 2015), or quality and performance of consumer value (Hamari, Hanner, & Koivisto, 2017).

This research's principal theoretical contribution focuses on security. With the exception of Acquisti & Gross's (2006) study, which found that an individual's privacy concerns are a weak predictor of his participation in the social network, and Featherman, Miyazaki, & Sprott's (2010) study, which found that the perspective of loss of privacy and misuse of information in, for example, social networks, can influence the user's willingness to provide their data, there are limited research on this variable in terms of user's willingness to use and willingness to pay. Also, the research on the relation between security and fremium services is underexplored, especially freemium social networks, and this lack of articles to directly compare the results can be deemed a good indicator of the pertinence of the current study. With this said, one of this study's key contribution is that this variable was shown to be one of the most important elements influencing users' willingness to continue using the social media's free version. Based on this, the PLS results shown that there is a direct positive influence between Security and

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continued use intention. This suggests that consumers are more inclined to stick with a social networking app if they believe the security component in it is trustworthy. However, the findings demonstrate that the same cannot be said for the intention to acquire the premium version, since our research found no direct influence between security and willingness to pay. Also, in our IPMA study we can see very clearly that there is a relation between security and the continued use of the basic service (see Figure 4.1 and table 7), and when we look at the final target construct, Continue Use Intention (Free), the second top priority belongs to Security, with a relatively high positive importance.

Another interesting contribution of this study is to understand how the perception of quality of the freemium social network influences both continue use intention (free) and purchase intention (premium). In the literature review, we explained that Hamari et al., (2017) looked at numerous dimensions of service quality, and that findings were similar to the ones present in the current study in the sense that overall service quality appears to be closely linked to the desire to use the freemium service and the willingness to purchase the premium content. The first conclusion we can draw from the results, particularly the PLS results, is that quality had a substantial impact on both continuous use intention and intention to purchase premium content, showing that consumers value quality as much as we anticipated. The second conclusion we can draw from the results, specifically the IPMA results, is that there is a clear link between quality perception and continued use of the basic service, which can explain the intention to upgrade to the premium version, as the premium version may provide higher quality functions.

To sum up, according to the IPMA results present in this study, the two most influential variables for both Continue Use Intention (Free) and Purchase Intention (Premium) are Quality and Security, in order.

With this study, another interesting contribution is that the price value of freemium services shows to have a negative association with the intention to purchase premium content, also social platform community is found to positively affect premium purchases, and lastly, we found support for the usage frequency hypothesis proposed in this study, indicating that if a user establishes a habit of using a social media, he will eventually decide to buy the premium version.

6.2 - Managerial implications

From a managerial perspective, to achieve a sustainable competitive advantage in the social media environment, managers should focus their attention on their business's freemium model and realize if it's worth to apply a freemium model or if it's being well implemented.

Recently, more e-commerce experts and online information service providers are seeing the turning point where online information and content will start to carry a price tag (Bowman, 2004). Understanding consumers' perceptions and attitudes toward freemium online content or services and its related critical factors is crucial for managers to assess and predict the behaviors of their online customers, which should in turn help a company choose the appropriate business model (Wang, Zhang, Ye, & Nguyen, 2005). The freemium model needs to be very well balanced to work, because in order to feel the need to look for the premium version of the service, customers must first feel negatively about the limitations of the free version (Hamari, Hanner, & Koivisto, 2020). Similarly, customers who simply enjoy the freemium service enough might not feel the urge to purchase the premium features (Hamari, Hanner, & Koivisto, 2020).

This study's most important finding concerns the security variable. According to this study, this variable is one of the most critical factors determining consumers' willingness to continue using the free version of social media. This suggests that customers are more likely to continue with a social networking program if they are confident in its security features. As a result, we recommend that managers emphasize these advantages as much as possible in order to convince users to keep using the social network, as freemium is undeniably a marketing strategy for attracting users. Freemium looks to be the ideal way to go when the goal is to draw people into the system rather than as part of a monetization or sales strategy (Hamari, Hanner, & Koivisto, 2020).

Users who feel there is a difference between the premium and free versions are more likely to buy when they are happy with the software application (Kumar, 2014). When premium features are worth paying, consumers' intent to purchase increases, as expected. In terms of premium sales, according to our research, improving the quality of the freemium service increases premium service sales by increasing the inclination to use the freemium service. As a result, freemium service managers should try to improve the core service's quality as it improves retention.

These findings imply that managers are faced with a problem when it comes to converting freemium customer segments to premium customers solely by enhancing service quality. The reason for this dilemma is that the core freemium service and premium products address different needs and thus the service quality of the free part of the service may be unrelated to the intentions to purchase premium parts of the service. As an example, in the social network LinkedIn, the premium version is more targeted at specific customer segments, such as recruiters or salespeople, and the free version is for users to network and find employment,

In comparison to the literature on purchase intention in the mobile environment, which identified price as a key factor influencing purchase intention, our study showed the same conclusion. As a result, we urge managers to emphasize the premium version's advantages as much as possible in order to attract people to buy the premium version at a reasonable price. Managers should offer the user just enough access to begin reaping the benefits and start the paid plans when the users are way too invested in the product to want to quit using it.

Managers should think about the service's scalability and the price point at which a customer is prepared to pay for it, as well as what extra features you may provide to entice them to upgrade. Managers need to realize that users must be convinced to upgrade due to their belief in the product/brand, because they are more likely to stay premium indefinitely if they upgrade because they have genuine faith in the product/brand and believe their money will be well spent in terms of expanded access and features.

In addition, previous research has found a complex relationship between enjoyment and willingness to purchase in-app goods (Hamari, 2015) implying that users who want to keep using but find it less enjoyable, possibly due to the artificial obstacles mentioned above, are more willing to pay for premium services. Therefore, managers are enticed to strike a balance between enjoyment enough to retain users, but inconvenient enough to entice more premium upgrades.

We reinforce Lucht's (2019) arguments that to create competitive advantages, managers need to realize that paying and non-paying users are equally important to the business and it is very important that managers focus their attention on maintaining this balance between them. They can accomplish this by making the free version more frustrating and inconvenient in order to encourage customers to upgrade to the premium version, but they must also keep the free version appealing enough for consumers to continue using the service. This observation emphasizes the duality of objectives that a

freemium service provider should have. The management must be able to monetize free users and increase the conversion rate for this model to function (Wagner, Benlian, & Hess, 2014), making the firms' capacity to retain paying customers and convert non-paying users into paying users a vital success component.

6.3 - Limitations and Future Research

For various reasons, the findings of this study should be understood and accepted with precaution. First and foremost, it should be noted that the sample group's selection resulted in some bias. Some frequent constraints occur from the survey approach used in this study, such as the use of a small number of participants or extrapolating samples to populations, raising the generalization risk. Despite the effort to ensure heterogeneity in our sample, by enquiring different groups of people, in different phases of life, with different incomes and ages, we encourage further research in this area to increase the study's variability. We also use a non-probabilistic convenience sampling procedure for the survey, creating representativeness problems for the population under study.

Secondly, statistical analysis can only give numerical associations, which must then be interpreted subjectively. Nonetheless, findings that are consistent with those of other research might increase trust in the conclusions.

Thirdly, the questionary subjects were social media users in Portugal and culture and lifestyle may differ among countries. In order to better generalize, future research should include more transversal and cross-country samples, decreasing the limits of a single-country sample.

Lastly, another of the main limitations for this study is that not all possible purchase motivations were covered here. This also becomes apparent in the low R^2 in the regression analysis. The level of analysis is a limiting factor, since this study examined only factors suggested by the perceived value theory (Sweeney & Soutar, 2001) and other selected variables by the author (usage frequency, intrusiveness of advertisement and security), in relation to continue use intention and willingness to pay premium. Additional predictors, such as culture and lifestyle could conceivably have an influence on continuance intention to use (free) and purchase intention (premium). Despite this being a limitation, it is also an opportunity for a future investigation to study these different predictors in this specific context.

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Appendixes

Appendix A – Translated Items from English into Portuguese

Translated Item to Portuguese	Item in English
SPC1. Pessoas que aprecio gostam desta rede social. **SPC2**. Esta rede social traz-me aprovação social. **SPC3**. Esta rede social ajuda-me a sentir-me aceite. **SPC4**. Esta rede social melhora a forma como sou visto(a). **SPC5**. Esta rede social causa uma boa impressão nas outras pessoas.	**SPC1**. People who I appreciate like this social network. **SPC2**. Using this social network brings me social approval. **SPC3**. Using this social network helps me feel accepted **SPC4**. This social network improves the way I am perceived. **SPC5**. The fact I use this social network makes a good impression on other people
EJ1. A rede social é divertida. **EJ2**. A rede social é agradável. **EJ3**. A rede social é emocionante. **EJ4**. A rede social é interessante. **EJ5**. A rede social faz-me sentir bem. **EJ6**. A rede social faz-me sentir relaxado(a) **EJ7**. Eu gosto de usar esta rede social	**EJ1**. This social network is enjoyable. **EJ2**. This social network is pleasant. **EJ3**. This social network is exciting. **EJ4**. This social network is interesting. **EJ5**. I enjoy using apps **EJ6**. Using apps makes me feel relaxed **EJ7**. Using apps make me feel good
P1. A versão premium da rede social oferece uma boa relação preço/qualidade. **P2**. A versão premium da rede social vale o dinheiro. **P3**. A versão premium da rede social é barata. **P4**. A versão premium da rede social é cara.	**P1**. All in all, the game offers value for money. **P2**. All in all, the game is a good product/service for the price. **P3**. All in all, the game is cheap. **P4**. All in all, the game is expensive. (reversed)
Q1. A rede social é de boa qualidade. **Q2**. A rede social está bem feita. **Q3**. A rede social funciona de forma confiável. **Q4**. A rede social funciona como eu esperava. **Q5**. A rede social oferece uma qualidade consistente.	**Q1**. This social network is of good quality. **Q2**. This social network is well made. **Q3**. I believe that this social network works reliably. **Q4**. I think that this social network works as I expect it to **Q5**. This social network has an acceptable standard of quality
UF1. Uso muito esta rede social para comunicar com pessoas. **UF2**. Em geral esta é a minha rede social preferida.	**UF1**. I often use this social network to communicate with others. **UF2**. In general, this is my preferred social network.

UF3. Sou viciado(a) nesta rede social	**UF3**. I am addicted to using this social network.
S1. As minhas informações pessoais estão seguras nesta rede social. **S2**. Eu confio nesta rede social. **S3**. Consigo encontrar redes sociais substitutas mais seguras. **S4**. A proteção dos meus dados pessoais nas redes sociais é importante para mim. **S5**. Esta rede social respeita as regras de proteção e recolha de dados da União Europeia	**S1**. My personal information is safe on this social network. **S2**. I trust this social network. **S3**. I can find safer substitute social networks. **S4**. The protection of my personal data on social media is important to me. **S5**. This social network respects the European Union's data protection and collection rules
A1. Os anúncios na versão gratuita da rede social são distrativos. **A2**. Os anúncios na versão gratuita da rede social são intrusivos. **A3**. Os anúncios na versão gratuita da rede social são irritantes. **A4**. Os anúncios na versão gratuita da rede social são agradáveis.	**A1**. The commercials in the free subscription of the social network are distracting. **A2**. The commercials in the free subscription are intrusive. **A3**. The commercials in the free subscription are annoying. **A4**. The commercials in the free subscription are enjoyable.
PI1. Prevejo que vou atualizar a minha conta para uma conta premium nos próximos 3 meses. **PI2**. Pretendo atualizar a minha conta para uma conta premium nos próximos 3 meses. **PI3**. Planeio atualizar a minha conta para uma conta premium nos próximos 3 meses.	**PI1**. I plan to upgrade to the premium subscription in the next three months. **PI2**. I will upgrade to the premium subscription in the next three months. **PI3**. I intend to upgrade to the premium subscription in the next three months
CUI1. Prevejo que vou continuar a usar a rede social no futuro, pelo menos tanto quanto tenho usado recentemente. **CUI2**. Pretendo usar a rede social pelo menos no próximo mês com a mesma frequência com que a usei anteriormente. **CUI3**. Planeio usar a rede social durante o próximo mês.	**CUI1**. I predict that I will keep using this social network in the future, at least as much as I have used it lately. **CUI2**. I intend to use this social network at least as often within the next month as I have previously used it. **CUI3**. I plan to use this social network during the next month.

Appendix B –Bootstrap results for indirect effects

Path	Path Coefficient	Standard Errors	*t* *s*tatistics	*p* *v*alues
Social Platform Community → Continue Use Intention → Purchase Intention	0,002	0,006	0,363	0,717
Quality → Continue Use Intention → Purchase Intention	0,009	0,015	0,588	0,557
Advertisement → Continue Use Intention → Purchase Intention	0,004	0,008	0,459	0,647
Usage Frequency → Continue Use Intention → Purchase Intention	0,004	0,007	0,494	0,622
Enjoyment → Continue Use Intention → Purchase Intention	0,004	0,010	0,428	0,669
Price → Continue Use Intention → Purchase Intention	0,004	0,007	0,531	0,596
Security → Continue Use Intention → Purchase Intention	0,008	0,014	0,605	0,545

Appendix C – Importance-Performance Map [Purchase Intention (Premium)]