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Bachelor thesis on the topic of:

Music Streaming Adaption – Drivers of Behavioral Intention

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Abstract

Music consumption and distribution has changed drastically in the last twenty years due to digitalization. Instead of buying music products, like CDs or even downloaded digital music files, today music is predominantly distributed via online music streaming. Therefore, it is mandatory for the music industry as well as researchers to determine which factors are affecting consumers intention to use music streaming services. This study aims to investigate drivers of Behavioral Intention (BI) to use a music streaming service. Particularly, aspects of social preferences in the context of music streaming will be explored. Therefore, a research model is created, based on the Value-based Adoption Model (VAM) (Kim et al., 2007) with an extension to take social factors into account. An online questionnaire with 102 participants was conducted to test the research model and the corresponding hypotheses. In order to evaluate reliable indications, some adjustments needed to be made resulting in a corrected research model. The final independent variables of the corrected model are Perceived Value (PV) (which is composed of Perceived Usefulness (PU) and Perceived Enjoyment (PE)), Perceived Ease of Use (PEU), Perceived Price Value (PPV), Facilitating Conditions (FC), Perceived Fairness (PF), Social Connectivity (SC), and Peer-Effects (PFX). The empirical results show that Perceived Value (PV), Perceived Price Value (PPV), and Perceived Fairness (PF) are determinants of consumers Behavioral Intention (BI) to use a music streaming service.

Kurzzusammenfassung

Musikkonsum und -Vertrieb haben sich den letzten zwanzig Jahren durch die Digitalisierung stark gewandelt. Statt Musikformate, wie CDs oder heruntergeladene digitale Musikdateien, zu kaufen, wird Musik heute überwiegend über Online Musik-Streamingdienste vertrieben. Deshalb ist es sowohl für die Musikindustrie als auch für die Forschung unerlässlich, Faktoren zu ermitteln, die die Absicht zur Nutzung solcher Dienste beeinflussen. Diese Studie zielt darauf ab, die Einflussfaktoren der Verhaltensabsicht von Verbrauchern zur Nutzung von Musik-Streamingdiensten zu untersuchen. Insbesondere sollen Aspekte der sozialen Präferenzen im Kontext von Musikstreaming erforscht werden. Dazu wird ein Forschungsmodell erstellt, das auf dem Value-based Adoption Model (VAM) (Kim et al., 2007) basiert und um soziale Faktoren erweitert wird. Anhand einer Online-Befragung mit 102 Teilnehmern konnten das Modell sowie die dazugehörigen Hypothesen getestet werden. Um zuverlässige Hinweise zu erhalten, mussten einige Anpassungen vorgenommen werden, die zu einem korrigierten Forschungsmodell führten. Die endgültigen unabhängigen Variablen des korrigierten Modells sind der wahrgenommene Wert (Perceived Value; PV) (dieser Faktor setzt sich aus wahrgenommener Nützlichkeit [Perceived Usefulness; PU] und wahrgenommenem Vergnügen [Perceived Enjoyment; PE] zusammen), wahrgenommene Benutzerfreundlichkeit (Perceived Ease of Use; PEU), Preis und Wert (Perceived Price Value; PPV), begünstigende Bedingungen (Facilitating Conditions; FC), wahrgenommene Fairness (Perceived Fairness; PF), soziale Vernetzung (Social Connectivity; SC) und Peer-Effekten (Peer-Effects; PFX). Die empirischen Ergebnisse zeigen, dass der wahrgenommene Wert (PV), Preis und Wert (PPV) und die wahrgenommene Fairness (PF) die Verhaltensabsicht der Verbraucher, einen Musik-Streamingdienst zu nutzen, bestimmen.

1 Introduction

The way we consume music has changed significantly in the last two decades. The established method of distributing physical formats of music was suddenly disrupted by the rise of the internet forcing the music industry to find new ways to sell its products in the digital world. The first digital model to sell music through download-to-own platforms like iTunes was created as a reaction to digital music piracy in the early 2000s. Despite its success it could not compensate for the losses through piracy and the decline of physical sales. Therefore, it was soon displaced by an access-based distribution model called music streaming often referred to as Music as a Service (MaaS) (Dörr et al., 2010; 2013). Unlike music downloading streaming grants access to extensive music libraries without transferring ownership of musical products. It soon became clear that this model would transform the way of music consumption and distribution and also become the dominant format globally (IFPI, 2022a, pp. 10). In 2021 global music revenues reached the highest level of the millennium. In its Global Music Report 2022 the International Federation of the Phonographic Industry (IFPI) states that “once again, streaming – particularly paid subscription streaming – was a key driver of the overall growth.” (IFPI, 2022a, p. 10). Since its rise in the late 2000s music streaming became the predominant method of music consumption with paid subscription streaming being the single most important stream of revenue for recorded music (IFPI, 2022a, pp.10). In consequence, it is essential for the music industry to identify the determinants of consumer value and the drivers that influence music consumption behavior in today’s era of music streaming.

The aim of this study is to contribute to understanding which drivers influence users’ behavioral intention to use a music streaming service. Since previous research has not adequately addressed other-regarding preferences (Fehr & Schmidt, 2006) in the context of music streaming, to my best knowledge, this study aims to contribute to filling this gap. For this purpose, a survey with 102 participants was conducted. The research model created for this study builds upon the basic framework of the Value-based Adoption Model (VAM). The original VAM was complemented by an extension to take social aspects regarding behavioral intention into consideration.

The remainder of this work is structured as follows. First a theoretical overview is provided by outlining the development of online music distribution, a review of research literature regarding the adoption of music streaming and technology adoption theories in general as well as a definition of social preferences and their implications for empirical research. This is followed by the development of a research model and hypotheses. Next the research methodology will be presented, as well as data analysis and the discussion of results. By looking at limitations and directions for future research a conclusion will be discussed.

2 Theoretical Background

This study investigates music consumption behavior within the context of music streaming. Accordingly, the aim of the following chapter is to establish a broad theoretical understanding of today's music streaming services. The theoretical background of music streaming will be discussed as well as the extensive body of interdisciplinary research literature regarding this topic.

2.1 Music Streaming Services

As a result of digitalization and the rise of the internet, music consumption and distribution has drastically changed since the turn of the millennium. The facilitation of information systems allowing users to trade and share goods and services online made the music industries' business model of selling physical formats of music outdated. This era is often referred to as the digital revolution. With the launch of Napster in 1999, illegal peer-to-peer file-sharing of digital music files started as well as the downfall of the music industry (see Fig. 1). As a reaction to music piracy download-to-own (DtO) platforms were established (e.g., iTunes) as well as digital rights management systems (DRMS) that were meant to prevent illegal file-sharing (Dörr et al., 2010; 2013). DRMS were unable to eliminate music piracy though. And while there was a significant adoption of legal download-to-own platforms in the 2000s, with a year-on-year growth of 8% (IFPI, 2012, p. 6), they couldn't compensate for increasing losses through music piracy and the continuous decrease of physical sales. Therefore, a new business model was created that provides access to a comprehensive music library via streaming without transferring ownership. Instead of paying per download, music streaming users can choose between a premium model with periodic subscription fees, or a somewhat restricted free model supported by advertisements (Dörr et al., 2013, p. 384). This new access-based model of Music as a Service (MaaS) (Dörr et al., 2010; 2013) is also referred to as the freemium model (a service offering a free version as well as a paid premium one) (Wagner & Hess, 2013, p. 1). It was favored by "[...] the rapid development of smartphone technology [...] and mobile network technologies such as 5G [...]" (Chang et al., 2021, p. 2) which made constant mobile media consumption possible.

In its Digital Music Report 2009 the International Federation of the Phonographic Industry (IFPI) states that "the introduction of access services is the single most important current development in the music business." (IFPI 2009, p. 8). Thirteen years later the IFPI Global Music Report 2022 acknowledges that the focus of music consumption has completely shifted from ownership of music products (such as physical copies or downloaded digital music files) to an access model (through music streaming services) (IFPI, 2022, p. 12).

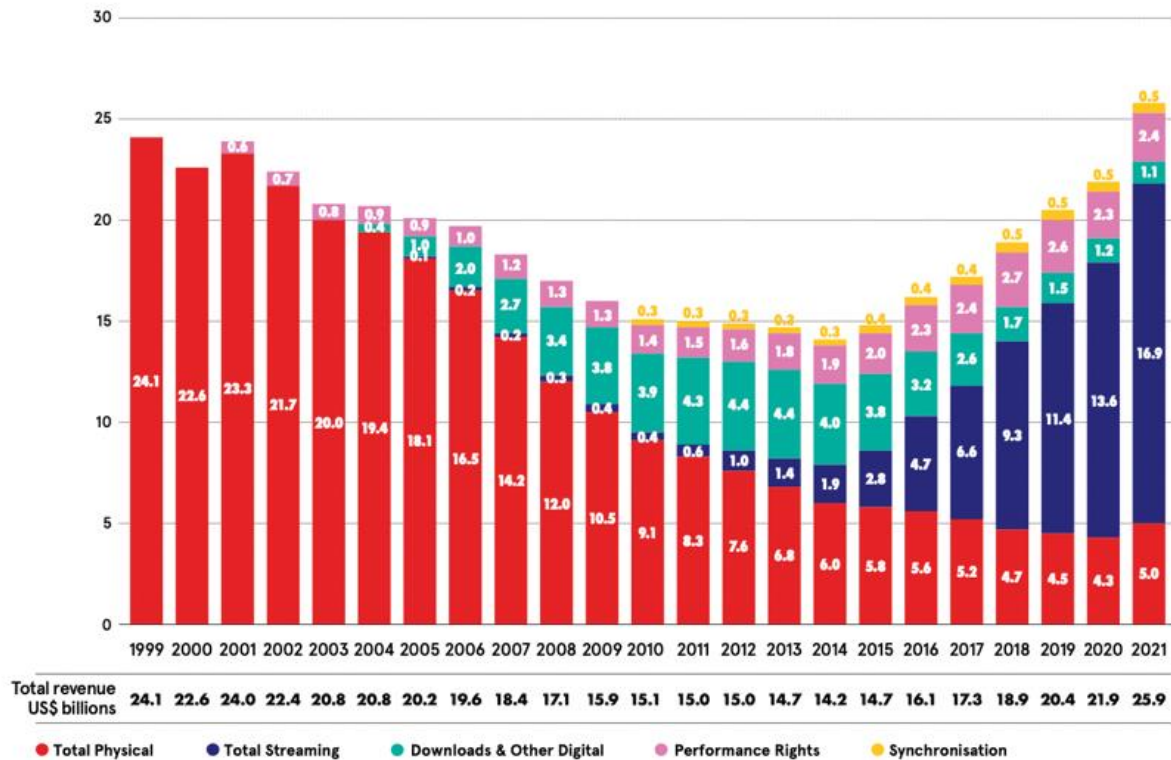


Figure 1. Global recorded music industry revenues 1999 – 2021 (US\$ Billions) (IFPI, 2022a, p. 11).

The reports statistic data shows that profits from digital music downloads are constantly decreasing (around 10.7% in 2021) while revenues from streaming are growing (by 24.3% in 2021) (see Fig. 1). In total, 65% of the global recorded music revenues in 2021 were obtained through streaming services (paid subscription audio streams and free ad-supported streams combined) (IFPI, 2022a, pp. 10), proving that “[...] streaming has become the most popular way to listen to music” (Barata & Coelho, 2021, p. 11). Especially regarding younger demographics (16-34 years), in which more than 50% of music consumption is done through paid subscription audio streaming (IFPI, 2022b, p. 9). In 2021 paid subscription streaming profits rose by 21.9% and represented nearly half of the global market alone (47.3%) (IFPI, 2022a, pp. 10), making it the most valuable stream of income for the music industry. As Wagner and Hess acknowledge, “[...] it is [therefore] very important for freemium service providers to know the antecedents that lead users to pay for a service even though there is a free version” (2013, p. 1). Correlating to MaaS (Dörr et al., 2010; 2013), a trend can be observed as there are similar freemium access models in other contexts of information systems as well. For instance, in the fields of Software it is called *Software as a Service* (SaaS) (e.g. Microsoft Office 365, Dropbox, Slack), and in the distribution of information content it is called *Content as a Service* (CaaS) (e.g. Netflix, YouTube, online magazine) (Dörr et al., 2010, pp. 1). It shows that information goods like music are no longer comprehended as products to own, but as products to experience (Wikström, 2012, p. 10).

2.2 Literature Review / Qualitative Research

The digital revolution has had a major impact on scientific research, just as it has on every other aspect of society. Due to the rise of music streaming services a lot of researchers from such diverse fields as information management (Barata & Coelho, 2021; Chang et al., 2021; Hamari et al., 2020; Wang et al., 2013), marketing (Amalina, 2019; Camilleri & Falzon, 2020; Hsu et al., 2021), information systems and computer science (Dörr et al., 2010; 2013; Mäntymäki & Islam, 2015; Park, 2020; Wagner & Hess, 2013; Wagner et al., 2014), economics (Chiang & Assane, 2009; Hampton-Sosa, 2017; 2019; Fernandes & Guerra, 2019; Lin et al., 2013; Wikström, 2012), and psychology (Chen et al., 2018a; 2018b) have started to investigate the new phenomenon since the late 2000s. Researchers that were investigating music streaming services at the time had a whole branch of research about digital music distribution to build upon. However, this research mostly regards the concept of download-to-own (DtO) and pay-per-download (Ppd), as well as effects of illegal music piracy. Also, as the existing empirical research is mostly based on conceptual models which do not consider intrinsic social preferences like fairness concerns or concerns for the well-being of others (Fehr & Schmidt, 2006), it is important to address this research gap and contribute to closing it. Therefore, this chapter is divided in two sections. The first section will give an overview of research literature regarding music streaming services by discussing a small selection of empirical studies about behavioral intention in the context of music streaming. The second section will provide a very brief overview of other-regarding preferences and their implications for empirical research (Fehr & Schmidt, 2006).

2.2.1 Music Streaming Adoption

One of the first studies that focused on the access-model of Music as a Service (MaaS) in distinction to the established ownership-model of DtO and PpD was conducted by Dörr et al. in 2010. It investigates pricing and consumers' willingness to pay (WTP) for music streaming with the aim of "[receiving] first research implications about customers' attitude towards MaaS" (Dörr et al., 2010, p. 1). Their results show that in 2010 three main attributes were most influential on consumers behavioral intention towards MaaS and their WTP. The most important one is price followed by contract duration and music quality (Dörr et al., 2010, p. 1). Other important factors that were found regarding the pricing of MaaS are mobile application and offline access as well as mobile internet coverage respectively the insufficiency of it at the time (Dörr et al., 2010, p. 7). Because of the effects of facilitating conditions, Dörr et al. resume "that MaaS falls short of its opportunities due to technical limitations" (2010, p. 7).

Another study about people's willingness to pay for music streaming was conducted by Wagner and Hess in 2013. "Based on the Theory of Planned Behavior, [they] developed a research

model to identify antecedents of customers' intentions and attitudes toward the premium version of music services when a free version is available" (Wagner & Hess, 2013, p. 1). Their results illustrate that the intention to use the free version of a music streaming service is the most influential on consumers intention to become a premium user. Wagner and Hess resume that a feature-limited freemium concept might not work as well as a time-limited one for music streaming services. Additionally, they found that attitude is the second most influential variable on users' WTP, followed by subjective norms (Wagner & Hess, 2013, p. 6).

In a follow-up study Wagner et al. (2014, p. 259) continued their research about customers intention and attitude towards premium versions in the freemium revenue model regarding the conversion of freemium customers from free to premium. They recognize the importance of improving customers' conversion rates since "providers have to pay royalties to the music license holder for every song that a free user plays" (Wagner et al., 2014, p. 260). By evaluating the role of the perceived premium fit in the case of MaaS, they "examine the extent to which a basic version of a freemium service promotes the non-free premium version and how the similarity between the free and premium versions influences the described relationship" (Wagner et al., 2014, p. 267). Their results indicate that a strong functional fit between a free and premium service increases the probability of users' conversion (Wagner et al., 2014, p. 267). Therefore, Wagner et al. resume once more that "freemium providers should rethink the use of feature limitations as a means of persuading users to purchasing the premium version" (2014, p. 267). Instead, they again propose for freemium services to offer time-limited trial periods (Wagner et al., 2014, p. 267).

Another important study about the conversion of free users into paid subscribers was conducted by Chen et al. in 2018 (2018b). By investigating behavioral, psychological, and social perspectives, they identify some of the main factors that influence music streaming consumers choices. The study compares what Chen et al. declare to be "the two different purchase motivations of consumers: social influence and hedonic performance expectancy" (2018b, p. 141). "[Their] data analysis shows that social influence impacts consumer attitude towards music streaming, which in turn drive purchase intention" (Chen et al., 2018b, p. 128). They also find that "continuous intention of paid music streaming is driven by hedonic performance expectancy of consumers, not consumer attitude" (Chen et al., 2018b, p. 128).

In another study, Chen et al. propose a "two-phased model to address the conversion challenge" (2018a, p. 14) by distinguishing between the alluring phase and the hooking phase. Thereby "the study models purchase intention and continuance intention separately" (Chen et al., 2018a, p. 13). The results suggest "that attitudinal and social factors are conducive to the initial adoption of music streaming services, but facilitating and communication factors contribute to the continuance intention" (Chen et al., 2018a, p. 13). Therefore, they resume that "continuance intention centers on the functionality and cost of the streaming service rather

than attitudes and social influence [...]”, “[...] which have been shown to be antecedents to purchase intention” (Chen et al., 2018a, p. 13). They also find that “trust is an indispensable common factor for the conversion process in both initial and post-adaption phase” (Chen et al., 2018a, p. 13).

Lastly, in their study from 2021 Mariana Lopes Barata and Pedro Simões Coelho “aim to understand the factors that influence music consumption through streaming platforms, particularly studying the intention to adopt premium (paid) version of a music streaming service and recommend it” (p. 1). By performing a survey, using an extended version of the research model UTAUT2, “[their] results showed that the variables which explain behavioral intention to buy a premium account are performance expectancy, effort expectancy, hedonic motivation, price value, habit, perceived freemium-premium fit and attitude towards piracy” (Barata & Coelho, 2021, p. 11). Regarding the variable of behavioral intention, the most important variables are habit, performance expectancy and price value (Barata & Coelho, 2021, p. 11). Furthermore, the behavioral intention to recommend using a music streaming service is shown to be positively influenced by the variables of behavioral intention to purchase paid music streaming services as well as personalization (Barata & Coleho, 2021, p. 14f.).

As shown by this selection of research literature regarding the behavioral and purchase intention (resp. WTP) of music streaming adoption, some variables seem to be of recurring relevance throughout different studies and empirical investigations. Namely: performance expectancy (usefulness), effort expectancy (or functionality), hedonic motives (enjoyment), freemium-premium fit, price value, facilitating conditions, social influence (e.g., subjective norms), and attitude.

2.2.2 Social Preferences

As described by Fehr and Schmidt (2006), “most economic models are based on the self-interest hypothesis that assumes that material self-interest exclusively motivates all people” (p. 616). However, there is a lot of evidence obtained by experimental economists and psychologists that contradicts this hypothesis. Other-regarding preferences like fairness concerns, the concern for the well-being of others, and reciprocity have been proven to be essential in social interactions. Hence, empirical research regarding social behavior should always consider those social preferences. Compared to models based on the self-interest assumption, models that take other-regarding preferences into account have been found to predict social behavior much better (Fehr & Schmidt, 2006, p. 618). Fehr and Schmidt (2006) even state that “if they [other-regarding preferences] are neglected, social scientists run the risk of providing incomplete explanations of the phenomena under study or – in the worst case – their explanations may be wrong” (p. 684).

Building upon this recognition, a framework will be developed in the following chapter, considering most of the variables mentioned in section 2.2.1 as well as aspects of social preferences.

3 Framework and Hypotheses

Music streaming represents a new technology within the field of information systems (IS), more precisely Information and Communication Technology (ICT). This study aims to understand the process of adopting this new technology. Therefore, a suitable framework needs to be chosen within the great selection of technology adoption theories. This section will discuss some of the most popular and well-tested theories, construct a fitting research model, and present a selection of variables and hypotheses.

3.1 Adoption Models

The Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975) is the foundation for many theories relating to the adoption of information systems (IS) by consumers. Originating from the field of psychology, the TRA first theorized the relationship between the intention of individuals and their actual behavior. The theory suggests that attitudes and subjective norms influence intentions, which in turn affect behavior. According to the TRA, people are more likely to engage in a behavior if they perceive it as positive and if they feel that others want them to engage.

Despite its success in many studies, the TRA has also been criticized for its limitations. While attitudes and subjective norms have been found to correlate with behavioral intention and subsequent behavior in many studies, there is evidence suggesting that behavioral intention does not always translate into actual behavior due to circumstantial limitations. To address this, Ajzen (1991) introduces the Theory of Planned Behavior (TPB) by adding the concept of “perceived behavioral control”, which accounts for an individual's perception of the ease or difficulty of performing a specific behavior. This addition allows the TPB to cover non-volitional behaviors and enhances its ability to predict both behavioral intention and actual behavior.

Another important extension of the TRA is the Technology Acceptance Model (TAM) by Davis (1989). This IS theory “models how users come to accept and use a technology” (Park, 2020, p. 6) by considering the two variables of Perceived Usefulness and Perceived Ease of Use. Perceived Usefulness refers to an individual's belief that using a specific technology will improve their task performance compared to not using it. Perceived Ease of Use on the other hand refers to the belief that using the technology will be effortless. While Perceived Usefulness focuses on the benefits of the technology, Perceived Ease of Use considers the

effort required to use it. Practice has shown that even if someone recognizes the usefulness of a technology, they may not adopt it if they perceive it as too demanding or difficult to use. Another factor that is keeping users from adopting ICT service is cost. The TAM has been widely used to explain the adoption of conventional technologies. In the context of organizations, employees typically serve as adopters and users of these technologies for work-related tasks and the organization covers the costs associated with mandatory adoption and usage. However, mobile commerce (m-commerce) services are mostly used for personal purposes and the cost incurred in this voluntary adoption and usage is covered by the individuals themselves. Therefore, Perceived Value and cost become more relevant in the adoption of ICT than Perceived Usefulness and Ease of Use. To cover for-fee m-commerce ICT services and “explain customers’ [mobile internet] adoption from the value maximization perspective”, Kim et al. (2007, p. 111) propose a Value-based Adoption Model (VAM). The unified conceptual framework of the TAM and VAM is shown in Figure 2.

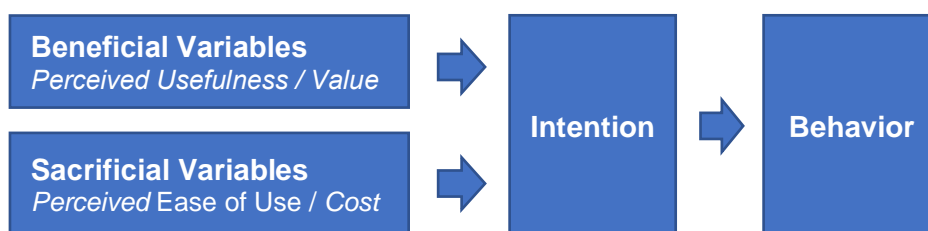


Figure 2. Basic framework of the TAM and VAM.

3.2 Original Research Model

As mentioned before, music streaming represents a new technology, more precisely an ICT within the field of m-commerce. Therefore, the basic framework of the VAM (Fig. 2) seems to be a suitable baseline to build a research model upon. Considering the key variables that were found to be of recurring relevance, the basic framework of the VAM was expanded by an additional category in order to take social variables into account. Like in the TPB, the construct of attitude is added in-between the independent variables and the construct of intention. The research framework shown in Figure 3 is created as a result.

Building upon the recognition of former adoption research in the context of online music streaming, the basic categories of this framework were complemented by a selection of context-based variables. The resulting research model is displayed in Figure 4.

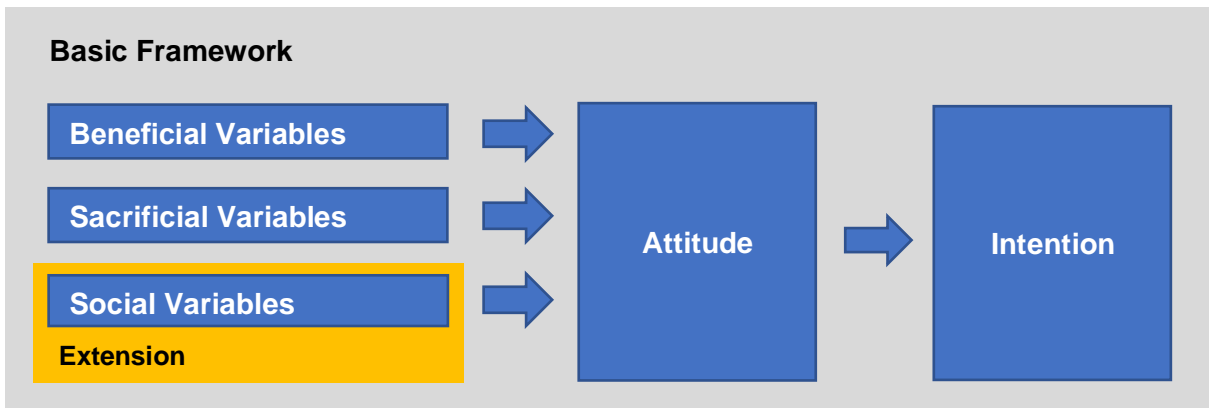


Figure 3. Research framework based on the VAM with an extension.

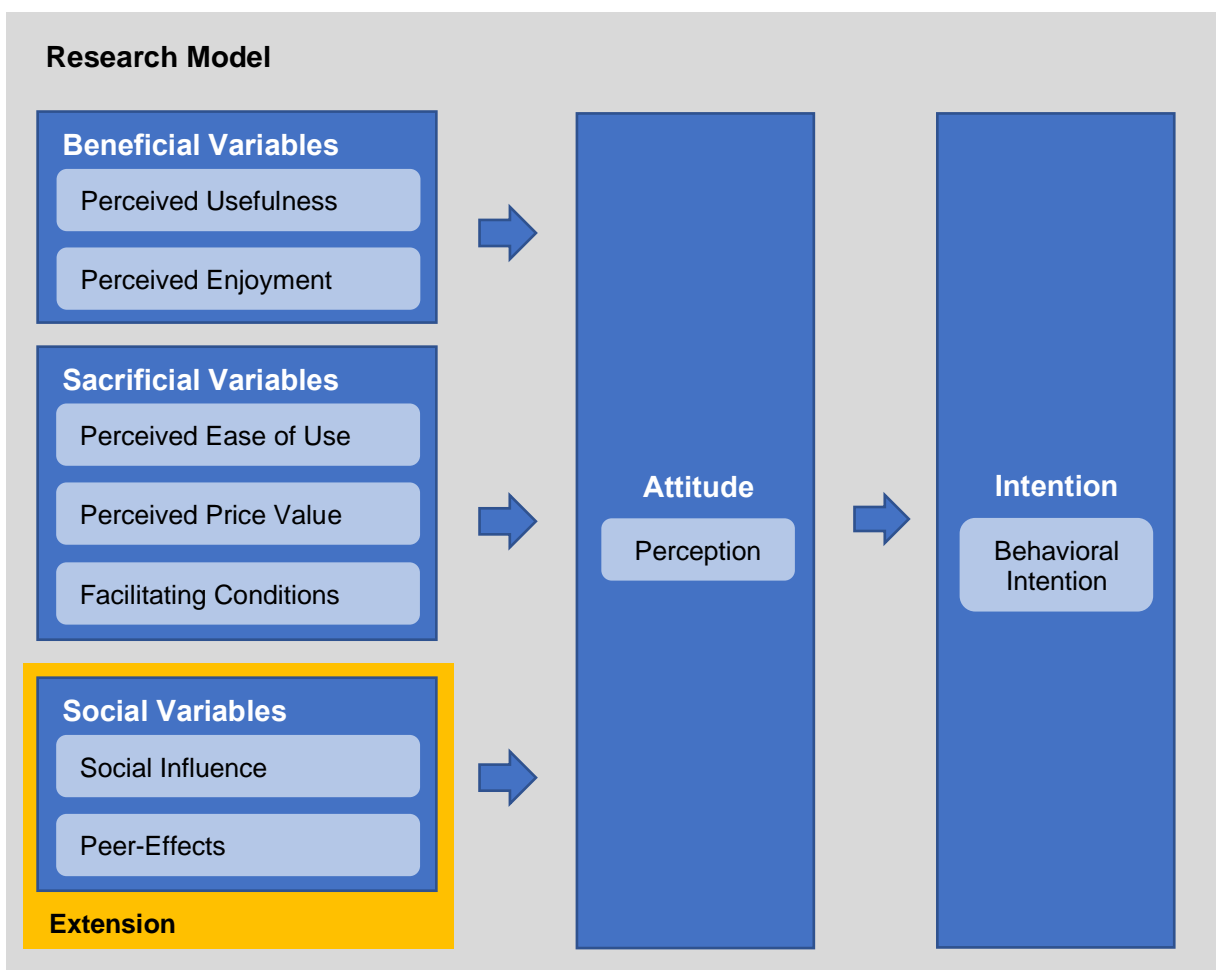


Figure 4. Complete research model with all variables.

3.3 Variables and Hypotheses

As shown by the conceptual model in Figure 4, the research model consists of five basic categories. The first three contain seven independent variables while the other two embody one dependent variable each.

In the following section each variable will be presented and the hypothesis that constitute the conceptual model will be developed. Theoretical research that supports and explains these hypotheses will be provided in addition.

3.3.1 Perceived Usefulness

Davis defines Perceived Usefulness (PU) as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989, p. 320). He also explicitly contextualizes PU within an organizational setting (Davis, 1989, p. 320). Therefore, Kim et al. describe PU as an extrinsic and cognitive benefit. It represents “a measure of extrinsic motivation [...]” that “reflects the desire of an individual to engage in an activity because of external rewards” (Kim et al., 2007, p. 116). PU is synonymously categorized as performance expectancy due to its focus on outcome expectations (Venkatesh et al., 2003). In this study PU is defined as the extent to which consumers perceive the act of consuming music through a streaming service as useful in their daily lives. As shown by several studies (Barata & Coelho, 2021; Dörr et al., 2010; Fernandes & Guerra, 2019; Park, 2020), PU (resp. performance expectancy) is one of the most important determinants of music streaming adoption. In their Unified Theory of Acceptance and Use of Technology (UTAUT), Venkatesh et al. even state that PU “is the strongest predictor of intention and remains significant at all points of measurement in both voluntary and mandatory settings” (Venkatesh et al., 2003, p. 447). Therefore, the following hypothesis is formulated:

H1-1: Perceived Usefulness (PU) is positively related to the perception of music streaming services.

3.3.2 Perceived Enjoyment

According to Kim et al., “enjoyment refers to the extent to which the activity of using a product is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated” (2007, p. 116). Therefore, they define enjoyment as “an affective and intrinsic benefit” (Kim et al., 2007, p. 116). The influence of hedonic motivation on the acceptance and use of technology was also recognized by Venkatesh et al. and thus added to their expanded model UTAUT2 (2012, p. 161). In this study Perceived Enjoyment (PE) is defined as the extent to which consumers perceive the act of consuming music through a streaming service as enjoyable. The relevance of PE as a determinant of music streaming adoption has been confirmed by numerous studies (Barata & Coleho, 2021; Chen et al., 2018b; Fernandes & Guerra, 2019; Hamari et al., 2020; Wang et al., 2013; Park, 2020). Hence, the following hypothesis is formulated:

H1-2: Perceived Enjoyment (PE) is positively related to the perception of music streaming services.

3.3.3 Perceived Ease of Use

According to Davis, “Perceived Ease of Use (PEU) [...] refers to the degree to which a person believes that using a particular system would be free of effort” (1989, p. 320). He therefore claims that “an application perceived to be easier to use than another is more likely to be accepted by users” (Davis, 1989, p. 320). As part of the category of perceived non-monetary sacrifice, PEU is also incorporated in the VAM by Kim et al. (2007). Within its category, PEU is considered a sacrificial effort and convenient cost that “refers to the overall user-friendliness of using mobile devices to access the Internet” (Kim et al., 2007, p. 117). PEU is also represented in the TPB under the name of Perceived Behavioral Control (Ajzen, 1991), as well as in the original UTAUT and the expanded UTAUT2 under the name of Effort Expectancy (Venkatesh et al., 2003). In this study PEU is defined as the extent to which consumers perceive that music consumption with a music streaming service is easy. Its influence on the adoption of music streaming has been acknowledged by several studies (Barata & Coleho, 2012; Dörr et al., 2013; Fernandes & Guerra, 2019; Lin et al., 2013; Wagner & Hess, 2013; Park, 2020). Therefore, the following hypothesis is formulated:

H2-1: Perceived Ease of Use (PEU) is positively related to the perception of music streaming services.

3.3.4 Perceived Price Value

As mentioned before, the most important difference between a consumer setting and an organizational use setting is that consumers must pay their use of technology services themselves whereas employees do not. Therefore, cost and pricing structure may have a significant impact on ICT adoption which is mostly used by consumers instead of organizations. Perceived Price Value (PPV) is defined as “consumers’ cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using them” (Dodds et al., 1991; Venkatesh et al., 2012). In marketing research PPV is conceptualized together with the quality of a product or service (Zeithaml, 1988; Venkatesh et al., 2012, p. 161). The PPV is positive if the benefit of using a technology is perceived to be greater than its monetary cost (Venkatesh et al., 2012, p. 161). In this study PPV is defined as the extent to which consumers perceive the act of consuming music through a streaming service provides good value for money. As shown by many studies (Barata & Coelho, 2021; Dörr et al., 2010; Fernandes & Guerra, 2019; Hamari et al., 2020; Lin et al., 2013; Wagner & Hess, 2013; Wagner et al., 2014;

Park, 2020), PPV (resp. cost/fee) was found to be a key factor of intention. Hence, the following hypothesis is formulated:

H2-2: Perceived Price Value (PPV) is positively related to the perception of music streaming services.

3.3.5 Facilitating Conditions

Facilitating Conditions (FC) refer to resources and support that must be available to users in order to be able to perform a behavior. As shown by Venkatesh et al., those resources can vary significantly across different situations (Venkatesh et al., 2012, p. 162). For instance, “many aspects of facilitating conditions, such as training and support provided, will be freely available within an organization and fairly invariant across users” (Venkatesh et al., 2012, p. 162). Other aspects of FC that may influence technology adoption for instance are education, age, and experience as well as the availability of resources like internet access, personal computers, and mobile devices. Therefore, consumers who have access to a favorable set of FC are more likely to intend on using a technology. Like in the TPB, Venkatesh et al. comprehend FC as perceived behavioral control which is influencing both intention and behavior (Venkatesh et al., 2012, p. 162). In this study FC are defined as the extent to which consumers perceive that they have the resources necessary to consume music with a music streaming service. The effect of FC on technology adoption is demonstrated by several studies (Barata & Coelho, 2021; Dörr et al., 2010; Chen et al., 2018a; Park, 2020). Therefore, the following hypothesis is formulated:

H2-3: Facilitating Conditions (FC) are positively related to the perception of music streaming services.

3.3.6 Social Influence

In existing research literature and theories the construct of Social Influence (SI) is predominantly defined through extrinsic aspects regarding the opinions of important referent individuals or groups. Venkatesh et al., for instance, define SI as “the degree to which an individual perceives that important others believe he or she should use the new system” (2003, p. 451). Categorized as subjective norms, SI is also part of the TRA and the TPB, referring to similar extrinsic concerns. In this study more intrinsic aspects of social effects will be considered under the variable of SI. Building upon the work of Fehr and Schmidt (2006) other-regarding preferences will be in focus, acknowledging fairness concerns about the welfare of the artist. In addition, SI refers to aspects of social connectivity, taken from the uses and

gratification theory (UGT) by Katz et al. (1974). Katz et al. recognize “that mass communication is used by individuals to connect [...] themselves” and their theory “attempts to comprehend the whole range of individual gratifications of the many facets of the need »to be connected«” (1974, p. 513). Hence, the following hypothesis is formulated:

H3-1: Social Influence (SI) is positively related to the perception of music streaming services.

3.3.7 Peer-Effects

The variable of Peer-Effects (PFX) refers to the aforementioned extrinsic influence regarding opinions of important referent individuals or groups. As mentioned before, PFX are based on the subjective norm construct taken from the TRA and the TPB (Fishbine & Ajzen, 1975; Ajzen, 1991). They represent social pressure which influences an individual to engage in a certain behavior (Barata & Coelho, 2021, p. 3). In this study PFX are defined as the extent to which consumers perceive the act of consuming music through a streaming service to be positively endorsed by important referent individuals or groups. Its relevance is widely acknowledged (Barata & Coelho, 2021; Chen et al., 2018a; Chen et al., 2018b; Dörr et al., 2013; Lin et al., 2013; Wagner & Hess, 2013; Park, 2020). Therefore, the following hypothesis is formulated:

H3-2: Peer-Effects (PFX) are positively related to the perception of music streaming services.

3.3.8 Perception

The dependent variable Perception (P) is based on the construct of attitude taken from the TRA and the TPB (Fishbine & Ajzen, 1975; Ajzen, 1991). Following their definition, P is comprehended as a psychological inclination to respond or behave in manners influenced by positive or negative evaluations and beliefs (Fishbein and Ajzen, 1975). In other words, P refers to an individual's positive or negative feeling about performing a certain behavior. Accordingly, the more positive a persons perception is toward a behavior, the more likely they are to engage in it. In this study P is defined as the extent to which consumers attitudes towards a music streaming service is positive. The influence of P respectively attitude is proven by several studies (Chen et al., 2018a; 2018b; Dörr et al., 2013; Lin et al., 2013; Wagner & Hess, 2013; Wagner et al., 2014). Therefore, the following hypothesis is formulated:

H4: Perception (P) is positively related to the intention to use a music streaming service in the future.

3.3.9 Behavioral Intention

The dependent variable Behavioral Intention (BI) is conceptualized according to the models of TRA, TPB, TAM, VAM and UTAUT/UTAUT2. The connection of behavioral intention and actual behavior defines “the basic concept underlying user acceptance research” (Park, 2020, p. 8). The relationship between BI and usage has been investigated by many studies which have proven that BI is the key factor of actual usage. Therefore, a corresponding link between BI and usage is also assumed in the context of online music streaming. In this study BI is defined as the extent to which consumers have consciously developed intentions to use a music streaming service in the future.

Category	Variables	Code	Model	References
Beneficial Variables	Perceived Usefulness (resp. Performance Expectancy)	PU	TAM, VAM, UTAUT, UTAUT2	Davis (1989), Kim et al. (2007), Venkatesh et al. (2003), Venkatesh et al. (2012)
	Perceived Enjoyment (resp. Hedonic Motivation)	PE	VAM, UGT, UTAUT2	Kim et al. (2007), Katz et al. (1974), Venkatesh et al. (2012)
Sacrificial Variables	Perceived Ease of Use (resp. Perceived Behavioral Control; Effort Expectancy)	PEU	TPB, TAM, VAM, UTAUT, UTAUT2	Ajzen (1991), Davis (1989), Kim et al. (2007), Venkatesh et al. (2003), Venkatesh et al. (2012)
	Perceived Price Value	PPV	UTAUT2	Venkatesh et al. (2012)
	Facilitating Conditions	FC	UTAUT, UTAUT2	Venkatesh et al. (2003), Venkatesh et al. (2012)
Social Variables	Social Influence	SI	UGT	Katz et al. (1974), Fehr & Schmidt (2006)
	Peer-Effects (resp. Subjective Norms; Social Influence)	PFX	TRA, TPB, UTAUT2	Fishbine & Ajzen (1975), Ajzen (1991), Venkatesh et al. (2012)
Attitude	Perception (resp. Attitude)	P	TRA, TPB,	Fishbine & Ajzen (1975), Ajzen (1991)
Intention	Behavioral Intention (resp. Intention to Use; Adoption Intention)	BI	TRA, TPB, TAM, VAM, UTAUT, UTAT2	Fishbine & Ajzen (1975), Ajzen (1991), Davis (1989), Kim et al. (2007), Venkatesh et al. (2003), Venkatesh et al. (2012)

Table 1. Variables and references used.

4 Research Methodology

The methodological approach for the development of this study is based on both an in-depth qualitative analysis of research literature about music streaming adoption as well as the quantitative method of a data collection. After providing an overview of existing research literature in chapter 2.2, this section will focus on the design of a questionnaire and its evaluation.

4.1 Data Collection / Quantitative Research

A questionnaire was designed according to the proposed conceptual research model (Fig. 4). All variables and items were adapted from existing theoretical models and literature as shown in Table 1. The selection of items also benefitted from other research related to music streaming adoption (Barata & Coelho, 2021; Dodds et al, 1991; Fernandes & Guerra, 2019; Mäntymäki & Islam, 2015; Wang et al., 2012). The resulting survey consists of 37 items that were rated on a 5-point Likert scale varying from strongly disagree to strongly agree. The final list of items is shown in Table 2. The questionnaire was designed in English and launched online via UniPark to a variety of respondents with different backgrounds. A sample of 102 complete responses was obtained.

Variables	Code	Items
Perceived Usefulness	PU	<ol style="list-style-type: none"> Using a music streaming service is useful in my daily life. Using a music streaming service enables me to enhance my music appreciation. Using a music streaming service makes it easier to get the music information. Using a music streaming service helps me to access music content more quickly. Being able to customize my account and playlists on a music streaming service is useful to me. The ubiquity provided by a music streaming service is useful to me.
Perceived Enjoyment	PE	<ol style="list-style-type: none"> Using a music streaming service provides enjoyment to my daily life. Using a music streaming service is exciting. Using a music streaming service is pleasant.
Perceived Ease of Use	PEU	<ol style="list-style-type: none"> Using a music streaming service is easy for me. My interaction with a music streaming service is clear and understandable. It is easy for me to become skillful at using a music streaming service.
Perceived Price Value	PPV	<ol style="list-style-type: none"> Paid music streaming services are reasonably priced. Paid music streaming services are good value for money. At the current price, paid music streaming services provide good value.
Facilitating Conditions	FC	<ol style="list-style-type: none"> I have the resources necessary to use a music streaming service. I have the knowledge necessary to use a music streaming service. A music streaming service is compatible with other technologies I use.
Social Influence	SI	<ol style="list-style-type: none"> The payment of content creators by a music streaming service is fair. Using a music streaming service enables me to enhance my social connectivity. It is important for me to be able to share the music I consume on social networks.
Peer-Effects	PFX	<ol style="list-style-type: none"> People who are important to me think that I should use a music streaming service. People who influence my behavior think I should use a music streaming service. People whose opinions I value recommend using a music streaming service.
Perception	P	<ol style="list-style-type: none"> I have a positive perception towards music streaming services. My perceived usefulness has a positive influence on my perception towards music streaming services. My perceived enjoyment has a positive influence on my perception towards music streaming services. My perceived ease of use has a positive influence on my perception towards music streaming services. My perceived price value has a positive influence on my perception towards music streaming services. Facilitating conditions have a positive influence on my perception towards music streaming services. Social influence has a positive influence on my perception towards music streaming services. Peer-effects have a positive influence on my perception towards music streaming services.
Behavioral Intention	BI	<ol style="list-style-type: none"> I intent to use a music streaming service in the future. I intent to use a paid subscription music streaming service in the future. My perception of a music streaming service has a positive influence on my behavioral intention to use a music streaming service in the future. My perception of a music streaming service has a positive influence on my behavioral intention to use a paid subscription music streaming service in the future.

Table 2. List of used items in the questionnaire.

4.2 Descriptive Statistics

Among the sample of 102 respondents 58.8% were male, 36.2% were female and 4.9% identified as diverse. Within a spectrum of 18 to 66 years 70.5% were aged between 23 to 32 years with an average of 29.79 years. 68.6% of all respondents have an academic degree and 77.5% of all respondents stated that they are of German nationality. Besides those general descriptive measures, the participants were also asked about their music consumption, occupation, and music streaming experience. 52.9% of all respondents stated that their job or study has something to do with music. 77.5% also stated that recorded music consumption plays an important role in their daily life. Almost all respondents (94.1%) stated that they have used a music streaming service before, including 90 respondents (88.2%) who are current users of a music streaming service. 86.7% of them are paying for a music streaming subscription and only 13.3% are using a free music streaming offer. 69.6% of all respondents stated that music streaming is their preferred way of recorded music consumption and the most popular music streaming provider among the respondents is Spotify with 64 out of 90 current users within the group of respondents (71.1%).

In the following, two groups of participants will be separated, those who are currently using a music streaming service and those who are not. Because the sample size of respondents who are not using a music streaming service is very small (12), only data of current music streaming users will be analyzed. Therefore, the sample size drops to 90 valid respondents.

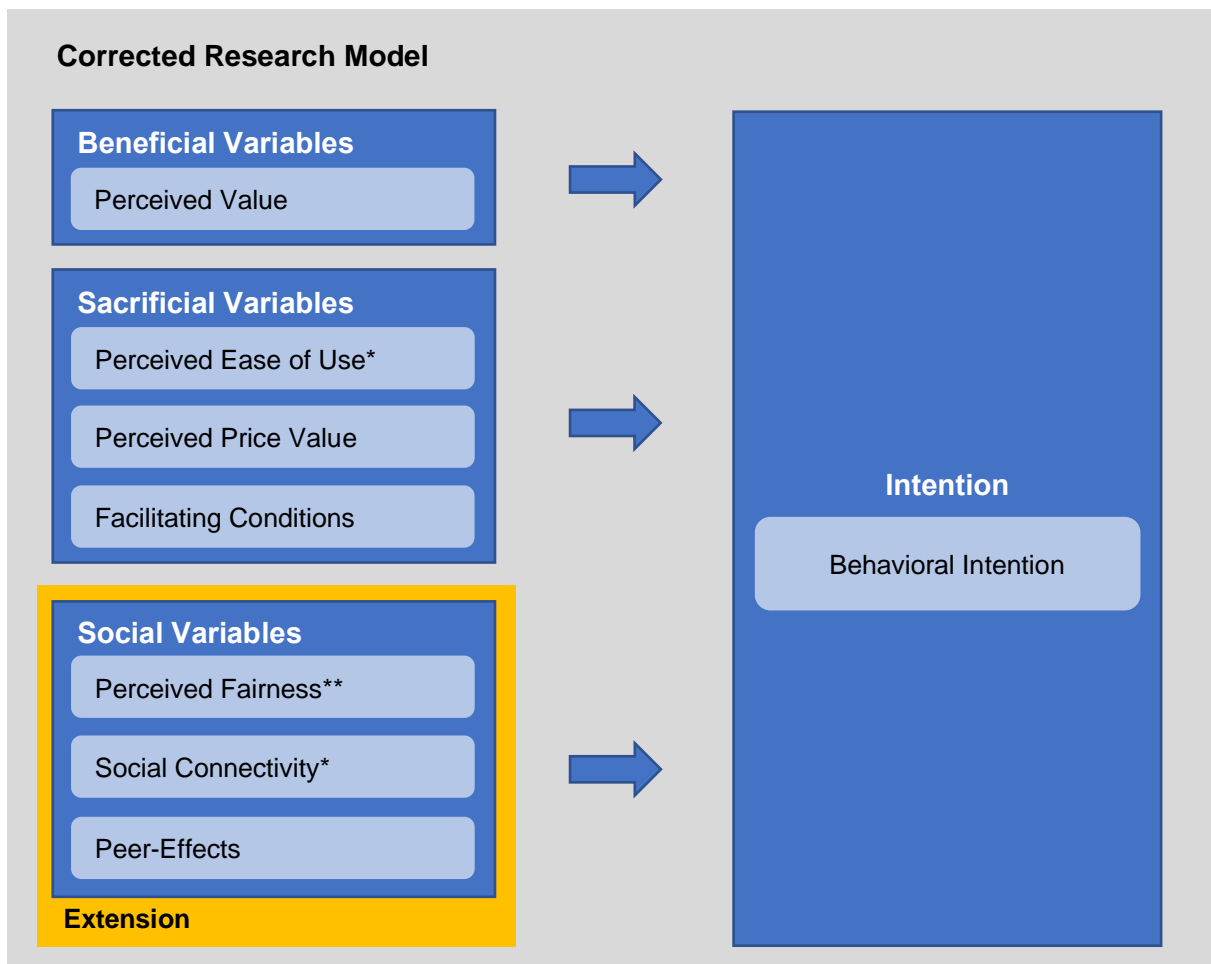
4.3 Exploratory Factor Analysis

By performing exploratory factor analysis (EFA), using principal component analysis (PCA), some conceptual issues of the survey were revealed. While some variables displayed a high degree of similarity, other variables indicate internal inconsistency. As a result, various items were cross-loading or loading in multiple components. To resolve this issue the poorly designed, inconsistent dependent variable of Perception was eliminated. Only item P1 (I have a positive perception towards music streaming services) was kept, which was loading in the component of Behavioral Intention and therefore added to the construct of BI. Since they displayed a high degree of correlation, both variables Perceived Usefulness (PU) and Perceived Enjoyment (PE) were combined into the construct of Perceived Value (PV). This combination is also supported by the conceptual model of the VAM (Kim et al., 2007). Item PE3 (using a music streaming service is pleasant) was cross-loading and therefore excluded. Further, a conceptual error of the SI construct was demonstrated. EFA displayed an internal inconsistency of the construct in form of items loading in multiple components. Item SI1 (the payment of content creators by a music streaming service is fair) is not correlating with the items SI2 und SI3, which are considering aspects of social interaction through music streaming

services. Therefore, SI1 was conceptualized as a single-item factor under the name of Perceived Fairness (PF), while SI2 und SI3 were defined as a two-item factor under the name of Social Connectivity (SC). It must be noted that factors with less than three items are not considered meaningful and therefore not recommended. Since intrinsic social aspects of behavioral intention are particularly interesting to me, I decided to keep the two constructs anyways. Small coefficients below 0.5 were suppressed, resulting in additional exclusions of items (PU3, PU4, PEU1).

4.4 Model Correction and Alternative Hypotheses

As a result of the exclusion of variables, particularly the dependent variable Perception (P), a correction of the original research model must be made. Adapting to the new collection of factors the framework is conceptualized as shown in Figure 5.



*Two-item factor, **single-item factor.

Figure 5. Corrected research model with variables.

All original hypotheses can no longer be tested because of the elimination of the dependent variable Perception (P). Therefore, new alternative hypotheses are proposed in regard of the corrected conceptual model.

Code	Relationship	Hypothesis
H1-alt	PV → BI	Perceived Value (PV) is positively related to the Behavioral Intention (BI) to use a music streaming service in the future.
H2-1-alt	PEU → BI	Perceived Ease of Use (PEU) is positively related to the Behavioral Intention (BI) to use a music streaming service in the future.
H2-2-alt	PPV → BI	Perceived Price Value (PPV) is positively related to the Behavioral Intention (BI) to use a music streaming service in the future.
H2-3-alt	FC → BI	Facilitating Conditions (FC) are positively related to the Behavioral Intention (BI) to use a music streaming service in the future.
H3-alt	PF → BI	Perceived Fairness (PF) is positively related to the Behavioral Intention (BI) to use a music streaming service in the future.
H4-alt	SC → BI	Social Connectivity (SC) is positively related to the Behavioral Intention (BI) to use a music streaming service in the future.
H5-alt	PFX → BI	Peer-Effects (PFX) are positively related to the Behavioral Intention (BI) to use a music streaming service in the future.

Table 3. Alternative hypotheses.

4.5 Reliability and Validity of the Corrected Model

Based on the measurements obtained by the EFA, reliability was tested as well as convergent validity and discriminant validity. Reliability was examined using composite reliability. As shown in Table 4, measurements of all factors exceed the recommended value of 0.7. Reliability of the PF factor however cannot be measured because it's a single-item construct. Convergent validity of the variables was examined using factor loading and average variance extracted (AVE). As shown in Table 4, the factor loading of each item is above 0.5 but the construct of PV did not exceed the recommended AVE level of 0.5. Another reliability analysis was conducted using Cronbach's alpha to resolve this issue. Since the additional analysis did not present a solution to increase the AVE (e.g. by excluding further items), I decided to proceed with the low value. It must be noted though, that less than one-half of the observed variances in the PV items are attributed to their presumed construct, which is not recommended.

Construct / Item	Composit reliability	AVE	Factor loading
Perceived Value (PV)	0.813	0.424*	
PU1			0.660
PU2			0.657
PU5			0.641
PU6			0.586
PE1			0.807
PE2			0.520
Perceived Ease of Use (PEU)	0.789	0.654	
PEU2			0.875
PEU3			0.736
Perceived Price Value (PPV)	0.783	0.549	
PPV1			0.619
PPV2			0.827
PPV3			0.762
Facilitating Conditions (FC)	0.756	0.513	
FC1			0.593
FC2			0.812
FC3			0.726
Perceived Fairness (PF)	Not enough items	Not enough items	
SI1			0.802
Social Connectivity (SC)	0.749	0.599	
SI2			0.782
SI3			0.766
Peer-Effects (PFX)	0.899	0.748	
PFX1			0.851
PFX2			0.878
PFX3			0.866
Behavioral Intention (BI)	0.840	0.519	
P1			0.724
BI1			0.530
BI2			0.620
BI3			0.833
BI4			0.844

*Measurement below recommended value of 0.5.

Table 4. Reliability, AVE, and factor loading of the modified data sample.

To assure discriminant validity, the square root of AVE and correlations of the latent variables were examined. Each construct should exceed the correlations between that construct and all other constructs to confirm discriminant validity (Fornell & Larcker, 1981). As shown in Table 5, all correlations between variables are lower than the square root of the individual constructs, thus the discriminant validity is confirmed.

Additionally, the relationship between the independent variables and the dependent variable BI is shown by the correlation matrix in Table 5 (highlighted in gray). As displayed, the correlation of PV, PPV and FC with BI is highly significant at the 0.01 level, PEU and PFX are significantly correlated at the 0.05 level and PF and SC are not significantly correlated with BI. As before, I decided to proceed with the insignificant correlations to evaluate the influence of intrinsic social aspects in linear regression.

	PV	PEU	PPV	FC	PF	SC	PFX	BI
PV	.651							
PEU	.319**	.808						
PPV	.299**	.182	.741					
FC	.343**	.244*	.452**	.716				
PF	-.093	-.142	.106	-.041	.802			
SC	.278**	.073	.185	.016	.139	.774		
PFX	.409**	.196	.256*	.297**	.005	.367**	.865	
BI	.540**	.251*	.396**	.404**	.160	.181	.260*	.721

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

PV, perceived value; PEU, perceived ease of use; PPV, perceived price value; FC, facilitating conditions; PF, perceived fairness; SC, social connectivity; PFX, peer-effects; BI, behavioral intention.

Table 5. Diagonal elements are the square root of AVE; off-diagonal elements are the correlations. The correlation coefficients of the independent variables with the dependent variable BI are highlighted in gray.

4.6 Regression of the Corrected Model

To investigate the quantitative relationship between all independent variables and the dependent variable Behavioral Intention (BI) in the corrected model, linear regression was performed. The significance of each factor regarding the regression model was examined by using stepwise multiple regression. The results are displayed in Table 6.

It can be observed that the regression model is statistically significant ($F = 17.842$, $p < .001$). However, the R^2 -value only indicates a moderate strength of relationship, where 38.4% of the behavioral intention to use a music streaming service can be explained by the independent variables. Therefore, the ability to predict behavioral intention with this model must be considered moderate or even weak. Furthermore, the results show no problem of multicollinearity ($VIF < 2$) or autocorrelation, with a Durbin-Watson value ($DW = 2.027$) that demonstrates satisfactory independence of the standard residuals of the model.

Analyzing the path coefficients obtained by stepwise regression (Table 6), it can be observed that only three factors are statistically significant in explaining Behavioral Intention (BI). Perceived Value (PV) is the most important one ($B = .490$, $p < .001$), followed by Perceived Price Value (PPV) ($B = .325$, $p = .012$) and Perceived Fairness (PF) ($B = .689$, $p = .038$).

Hence, H1-alt, H2-2-alt, and H3-alt are confirmed by the empirical results. Perceived Ease of Use (PEU), Facilitating Conditions (FC), Social Connectivity (SC), and Peer-Effects (PFX) were not validated; therefore, H2-1-alt, H2-3-alt, H4-alt, and H5-alt are not supported by the model (see Table 7).

Independent Variable	Behavioral Intention					Model			
	B	SE	Beta	t	p	VIF	DW	R ²	F
(Consistant)	2.583	2.241		1.153	.252		2.027	.384	17.842**
PV	.490	.090	.487	5.445	<.001**	1.118			
PPV	.325	.126	.231	2.579	.012*	1.121			
PF	.689	.327	.181	2.108	.038*	1.029			

*p<0.05, **p<0.01; adjusted R² = .362.

PV, perceived value; PPV, perceived price value; PF, perceived fairness.

Table 6. Stepwise regression analysis summary for the dependent variable Behavioral Intention.

Hypothesis	Relationship	Expected sign	Supported
H1-alt	PV → BI	+	Yes**
H2-1-alt	PEU → BI	+	No
H2-2-alt	PPV → BI	+	Yes*
H2-3-alt	FC → BI	+	No
H3-alt	PF → BI	+	Yes*
H4-alt	SC → BI	+	No
H5-alt	PFX → BI	+	No

*p<0.05, **p<0.01.

PV, perceived value; PEU, perceived ease of use; PPV, perceived price value; FC, facilitating conditions; PF, perceived fairness; SC, social connectivity; PFX, peer-effects; BI, behavioral intention.

Table 7. Results of the corrected model and hypotheses testing using linear regression.

5 Discussion

Music streaming has become the most important way of music consumption as well as the most significant stream of revenue for the industry. This is due to the drastic change of music consumption and distribution caused by digitalization. Therefore, it is important to determine the drivers of behavioral intention to use a music streaming service. While previous research has investigated various aspects of behavioral intention regarding online music streaming, factors of intrinsic social motivation have not been fully explored yet, especially regarding social preferences like fairness concerns and concerns for the well-being of others. Based on the conceptual model of the VAM (Kim et al., 2007), this study empirically tested several constructs and their influence on music streaming intentions. In order to be able to take social aspects into consideration, the original model of the VAM was expanded.

The results demonstrate that only three of the seven independent variables are significantly related to the dependent variable. The variables that explain the Behavioral Intention (BI) to use a music streaming service are Perceived Value (PV), Perceived Price Value (PPV), and Perceived Fairness (PF). The empirical finding that PV and PPV represent significant predictors of BI in the context of music streaming is consistent with previous research. Multiple studies demonstrate the importance of Perceived Usefulness (PU) and Perceived Enjoyment (PE) (Amalina, 2019; Barata & Coelho, 2021; Chen et al., 2018b; Dörr et al., 2010; Fernandes & Guerra, 2019; Hamari et al., 2020; Wang et al., 2013) of which PV is composed. This means that consumers who perceive the offer of a music streaming service to be useful and/or enjoyable (and therefore valuable) are very likely to use such. Thus, it is important for music streaming providers to identify functions and aspects of their service which consumers perceive as beneficial in their daily life and further develop those functions. For instance, providers could further improve their tools to search for music, sorting algorithms, and recommendation options. They could also create more versatile playlists and better implement additional information about artists, for instance music videos and concerts to improve the performance and hedonic benefit of using a music streaming service. A popular feature of a music streaming service that increases the enjoyment and engagement of it is Spotify Wrapped. Every end of the year, an exciting summary of user's music history, top artists, favorite genres, and total minutes of music consumption is displayed in a fun and playful way. This feature is a good demonstration of an engaging way of using data.

The empirical finding of PPV being significant in the prediction of the BI to use a music streaming service is also consistent with previous research (Amalina, 2019; Barata & Coelho, 2021; Dörr et al., 2010; Hamari et al., 2020; Park, 2020; Wagner & Hess, 2013; Wagner et al., 2014). The data confirms that most respondents think that music streaming services provide good value for money. The advantage of using a music streaming service needs to be greater than the monetary cost to positively impact the intention to purchase a subscription account (Venkatesh et al., 2012). Therefore, to ensure a positive price value, music streaming providers should be aware of the trade-off between perceived sacrifice and benefits considered by their customers and offer realistic prices. However, the data also shows that some respondents who attest that music streaming services offer good value for money do not think that music streaming services are reasonably priced (PPV1). 17.8% of the respondents denied this statement while 12.2% even disagreed strongly. Pearson's correlation also displayed a significant correlation ($B=.245^*$, $p<0.05$) between PPV1 and the single-item factor Perceived Fairness (PF). This indicates that a significant number of respondents think that the pricing of a music streaming service is too low and therefore unfair, contradicting the result of Barata & Coelho (2021, p. 12).

The third variable that explains the BI to use a music streaming service is the single-item factor Perceived Fairness (PF). To the best of my knowledge, the empirical finding that Perceived Fairness (PF) significantly influences consumers' Behavioral Intention to use a music streaming service represents a new implication. The item of the PF construct proposes that the payment of content creators by a music streaming service is fair. 28.9% of the respondents disagree with this proposition, and 47.8% of the respondents even disagree strongly. This means that more than three-quarters of all respondents think that the payment of content creators by a music streaming service is unfair. It also indicates that consumers care about fair payment for artists and content creators and prioritize their well-being. This finding is consistent with previous research by Fehr and Schmidt (2006), who investigate other-regarding preferences in economics and behavioral game theory (see chapter 2.2.2). As Fehr and Schmidt (2006, p. 684) describe, the self-interest assumption, which is common in most economic and psychological models, leads to incomplete or even wrong explanations of phenomena under study. The empirical finding of this study supports this conclusion and demonstrates the meaningfulness of social preferences in the context of music streaming. Therefore, researchers and music streaming providers should be aware of its importance in the adoption decision phase of consumers, taking it seriously and acting accordingly. This means that researchers should always consider other-regarding preferences while investigating social behavior. They should also adapt existing research models to take social preferences into consideration. Music streaming providers should investigate the relationship between consumers' perceived price value and their fairness concerns regarding the well-being of content creators. They should then adapt their pricing accordingly so that consumers' Perceived Price Value is positive while also perceiving the (monetary) conditions for content creators as fair. Providing an offer in which both variables are satisfied would give a service an advantage over the competition.

The variables Perceived Ease of Use (PEU), Facilitating Conditions (FC), Social Connectivity (SC), and Peer-Effects (PFX) have not been found to statistically affect BI. It can be assumed that most people today have the skills and resources to use a music streaming service. Therefore, aspects of effort and facilitating conditions (like mobile internet access) have no significant effect on the BI to use a music streaming service. Furthermore, it can be assumed that music streaming services are not the preferred way of social interaction for most consumers. In a saturated market with numerous social media offerings, options for social interaction on music streaming platforms do not significantly affect the BI to use a music streaming service. Since most people use a music streaming service nowadays (94.1% of all respondents stated that they have used a music streaming service before and 88.2% of the respondents are current users of a music streaming service), the influence of peer individuals

or groups on the BI to use a music streaming service can be assumed to be minimal. Therefore, PFX do not significantly influence the dependent variable BI.

6 Limitations and Future Research

Like other empirical research, there are some limitations to this study that need to be considered. As discussed in chapter 4.3, the design of the questionnaire shows conceptual issues in the evaluation, resulting in a difficult data sample. Therefore, some corrections of the research model needed to be made as well as modifications of some factors. Additionally, some of the items needed to be excluded to assure reliability of the model. As a result, three factors were left with less than three items (PEU, PF, SC), which is not recommended. Perceived Fairness (PF) is even only composed of a single item. Therefore, the meaningfulness of the empirical results of this study must be considered as moderate. To further investigate the findings of this study, future researchers should adapt the proposed research model but use it with a more consistent and reliable questionnaire and a selection of more coherent items.

The scope of the study as well as the distribution of the participants also represents a limitation. The final evaluation only considered 90 valid respondents, which is not a lot considering the number of factors. Additionally, descriptive statistics display, that most of the respondents are male, relatively young, have a high degree of education, and are of German nationality. Most respondents stated that music is important in their daily life and more than half of them even stated that their job or study has something to do with music. Consumers who may be musicians themselves or at least have close contact with musicians in their daily work or study, may have a higher degree of fairness concerns regarding the well-being of artists and content creators. This must be considered when evaluating the empirical results. Therefore, to further investigate the empirical implications of this study, future researchers should conduct a survey with more participants and a broader field of participants.

7 Conclusion

The aim of this study was to investigate drivers of Behavioral Intention (BI) to use a music streaming service. To close a research gap aspects of social preferences should be explored in particular. Therefore, a research model based on the Value Acceptance Model (VAM) (Kim et al., 2007) with an extension to take social factors into account was created.

The empirical results show that Perceived Value (PV), Perceived Price Value (PPV), and Perceived Fairness (PF) are determinants of the Behavioral Intention (BI) to use a music streaming service. Other Factors were Perceived Ease of Use (PEU), Facilitating Conditions (FC), Social Connectivity (SC) and Peer-Effects (PFX) which were not found to have a

significant effect on consumers' BI. Therefore, three hypotheses could be validated while four were rejected.

The empirical finding of PV and PPV, being significantly affective regarding the intention to use a music streaming service, is consistent with previous research. The result of PF being a significant determinant of BI, however, represents a new finding, to the best of my knowledge. It shows that social preferences should not be overlooked by researchers and practitioners and their power should not be underestimated. Hence, the outcome offers a valuable insight and implication for providers of music streaming services as well as fellow researchers. By making providers aware of what is important to their customers, the result of this study can help improve the offerings of music streaming services and thus create a better environment for creators and consumers.

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