The Digital Music Market: a study of Brazilian consumers’ behavior

ABSTRACT
The convergence between technology, the Internet and music brought about great challenges to the recording industry worldwide. Despite digital music’s revenue growth, the music industry has declined significantly over recent years. To attract new customers and compete with other ways of getting music on the network, record companies and on-line music providers must figure out who their potential customers are. The goal of this study was to explore and describe the characteristics and behavior of digital music users, as well as of those who are willing to pay or unwilling to use this service, in order to fully understand this market’s context. These are the study’s main findings: 1) 88% of the sample of Brazilian Internet users are also digital music users; 2) their profile is significantly related to the profile of Internet usage (social networking and entertainment); 3) non-users fail to use digital music mainly due to lack of knowledge on how to do it; 4) 66.4% intend to pay for digital music; 5) they share one characteristic: they frequently shop online; 6) people who are willing to pay for digital music receive the difference between legal and illegal music, and do not value the Internet much. We hope this study will promote efficient, customer-oriented marketing actions.

Keywords: Digital music. Marketing. Consumer behavior.

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RESUMO
A convergência entre tecnologia, Internet e música resultou em grandes desafios para a indústria fonográfica mundial. Apesar do crescimento no volume de receitas de música digital, a indústria fonográfica vem diminuindo significativamente nos últimos anos. Para atrair novos clientes e competir com outras formas de aquisição de música na rede, as gravadoras e os provedores de serviços de música on-line precisam descobrir quem são e como se comportam seus clientes em potencial. O objetivo deste trabalho foi explorar e descrever características e comportamentos de usuários de música digital, bem como daquelas pessoas que querem pagar, ou que não querem utilizar tal serviço, a fim de entender, de forma mais ampla e segura, o contexto desse mercado. Por meio de técnicas estatísticas, foi possível descrever o perfil de usuários, não usuários e pessoas com intenção de pagar pela música digital. Essas foram as principais descobertas deste estudo: 1) 88% da amostra de internautas brasileiros são usuários de música digital; 2) seu perfil está significativamente relacionado com o perfil de uso da Internet (redes sociais e entretenimento); 3) os não usuários deixam de utilizar música digital principalmente pela falta de conhecimento de como fazê-lo; 4) 66,4% das pessoas têm intenção de pagar pela música digital; 5) que compartilham uma característica: compram com frequência pela Internet; 6) pessoas com intenção de pagar pela música digital percebem a diferença entre música legal e ilegal, além de atribuírem baixo grau de importância para a Internet. Espera-se que este estudo promova ações de marketing eficientes, orientadas para o cliente.


RESUMEN
La convergencia de Internet y la música ha dado lugar a grandes desafíos para la industria de la grabación musical en todo el mundo. A pesar del crecimiento de los ingresos de la música digital, la industria de la música ha disminuido significativamente en los últimos años. Para atraer a nuevos clientes y competir con otras formas de obtener música en la red, las compañías discográficas y los proveedores en línea de música deben averiguar quiénes son sus clientes potenciales. El objetivo de este estudio fue explorar y describir las características y el comportamiento de los usuarios de música digital, así como el de las personas que quieren pagar, o no desean usar este servicio, con la finalidad de entender plenamente el contexto de este mercado. Estas fueron las principales conclusiones de este estudio: 1) el 88% de los internautas brasileños es usuario de música digital, 2) su perfil está significativamente relacionado con el perfil de uso de Internet (redes sociales y entretenimiento), 3) los no usuarios no acceden a música digital, sobre todo por falta de conocimientos sobre cómo hacerlo, y 4) el 66,4% de las personas la intención de pagar por la música digital; 5) que comparten una característica: con frecuencia compras en línea, y 6) las personas que pagan por la música digital observan la diferencia entre la música legal e ilegal y le atribuyen un bajo grado de importancia a Internet. Este estudio pretende promover acciones eficientes de marketing orientados al cliente.


1 INTRODUCTION

Digital media is transforming the way people connect and relate, changing their behaviors and attitudes. Few hesitate to admit that the digital revolution is one of the most significant influences on human behavior ever. Since more and more people are connecting themselves to the Internet every day, we can observe that the world is changing – and consumer behavior is evolving faster than we can say the words “World Wide Web” (SOLOMON, 2008). The convergence of the Internet (computers/cell phones/TVs) and the widespread diffusion of high speed broadband has brought about a new revolution and awakened consumers’ attention to digital content (movies, music, books, etc.)
The increase of broadband distribution and the creation of online music services are affecting the way music is accessed and consumed. Before the Internet, consumers basically had two possibilities to access music: recording it from the radio or buying a diskette or CD. Copying was too time-consuming and often required the marginal investment of buying an empty cassette tape; moreover, the quality of a copy is always worse than that of an original. Due to hardware and software technological progress, copying music has become much easier, cheaper, and the quality of the copy is comparable to the original. Worldwide, there are over 400 legalized digital music services, of which 28 are in Brazil (INTERNATIONAL FEDERATION OF THE PHONOGRAPHIC INDUSTRY – IFPI, 2010). Through these services, one can download one’s favorite songs so as to listen to them later on an MP3 player or mobile phone. This market is valued at over US$ 4.6 billion and represents almost 30% of the global music market. Between 2004 and 2010, it grew over 1000% (IFPI, 2010).

Despite digital music’s revenue growth, however, the music industry in general has been declining significantly over recent years. One of the main reasons for this decline, according to IFPI (2010), is illegal sharing and massive downloading of music. Even if online music sales keep up an exponential growth trend, it will be insufficient, in most markets, to make up for declining physical sales. Album sales fell by more than 40% between 2005 and 2009 (IFPI, 2010). Overall, music digitalization has changed the way people listen to music. Diversification of delivery and sharing platforms may have increased music listening time, but unauthorized downloading of copyrighted content from the Internet has raised concerns for the international phonographic market. According to IFPI (2010), 95% of the music downloaded on the Internet is illegal or unpaid for. According to the same source, Brazil is the second highest-ranking country in the world as to how much music is downloaded without being paid for. All the progress offered in ways of consuming music has resulted in a huge difficulty to protect the copyright of digital albums. An example: the case of friends who consume music and share their MP3 files over phones, MP3 players and computers. There isn’t even any way to find out about these operations (POETSCH, 2011).

In many countries, mainly in North America and Europe, recording labels and publishers accumulate losses, causing problems to their respective economies. According to Frances Moore (IFPI, 2010), IFPI CEO, this is a crisis that affects not only the industry, but also musicians, jobs, consumers and an even larger creative field. This loss is especially due to the alternative paths that have been created for obtaining music, which are distant from the traditional way of doing so (BARROS et al., 2010) and directly affect consumer behavior as to music consumption. Often, in order to solve this problem, governments and record companies are forced to take drastic action to protect their economies and profits. And this results in consequences to society, such as strict laws, in order to curb the massive sharing of digital music. In other cases, record labels sue the owners of programs that allow for sharing of music on the Internet, as well as the consumers who access it themselves. On the other hand, authors have been critical of this behavior:

Ignorance, in this case, is that this notorious association may put an end to the thousands of Internet users who are avid for music and download millions of MP3 files per minute on P2P sharing networks such as Kazaa and Grokster, [...] and record companies do not realize that they could use their own market intelligence and try to discover the tastes and desires of these people who spend most of their time online, downloading music (BOBEDA, 2004).

Accordingly, some studies, as reported by British newspaper “The Independent” (SHIELDS, 2009), reveal how breaking beliefs
The key to developing online music services is understanding how listeners are going to consume their music, especially considering that “the Internet is a client-driving environment” (STYVÉN, 2007, p. 8).

Thus, in order to develop strategies and differentiate themselves from competition, online music sales services must recognize potential customers and identify similarities and differences between them (OZER, 2001). Currently, to study and understand consumers’ behavior is a prerequisite to companies’ success in the market (BLACKWELL; MINIARD; ENGEL, 2009). Although many think the reason behind the global music industry’s breakdown has to do only with piracy and with massive sharing on the Internet, digital music will be the main responsible for revenue over the coming years.

Since currently 95% of Internet music is illegal or unpaid for (IFPI, 2010), we can conclude that 5% of users pay for the digital music they consume. However, market and literature haven’t as yet much explored information about these users. What makes a user consume digital music and pay for it, since there are many opportunities to get it for free on the Internet? To discover more about this behavior is key to the music industry as well as to digital music service providers. For a better understanding of the digital music market, analysis should start from knowledge about online music consumers (WALSH et al., 2003). Based on this digression, we can define the problem of this research, thus expressed: What are the characteristics and behaviors of digital music users? To answer this research question, this study has the following goals: a) to describe digital music users; b) to identify reasons for not using digital music; c) to verify consumers’ willingness to pay for digital music; d) to identify the relationship between variables for the use of digital music and for the intention to pay for it. This research is relevant not only to providers of this service on the Internet, but also to record labels and music publishers, who need to identify behaviors about piracy supports the need for better understanding of consumers. People who usually illegally download tracks on the internet are, at the same time, those who most spend on music (SHIELDS, 2009). Mark Mulligan, responsible for research presented in the same newspaper, sheds new light on the issue. According to him, “people who exchange files are those interested in music. They are using sharing as a discovery mechanism. There is a generation of young people who have no concept of music as a paid commodity” (SHIELDS, 2009). We know that opinions differ. To some people, free downloading of music prevents piracy. To others, the higher the price of these services, the greater the incentive to piracy. And thus there is no end to the new arguments that come up, such as the one which argues that the greatest digital music consumers pay are the “pirates” themselves. The fact that iTunes has sold over a billion downloads over its first years of operation (APPLE, 2011) shows that there are consumers who are willing to pay for legal digital music, although copies are free and easily available. According to Steve Jobs, music fans, instead of wasting time on file sharing networks, trying to find desired contents, could go to iTunes and buy songs with a single click. There they would find reliability, guarantees and the ease of online purchasing (KAHNEY, 2008). Instead of punitive and repressive actions, online music sales can be a more effective alternative to combating piracy, and contribute to the sector’s renewal (SANDES; TURRI, 2008). Along with the possibility of converting a part of file sharers into buyers, there is potential growth for the online market (STYVÉN, 2007). That is, the global phonographic market currently faces the challenge of reestablishing itself and achieving results that are similar to periods prior to the Internet era. However, this search for meaningful results must necessarily include effective strategies to acquire new clients within a new business model: digital music. Music consumption is certainly affected by the Internet.
and characteristics of their target audience, the consumers of digital music.

However, despite growing interest in the field of psychology research as to consumer behavior, literature on digital music consumers’ behavior has not discussed these issues fully. Most of the work that addresses this topic is focused only on piracy. Some studies that address consumer behavior observe the implication of copying as to social variables or as to its economic impact on the international music industry. Thus, this study is justified by its relevance to digital music providers on the Internet and to record labels and music publishers; research concerning digital music consumers, that allows for identifying their characteristics and behavior, will doubtless contribute to the development of the music industry itself.

2 THEORETICAL FRAMEWORK

2.1 A panorama of research concerning the digital music market

Researchers have approached digital music consumers’ behavior in various ways. In assessing research contexts, the most frequent topics show greater concern for illegal sharing of music over the Internet. Still as to research goals, they focus mainly on finding the characteristics and determinants of people who use networks for sharing, as well as on proposing models for fighting piracy. Due to concerns about the increasing spread of illegal sharing networks (P2P), since nowadays they are the main threat to the digital content industry and have been causing financial losses (IFPI, 2010), the topic “piracy” is discussed by several articles: Coyle et al. (2009); Lysonski and Durvasula (2008); Plowman and Goode (2009); Sinha and Mandel (2008).

Illegal downloading of music is a constant problem for the music market, as highlighted by the article by Coyle et al. (2009). According to the authors, concern about the illegal transfer of music has become so controversial that the music industry, represented by the RIAA’s, launched a major effort to shut down servers that use illegal conduct in the trade flows of digital music. Accordingly, several authors point out that illegal downloading of music has become a relentless and unbridled activity, especially among college students who are in general not intimidated by more drastic lawsuits that aim at mitigating this activity (COYLE et al., 2009; KNOPPER, 2011; LYSONSKI; DURVASULA, 2008). Contrary to this approach, other authors state that it is not clear whether legal proceedings brought by the RIAA or the increased availability of services such as iTunes and Rhapsody (EASLEY; MICHEL DEVARAJ, 2003) are managing to weaken the use of illegal digital music (STYVÉN, 2010).

The decision to engage in music piracy may be preceded by a number of issues, says Coyle et al. (2009). Possible antecedents of piracy intentions abound. Thus, the authors propose a matrix to analyze the relative effects of piracy on decision, intentions and motivations, including ethics, economic profile and legal concerns, as well as consumer behavior and distribution issues. The rational theory of delinquency states that stakeholders weigh costs and benefits before committing a deviant act (STYVÉN, 2010). One of the analyzed articles’ research topic is customers’ intention to pay in comparison with online music prices, using a digital music distribution store as model (REGNER; BARRIA, 2009). Plowman and Goode (2009) also reiterate that other characteristics, such as perceived quality, can influence the decision to pay for digital music.

2.2 Goals of research concerning digital music consumers

Bockstedt; Kauffman; Riggins (2013) propose a model that takes into account aspects of the traditional music industry, both in the value chain and in the distribution network, and the characteristics of digital music, sometimes referring to customers’ creation of value. The model highlights changes in market structure from the perspective of the players in the music
industry value chain. Swatman, Krueger and Beek (2006), on the other hand, provide an empirically based analysis of the evolution of business models on the Internet, specifically in the digital content market, with particular focus on the possibilities of cooperation and competition within the digital music market.

To investigate determinant variables that are relevant to the exchange theory within the digital environment, including economic, legal and ethical aspects of digital music consumers’ behavior, was the focus of research by Coyle et al. (2009). This determinants matrix features numerous interrelated factors and assesses the decision-making process concerning more contextual music piracy. The authors assess the piracy trend based on indirect (willingness to pay and the legal alternative) and direct (such as the preference for piracy, for example) measures. Sinha and Mandel (2008) also focused on investigating the determinants of tendencies towards piracy. If measured directly or indirectly, the tendency towards piracy depends, in varying degrees, on three main factors: positive incentives (for example, the functionality of the legal site), negative incentives (for example, the perception of the risk in piracy), and consumption characteristics.

Another line of research identified is the one that aims at analyzing guidelines and attitudes towards piracy and its impact on ethics. The work of Lysonski and Durvasula (2008) also highlights ethical scenarios as a way of understanding the reasoning of users in illegal downloading. To explore the intention of illegally downloading music from the Internet, focusing on the perception of quality and cost in the context of first-time (those using it only a little) and advanced (those who use it very often) users was also the purpose of Plowman and Goode’s study (2009). In the same line of research, an article by Sinha and Mandel (2008) explores the factors governing consumers’ willingness to commit piracy of digital products such as, for example, a digital music strip.

Another aspect addressed in research of the digital music market was analysis of digital music prices in consumers’ willingness to use it. Through laboratory research, using a virtual digital music store, Regner and Barria (2009) analyzed how much a customer pays, on average, for digital music. The authors also analyzed what makes a customer pay more than the minimum required, within a service model in which customers have freedom of choice. Finally, we can also mention the article by Styven (2010), aiming to test a research model and carry out segmentation analysis, based on the involvement of music, in order to understand the relationship between the musical involvement and preference for tangible music formats.

2.3 Contributions of analyzed research

In order to identify contributions to the field of digital music consumers’ behavior, we present the following results and also the practical and theoretical implications of the aforementioned research.

a) Market changes: the research offered a perspective on the evolution of the music industry. Interpretations based on value chain analysis, market structure characteristics and the different perspectives of each player in the recorded music market led to consideration of a number of propositions that characterize possible changes in the market in the future (BOCKSTEDT; KAUFFMAN; RIGGINS, 2013). Market analysts and industry experts often point to the inevitability of the music industry finding new business models to replace traditional models used so far and thus generate sustainable revenues, in the future, for suppliers of digital music (STYVÉN, 2010). Swatman, Krueger and Beek (2006) state that companies should
focus on their core competency. There are two groups of promising business models on the Internet, according to these scholars: (1) business models that integrate the creation, acquisition, value addition and digital distribution of content with the help of a profitable software platform and (2) business models that focus on their core competencies and find the right partners to support the strategy. So, while it is not possible to predict precisely how the digital music market will operate in the future, studies offer a number of insights that give rise to further investigation (BOCKSTEDT; KAUFFMAN; RIGGINS, 2013).

b) Piracy: the results of research suggests that music piracy has evolved from an ethical issue that was considered mild to more serious and complex deviant behavior (COYLE et al, 2009). Moreover, the results of Lysonski and Durvasula (2008) suggest that downloading continues at a fast pace, nowadays driven by the strong belief that it is not ethically wrong. Fear of consequences does not seem to have any impact on the propensity to download illegally. The efficiency of appealing to guilt, as considered by the RIAA, is questionable, given the findings of the study. The results of Lysonski and Durvasula (2008) indicate that there is a significant negative correlation between intentions of illegally downloading and punitive consequences. Kwong and Lee (2002) also found that laws can be a major force to deter CD piracy in Hong Kong. On the other hand, the results of other studies (PLOWMAN; GOODE, 2009; SINHA; MANDEL, 2008) suggest that current efforts based on the law to deter illegal downloading of music online are not effective. Based on three studies, results suggest that negative incentives are a strong impediment to certain consumers, but may actually increase the tendency towards piracy in others. On the other hand, positive incentives such as improved functionality can significantly reduce tendencies towards piracy among all segments of consumers surveyed. The threat of embarrassment did nothing to increase their intention to pay for legal music (or, correspondingly, to reduce their piracy intentions) (SINHA; MANDEL, 2008).

c) Prices: when analyzing the results and contributions of research on the subject, important general findings were identified. Prices were a particular variable amongst the studies. The study of Plowman and Goode (2009) notes that the quality of music is an important factor for heavy-users (digital music superusers) to adhere to paid services, but for light-users (users who do not use digital music frequently) quality is not decisive and prices are the really significant part. Therefore, these results emphasize that prices and quality of music are the most important factors affecting the behavior of individuals when downloading music. According to Swatman, Krueger and Beek (2006), online retailers must develop competitive pricing strategies and offer easy access to digital music consumers. To bring users of illegal sharing networks who think that prices per downloaded music are too high, attractive business models according to the characteristics of consumers must be developed. Chu and Lu (2007) found that online music providers need to identify and target their customers and offer attractive prices for each segment (LYSONSKI; DURVASULA, 2008). The observed pattern of consumer behavior, of not voluntarily paying for digital music, can be explained by a sufficiently high level of social preferences (REGNER; BARRIA, 2009).

d) Practical implications: the main practical implications identified are the insights
that the studies provide to managers, businesses and users concerning specific topics researched, allowing greater understanding of the phenomena occurring in the digital music market. Considering the specific implications of each article, several factors can be extracted to assist players with questions referring to the digital music market. The research provides an explanatory perspective on the emergence of a new market and identifies potential drivers for value creation (BOCKSTEDT; KAUFFMAN; RIGGINS, 2013; COYLE et al., 2009; REGNER; BARRIA, 2009; SINHA; MANDEL, 2008; SWATMAN; KRUEGER; BEEK, 2006).

Research results (SINHA; MANDEL, 2008) presented the smaller likelihood of users downloading illegal digital music, provided there were services with resources and quality, that is: extensive catalogs of music, availability of extra content such as rare recordings, live concerts and downloading of ringtones and videos.

The results of the study by Coyle et al. (2009) suggest that using lesser known artists, rather than recognized stars, to explain how the illegal sharing of digital music affects the market negatively, may be more effective in combating piracy.

The Internet has allowed consumers to listen to songs before they decide to buy them, which reduces the likelihood of purchasing artists’ full albums (KLEINSCHMIDT, 2007). This change affected the industry economically; thus, it was not just a question of piracy, as most studies suggest (STYVÉN, 2010). Studies by Styvén (2010) also found that it is not necessary to eradicate physical formats and that they are meeting the needs of different consumers. SWATMAN, Krueger and Beek (2006) reveal that more and more senior citizens are using the Internet in Europe and that they are a promising target group for online content providers.

e) Impacts on other creative industries: regarding results, practical and theoretical contributions, we found that the studies applied to digital music consumers’ behavior are also useful for analysis by other industries, especially by the information market that involves entertainment (BOCKSTEDT; KAUFFMAN; RIGGINS, 2013; PLOWMAN; GOODE, 2009). The fast-growing movie download market has many similarities with the digital music market (STYVÉN, 2010). The traditional market of physical CDs and DVDs is also moving on from its current situation to another future situation which is as yet unknown (COYLE et al., 2009; PLOWMAN; GOODE, 2009; REGNER; BARRIA, 2009; SWATMAN; KRUEGER; BEEK, 2006). Digital movie downloads offer the same interface and user experience as traditional DVD and VCRs.

Bockstedt; Kauffman; Riggins (2013) state that, just as digital music, digital movies are easily reproduced and transferred, so the trends in the film industry will follow the same paths of the music industry (SINHA; MANDEL, 2008).

Plowman and Goode (2009) suggest that individuals they interviewed indicate similar beliefs about online music downloading, movie downloading and piracy software. According to the suggestions of Bhattacharjee and Sanders (2003), effective strategies used to download music could also be applied to downloading movies and piracy software. Therefore, knowledge acquired in this research can be applied to other digital products with characteristics that are similar to digital music.

3 METHOD

In this paper, the method employed can be classified as quantitative, since it seeks to establish the frequency of characteristics and behaviors among consumers; exploratory, since it helps to develop a more precise formulation of the problem referring to digital music consumption;
and descriptive, since it tries to obtain the profile of consumers and discover or verify the relationships between variables.

At an early stage of this work, the goal was to explore the topic based on a literature review concerning consumer behavior and characteristics, in order to obtain data to prepare the questionnaire. International research about digital music consumers’ behavior was used as basis for this work.

The results of this initial effort allowed us to select 48 variables. These variables were used to prepare the next phase of the questionnaire and were grouped into four different fields: 1) a set of sociodemographic questions about age, gender, marital status, geographic location, occupation, income and education; 2) a set of questions about behavior concerning Internet and technology; 3) a set of questions about the consumption of digital music; 4) a question on the reasons for non-use. To measure the characteristics and behaviors of digital music consumers, a structured, self-managed online survey was carried out among Brazilian consumers. To this end, a questionnaire was created using the SurveyMonkey tool.

Before beginning research, the questionnaire was pre-tested with postgraduate Management students and industry experts, in order to identify and eliminate potential problems (MALHOTRA, 2008). Therefore, we interviewed a total 12 people who were invited to fill in the questionnaire and to suggest changes in grammar, layout, content, or to point out adjustments, if they were necessary. This step proved useful to improving the wording of some questions, and also contributed to minor revisions in the text and in formatting of the data collection instrument.

In the next phase of research, for data collection, we used the non-probabilistic “snowball” sampling technique. In this type of sampling one initially chooses a random group of respondents. After they answer the survey, they are requested to identify others who belong to the target interest population (MALHOTRA, 2008). The current research was launched in September, 2011 and made available at http://www.surveymonkey.com/s/ea-ufrgs-mercadamusicadigital for 31 days (from 16.09.2011 to 21.10.2011).

The “snowball” technique, alongside social networks, proved to be a dynamic and extremely efficient configuration for data collection. This procedure was convenient not only for the considerable amount of responses, but also the geographical coverage that it provides. To have an idea of this scope, the state of Piauí ranked fourth in the number of responses (11); other states from the Brazilian North and Northeast also offered respondents: Bahia (2), Ceará (2), Rio Grande do Norte (2), Alagoas (1), Amazonas (1) and Rondônia (1). In sum, 574 people responded to the survey. Incomplete questionnaires were excluded from the assessment, resulting in a final sample of 512 individuals.

Following the preparatory phase, data was analyzed using the SPSS® statistical package. To meet research goals, statistical tools such as frequencies, averages and standard deviation were used – alongside comparative techniques such as chi-square, Student’s t test, logistic regression analysis and principal component analysis (PCA). Other multivariate ANOVA type techniques were also used: a set of questions (variables) are globally analyzed, so as to try to summarize opinions, characteristics or behaviors (FREITAS; MOSCAROLA, 2002), or, according to Malhotra (2008 ), to study the differences between the averages of two or more populations. These techniques are appropriate to examine (I) the differences, (II) the magnitudes and (III) the relationships between variables.

4 RESULTS

Preliminary interpretation of the data starts by applying descriptive statistical techniques such as frequency distribution, average and
standard deviation in the case of interval variables (MALHOTRA, 2008). Before preliminary analysis, the sample must be characterized – as can be seen in this section –, based on variables with additional information. The sample’s age profile is between 18 and 80 years old (A = 33.73, SD = 12.78), and 54.1% are female; 53.9% of respondents are married and most of the sample’s income is higher than R$ 5,000.00 (46.7%). As to schooling, we identified a high level of education, since 73.8% stated they were at least graduated from university. Variables state and region intend to identify the geographical location of the people who answered the survey. The state of Rio Grande do Sul represents over half the sample (83%), followed by São Paulo (4.3%) and Rio de Janeiro (2.5%). Most of the people who answered the questionnaire are managers (19.7%), followed by students (8.6%) and teachers (7.4%). The field other, despite being more representative, presented a high dispersion of professions (44.3%). For presentation of this preliminary analysis, data was separated into two groups, that of the digital music users and that of the non-digital music users, as can be seen below.

When answering the question “Have you ever used your computer or mobile phone to play digital music files such as MP3 files? Or to listen to the radio on the Internet?”, 55.2% of respondents revealed that they use digital music frequently and 33.3% do so too, but infrequently, totaling 88.5% of the responses. Inversely, 11.5% of people claimed not to play music over the Internet, but, among these, 6.6% are interested in doing so in the future. The first important result of this research concerning digital music consumers’ behavior is the large proportion of Internet users who have already had some sort of experience with digital music: 88.5%. Results allow us to infer that, as well already being very normal, listening to music on digital media can become even more popular, since 42.2% of people who still don’t use digital music said they will possibly do so in the future.

Among the users who reported using digital music frequently or infrequently, the source most used, with the highest average for obtaining music, was listening to music/radios online (3.29), followed by sharing networks (3.06) and copies of CDs, USB flash drives or Bluetooth (2.97). The smallest frequencies of use are in the field other (1.37), online paid music stores (1.54) and on the mobile phone (1.63). In the field other, other media such as AppleTV and downloading from YouTube were mentioned.

Listening online (streaming) has become an increasingly common habit among Brazilians. The popularity of online radio is made evident by the ease in finding services on the Internet. In fact, all one has to do is type the word “music” in Google so as to have instant access to any complete song, with and without advertising. Through digital music services online, one can access huge collections, complete and in an organized way (titles, composers, etc.). Another factor that encourages the increasing demand for music online, without having to download, is reduction in storage space. Depending on the user’s digital music collection, it can occupy almost the whole capacity of the computer or MP3 player. This problem does not occur only with online music, since every library has been archived on the service provider, and all that is necessary is an Internet connection to play it. Next, there are sharing networks (P2P), such as Kazaa, eMule and Bittorrent (3.06). In research in international journals, the use of sharing networks (P2P) usually appears in second or third place. Although it is not ahead of streaming, it is still widely used.

This media resists, because there is a need for ownership of music by users. Digital music downloaded to the computer can be archived permanently. To share music through copies of CDs, flash drives and Bluetooth ranked third within the sources who obtained approximate frequency to three on the same scale. This occurs due to the following facts: the value of
portable storage units (flash drives) decreases with increasing time and storage space, inversely, that is, more and more people buy flash drives and can store numerous files, especially music files.

The declining prices of mobile phones with advanced features has also helped the sharing of digital music. Sending a music file to another mobile phone, for example, can be done in seconds. As people acquire knowledge to use these resources, the greater the adhesion to these digital music sources. When asked about their perceptions concerning digital music as to learning, illegality and quality, most users stated that they learned to use it alone (49.1%). The vast majority believes that it is not illegal (61.7%) and also finds the quality of music important (89.4%). For users who have extensive experience on the Internet or on computers, learning to use or obtain digital music by oneself is common. However, with the high spread of information through the network, it has become very easy to access text, video or audio tutorials. There are approximately over 9 million results in Google, in Portuguese, for the words “how to download music”. Most of these results teach, in detail, what has to be done to listen to music online. Among the reasons why some respondents reported never using digital music, the most important cause was lack of knowledge. A good part, 40.3%, just does not know how digital music works. Next, comes lack of available time to deal with digital music (24.7%), followed by other reasons, up to the smallest part (1.1%), who did not know this type of service existed.

The goal, now, is to assess the differences between general Internet users who intend to pay for digital music and those who do not intend to so do, according to their characteristics and behaviors. The result, and an amazing one at that, is the amount of people, regardless of whether or not they use digital music, who would be willing to pay to listen to music or download from the Internet: 66.7% of Internet users said they intend to pay for music online, while only 33.3% said they would be unwilling to pay anything (R$ 0.00).

We assessed the possible predictors of digital music use based on a model. To this end, a logistic regression analysis was carried out (Enter method), specifying use of digital music as the dependent variable (user = 1; non-user = 0) and the other model variables as potential predictors. The results showed statistical significance for model $x^2 = 95.65$, $gl = 13$, $p < 0.001$. The set of dependent variables correctly classified 92.6% of individuals as users or non-users of digital music. However, the only predictors that were statistically significant were the Internet entertainment usage profiles, $B = 1.27$, $p <0.001$, and relationship, $B = 0.34$, $p = 0.005$. Both variables were positively associated with the dependent variable. This indicates that, for this sample, the higher the score of an individual in the entertainment and relationship profiles, the more likely the individual is to be a user of digital music. A second logistic regression, using only these two predictors, also presented a high rate of correct classification of individuals (90.2%), $x^2 = 70.45$, $gl = 2$, $p < 0.001$. In short, the higher the intensity of Internet use by a user for entertainment and/or relationship purposes, the greater the chances of this subject also being a digital music user.

We assessed potential predictors of intention to pay to listen to digital music based on a model. To this end, a logistic regression analysis was carried out (Enter method), specifying the intention to pay to listen to digital music as the dependent variable (stated that would pay = 1; stated that would not pay = 0) and the other model variables as potential predictors. The results showed no statistical significance for the model $x^2 = 23.22$, $gl = 17$, $p = 0.142$. Thus, a second model was analyzed, adding predictor variables value attributed to the Internet and opinion about illegality. This time, we used the method Forward: conditional, allowing only predictors with one significant contribution to be kept in the model. The model was statistically
significant, $x^2 = 61.33$, $gl = 3$, $p < 0.001$, allowing for the correct classification of 68.5% of the individuals in the categories of the dependent variable (individuals intending to pay and with no intention to pay). Three predictors were kept in the model: frequency of purchases on the Internet $B = 0.35$, $p < 0.001$, value given to the Internet, $B = -0.41$, $p = 0.013$, and considering it illegal to download digital music, $B = 1.57$, $p < 0.001$. The variables frequency of purchases on the Internet and considering it illegal to download digital music, therefore, proved to be positively associated with the intention to pay to listen to digital music, while value attributed to the Internet was negatively associated to it. The assessment of possible predictors of intention to pay to listen to digital music can be summarized as follows: those who reported buying on the Internet were also more favorable to buying digital music; those who proved to think that downloading digital music without paying for it is illegal were more favorable to pay for digital music; and those who reported attributing less value to the Internet were more favorable to paying for digital music.

5 DISCUSSION OF RESULTS

Over 88% of the sample of Brazilian Internet users in this study are digital music users

Digital music has already occupied its place in the Brazilian market. The absolute majority of Internet users, according to the sample, said they had already used their computer or mobile phone to play digital files or to listen to the radio on the Internet (88.5%); 62.3% do so very often, and more than half of those who do not use digital music want to use it in the future. When compared to research on the use of digital music in Europe (INDICARE, 2005), Brazil has becomes a leader in the use of digital music, as shown in Table 1, below:

**TABLE 1** – Comparison between number of digital music users in brazil and in european countries

<table>
<thead>
<tr>
<th>Have you ever used your computer or mobile phone to play digital music files such as MP3 files? Or to listen to the radio on the Internet?</th>
<th>Yes, I frequently do so; and Yes, I do so, but not very frequently.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>88%</td>
</tr>
<tr>
<td>Sweden</td>
<td>80%</td>
</tr>
<tr>
<td>Spain</td>
<td>75%</td>
</tr>
<tr>
<td>Europe</td>
<td>69%</td>
</tr>
<tr>
<td>Germany</td>
<td>68%</td>
</tr>
<tr>
<td>Hungary</td>
<td>68%</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>65%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>64%</td>
</tr>
<tr>
<td>France</td>
<td>63%</td>
</tr>
</tbody>
</table>

**Source:** The authors
We can state, thus, that the use of digital music is already a habit that has been incorporated into the routine of Brazilians. The off-line era is over so as to make way for online. With a dwindling number of physical stores, people have migrated en masse to their MP3 players, be they mobile phones, televisions or cars with digital music players.

The increasingly widespread habit of listening anywhere and at any time, even while performing other tasks such as working, studying, cooking, driving – to name a few – makes listening to music a symbolic contemporary behavior (CASTRO, 2005, p. 32).

Even facing no availability of legal services and considering technical difficulties, in some cases, digital music is seducing users with its versatility and portability. Why take a CD box with a hundred songs in the car, if you can carry over 5,000 songs with a 5 cm flash drive? Brazil is the country where people most spend time connected to the Internet; 87% of Brazilians access the web weekly (IBOPE, 2011) – and it is also one of the countries where music is intrinsically connected to their own cultures. Therefore, it is only natural that the mixture of these two elements promote high levels of adherence to digital music. Digital music, albeit illegal, in most cases, is available to any user – all one needs is a computer and Internet access –, which eases its increasing penetration in Brazilian everyday life.

The main reason for the non-use of digital music is lack of knowledge

Despite the many different ways of listening to music on the Internet that appear in Google results, as seen previously, most people do not use digital music because they don’t know how it works (40.3%) – that is, they claim lack of knowledge about where and how to get digital music. This Internet user does not possess sufficient technological ability to take advantage of new features such as digital music. This is an interesting field of research because there are very few studies about it. Lack of time was the second most mentioned reason by respondents (24.7%). Walsh et al. (2003) suggest that time pressure can affect different stages of consumers’ decision-making process, since it can cause mental overload or confusion. The services currently available are too complicated, since they require software to be installed and, therefore, require a lot of users’ time. In this case, more intuitive, user-friendly services have to be created, allowing music to be listened to quickly and easily, in order to meet the needs of this portion of non-users. These people do not explore the Internet enough to find solutions to their problems. This shows that they are more likely to the professional use of the web (e-mail, networking, etc.), according to what was found in research results concerning Internet users’ profiles as to the use and non-use of digital music. It is evident here, too, that tutorials are needed to facilitate the entry of new digital music users.

Internet users intend to pay for digital music

Buying attitudes and intentions are important predictors of purchases (NOTANI, 1997). Willingness to pay is commonly defined as the maximum price that a buyer is willing to pay for a quantity of a product or service (WERTENBROCH; SKIERA, 2002). Thus, it can be considered essential information for business models for companies aiming at implementing price optimization policies. Moreover, perception of the value of digital music can be a key factor in explaining why people download music, or stop using digital music. How many Internet users intend to pay for a digital song? Over 66% of the people who answered
the survey (66.4%) reported that they would be willing to pay for a single song via the Internet. This result is relevant because, despite the large number of sharing networks and the widespread use of illegal distribution facilities, Internet users are still willing to pay for digital music. Lin, Hsu and Chen (2009), who investigated the intention to pay for digital music from the perspective of the Theory of Planned Behavior (TPB), indicate that willingness to pay increases when there is knowledge that unauthorized downloading music is illegal. Other factors, such as affordable prices and websites that are easy to use, can also positively affect the willingness to pay for digital music. According to the survey results, for the sample of respondents, the most appropriate price for a single song, on average, is approximately R$ 1.09.

The type of Internet use influences the use of digital music

When analyzing the activities most commonly carried out on the Internet, its use for relationship and entertainment purposes is significant. These variables were significant for digital music users from a statistical point of view (entertainment, B = 1.27, p < 0.001, and relationship, B = 0.34, p = 0.005). People who talk to friends or relatives on social networks and communicators such as Facebook, Orkut, Twitter and MSN also often use the Internet to listen to music. After they discover a new song, usually on the radio, on TV or through a friend, young people download it from the Internet and save the file to their computers. The Internet and social networks are essential media when novelty seeking (MTV BRAZIL, 2010). Sixty percent (60%) of Internet users have been using social networks for three or more years (IBOPE, 2011). In addition to relationships with other people, these Internet users seek entertainment on the web, whether to watch movies, download videos, games or programs. The web has become almost the main form of entertainment in Brazil. Based on analysis of the degree of relationship between variables, we can observe that the greater the use of the Internet for these purposes, the greater the penetration of digital music in everyday Brazilian users’ lives.

The frequency of purchases on the internet compared to the intention of paying for digital music

The relationship between the intention to pay for digital music was statistically significant when compared to the amount of times that Internet users made online purchases (B = 0.35, p < 0.001). This means that people who are more comfortable purchasing goods or services on the Internet are also more willing to pay for digital music. Several recognized brands in the retail market have taken up the Internet as their main point of contact with consumers; this made it easier for users to have their first experiences with buying on the internet. New payment methods are emerging (PayPal, PagSeguro, etc.) that offer users greater security when purchasing. Because it is a digital good, online music is directly linked to these two factors. To buy digital music it is essential to use the Internet; without e-commerce one cannot do so. Therefore, the higher the e-commerce market in Brazil and the higher the online payment options that promote safety for the user, the greater the adherence to digital music.

Perception of the legality of digital music compared to the intention of paying for it

Downloading music may be illegal when unauthorized. It may be legal, when paid for directly or indirectly, or distributed for free by
their authors. The perception of people regarding the legality of digital music demonstrates how most users understand that digital music can be obtained facing payment or not. Almost 62% understood that digital music is not illegal. This fact is ratified in the 44 questions answered in the other field. Almost everyone who made observations in the other field revealed that this payment issue varies depending on the source from which music is obtained. Digital music, in itself, is not illegal; illegality is in the media from where it is acquired. We conclude that users know that there are legal and illegal ways to obtain digital music, so the act of using illegal digital music, for most users, is conscious. What must be mentioned, according to the results of comparative analysis, is that those Internet users who believe that downloading music without paying for it is illegal are the same ones who are willing to pay for digital music. The interpretation of this relationship can be thus: these are people who realize that not paying for digital music services may be illegal and so they want to pay. However, there is a controversial side: despite realizing the illegality of the act and want to pay for it, Internet users indicate online music stores as the least used source of digital music.

Value attributed to the Internet and its relationship with the intention to pay for digital music

According to research results, those who intend to pay to purchase music on the Internet attribute little value to the latter. That is, people who do not value the Internet, or who believe that the world wide web is not decisive to their daily activities, seek to pay to listen to music. They want to meet their needs quickly and efficiently, without the commitment of having to learn how to master new technologies. From that, we can infer that people who are not too familiar with computer sciences prefer to pay for services, to make the whole process easier. They see the Internet as a means and not as an end. Inversely, there are Internet users who believe that the web is crucial; these are heavy-users of the web and, therefore, easily learned how to use its resources and know how to take advantage of ways to get free or illegal music.

Preliminary analysis of the characteristics and behavior of digital music consumers, added to comparative analysis of segments and variables that affect them, allowed for the following characterization:

Profile of digital music users: these people represent most of the sample and are different from non-users because they have more experience with the Internet and computers, and are not people who started using computers recently. They know the Internet so well that they feel free to buy on the web. They usually access the Internet at home or at school/university. As well as accessing it from these places, we also observed that digital music users connect more often to the Internet via their mobile phones. To them, the Internet is important to entertain and interact with friends or family. The higher the relationship of these users with social networks – instant messaging, etc. –, the greater the chance that they are also heavy users of digital music. These users have give up buying CDs for at least over 12 months, since they already have their MP3 players or their smartphones, enabling them to take virtually their whole library with them. They can be considered the heavy-users. They learned how to use digital music alone and consume music with quality, very often and in many ways, mainly through online radios, without the need to download. They use sharing networks (P2P) and also share music with friends and family through flash drives, CDs or Bluetooth. In general, they do not use official/legal stores, but they believe that it not illegal to obtain music in other ways; many of them intend to pay for music. In social and demographic terms, digital music users are young people, aged
between 18 and 35, with an income greater than R$ 2,500.00 and are not in a relationship with another person, that is, in most cases, they are single. Gender, educational level and profession are characteristics that do not influence the use of digital music.

**Profile of non-users of digital music:** people do not use digital music because they don't know how it works and do not have enough time to learn. Despite the lack of interest of some, most non-users do intend to use it one day, provided they have sufficient equipment to play digital music. Although the time of their relationship with the Internet and computers is practically equal to that of digital music users, they do not buy on the web very often. They prefer the professional use of the world wide web and give less preference to personal issues such as relationships and entertainment. They access the Internet frequently at home and at work. They still want to buy CDs and do so more often than the digital music users, since, in general, they do not possess MP3 players or smartphones. They are in relationships and are highly educated. In terms of age, they are older than digital music users, focusing on the 44-plus age group.

**Profile of people who intend to pay for digital music:** people who are not very young, nor very old (at intermediate age groups) want to pay for digital music. Most are willing to spend an average R$ 1.09 per music obtained from the Internet. They like to buy on the web, an aspect that proved to be the most decisive to the intention for paying for digital music. They tend to have higher speed Internet and to use the phone frequently to access the web. They realize that digital music is illegal when obtained from unauthorized sources. We also observed that, in this profile, the smaller the value attributed to the Internet by people, the greater the chance of them becoming users of paid digital music, indicating that this type of person wants to pay for a service to make obtaining digital music easier, without requiring technical knowledge of the Internet or computers to do so.

6 **FINAL CONSIDERATIONS**

This study aimed at identifying the characteristics and behaviors of Brazilian digital music users through a survey which combined exploratory and quantitative aspects. The exploratory aspect allowed us to identify, at an early stage, through literature reviews of papers from various countries, the main variables that make up digital music consumers’ behaviors, to then quantitatively apply them to the Brazilian market. The research question was answered and the purpose of the study attended. Thus, the specific objectives were also achieved:

*To describe the profile of digital music users:* Results obtained from this research allowed us to describe the consumption behavior and habits of digital music users. Brazilians are big users of digital music and their profiles are different from that of non-users;

*To identify the reasons for not using digital music:* when asked about the reasons for not using digital music, Internet users claimed not knowing how it works, clearly reflecting lack of knowledge about the ways of obtaining music. This fact reiterates the need for more intuitive and simplified services;

*To verify consumers’ willingness to pay for digital music:* most Internet users (66.4%), whether or not users of digital music, are willing to pay for it. This is significant information which offers new perspectives to the music industry, since it is overrun with piracy;

*To identify the relationship between the variables for use and intention to pay for digital music:* the variable that was most significant for the use of digital music was purpose of the use of the Internet (entertainment and relationship). The main variables that affect the intention to pay for digital music were: the habit of buying on the Internet, the perception of the illegality of digital music and the value attributed to the Internet by the user. These variables are the basis for defining the target audience.
In general, we can conclude that the digital revolution has brought about significant changes in consumer behavior. This fact is inferred through these research results: 88.5% of respondents said they use digital music. The old ways of listening to music, such as vinyl, cassette and CDs, have now given way to online radio, sharing networks and USB flash drives. Still, despite this scope, there are still people who do not use digital music because they lack the knowledge to do so. The range of users is very large, so one must pay attention to the digital music market. People want music and what is most important fact for those who want to profit from this business is knowing that people are willing to pay for it.

Through an inference about the population of Internet users, used in this study as to digital music users (88.5%), we reached the number of 68 million people using digital music. If we consider the people who claimed the intention of paying for it (66.7%), we reach 45 million people wanting to use the service and willing to pay for it. To go further, we can estimate the size of this market: with a ticket-average of R$1.09 per song (weighted average of the values presented among the research options), with an average monthly consumption of five songs per person, we find a potential market estimated at R$3 billion and a half per year. It is possible that the music industry’s crisis scenario will change. There are a great number of Internet users intending to pay for digital music. But everything will depend on how the players in this market are going to behave facing consumers. Using the variables and the profiles of these potential customers will be decisive to the revival of this industry.

This research not only affects the music industry and online service stores, who need to profit in a market taken by uncertainties. It also offers a basis for the whole creative industry, which, soon, will be faced with the same challenges. As well as listening to music, the way we read books, magazines, newspapers and watch movies is changing – or has already changed.

To investigate the behavior of digital music consumers allowed us to find differences and similarities between the segments, which bring about the need for different approaches that are adapted to each profile. Moreover, the study allowed us to observe the importance of research as a tool for problem solving. From the academic point of view, this paper discussed the relationship between consumer behavior and the Brazilian use of digital music. It can be used as a basis for insights in the fields of marketing and technology. Moreover, it brings new approaches, differently from other studies that address the topic of digital music with a specific focus on piracy and on the intention to pay for the former. Here there are more variables, such as, for example, the reasons for not using digital music. The data collection technique can be the basis for any research, allowing to predict the amount of answers according to each social network used.

To ensure the continuity of this study, we suggest types of research involving the following topics: a) research concerning users of paid services: companies in this field may carry out the same study focused on users of paid services, thus providing additional relevant information, since these are users who, besides having the intention to pay, in fact do so; b) a comparative study of the behavior of users from Brazil and from other countries: to compare the results of this research with those from other countries, thus identifying if digital music users’ behavior is not restricted to specific cultures or regions, or if this phenomenon has already become globalized behavior; c) establishment of marketing actions to reach the target audience: next, we present suggestions of marketing actions to attract new paying digital music users. It is worth observing that this work has implications for the marketing management field, since it presents important factors from the consumer behavior perspective. Information obtained here could be the basis for the development of effective marketing actions.
for online music service providers and the music industry in general. To reach this market, it is necessary to find people who want to use digital music and are willing to pay for it, that is, marketing plans should be aimed at a segmented target audience.

Next, we present suggestions for actions. Companies in this field, such as digital music providers, must position their services in terms of quality and prices so as to commercially leverage this segment. Swatman, Krueger and Beek (2006), in their studies of the behavior of digital music consumers, suggest that online retailers should develop competitive pricing strategies and offer easy access for consumers. To attract users of illegal file-sharing networks, who think that the price for a downloaded song is high, it is necessary to develop attractive business models according to the characteristics of consumers, observe the authors. A study carried out by Chu and Lu (2007) corroborate the findings of Swatman, Krueger and Beek (2006): the authors found that online music providers need to identify and target their customers and offer attractive prices to each segment. In addition, layered pricing models may allow music companies to receive maximum value from each music track (SINHA; MANDEL, 2008).

Certain limitations must be considered when evaluating this work. This research has limitations that are inherent to its target audience, firstly with respect to the sample. It was a non-probability sample, which hinders wider and generalized analysis of the population. Moreover, the use of online tools for data collection allows analysis only of the population of Internet users.

NOTAS

1. Recording Industry Association of America is an organization based in Washington that represents USA record labels.

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