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Possibilities of Digital Piracy Management in Music Records Industry

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Abstract

Digital piracy, particularly for its execution-friendly technological environment, is a relevant problem in many countries. Over the past two decades due to the rapid expansion of the Internet and content products (music, movies, books and software) digital distribution, the number of users copying and distributing these products without the legal consent of their authors is increasing a phenomenon known as digital piracy. Music industry has the largest scale of digital piracy over the all-creative content business, related to very convenient reproduction and distribution of illegal music records. The main purpose of the paper is to determine how music authors evaluate possibilities of digital piracy management in the digital space. Survey with recorded digital music customers and interview with recorded digital music authors are provided to achieve the goal. Based on the results the idea of the management of digital piracy in the music records industry, which is oriented for maximizing commercial benefits of the introduction of the music records to consumers for the authors of the music records, was analyzed.

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Introduction

Digital piracy, particularly for its execution-friendly technological environment, is a relevant problem in many countries. Digital piracy, associated with any kind of copyrighted material distribution on digital channels without the consent of the authors, has become a major economic problem for the creative content industry, because digital

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piracy became to consumers of this industry product a mean of significant reduction of the costs for creative content products. Moreover, it lets availability to use a considerably wider range of such material than it was usual earlier, before creative content had spread in the digital space.

It is difficult to determine the exact volume of digital piracy, because this activity, same as shadow economy, is non-observed and hardly identified in quantity. However, organizations acting in digital piracy studies and control conduct various studies, on the basis of which it is possible to evaluate approximately the prevalence of digital piracy, characteristics and motives of persons engaged in the digital piracy. The latter are particularly important for analyzing digital piracy modelling capabilities, focused on reducing the prevalence of digital piracy and increasing the intellectual property protection.

Music industry has the largest scale of digital piracy over the whole creative content in the business sector, related to very convenient reproduction and distribution of illegal music records, and practically unlimited range of music records and abundance of these records creators. Therefore, considering the options of digital piracy management, it is advisable to investigate thoroughly practices and management options of digital music piracy, taking into account positions of both, consumers, as well as authors and distributors of music records.

In order to determine how digital piracy and its management in music industry is evaluated by users of music creators, empirical studies were conducted to summarize positions and opinions of the said persons engaged in music industry.

Object of the study – management of digital music piracy in music industry.

Aim of the study is to determine how music authors and consumers evaluate possibilities of digital piracy management in the digital space.

Achievement of this aim requires two empirical studies: survey of recorded digital music consumers and interview of recorded digital music authors.

1. Study Methodology of the Approaches to the Options of Digital Piracy Management in Music Industry

According to M. Alvisi, E. Argentesi and E. Carbonara (2002), S. H. Bae and J. P. Choi (2006), T. Regner and J. A. Barria (2009), T. P. Cronan and S. Al-Rafee (2008), C. W. L. Hill (2007), L. Aguiar and B. Martens, B. (2013), digital piracy should be treated as a new phenomenon, which highlighted a problem of previously deemed as insignificant sharing of copyrighted material among the users. Before the era of digitalisation users also had shared a variety of copyrighted material without permission of the authors, however, such sharing was limited physically (consumers had limited ability to reproduce copyrighted material and could only give each other the same copy of the work, protected by a specific physical format), therefore its prevalence and influence on revenue of the creative content industry was not considered to be significant. As long as the production of creative content industry has not been moved into the digital space, sharing of copyrighted material among the users caused to consumers themselves both, positive and negative consequences: the user, transferred the work to another user, could not use the same work. In the digital space, when reproduction of copyrighted material has become very simple, such sharing of copyrighted material between users eliminated the negative consequences for the users: they could use acquired copyrighted material for their own purposes and at the same time distribute an unlimited number of copies to other users. In this way, the sharing of copyrighted material has become quite a problem for creative content industry, having a significant impact on the industry revenue.

However, as L. Aguiar and B. Martens, (2013), P. Belleflamme, M. Peitz (2010) and A. Balestrino (2008) emphasize, two economic principles are often ignored in the space of the fight against digital piracy: business has to adapt to innovations and promote them; business has to take into account the needs and approaches of consumers. These principles should be considered as the fundamental axioms in the business world. Due to the changing consumer demands, creative content industry with the aim to limit digital piracy by prohibitions faces a big resistance of consumers who are customers of creative content industry organizations. Therefore, in this context, dilemma of damage of digital piracy and existing or potential benefit is eminently apparent.

Current experience of creative content industry shows that digital piracy has not only a negative impact. As R. K. Chellappa and S. Shivendu (2005), A. Duchene and P. Waelbroeck (2005), F. Silva and G. Ramello (2000), T. Regner and J. A. Barria (2009) emphasize, due to free advertising provided by widespread piracy, concert organizers sell more tickets; digital software piracy for personal use brings to software producers more profit from their sales of

software production to large companies; TV shows freely distributed on the Internet are rapidly becoming popular, circle of spectators is increasing, and finally, revenue is gained from advertising; free music-sharing between users allows reaching for new artists large audience quickly. Therefore, more and more often opinion is heard that industries affected by digital piracy, actually, get a solid profit due to these sources of income.

It is therefore important and necessary to explore digital piracy not only from negative approach, but also to evaluate the advantages and the opportunities it creates. In order to analyze how consumers of music industry and music creators evaluate the spread of digital piracy and options for digital piracy management, empirical studies of their approaches were performed.

Consumer survey is limited to the Lithuanian territory, in order to focus on the piracy factors having importance to Lithuania; therefore the general totality of the study is equated to the entire number of population of Lithuania from the age of 15 up to 60 years. Persons under 16 years old are excluded from the general population, because they do not decide independently on music purchasing; and persons over 65 years are excluded from the general population due to relatively low digital literacy of this age group. According to the Department of Statistics, general population size is the 1,833,990. The sample size was calculated according to the formula Paniotto with 95% confidence interval (Pranulis, 2007) and it consists approximately 400 respondents. In the poll participated 448 digital music consumers.

The aim of the questionnaire survey for consumers of digital music is to provide answers to two key questions:

- What are the main reasons of digital music piracy, i. e., what induce consumers to choose pirated music recordings instead of the legal.
- What is the approach of consumers to possible new models of digital music business.

A survey questionnaire was applied to conduct the study of consumers' approaches, which can be structured into four parts:

- Characteristics of respondents. In this part the respondents were asked to describe themselves according to demographic characteristics: age, gender, the average monthly income, education and activity. This makes it possible to evaluate the differences of opinions between different groups of respondents.
- Description of respondents' experience in the field of digital music piracy. In this part the respondents were asked to indicate how actively they participate in the activity of digital piracy: according to this, the prevalence of digital piracy in music sector of Lithuania may be assessed and the experiences of study participants may be identified, which have a significant impact on their assessment of possible alternative models of music distribution business.
- Identification of reasons for digital music piracy. In this part the respondents were asked to identify the reasons for which they are engaged in digital piracy. This makes it possible to identify main areas which should receive the most attention in development of alternative models of music distribution business.
- Description of respondents' approach to new business models. In this part the respondents were asked to provide their opinion on the possible business models: their attractiveness and conformity with consumers' needs.

Aim of the interview with authors of digital music is to reveal opinion of music authors on piracy, to analyze the structure of their sources of income and to find out their approaches to the possible new models of digital music business.

2. Results of Approaches of Digital Music Consumers

Analyzing the approaches of consumers to the digital music piracy management, the initial aim was to evaluate the prevailing tendency to digital piracy.

Thus, the results of the study lead to the conclusion that the majority of respondents personally use illegal music records and know a lot of the same people in their environment, but only some of them promote digital piracy by specific actions. Only a third of respondents believe that the illegal reproduction of music recordings cause significant damage to the performers.

It can be noted that in this case the emphasis is on convenience of receipt and use of music records, low price of music records and comfortable (acceptable to the consumer) music formats. However, in addition, users also highlighted some other factors that would encourage them to use legal music records: this is a range of music records and comfortable personalization (i. e., the possibility to create your own personal music library and use it comfortably), and possibility of sharing with friends or acquaintances. In this case, two additional effects are

highlighted, which are important to be assessed shaping solutions of management of digital music piracy in the music industry:

- It is important for users to be able to access a wide range of music, so that they could find a variety of their favorite musical works, as well as the opportunity to look for new music constantly.
- Social network effect has become increasingly important for users, so in case of music records distribution, the important feature of the product has become an opportunity to communicate with friends or acquaintances sharing favorite music records.

Analyzing user-defined causes inducing use of legal music records, it should be noted that most users indicated as non-motivating reasons that friends or acquaintances use only legal music records (for this reason, an answer 'definitely no' was chosen by 21.9 percent of respondents), higher fines for illegal use of records (19.2 percent) and P2P network restriction (16.4 percent).

From these results of the study it can be seen that users evaluate most negatively the reasons related with prohibitions and restrictions or forced promotion to change their normal behaviour. These results are related to the discussed approaches of R. J. Lobato and J. Thomas (2012), L. Aguiar and B. Martens (2013), K. Yoon (2002), R. D. Gopal, S. Bhattacharjee and G. L. Sanders (2006), R. K. Chellappa and S. Shivendu (2005), M. Peitz and Waelbroeck (2004), S. Liebowitz (1985), J.P. Johnson and M. Waldman (2005) and other authors', emphasizing that digital piracy (illegal use of creative content industry products) may not necessarily be harmful, and forced restriction does not necessarily provides the benefits for creative content industry.

In summary of the results of the study of approaches it can be stated that main factor inducing piracy in music industry is a convenient use of pirate music records, while maintaining a sufficiently high quality of illegal records and reducing their purchase cost. This suggests that management of digital piracy in music industry should be focused on the convenient use of music records from the user's part. Users closely relate convenient use of music records with convenient accessibility of music records and user-friendly file formats, large variety of music records, convenient access to personal music library from various devices and the ability to share music with other users. Namely based on these factors, it is appropriate to construct foundations for management of digital piracy in music industry.

The main causes for digital piracy of musical records distinguished by the participants of the study showed that the predominant reason is the ability to listen to the interested music track quickly and at any time (this reason was indicated by 60.3 percent of the respondents). Thus, a very important advantage for users of the music industry products is a quick and convenient access to musical records at any time. This factor is highlighted and discussed in OECD (2007), BSA (2012), the European Economic and Social Committee (2012) and IFPI (2013) studies, which analyzed the causes of digital piracy and its reduction or creation of opportunities for new business models. Therefore, finding ways to control digital piracy in the music industry the most attention has to be paid for convenient accessibility of music.

Major part of consumers is willing to pay a subscription fee as low as possible (the predominant choice is up to 3 euro per month), but some people tend to pay higher fees for likely higher quality services. Therefore, the formation of solutions for management of digital piracy in music industry requires providing a staged structure of subscription, when additional privileges are granted for a higher subscription fee.

Analyzing the approaches of consumer to existing business models indented for the music industry in the digital space, it should be noted that users evaluate as most attractive those models based on free of charge use of currently most popular music listening service ('YouTube', 'Linkomanija' and 'Spotify'), giving preference to them not only for the low cost use, but also because of the convenience and range. Therefore the formation of solutions for digital piracy management in music industry requires focusing on this type of models and combining the element of subscription fee with relevant characteristics of use convenience.

The discussed results of users' survey highlighted the target characteristics of digital piracy management in music industry from consumers' perspective. In order to identify main relevant characteristics of digital piracy management in music industry from authors' perspective, an expert interview of music authors was performed, the results of which are discussed below.

2. Results of Analysis of Music Authors' Approaches

Approach of authors of music records to the management of digital piracy in the music industry was studied by the method of expert interviews, surveying music authors immediately, using pre-made open questions. The study involved 19 experts. All of them are individuals creating music in Lithuania. Summary on experts' interview results analysis was prepared summarizing predominant approaches and opinions of experts.

Analyzing experience of experts related to digital piracy it should be noted that many experts encounter with facts of illegal music copying and use – all music authors involved in the study have such persons in their environment who listen to illegal music, download it from the Internet or copy from acquaintances. However, digital piracy as music copying and distribution for commercial gain, is encountered rarely: only 3 experts indicated that they have come across with this phenomenon indirectly (one expert pointed out that he interacted with one person engaged in such activity, other experts pointed out that they had heard about the specific facts of illegal music distribution for commercial purposes). Part of the experts being asked about facts of digital piracy, emphasized that there is a difference in awareness of digital piracy in music industry on what is digital piracy, and opinion that digital piracy can only be an illegal copying and distribution of works for commercial gain is often encountered in this industry.

Comparison, given by the experts, of the present new business models leads to the conclusion that, in many cases (like in the case of the consumers' survey) models of 'YouTube' and 'Spotify' are mentioned, and this shows that these models should get the most focus, while forming the solutions on the management of digital piracy in the industry of the music records.

According to the experts, the models of 'YouTube' and 'Spotify' are considered to be the most perspective business models in business terms; therefore, it is advisable to pay more attention to these models forming the decisions on management of digital piracy in the industry of the music records. It can also be noted that almost all the experts negatively evaluate the business model of 'Linkomanija', treating it as unattractive to the authors of the music records, and emphasizing the questioned legality of this model.

Based on the discussed results of consumer survey and the experts' opinion study, the model of digital piracy in the music records industry, which is oriented at maximizing commercial benefits of the introduction of the music records to consumers for the authors of the music records, was analyzed.

The model of the management of digital piracy in the music records industry is based on the practical models, which, according to the consumers, have the biggest appeal ('YouTube', 'Spotify', 'Linkomanija'), when music records are introduced as digital content in a single place, which is easily accessed by the consumers in digital space, which administrator, labeled as distributor of the content in the model, becomes the central figure in the whole model, who links the authors of the music records and subjects providing support services for them with consumers, ensuring commercial benefits of these links for the authors of the records.

In the model of the management of digital piracy in the music records industry, conjunction of the free on-line content and voluntary fixed tax, grounded in unlimited assortment delivery to the consumers for a certain amount of fixed income from one consumer, becomes the primary mean to introduce creative content in market. Thus, the commercial success of the system is the most dependent on the range of the music records and user traffic, while consumers' expenditure becomes not related with the intensity of the consumers' usage of the system.

In the Product / Service area of the model of the management of digital piracy in the music records industry, the dual content charging solution is formed: a voluntary fixed fee which is separated into three levels: free package, basic package and full package, as well as individual taxation, which is applied to additional services of content distribution.

Subject to the package used by the consumer, composition of the customer's area (relationship with the customers and distribution channel) of the model of the management of digital piracy in the music records industry is accordingly implemented. In this case, the focus is on the fact that closer and more intense communication with the customer should be related to bigger income from the consumer.

Conclusions

Analyzed approaches of consumers and experts to the management of digital piracy in the music industry leads to the conclusion as what kind of business solutions would be purposeful in this industry to ensure generation of revenue from music creation and distribution, acceptable to both, authors and consumers.

Analyzed approaches of consumers revealed that most of the attention should be given on convenient use of music records for consumer while forming the solutions on management of digital piracy in music industry, focusing on the model of fixed subscription fee, providing staged structure of subscribers, when higher subscription fee provides additional privileges.

According to experts, the most attention should be given on 'YouTube' and 'Spotify' models, while forming the solutions on management of digital piracy in music industry, which are considered to be commercially most viable models of music industry business in the digital space.

Digital piracy has the greatest negative impact on the sale-oriented authors, therefore while forming the solutions on management of digital piracy in music industry it is important to assess that the structure of such authors' income may significantly change due to the characteristics of digital space, which leads to the demand to develop for these authors economically acceptable alternatives of revenue generation, while adapting to consumer habits.

In summary, the results of the study revealed that there is a possibility to ensure for authors cost-effective and useful management of digital piracy in music industry, which should be oriented not on restriction of use of illegal content, but promotion of users to choose a legal content instead of illegal voluntary.

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